

# LAVACA REGIONAL WATER PLANNING GROUP

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## LAVACA REGIONAL WATER PLANNING GROUP Notice of Regular Meeting

August 12, 2024  
12:00 p.m. (Noon)

### EXECUTIVE COMMITTEE

Phillip S. Spenrath  
Chairman  
Counties

Neil Hudgins  
Vice-Chairman  
GCDs

Patrick Brzozowski  
Secretary  
River Authorities

Jim Coleman  
Electric Service

Marie Day  
Industries

Jack Maloney  
Municipalities

Ed Weinheimer  
Small Businesses

### MEMBERS

Tom Chandler  
Water Utilities

Steve Cooper  
Agricultural

Lee Hafemick  
Agricultural

Bart J. McBeth  
Agricultural

James Migl  
Municipalities

Vance Mitchell  
Agriculture

Richard J. Otts  
Industries

Com. Edward Pustka  
Counties

Robert Shoemate  
Environmental

Michael Skalicky  
Water Districts

Jill Sklar  
Counties

Grace Ward  
Public

The meeting will be held in person at the Texana Community Education Center, located in Texana Park, 344 Park Road 2, located approximately seven (7) miles east of Edna.

You may also access the meeting through audio/video conferencing:

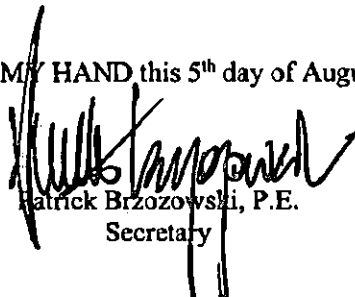
<https://tinyurl.com/mr3yvrhj>

1. Open meeting.
2. Receive public comments.
3. Consider approval of meeting minutes of May 6, 2024, and act as necessary.
4. Consider nominations for new voting members and act as necessary.
5. Receive update from Texas Water Development Board (TWDB) Project Manager and act as necessary.
6. Receive reports from regional liaisons and Interregional Planning Council representative and act as necessary.
7. Receive briefing and update from Black and Veatch consultant and act as necessary.
  - Schedule and Progress Update
  - Discussion and RWPG Approval of Major Water Providers
  - Discussion and RWPG Approval of Threshold of "Significant" Water Needs to Consider ASR as a Potential Strategy to Meet Those Needs
  - Water Management Strategy Updates
  - Briefing of Legislative and Policy Recommendations updates to Chapter 8 of the 2026 Plan received through July 31, 2024.
8. Discuss and schedule future meeting dates and act as necessary.
9. Receive public comments.

POSTED

AUG 05 2024 10:04am  
NR

WITNESS MY HAND this 5<sup>th</sup> day of August 2024

  
Patrick Brzozowski, P.E.  
Secretary

# Lavaca Regional Water Planning Group



Regular Planning Group Meeting

August 12, 2024

Jaime Burke, Black & Veatch



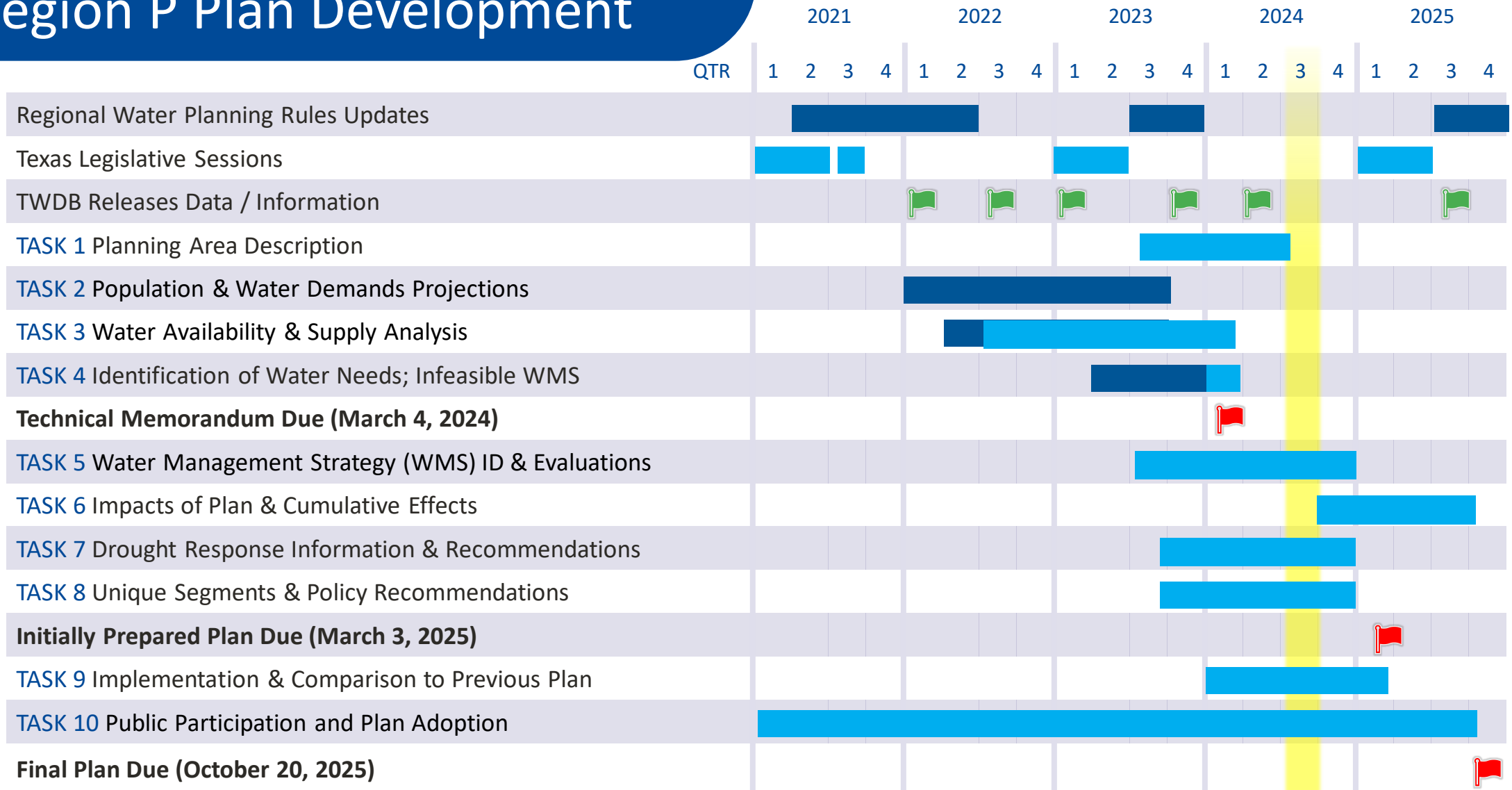
# Agenda Items

1. Open meeting
2. Public comments
3. Consider approval of minutes
4. Consider nomination of new voting members
5. TWDB update
6. Receive reports from regional liaisons and Interregional Planning Council reps
7. Receive briefing and update from Black & Veatch (technical consultant)
8. Schedule
9. Public comments
10. Adjourn

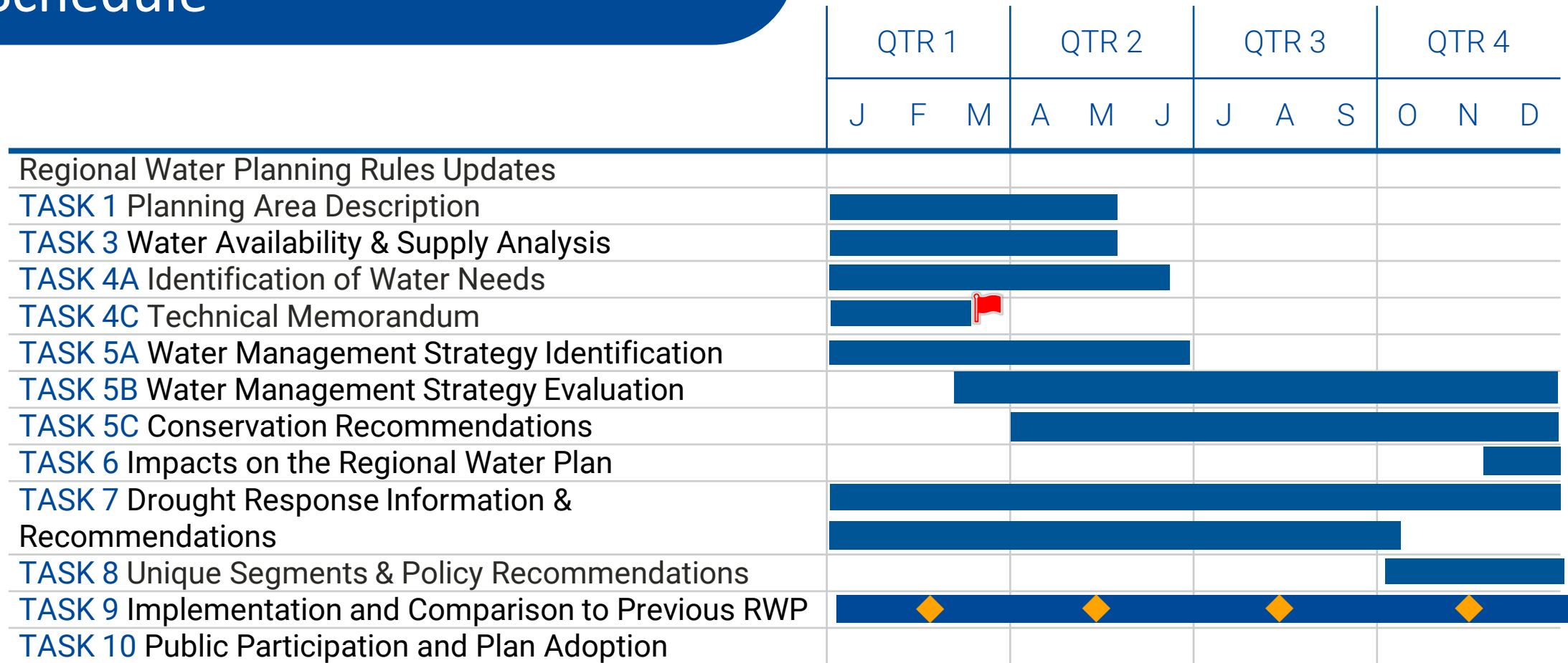
# Briefing and Update from Black & Veatch

## A. Schedule and Progress Update

# Conceptual Schedule for Region P Plan Development



# 2024 Anticipated Region P Schedule



## LEGEND

■ Region P RWPG Activities    ◆ Tentative Region P RWPG Meeting    🚩 TWDB Deadline

# Progress Since Last Meeting

- Moved Chapters 1-4 into the QA/QC process
- Received informal comments on the Technical Memorandum to TWDB
  - A non-MAG availability for the Yegua-Jackson in Lavaca County was inadvertently included. It has now been removed.
- Received NTP on Scope of Work for Task 5B – Evaluating Water Management Strategies
- Began water management strategy evaluations
- Sent communication out to defined “rural entities” within the region to provide information from TWDB and encourage engagement in the regional water planning process
- Sent out Chapter 8 to RWPG members for policy recommendation updates

## New or Ongoing Efforts

- Review of Drought Contingency Plans and beginning work on Chapter 7
- Water management strategy evaluations
- Chapter edits



# **Briefing and Update from Black & Veatch**

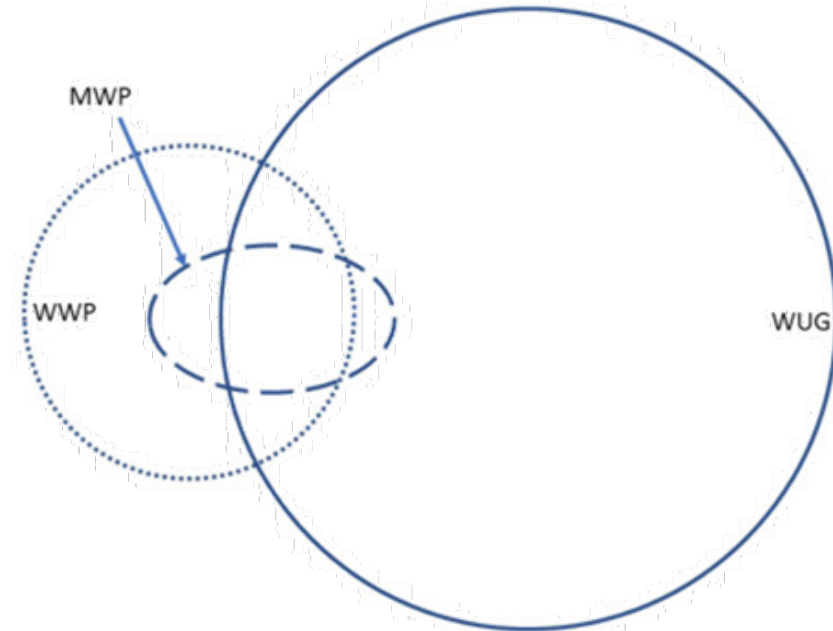
## **B. Discussion and RWPG Approval of Major Water Providers**

# Major Water Providers (MWP)

Per 31 TAC §357.10(19) a Major Water Provider is:

“A WUG or WWP of **particular significance** to the region’s water supply as determined by the regional water planning group. This may include public or private entities that provide water for any water use category.”

- The RWPG’s designation of MWPs will not change the role of the entity in the RWP. Information about the MWPs will be summarized in ‘snapshots’ in the RWP.
- Last cycle, the RWPG considered LNRA and El Campo before choosing LNRA as the only MWP for the region.
- What would the RWPG like to do this cycle?



## **Briefing and Update from Black & Veatch**

**C. Discussion and RWPG Approval of Threshold of “Significant” Water Needs to Consider ASR as a Potential Strategy to Meet Those Needs**

# Threshold for Significant Identified Water Needs in the Region

- Threshold used to determine whether to consider ASR as a potential strategy for a WUG, other than for those that have requested it.
  - Last cycle, the threshold was any WUG with an identified need of 10,000 acre-feet per year (ac-ft/yr) or greater.
  - For last cycle and this cycle, no WUGs meet this threshold.
- Does the RWPG have a desire to choose a different threshold this cycle?
- Action needed by RWPG to choose a threshold.

# Briefing and Update from Black & Veatch

## D. Water Management Strategy Updates

# Water Management Strategies Approved for Evaluation

- [Drought Management](#)
- [Advanced Water Conservation](#)
- [Expand Use of Groundwater](#)
- [Reuse](#)
- Lake Texana Yield Enhancement Project
- LNRA Desalination
- LNRA Aquifer Storage and Recovery
- Lake Texana Dredging

All summaries of WMSs are in DRAFT form and are subject to change.

All WMSs are evaluated uniformly using September 2023 \$.

[\\*Reviewing updates today](#)

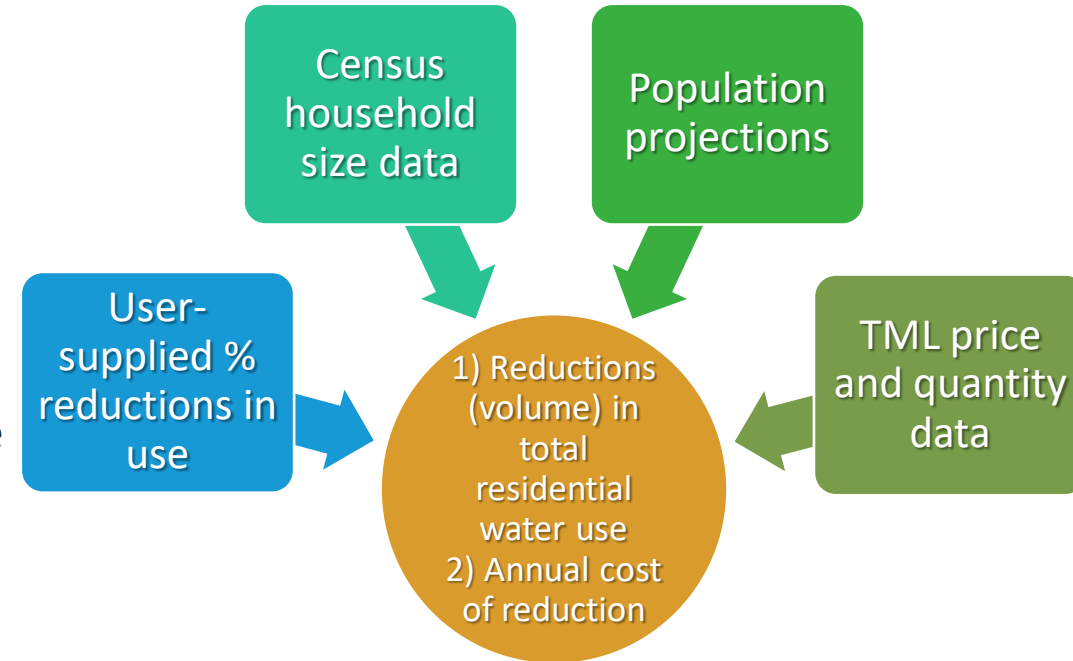
Water Management Strategy (WMS) Updates,  
Draft WMS Evaluations

## Drought Management:

- Municipal
- Manufacturing (not complete)

# Drought Management - Municipal

- Assumes demand reduction for a municipal WUG by activating a drought contingency plan and/or water restrictions.
- TWDB provided the updated Drought Management Costing Tool in March 2024
- Tool estimates the economic and hydrological impact of reductions due to drought WMS.
  - Yield is the total annual reduction of all household water use due to drought management plan implementation
  - Cost is the total annual cost of foregone water use
- Tool Evaluates:
  - Household size
  - Projected population
  - WUG-specific water use and price data
  - User-determined reduction in water use





# Drought Management - Municipal

- Applied to municipal WUGs to encourage them to follow their DCP
  - Not applied to County-Other.
- The percent demand reduction for each WUG is similar to last cycle and is based on the percentages identified in their DCP.

WUG	County	Basin	Percent Reduction	Demand Reduction (ac-ft/yr)					
				2030	2040	2050	2060	2070	2080
EDNA	JACKSON	LAVACA	15%	67	71	75	78	81	84
GANADO	JACKSON	LAVACA	20%	29	28	28	28	27	26
QUADVEST	JACKSON	COLORADO-LAVACA	15%	1	1	1	1	2	2
HALLETTSVILLE	LAVACA	LAVACA	30%	70	76	81	87	94	100
MOULTON	LAVACA	LAVACA	20%	15	15	14	14	13	13
SHINER	LAVACA	LAVACA	10%	17	18	20	21	22	24
YOAKUM	LAVACA	LAVACA	30%	83	87	92	96	100	105
EL CAMPO	WHARTON	COLORADO	15%	23	23	23	23	23	23
EL CAMPO	WHARTON	COLORADO-LAVACA	15%	140	141	141	141	141	141
EL CAMPO	WHARTON	LAVACA	15%	7	7	7	7	7	7
WHARTON COUNTY WCID 1	WHARTON	LAVACA	15%	8	8	8	9	9	9

# Drought Management - Municipal

- Costs

WUG	County	Basin	Percent Reduction	Unit Cost (\$/ac-ft)						Annual Cost (\$/yr)					
				2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
EDNA	JACKSON	LAVACA	15%	439	439	439	439	439	439	29,341	31,172	32,782	34,152	35,567	37,032
GANADO	JACKSON	LAVACA	20%	745	745	745	745	745	745	21,387	20,959	21,006	20,497	19,965	19,375
QUADVEST	JACKSON	COLORADO-LAVACA	15%	414	414	414	414	414	414	280	382	453	545	631	723
HALLETTSVILLE	LAVACA	LAVACA	30%	803	803	803	803	803	803	56,420	60,670	64,845	69,914	75,133	80,501
MOULTON	LAVACA	LAVACA	20%	745	745	745	745	745	745	11,395	10,954	10,529	10,117	9,721	9,339
SHINER	LAVACA	LAVACA	10%	160	160	160	160	160	160	2,761	2,953	3,143	3,364	3,593	3,830
YOAKUM	LAVACA	LAVACA	30%	1,001	1,001	1,001	1,001	1,001	1,001	83,075	87,497	91,681	95,865	100,243	104,815
EL CAMPO	WHARTON	COLORADO	15%	414	414	414	414	414	414	9,480	9,576	9,582	9,576	9,570	9,565
EL CAMPO	WHARTON	COLORADO-LAVACA	15%	414	414	414	414	414	414	57,788	58,386	58,408	58,374	58,352	58,329
EL CAMPO	WHARTON	LAVACA	15%	414	414	414	414	414	414	2,886	2,914	2,914	2,914	2,914	2,908
WHARTON COUNTY WCID 1	WHARTON	LAVACA	15%	526	526	526	526	526	526	4,046	4,091	4,307	4,473	4,656	4,845

# Drought Management – Manufacturing

- Included as alternative strategy last cycle.
  - Surface water may be restricted per LNRA's Drought Contingency Plan during times of severe drought, resulting in a demand reduction of **10 percent**.
  - Considered for surface water users in Jackson County
  - Costs based on TWDB's Socioeconomic Impacts of Projected Water Shortages - provided data on Manufacturing's contribution to the Lavaca Region economy
- RWPG input for this cycle?

Water Management Strategy (WMS) Updates,  
Draft WMS Evaluations

## Conservation:

- Municipal
- Irrigation
- Manufacturing

# Conservation: Municipal

- **Description:** WMS includes active conservation measures that conserve water ***over and beyond passive water conservation measures***, which stem from federal and state legislation requiring water efficient plumbing fixtures in new building construction and replacement.
- **Requirements:** TWDB requires RWPGs to:
  - Recommend gallons per capita per day (GPCD) goals for each municipal WUG or specified groupings of municipal WUGs for each planning decade
  - Consider active water conservation measures for WUGs and WWP WUG customers with identified water Needs;
  - Consider WMSs to address any issues identified in the TWDB water loss audits; and
  - Distinguish and separate conservation strategies/projects as to whether they are:
    - 1) Water Loss Mitigation; or
    - 2) Water Use Reduction.

# Conservation: Municipal

## Water Loss Mitigation

- Capital Improvements
  - Leak Detection and Repair
- Non-Capital Mitigation
  - Utility water loss audits
  - Irrigation Evaluations
  - Speed & Quality of Repair
  - Subsidized customer-side service line repairs

## Water Use Reduction

- Capital Improvements
  - Advanced Metering Infrastructure
- Non-Capital Reductions
  - Additional passive conservation through Low Flow Plumbing Fixtures
  - Outdoor water restrictions
  - Customer behavioral engagement software
  - Permanent landscape watering schedule
  - Landscape standards
  - Public outreach and education programs
  - Tiered water rates

# Conservation: Municipal

- **Methodology for WMS in 2026 Plan:**

1. **Goals:** Identify Region P-specific goals for municipal WUGs with >140 GPCD for each planning decade
  - Region P-specific GPCD Goals<sup>1</sup> are as follows:
    - GPCD > 140: Apply a 5% Decadal Reduction in GPCD
    - GPCD < 140: Apply a 0% Decadal Reduction in GPCD (i.e., retain existing GPCD)
  - Conservation not recommended for five municipal WUGs: Edna, Ganado, Jackson C-O, Lavaca C-O, Wharton C-O
2. **Yield:** Calculate the WMS savings (yield) that would be realized by meeting the GPCD goal (next slide) by multiplying the reduction by projected population

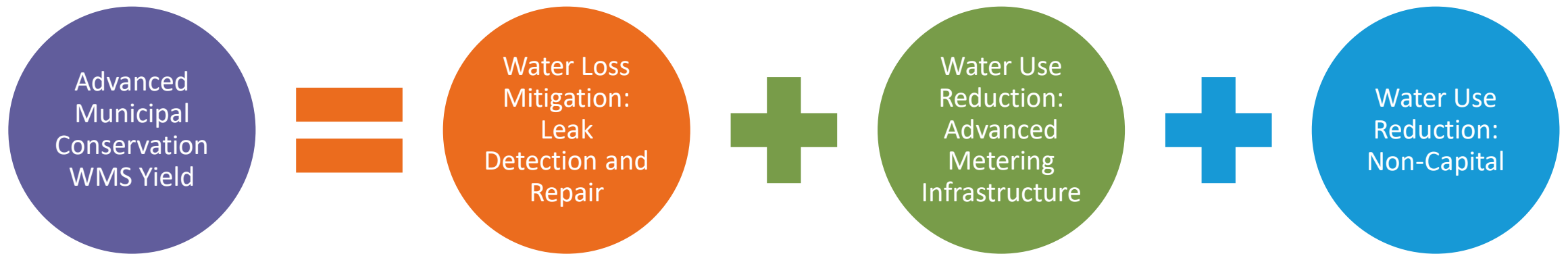
**Notes:**

<sup>1</sup> Goals are based on a recommendation from the Water Conservation Implementation Task Force (WCITF) to have a GPCD goal of 140 GPCD

# Conservation: Municipal

- **Yield:**

- Savings (in acft/yr) for each WUG in each decade were calculated by applying the Region M-specific GPCD goal and then separating the components based on whether they are:
  - 1) **Water Loss Mitigation: Leak Detection and Repair (avg. \$175/LF);**
  - 2) **Water Use Reduction: Advanced Metering Infrastructure (AMI) (\$540/meter); or**
  - 3) **Water Use Reduction: Non-Capital (\$305/ac-ft)**





# Conservation: Municipal

WUG	2030 GPCD	Municipal Water Savings (ac-ft/yr)					
		2030	2040	2050	2060	2070	2080
QUADVEST	195	1	1	2	4	6	8
HALLETTSVILLE	199	34	68	108	152	199	251
MOULTON	179	8	14	19	25	28	27
SHINER	207	26	53	85	118	154	192
YOAKUM	155	34	66	69	73	76	80
EL CAMPO	165	115	218	324	348	348	348
WHARTON COUNTY WCID 1	148	6	6	7	7	7	8
<b>TOTAL</b>		<b>223</b>	<b>427</b>	<b>614</b>	<b>727</b>	<b>819</b>	<b>915</b>

# Conservation: Municipal

WUG	Maximum Savings (ac-ft/yr)	Municipal Water Savings Costs					
		Total Project Costs	Largest Annual Cost	Annual Unit Cost (\$ per acft)	Annual Unit Cost of Water After Debt Service (\$ per acft)	Annual Cost of Water (\$ per 1,000 gallons)	Annual Cost of Water After Debt Service (\$ per 1,000 gallons)
QUADVEST	8	\$ 650,000	\$ 48,000	\$ 5,835	\$ 1,178	\$ 17.91	\$ 3.62
HALLETTSVILLE	251	\$ 6,340,000	\$ 499,000	\$ 1,988	\$ 462	\$ 6.10	\$ 1.42
MOULTON	28	\$ 1,566,000	\$ 115,000	\$ 4,080	\$ 778	\$ 12.52	\$ 2.39
SHINER	192	\$ 3,508,000	\$ 288,000	\$ 1,496	\$ 381	\$ 4.59	\$ 1.17
YOAKUM	80	\$ 6,523,000	\$ 463,000	\$ 5,798	\$ 859	\$ 17.79	\$ 2.64
EL CAMPO	348	\$ 13,691,000	\$1,013,000	\$ 2,908	\$ 519	\$ 8.92	\$ 1.59
WHARTON COUNTY WCID 1	8	\$ 2,446,000	\$ 172,000	\$ 21,665	\$ 3,681	\$ 66.48	\$ 11.30

- September 2023 dollars
- Developed using Uniform Costing Model (UCM) from TWDB
- Includes capital costs, annual debt service and operation and maintenance

# Conservation: Municipal

WUG	2030 GPCD	Municipal Water Savings & Costs for Water Loss Mitigation			
		Project Yield 2080 (ac-ft/yr)	Pipe Replaced Over Planning Horizon (Miles)	Total Project Costs	Annual Unit Cost (\$ per acft)
QUADVEST	195	1	0.5	\$ 616,000	\$ 43,000
HALLETTSVILLE	199	29	4.1	\$ 5,055,000	\$ 12,374
MOULTON	179	4	1.1	\$ 1,357,000	\$ 24,934
SHINER	207	22	2.1	\$ 2,589,000	\$ 8,288
YOAKUM	155	25	4.2	\$ 5,179,000	\$ 14,410
EL CAMPO	165	70	8.5	\$ 10,480,000	\$ 10,598
WHARTON COUNTY WCID 1	148	4	1.9	\$ 2,343,000	\$ 37,931

## Leak Detection & Repair Costs

- September 2023 dollars
- Developed using Uniform Costing Model (UCM) from TWDB
- Includes capital costs and annual debt service

# Conservation: Municipal

WUG	2030 GPCD	Municipal Water Savings & Costs for Water Use Reduction			
		Project Yield 2080 (ac-ft/yr)	Smart Meters Installed	Total Project Costs	Annual Unit Cost (\$ per acft)
QUADVEST	195	7	46	\$ 33,000	\$ 554
HALLETTSVILLE	199	222	1,815	\$ 1,286,000	\$ 643
MOULTON	179	24	296	\$ 210,000	\$ 821
SHINER	207	171	1,298	\$ 919,000	\$ 622
YOAKUM	155	55	1,898	\$ 1,344,000	\$ 1,813
EL CAMPO	165	279	4,535	\$ 3,211,000	\$ 990
WHARTON COUNTY WCID 1	148	4	143	\$ 103,000	\$ 1,950

## AMI + Non-Capital Costs

- September 2023 dollars
- Developed using Uniform Costing Model (UCM) from TWDB
- Includes capital costs and annual debt service

# Conservation: Irrigation

- Tail Water Recovery  
(Wharton - 2021 Plan update)
  - Irrigation system used for the collection, storage, and transportation of irrigation tail water and/or rainfall runoff for reuse. Assumes 12% of unimproved farm acreage will be improved.
  - Yield (savings) = 1.61 ac-ft/ac, or 1,910 AFY
  - Costs + Impacts:
    - Costs developed from 2010 LCRA Water Supply for Agriculture Report (updated to September 2023 \$):
      - Facilities costs = \$7.2 million
      - Project costs = \$10.1 million
      - Annual costs = \$782,000
      - Unit cost = \$409/ac-ft
    - Tail water recovery may result in a decrease of water quality and disease problems that result from the reuse of irrigation water. Natural resource impacts are expected to be negligible.

# Conservation: Irrigation

- On-Farm Conservation

(Wharton - 2021 Plan update; Jackson & Lavaca – New strategy)

- Combination of land leveling, multiple inlets, irrigation well meters, and replacement of canal ditches with pipeline. All measures focus on rice production, with the exception of irrigation well meters, which are applied to all irrigated crops in this analysis.
  - Land Leveling/Multiple inlets
    - Applied to 50% of unimproved rice acreage
    - Water savings: 1.23 ac-ft/ac
    - Land Leveling Cost: \$650/acre; Multiple Inlet cost: \$122/acre
  - Irrigation Well Meters
    - Applied to 5-12% of all cropland
    - Water savings: 10%
    - Meter Cost: \$6,000 ea., replaced every 20 years
  - Irrigation Pipeline
    - Applied to 25% of unimproved rice acreage
    - Water savings: 0.18 ac-ft/ac
    - Pipeline cost: \$290/acre

# Conservation: Irrigation

- On-Farm Conservation

(Wharton - 2021 Plan update; Jackson & Lavaca – New strategy)

- Combination of land leveling, multiple inlets, irrigation well meters, and replacement of canal ditches with pipeline. All measures focus on rice production, with the exception of irrigation well meters, which are applied to all irrigated crops in this analysis.

Strategy	Wharton County	Jackson County	Lavaca County
Land Leveling/Multiple Inlets	4,864	5,392	786
Irrigation Well Meters	670	348	17
Irrigation Pipeline	356	395	57
<b>TOTAL Savings (ac-ft/yr)</b>	<b>5,890</b>	<b>5,585</b>	<b>860</b>

# Conservation: Irrigation

- On-Farm Conservation

(Wharton - 2021 Plan update; Jackson & Lavaca – New strategy)

- Combination of land leveling, multiple inlets, irrigation well meters, and replacement of canal ditches with pipeline. All measures focus on rice production, with the exception of irrigation well meters, which are applied to all irrigated crops in this analysis.

Strategy	Wharton County	Jackson County	Lavaca County
Facilities Costs	\$4.47 M	\$4.03 M	\$0.6 M
Project Costs	\$6.23 M	\$5.62 M	\$0.89 M
Annual Costs	\$483,000	\$436,000	\$69,000
Annual Unit Costs (per ac-ft)	\$82	\$78	\$80

- September 2023 dollars
- Developed using Uniform Costing Model (UCM) from TWDB
- Includes capital costs, annual debt service and operation and maintenance



# Conservation: Irrigation

- Irrigation Conservation - Alternate Wetting and Drying (Alternate)
  - AWD is the implementation of intermittent irrigation. Though monitoring of soil moisture, the field is left to dry to a point when there is still sufficient water in the soil for sustained plant growth before it is re-flooded. This cycle is done repeatedly except during flowering stage of crop growth.
  - Could potentially add a capital cost component addition of moisture meters.
- Drought Management for Irrigation (Considered but not Recommended)
  - Polypipe irrigation, implemented during periods of drought, acts as an alternative to furrow irrigation or field inundation. The strategy involves the installation of flexible polyethylene resin pipes. These pipe systems provide a higher irrigation efficiency and better irrigation control but can only last up to one season and may require replacement throughout the growing season.

**Should either strategy be considered/developed for this cycle?**

# Conservation: Manufacturing

Accomplished via implementation of Best Management Practices (BMPs) for Industrial Users as defined by the TWDB (TWDB, 2013).

*\*No new BMPs or info since last cycle*

## Approach:

- Recommended for every Manufacturing WUG in the Region, regardless of need
- Water Audit is the initial action to increase water efficiency
  - On average water audits may help conserve 10-35% of water
  - Apply 10% water demand reduction for industrial users
- Cost
  - Assume costs are based on water audits being performed once every five years.
  - Assume industrial user will only implement BMPs if they have a cost-positive impact on their bottom line, so no additional costs to implement measures.
  - Assume minimum water audit cost of \$2,000. Assume cost of audit is proportional to water demand.
    - 1,000 ac-ft/yr of water demand = \$10,000 water audit

# Conservation: Manufacturing

WUG	COUNTY	BASIN	Demand Reduction (AFY)	Demand Reduction (AFY)	Demand Reduction (AFY)	Demand Reduction (AFY)	Demand Reduction (AFY)	Demand Reduction (AFY)
			2030	2040	2050	2060	2070	2080
MANUFACTURING	JACKSON	COLORADO-LAVACA	873	936	938	940	943	945
MANUFACTURING	JACKSON	LAVACA	11	11	11	12	12	12
MANUFACTURING	JACKSON	LAVACA-GUADALUPE	639	685	687	688	690	691
MANUFACTURING	LAVACA	LAVACA	53	55	57	59	61	63
MANUFACTURING	WHARTON	COLORADO-LAVACA	3	3	4	4	4	4

WUG	COUNTY	BASIN	Annual Cost (\$)						Unit Cost (\$)					
			2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
MANUFACTURING	JACKSON	COLORADO-LAVACA	\$ 17,454	\$ 18,722	\$ 18,764	\$ 18,806	\$ 18,850	\$ 18,898	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20
MANUFACTURING	JACKSON	LAVACA	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 38	\$ 35	\$ 35	\$ 35	\$ 35	\$ 35
MANUFACTURING	JACKSON	LAVACA-GUADALUPE	\$ 12,770	\$ 13,700	\$ 13,730	\$ 13,760	\$ 13,794	\$ 13,826	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20
MANUFACTURING	LAVACA	LAVACA	\$ 1,056	\$ 1,096	\$ 1,136	\$ 1,178	\$ 1,222	\$ 1,268	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20
MANUFACTURING	WHARTON	COLORADO-LAVACA	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 121	\$ 118	\$ 114	\$ 111	\$ 108	\$ 105

- Environmental/Cultural Concerns: Decrease in water use may result in decrease in freshwater inflow to a classified water body.

Water Management Strategy (WMS) Updates,  
Draft WMS Evaluations

## Expand Use of Groundwater:

- Edna (not complete)
- Hallettsville (not complete)
- Irrigation (not complete)

## Expand Use of GW: Edna

New strategy this cycle.

- Received request from Edna for a new well, pump, transmission line, ground storage tank and elevated storage tank
- Anticipated online 2030
- Sizing based on requested infrastructure, but MAG is limited (217 AFY)
- May want recommended WMS that is MAG-limited (higher unit cost) and alternative WMS that assumes full yield (lower unit cost)
- Currently working on strategy evaluation

# Expand Use of GW: Hallettsville

New strategy this cycle.

- Received request from Hallettsville for a new well, pump, and ground storage tank
  - Also assuming a short transmission line
- Anticipated online 2030
- Sizing based on requested infrastructure, but MAG is limited (294 AFY)
- May want recommended WMS that is MAG-limited (higher unit cost) and alternative WMS that assumes full yield (lower unit cost)
- Currently working on strategy evaluation

# Expand Use of GW: Irrigation

This strategy has been included previously as an alternative strategy.

- Proposes to use additional groundwater during dry years only to meet irrigation needs.
- Costs are based on additional pumping cost based on additional drawdown using existing wells.
- Can look at including to meet irrigation needs in Jackson, Lavaca, and Wharton counties as alternative strategies.
- Strategy evaluation has not yet started.

Water Management Strategy (WMS) Updates,  
Draft WMS Evaluations

**Reuse:**  
-El Campo



# Reuse: El Campo

This strategy has been included as recommended in the last two plans.

- Due to lack of movement on the project, we recommend pushing the online date back to 2040.
- Sand filtration system and a 12” transmission line (assumed 5 miles) and pump station to produce and deliver Type I effluent (560 AFY) for an undetermined customer.
- Costs + Impacts:
  - Costs (updated to September 2023):
    - Facilities costs = \$7.27 million
    - Project costs = \$10.18 million
    - Annual costs = \$1.14 million
    - Unit cost = \$2,041/ac-ft (After debt service = \$763/ac-ft)

Reduction in return flows. Effluent quality is being improved, but end user’s quality is reduced.  
Would reduce stress on groundwater.

## **Briefing and Update from Black & Veatch**

**E. Briefing of Legislative and Policy Recommendations updates to Chapter 8 of the 2026 Plan received through July 31, 2024**



# Updating the 2021 RWP to the 2026 RWP

## CHAPTER 8 Policy Recommendations

1. Environmental Issues
2. Ongoing Regional Water Planning Activities
3. Inter-Regional Water Coordination
4. Conservation Policy
5. Sustainable Yield of the Gulf Coast Aquifer
6. Support of the Rule of Capture
7. Groundwater Conservation Districts
8. Establishment of Fees for Groundwater Export
9. Limits for Groundwater Conservation Districts
10. Financial Policy Recommendations



- **Removal  
or  
Changes  
Needed?**

## 8.2.1 Environmental Issues

- **LRWPG has developed a water plan to address projected water demands within LRWPA. The construction of the Palmetto Bend Stage II reservoir was considered as a potential management strategy to meet shortages in the 2001 and 2006 RWPs for LRWPA. Currently, LNRA has designated an off-channel option in its Management Plans as the desired future treatment of the Lavaca River. The LRWPG has recommended this off-channel reservoir option in this regional water plan. An off-channel reservoir would negate many of the environmental issues related to an on-channel impoundment. The LRWPG understands that any water development strategy can have potentially threatening environmental consequences and fully supports efforts to identify and mitigate environmental impacts to the extent feasible.**



## 8.2.2 Ongoing Regional Water Planning Activities

- **LRWPG recommends that the Texas Legislature establish funding through TWDB for the continued existence of the regional planning groups. Duties would include the monitoring of ongoing research needed for planning, environmental flows issues, processing of any amendments to the plan, and monitoring the implementation of new crop varieties and other improvements to the area's primary water user. Provision of funding to pursue the above activities will allow LRWPG to continue to perform a vital role as a focal point for communications with the various user groups concerning development of and amendments to the Plan.**

- **Removal  
or  
Changes  
Needed?**



- **Removal  
or  
Changes  
Needed?**

## 8.2.3 Inter-Regional Water Coordination

- **LRWPG recognizes the importance of inter-regional coordination efforts in order to maintain consistency among regional plans in situations where activities in one region may impact water availability or project needs in other regions. As population growth and other development activities increase over time for much of the state, multi-regional issues and the ability of regions to cooperatively use resources will be of increasing importance. The LRWPG supports the creation of the Interregional Planning Council established by House Bill 807 from the 86th Legislative Session.**



- **Removal  
or  
Changes  
Needed?**

## 8.2.4 Conservation Policy

- **LRWPG supports existing and continued efforts of agricultural producers to practice good stewardship of surface and groundwater resources of the state of Texas. The group recognizes the economic impact that a voluntary conservation effort has on the viability of agricultural operations on the area. The group also supports state and federally funded programs administered by NRCS, State Soil and Water Conservation Board, and local soil and water conservation districts. These programs provide technical and financial assistance to agricultural producers to install, manage, and maintain structural and vegetative measures for increased irrigation efficiency and overall water conservation. They are important in successfully implementing the regional water plan.**

# Discuss and Schedule Future Meeting Dates