



# Brazos G Regional Water Planning Group

Wayne Wilson - Chair

Presentation for:  
Milam and Burleson Counties  
Groundwater Summit

Caldwell, Texas  
August 14, 2019



# Presentation Overview

1. Overview of the Brazos G Regional Water Planning Group
2. Overview of the Brazos G Regional Water Planning Area
3. Regional Water Planning Process
4. Highlights of the Brazos G 2021 Plan



# **Overview of the Brazos G Regional Water Planning Group**



## **Region G RWPG**

The regional water plans provide for the orderly development, management, and conservation of water resources, and include drought preparation and response.

The goal of Region G planning process is to assure sufficient water will be available at a reasonable cost to ensure public health, safety and welfare, further economic development and protect agriculture and natural resources.





## **23 Voting Members representing 12 Interest groups:**

- 1 – Public
- 1 – Industries
- 1 – Environmental
- 1 – Small Business
- 1 – Electric Generating Utilities
- 1 – River Authorities
- 1 – Water Utilities
- 2 – Agriculture
- 2 – Water Districts
- 3 – Counties
- 4 – Municipalities
- 5 – Groundwater Management Areas

## **Non Voting Members:**

TWDB, TDA, TPWD, TSSWCB and adjacent Regional Water Planning Groups



## **Brazos G RWPG Members and Interests Groups:**

**Public** – Gary Newman

**Counties** – Gary Meyers, Scott Felton, David Blackburn

**Municipalities** – Kenny Weldon, Jim Briggs, Tommy O'Brien, Wiley Stem

**Agriculture** – Wayne Wilson, Dale Spurgin

**Industry** – Terrill Tomacek

**Environment** – Luci Dunn

**Small Business** – Gail Peek

**Electric Utilities/Power Generation** – Gary Spicer

**River Authorities** – David Collinsworth

**Water Districts** – Joe Cooper, Kelly Kinard

**Water Utilities** – Charles Beseda

**Groundwater Management Areas** – Mike McGuire, Zach Holland,  
Gary Westbrook, Dirk Aarons, Dale Adams

LLANO  
ESTACADO

KNOX

REGION B

Voting Members  
as of  
February, 2019

KENT

STONEWALL

HASKELL

THROCK-  
MORTON

YOUNG

FISHER

**A** Spurgin

STEPHENS

PALO PINTO

JONES

SHACKEL-  
FORD

Adams **G**

O'Brien **M D**

Kinard

Dunn **E**

NOLAN

TAYLOR

CALLAHAN

EASTLAND

ERATH

Weldon **M**

HOOD

SOMERVILLE

JOHNSON

**U** Spicer

REGION C

REGION F

COMANCHE

**D** Cooper

BOSQUE

HILL

**W** Beseda

HAMILTON

MCLENNAN

Collinsworth **R C**

Felton

LIMESTONE

REGION H

CORYELL

FALLS

**M** Stem

LAMPASAS

BELL

Peek **B G**

Aaron

ROBERTSON

**G** Westbrook

WILLIAMSON

MILAM

BRAZOS

Newman **P M**

Briggs

**I** Tomecek

**A** Wilson

GRIMES

LOWER  
COLORADO

LEE

BURLESON

**G** Holland

WASHINGTON

## CURRENT VOTING MEMBER INTERESTS REPRESENTED

- A** Agriculture
- B** Small Businesses
- C** Counties (2 vacancies)
- D** Water Districts
- E** Environmental
- G** Groundwater Management Areas
- I** Industries
- M** Municipalities
- P** Public
- R** River Authorities
- U** Electric Generating Utilities
- W** Water Utilities

Prepared by



## **Current Brazos G RWPG Officers:**

Wayne Wilson – Chair  
Agriculture – Brazos County

Gail Peek – Vice-Chair  
Small Business – Bell County

David Collinsworth – Secretary/Treasurer  
River Authorities – McLennan County

## **Administrator for Brazos G RWPG:**

Brazos River Authority  
Stephen Hamlin – Program Administrator

## **Lead Consulting Firm for Brazos G RWPG:**

HDR Engineering, Inc.





## How does Brazos G communicate?

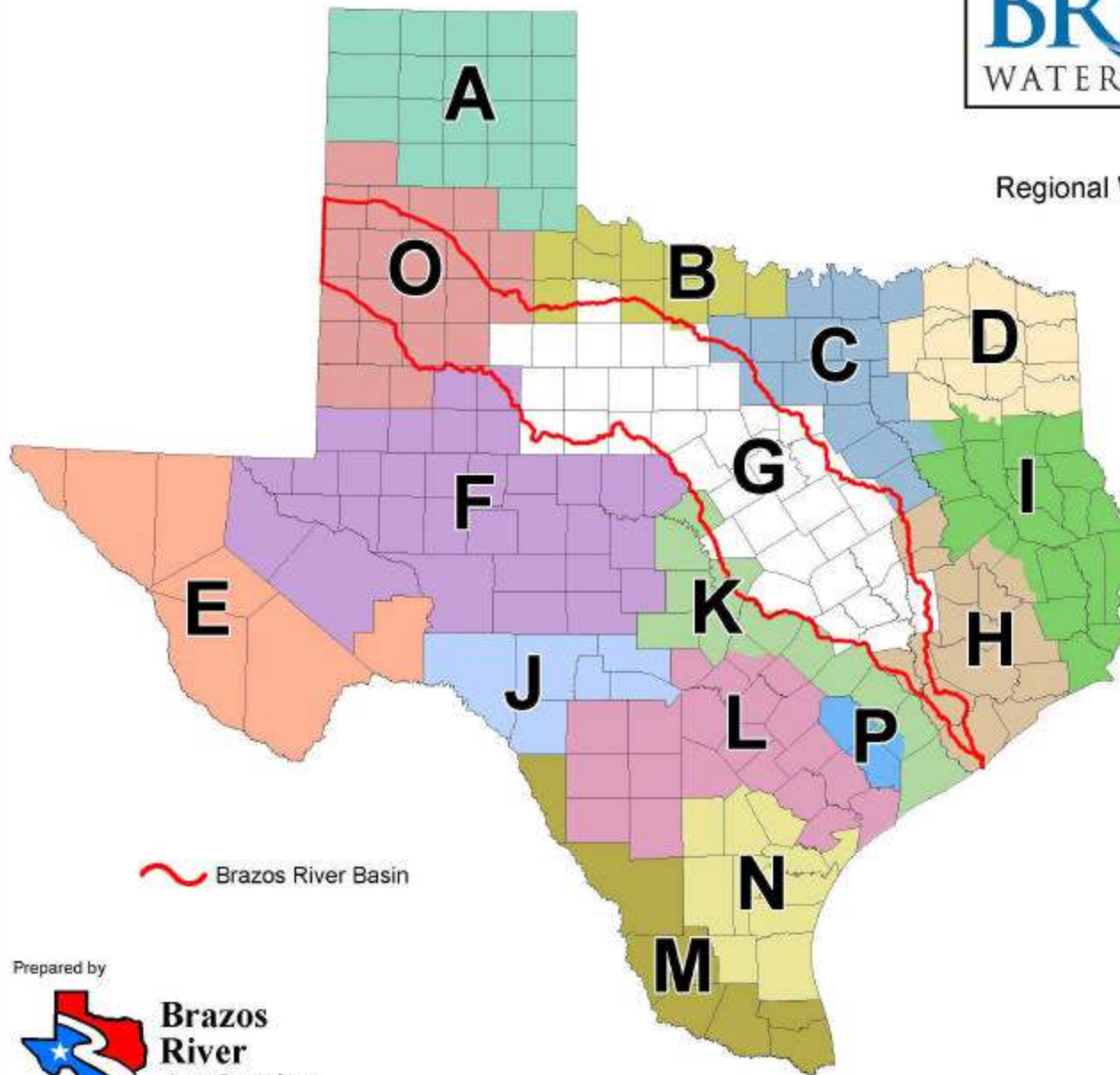
- Brazos G website: [www.brazosgwwater.org](http://www.brazosgwwater.org)
  - Posted meetings and planning information
  - Email contact widget
- Email list of interested parties
- Planning group meetings and required public hearings
- Surveys of Water User Groups and Wholesale Water Providers
- Public presentations when invited and time/funding allows
- Other public meetings to discuss major issues
- Phone calls/emails to & from us (members, BRA, consultants)
- Sub regional meetings






# Overview of the Brazos G Regional Water Planning Area

## Regional Water Planning Groups of Texas



- A** Panhandle
- B** Region B
- C** Region C
- D** North East Texas
- E** Far West Texas
- F** Region F
- G** Brazos G
- H** Region H
- I** East Texas
- J** Plateau
- K** Lower Colorado
- L** South Central Texas
- M** Rio Grande
- N** Coastal Bend
- O** Llano Estacado
- P** Lavaca

 Brazos River Basin

Prepared by



Administrative Agent for Brazos G RWPG

Source: Texas Water Development Board

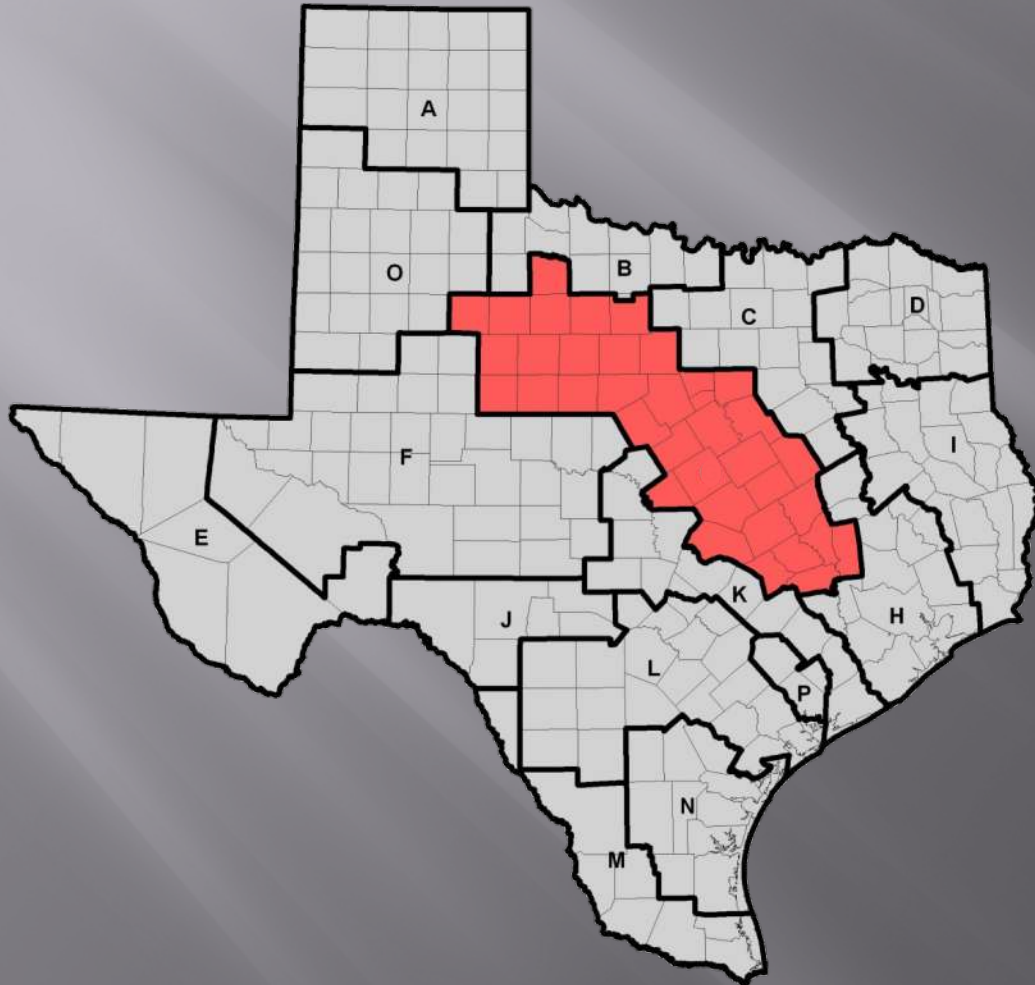
# BRAZOS G

WATER PLANNING GROUP



# BRAZOS G

WATER PLANNING GROUP



- 37 Counties
- 538 Water Users
  - 353 Municipal Groups
  - Other Uses (37 each)
    - Manufacturing
    - Steam Electric
    - Irrigation
    - Livestock
    - Mining
- 26 Wholesale Providers

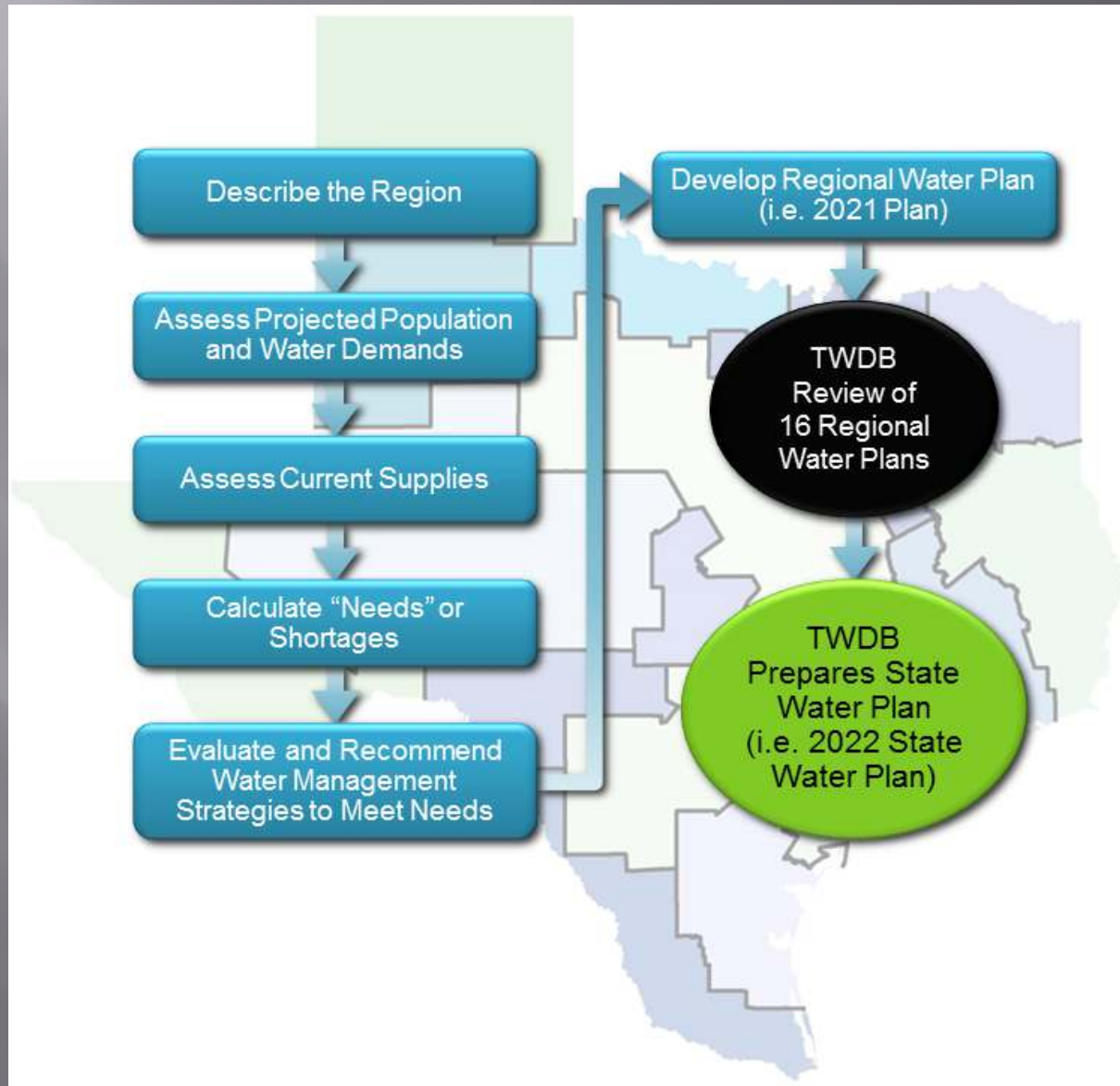




# Regional Water Planning Process



# Regional Water Planning Process





## **Why is the Regional Water Planning Process Important?**

### Funding

- TWDB (grants & loans) requires “consistency” with State and regional plans
- SWIFT funds require projects be in the Plan

### Permits

- TCEQ (water rights) requires “consistency” with State and regional plans
- Groundwater Conservation Districts – some districts require “consistency”

### Provides picture of the overall water supply situation for the State

- Education of the public
- Education and recommendations to the Legislature
- Dialogue regarding appropriate water supply strategies



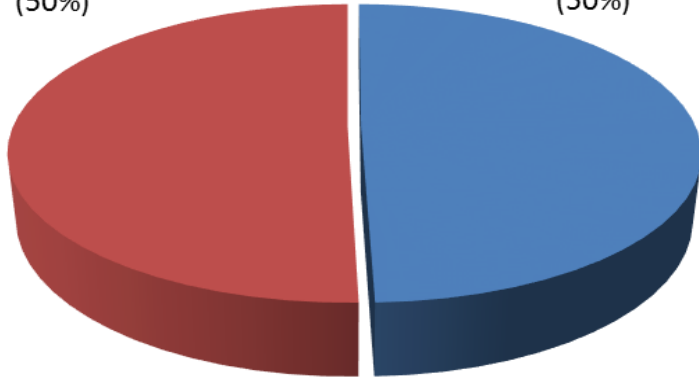
# Highlights of the Brazos G 2021 Plan

## Historical Water Use by Source

1980

Surface Water  
(50%)

Groundwater  
(50%)

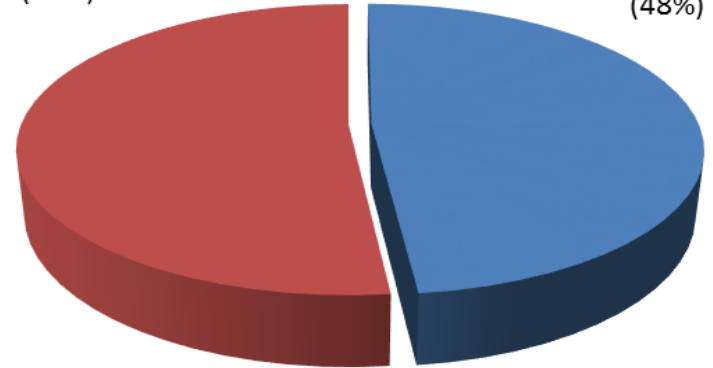


545,269 acft

1990

Surface Water  
(52%)

Groundwater  
(48%)

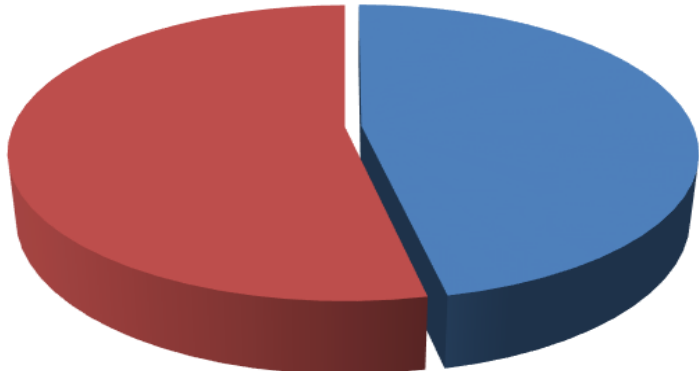


581,520 acft

2000

Surface Water  
(53%)

Groundwater  
(47%)

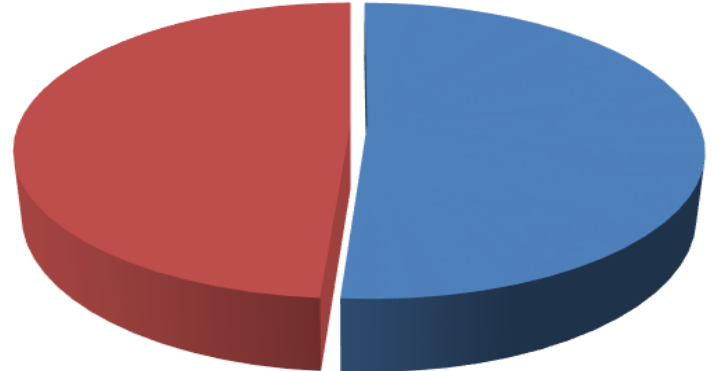


763,547 acft

2010

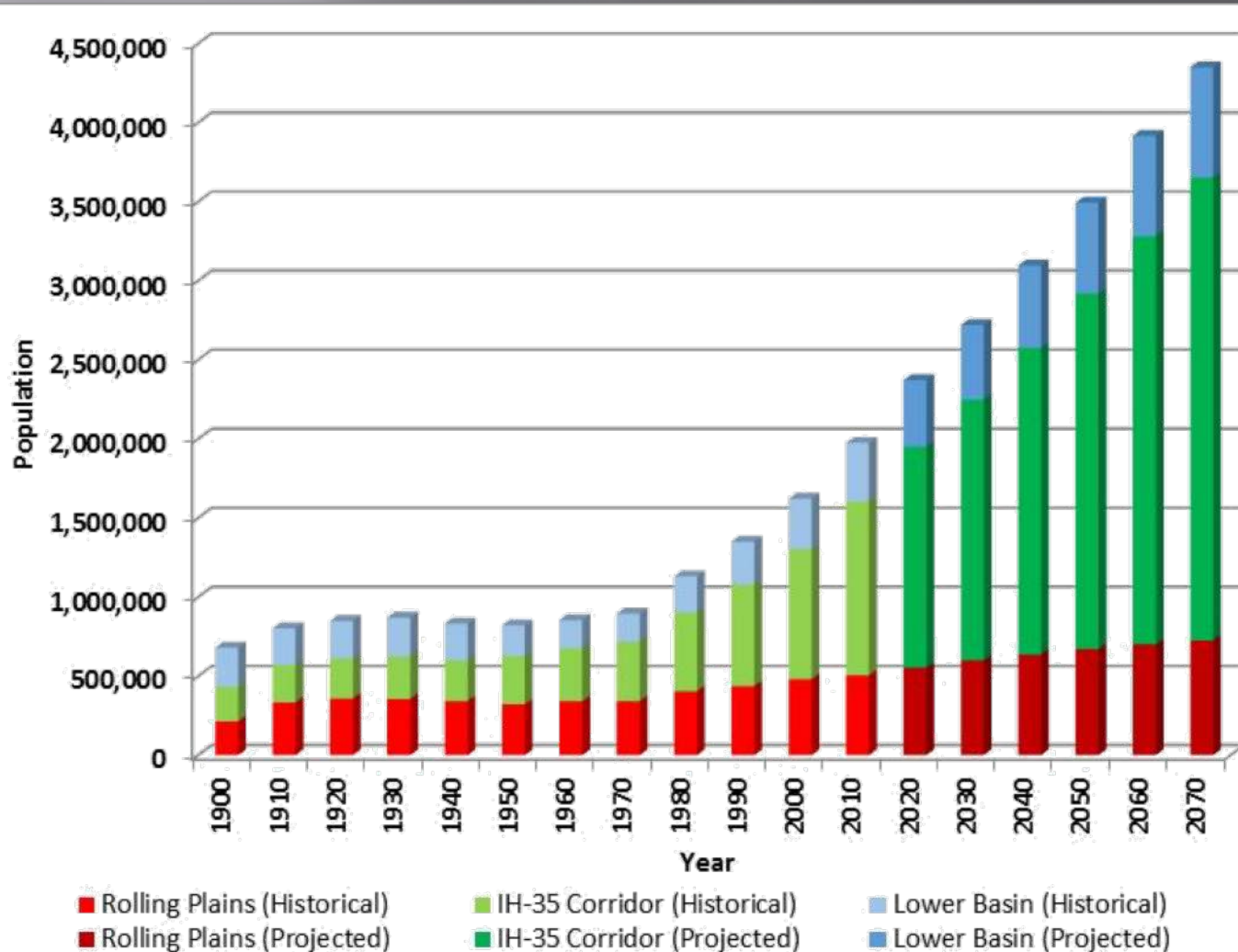
Surface Water  
(49%)

Groundwater  
(51%)



853,169 acft

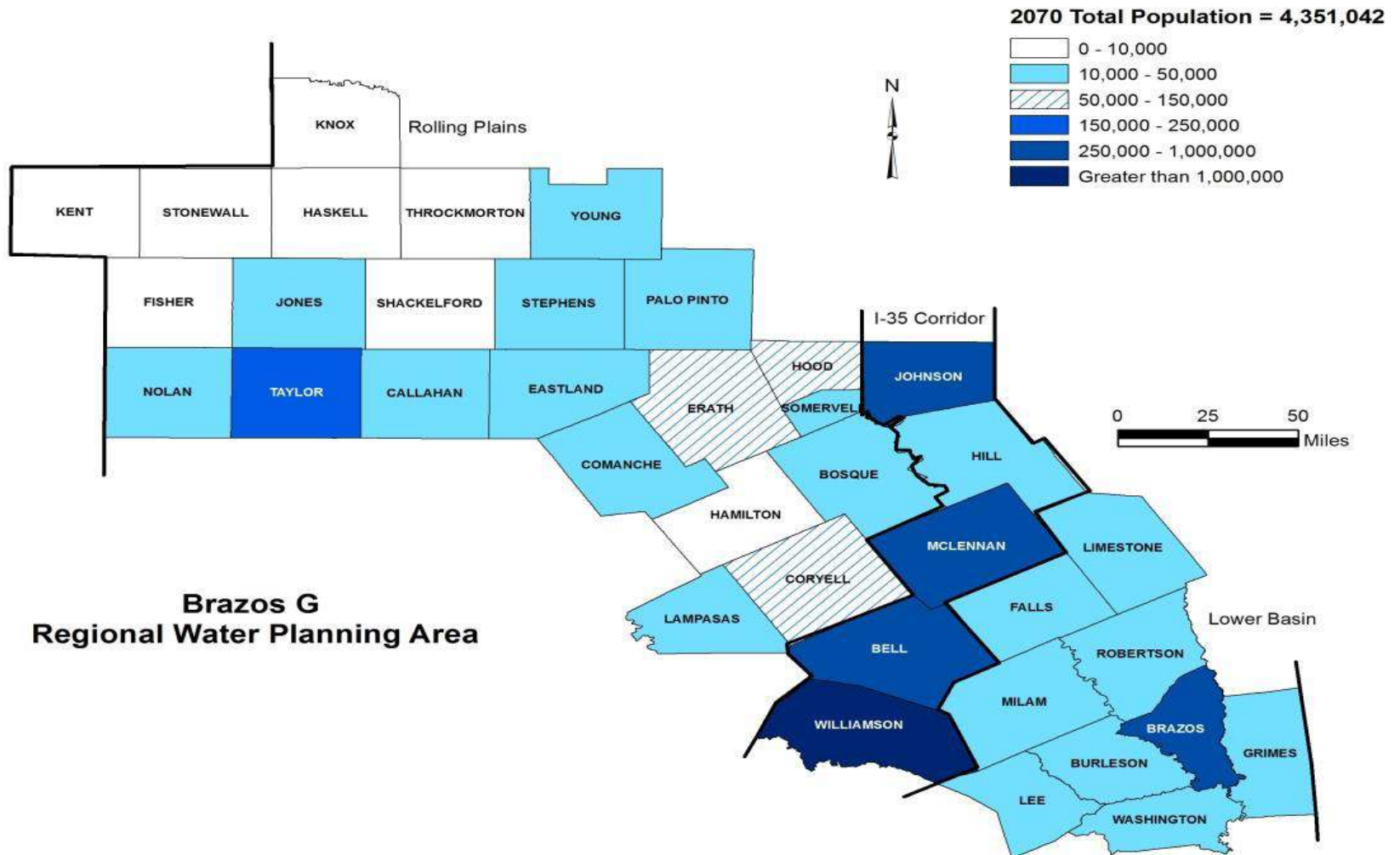
## Population Projected for the Brazos G Area



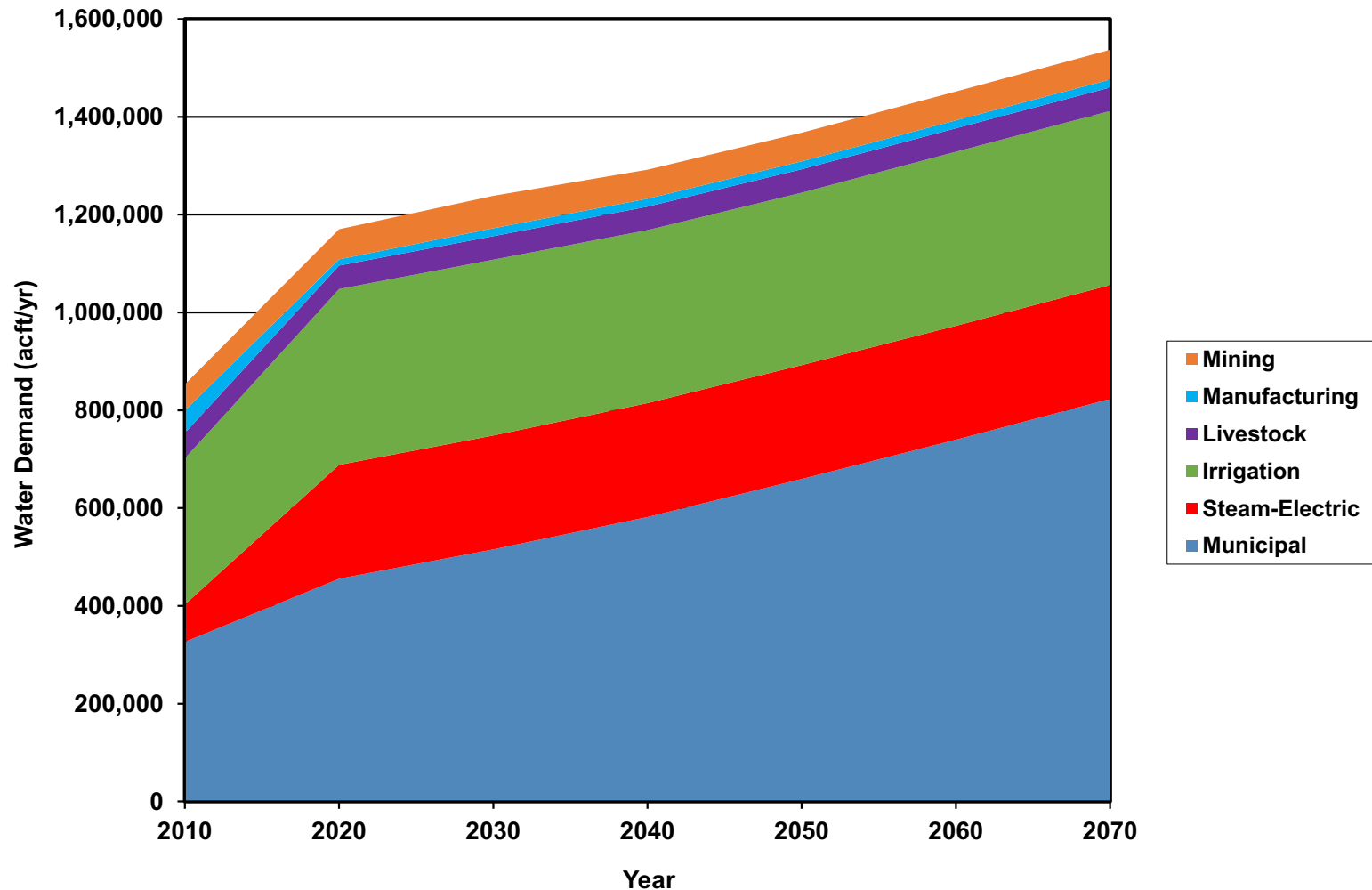


# BRAZOS G

## WATER PLANNING GROUP

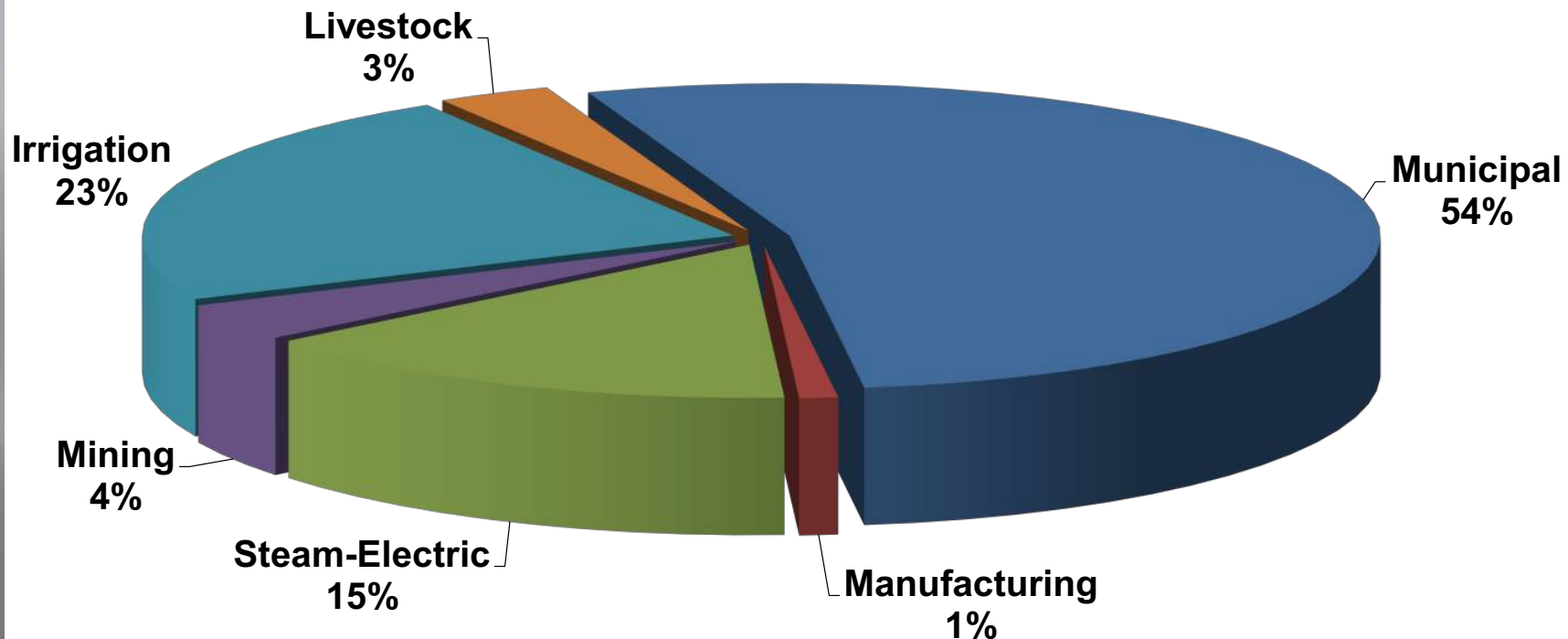


# Water Demands Projected for the Brazos G Area



**2070**

**Total Water Demand by Type of Use**





## Water Shortages Projected for the Brazos G Area

Surplus or (Shortage) = Supply – Demand

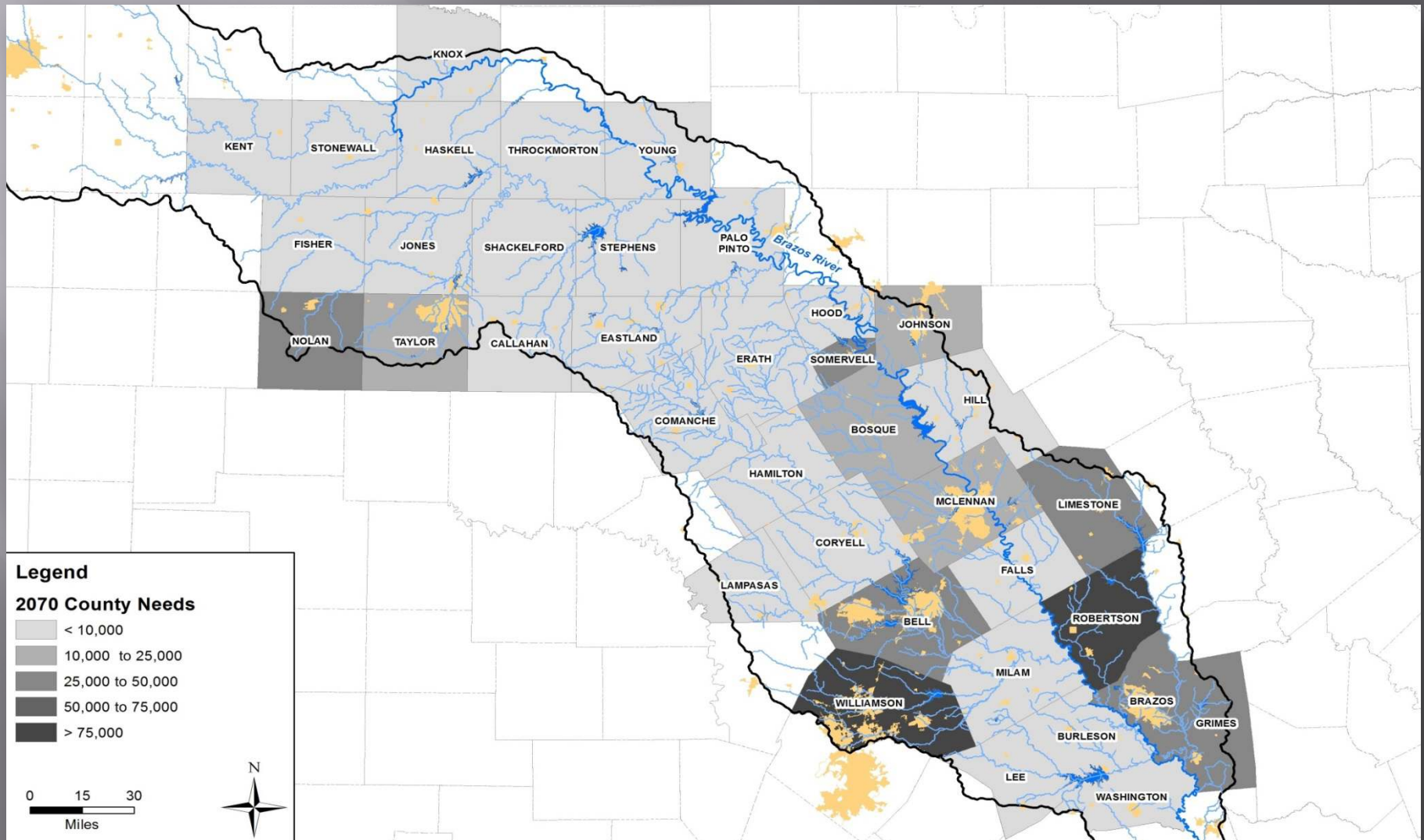
- ▣ Computed each decade for each WUG and WWP
- ▣ Assumes dry year demands and drought of record supplies
- ▣ Shortages caused by:
  - Growth in demand outstripping supply
  - Infrastructure limitations – treatment, well or pipeline capacity
  - MAG limiting groundwater supplies

Shortages in 2070 projected for:

- |                             |                          |
|-----------------------------|--------------------------|
| ○ 100 municipal WUGs        | ○ 21 counties Mining     |
| ○ 7 counties Manufacturing  | ○ 19 counties Irrigation |
| ○ 6 counties Steam-Electric | ○ 0 counties Livestock   |



## Projected Water Shortages (acre-feet/year)







## **Water Management Strategies Considered**

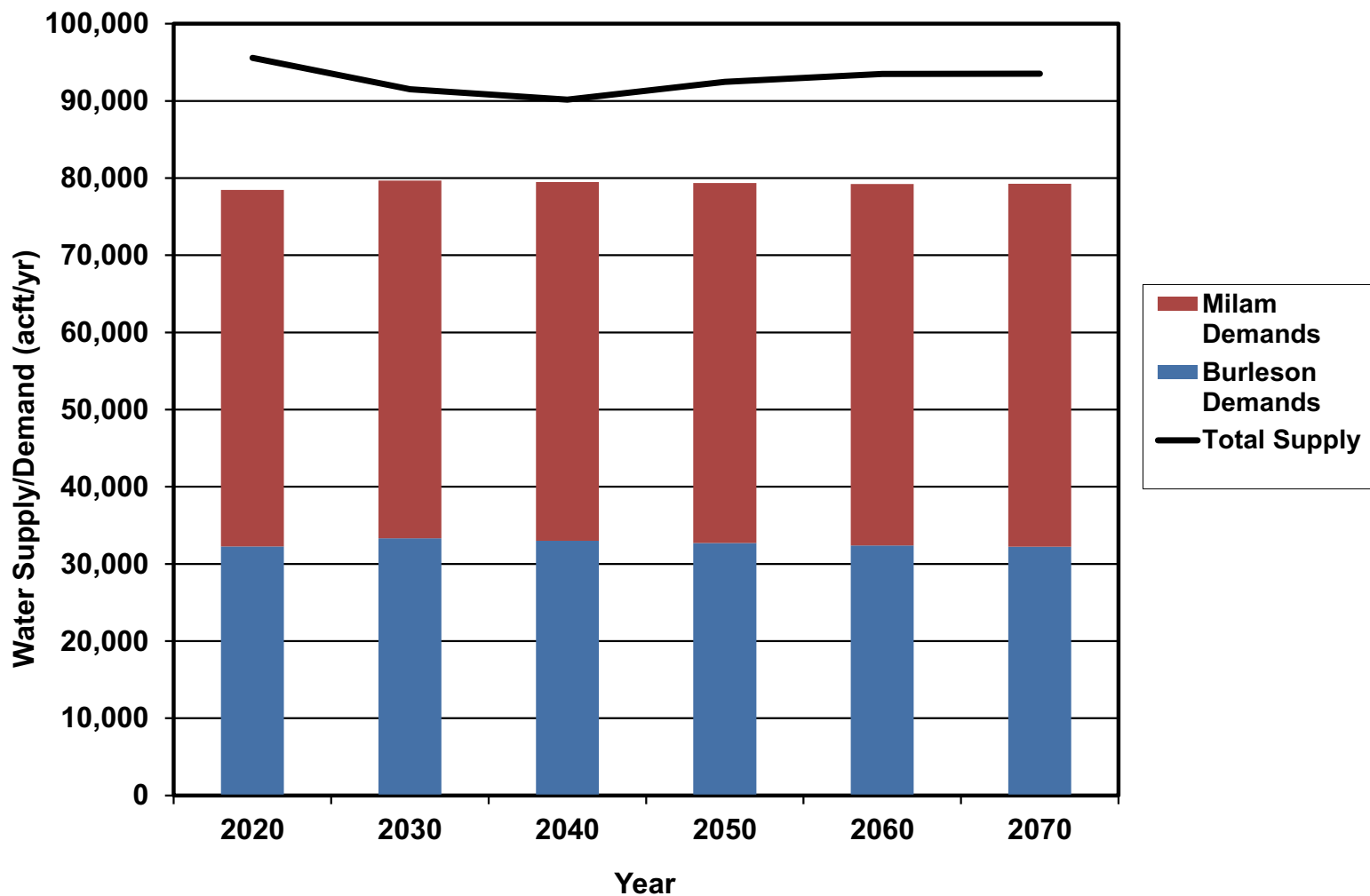
- Additional Conservation: 171 municipal WUGs
- Reuse
- Additional groundwater development (multiple aquifers)
- ASR:
  - McLennan County
  - College Station
  - Bryan
  - Lake Granger
  - Lake Georgetown
  - Johnson County
- Augmentation of Supplies
- SFWQC Chloride Control
- New Reservoirs:
  - Lake Creek Reservoir
  - Throckmorton Reservoir
  - Turkey Peak Reservoir
  - Brushy Creek Reservoir
  - Cedar Ridge Reservoir
  - South Bend Reservoir
  - Hamilton County Reservoir
  - Red River Off-Channel
  - Coryell County Off-Channel
  - Groesbeck Off-Channel
  - Brazos Main Stem Off-Channel
- Supplies from BRA System Operations Permit



## Water Demands for Burleson and Milam Counties (acft/yr)

Category	2020	2030	2040	2050	2060	2070
<b>Burleson County</b>						
IRRIGATION	26,804	26,804	26,804	26,804	26,804	26,804
LIVESTOCK	1,390	1,390	1,390	1,390	1,390	1,390
MANUFACTURING	117	117	117	117	117	117
MINING	995	1,923	1,512	1,100	686	428
MUNICIPAL	2,959	3,081	3,187	3,293	3,394	3,483
<b>Burleson County Total</b>	<b>32,265</b>	<b>33,315</b>	<b>33,010</b>	<b>32,704</b>	<b>32,391</b>	<b>32,222</b>
<b>Milam County</b>						
IRRIGATION	6,502	6,502	6,502	6,502	6,502	6,502
LIVESTOCK	2,761	2,761	2,761	2,761	2,761	2,761
MANUFACTURING	12	13	13	13	13	13
MINING	14	14	14	14	14	14
MUNICIPAL	4,664	4,822	4,923	5,116	5,307	5,495
STEAM ELECTRIC POWER	32,254	32,254	32,254	32,254	32,254	32,254
<b>Milam County Total</b>	<b>46,207</b>	<b>46,366</b>	<b>46,467</b>	<b>46,660</b>	<b>46,851</b>	<b>47,039</b>

## Water Demands/Supplies for Burleson and Milam Counties





[WWW.BRAZOSGWATER.ORG](http://WWW.BRAZOSGWATER.ORG)

Brazos River Authority  
4600 Cobbs Drive  
Waco, Texas 76710