

There are no water issues in Bell County ... and other bedtime stories

19th Annual Bell County Water Symposium

November 6, 2019

David Blackburn, Bell County Judge



Brief Bio

- David Blackburn
 - Former City Manager for Killeen and Temple
 - Former CEO for Temple Economic Development Corp
 - Have served on Killeen-Temple Metropolitan Planning Organization over a span of 3 decades
 - Have served on the Region G Water Planning Group in 2 different decades
 - Currently Bell County Judge ... for the past 10 months and 6 days



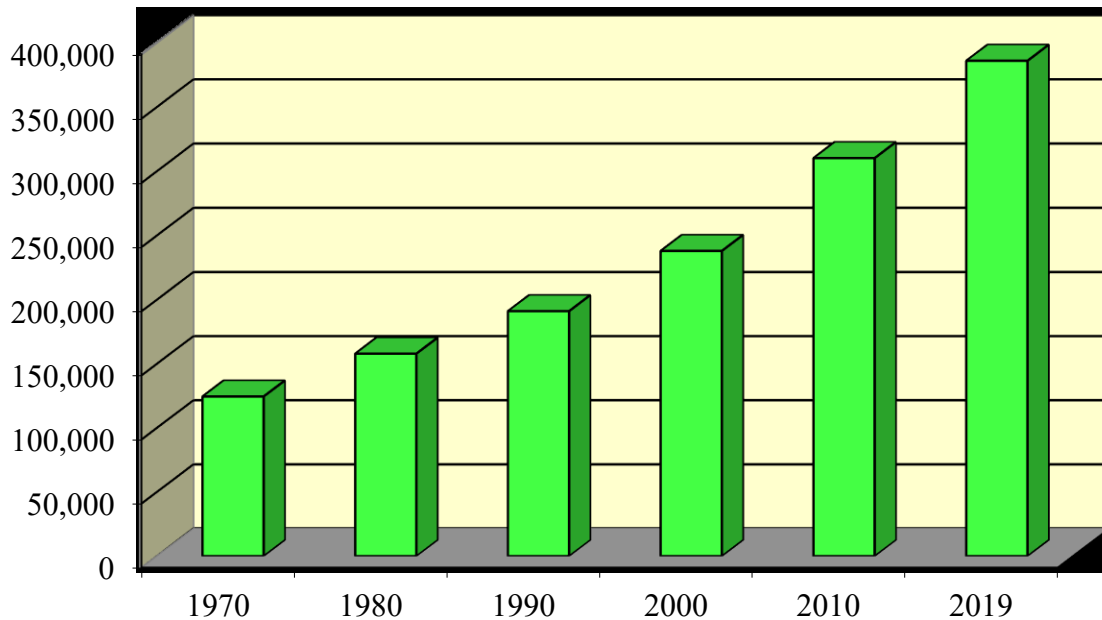
What does the County Judge have to do with water ?

- The County doesn't own any water rights
- The County isn't a purveyor of water
- The County isn't the holder of any CCN's
- But, the County does have 151 'documented' salamanders ...
(we're working on a wall to keep the undocumented ones out of the County...)



Seriously ...

Bell County Population



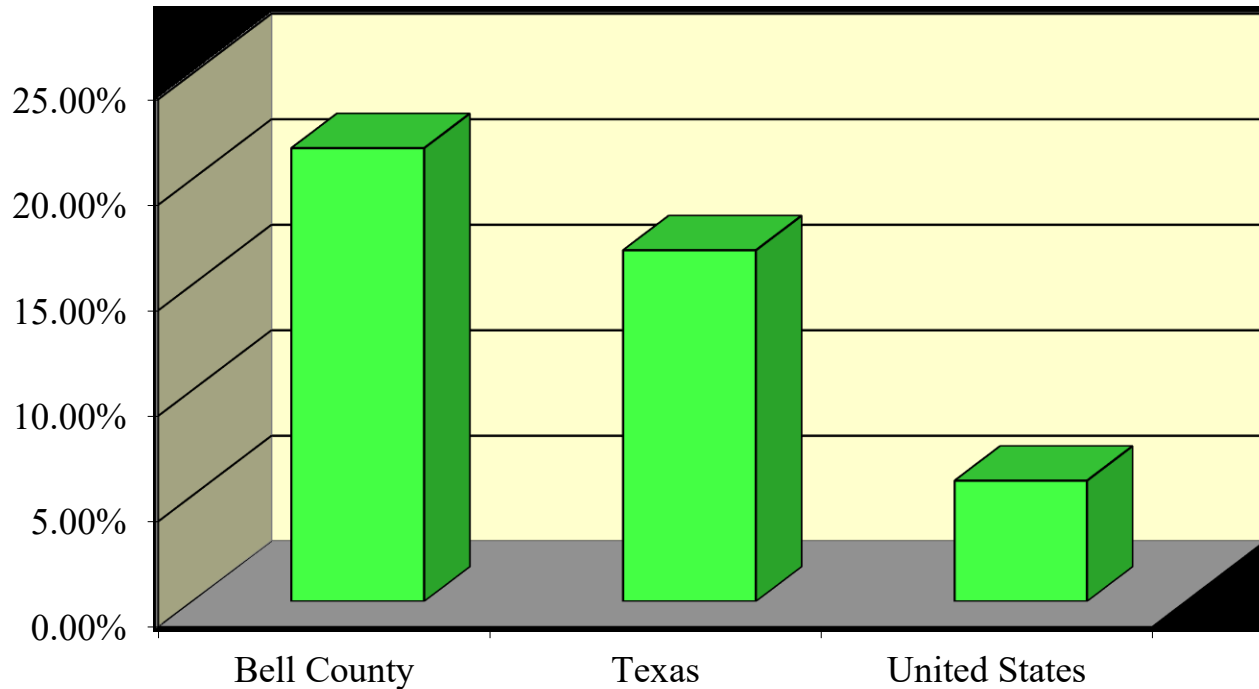
Bell County Actual Population

- 1960 - 94,097
- 1970 - 124,483
- 1980 - 157,889
- 1990 - 191,073
- 2000 - 237,974
- 2010 - 310,235
- 2019 - 386,014*

*Texas Dept. of State Health Services



2011-2019 Growth Rates



1990-2000 Growth Rates

- Bell County - 24.5%
- Texas – 22.8%
- United States - 13.1%

2000-2010 Growth Rates

- Bell County – 30.4%
- Texas – 20.6%
- United States – 9.7%

2011-2019 Growth Rates

- Bell County – 21.5%
- Texas – 16.6%
- United States – 5.7%

- Double digit growth every decade for the past 3 decades
- Approaching 400,000 people in Bell County
- People need (and want) a lot of things
 - Public safety
 - Roads and highways
 - Shopping
 - Parks & Recreation
- But, none of these things matter if we don't have one thing ...
water
- If growth is to continue , even if we are only to sustain where we already are, water is , bottom line, ***essential***

- Growing population ...
- Increasing demand for water ...
- Two fairly obvious observations ...
- And , the obvious is what County Judge's specialize in ... 😊

State Water Planning

- In response to statewide drought of record (1950-1957), the Texas Legislature passed the Water Planning Act of 1957
 - Established a state water planning process
 - Established the Texas Water Development Board (TWDB)
- Following intense drought conditions in the mid-1990s, Texas Legislature passed Senate Bill 1 in 1997
 - Established the current regional/state water planning process
 - Created 16 Regional Water Planning Areas/Groups
 - Emphasized extensive stakeholder input
 - Five year planning cycle culminating in the State Water Plan



2017

Texas State Water Plan by the Texas Water Development Board



ABOUT

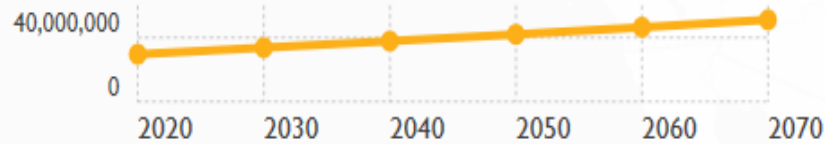
View data for

All of Texas

GO

TEXAS

Population



SHOW DATA TABLE

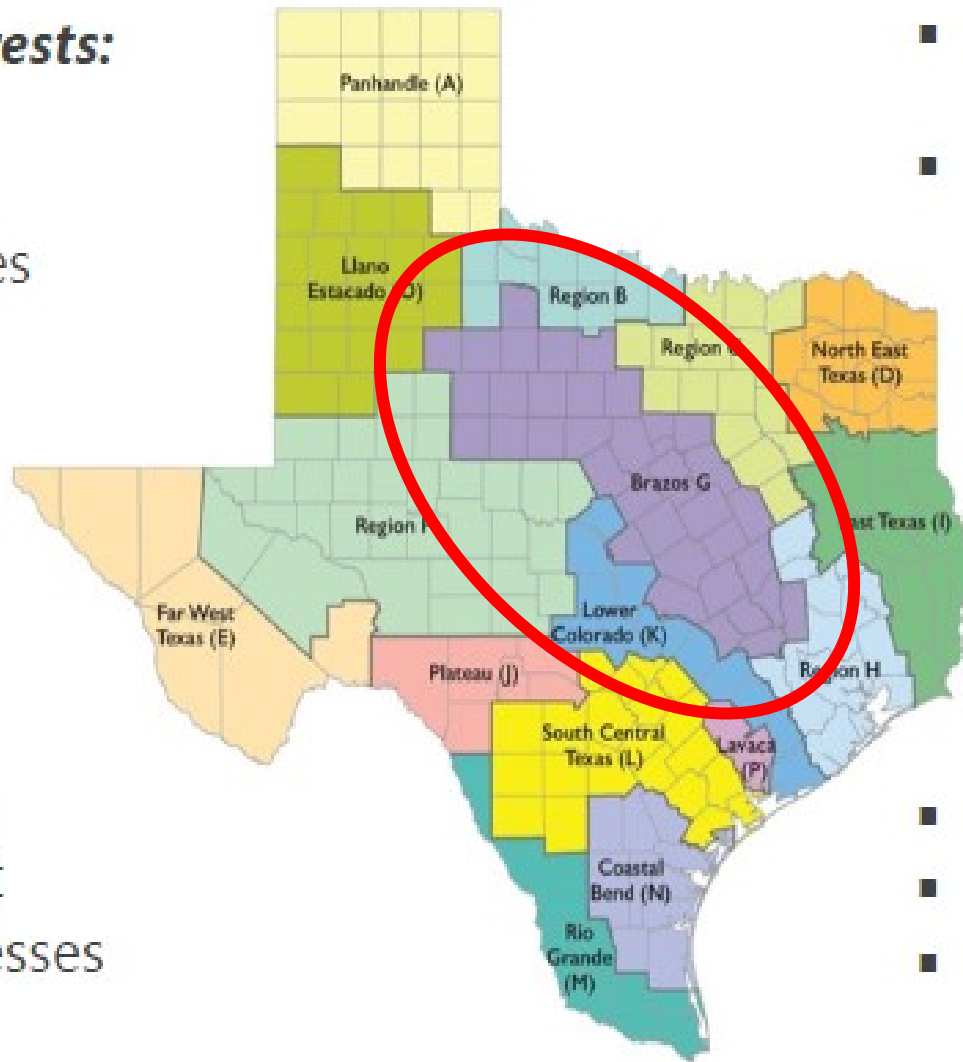
Region A
Region O
Region B
Region C
Region D
Region E
Region F
Region G
Region H
Region I
Region J
Region K
Region L
Region M
Region N
Region P



Voting Member Categories

Statutory interests:

- Public
 - Counties
 - Municipalities
-
- Industries
 - Agriculture
 - Environment
 - Small businesses



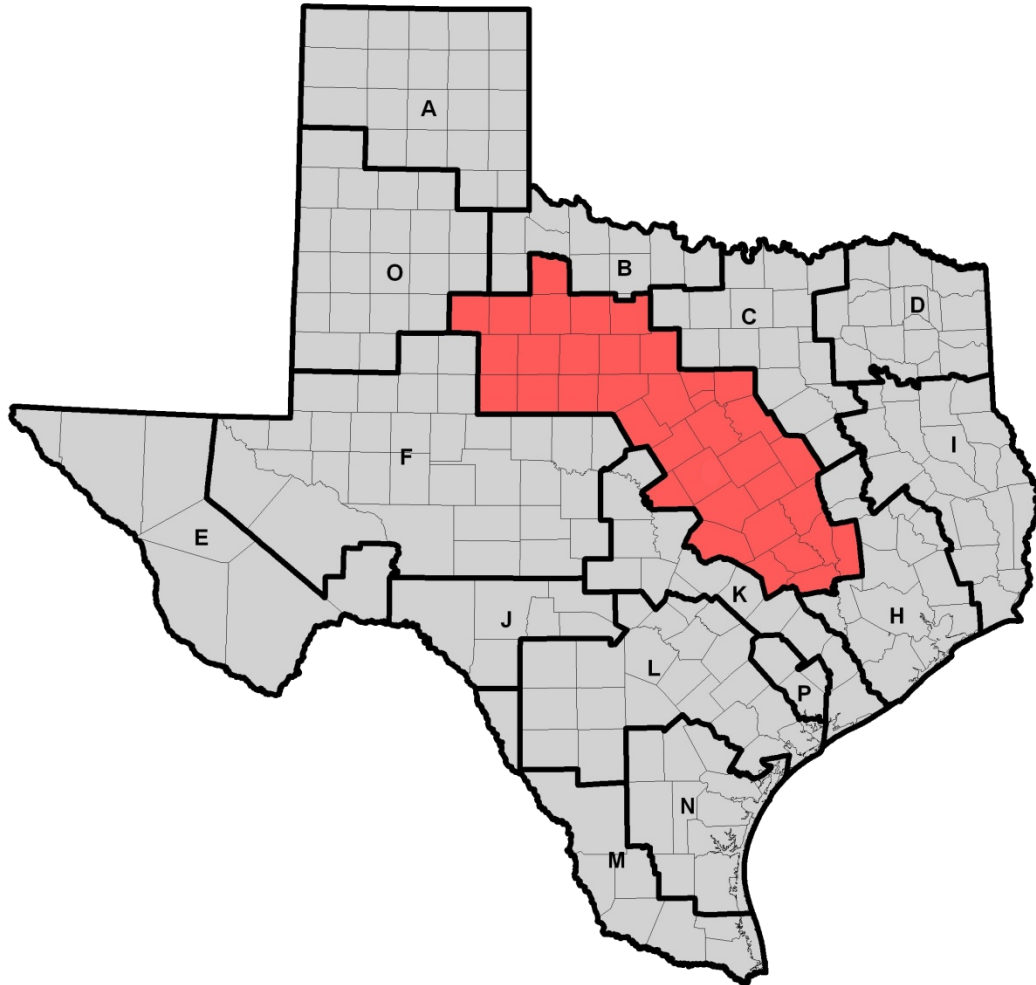
- Electric-generating utilities
- River authorities

- Water districts
- Water utilities
- Groundwater management areas (varies by region)

There are approximately 370 voting members in the 16 groups

Region G RWPG Composition

23 Voting Members representing 2,300,000 people:



37 Counties

538 Water Users

- **353 Municipal Groups**

- **Other Uses (37 each)**

- **Manufacturing**

- **Steam Electric**

- **Irrigation**

- **Livestock**

- **Mining**

26 Wholesale Providers

LLANO
ESTACADO

KNOX

REGION B

Voting Members
as of
March, 2019

KENT

C

Myers

THROCK-
MORTON

YOUNG

STONEWALL

HASKELL

FISHER

A

Spurgin

STEPHENS

PALO PINTO

JONES

SHACKEL-
FORD

Adams

G

O'Brien

M

D

Kinard

EASTLAND

ERATH

HOOD

U

Spicer

JOHNSON

NOLAN

Dunn

E

CALLAHAN

COMANCHE

Weldon

M

Cooper

SOMERVELL

HILL

BOSQUE

W

Beseda

REGION F

HAMILTON

CORYELL

MCLENNAN

Collinsworth

R

C

Felton

LIMESTONE

M

Stem

LAMPASAS

Peek

B

Blackburn

C

C

Aaron

FALLS

ROBERTSON

G

Westbrook

BELL

MILAM

BRAZOS

A

Wilson

WILLIAMSON

M

Briggs

I

Tomecek

GRIMES

LOWER
COLORADO

Newman

P

BURLESON

G

Holland

LEE

WASHINGTON

CURRENT VOTING MEMBER INTERESTS REPRESENTED

- A** Agriculture
- B** Small Businesses
- C** Counties
- 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

2017 State Water Plan



www.twdb.texas.gov/waterplanning/swp/

2017

Texas State Water Plan by the Texas Water Development Board



A

View data for

County

Select County

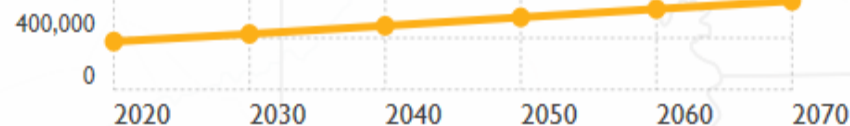


GO

Bell County

County in Region G

Population



[SHOW DATA TABLE](#)

Coryell

Lampasas

Bell

Burnet

Mason

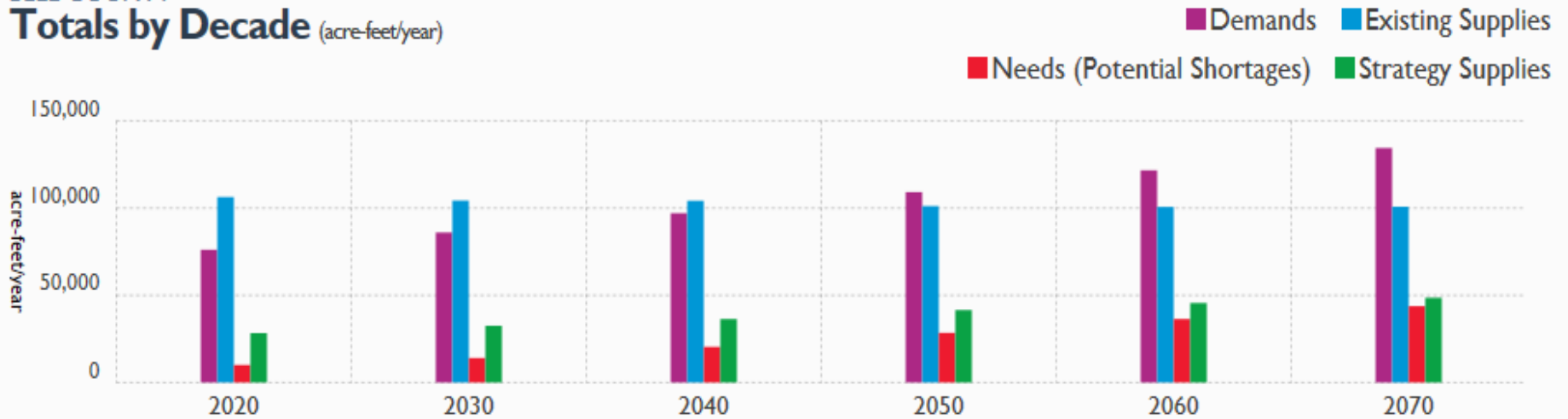
Llano

Williamson



BELL COUNTY

Totals by Decade (acre-feet/year)




	2020	2030	2040	2050	2060	2070
<u>Demands</u>	76,075	85,958	97,041	109,131	121,622	134,411
<u>Existing Supplies</u>	106,292	104,280	104,163	101,123	100,628	100,749
<u>Needs (Potential Shortages)</u>	10,026	14,028	20,414	28,469	36,383	43,762
<u>Strategy Supplies</u>	28,330	32,532	36,370	41,534	45,563	48,594



BELL COUNTY

Demands by Usage Type (acre-feet/year)

 Irrigation  Municipal  Manufacturing

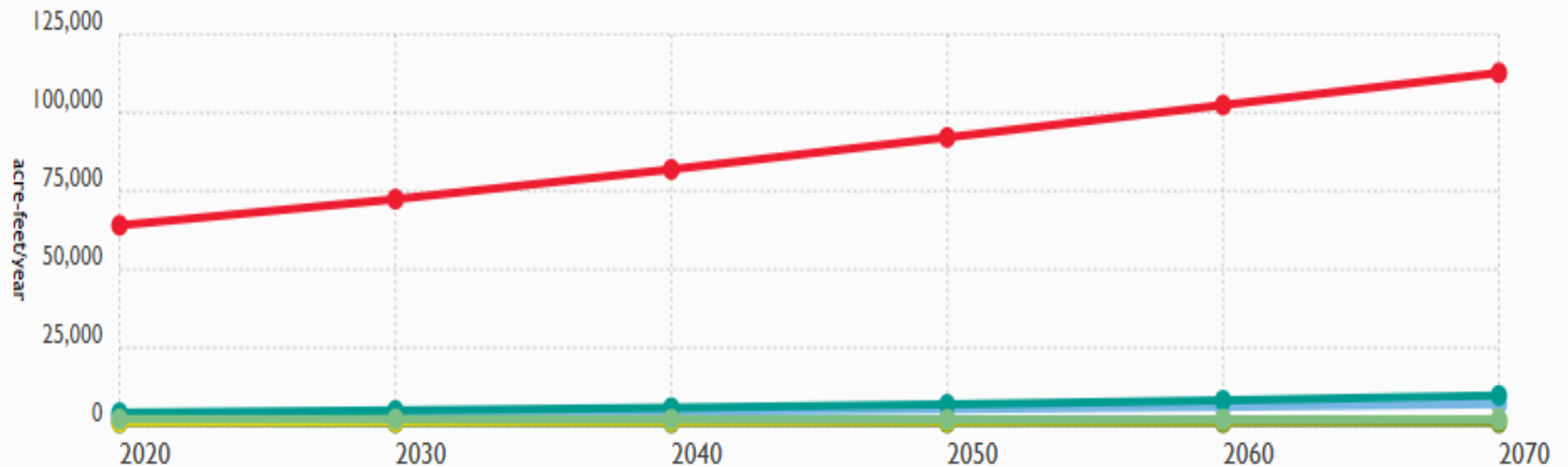
 Steam Electric Power  Livestock  Mining

DEMANDS

EXISTING SUPPLIES

NEEDS (POTENTIAL SHORTAGES)

STRATEGY SUPPLIES

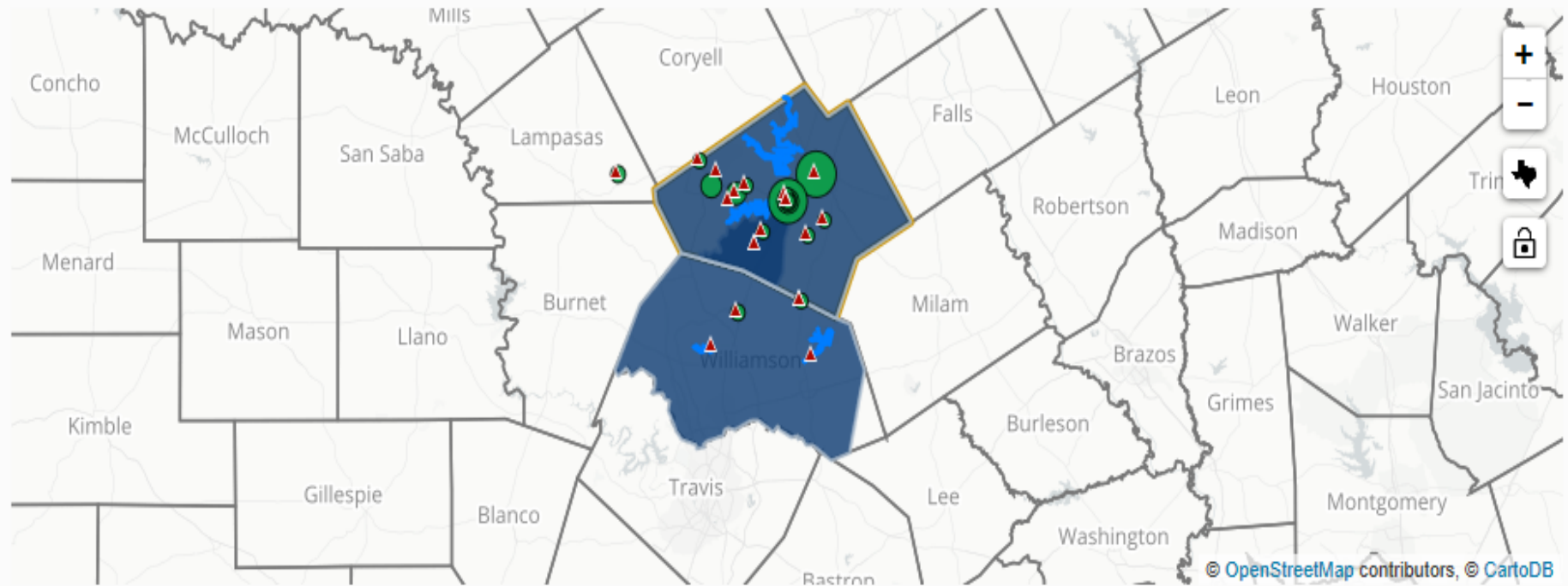


[SHOW DATA TABLE](#)



BELL COUNTY

Water User Groups - 2020 - Strategy Supplies (acre-feet/year)

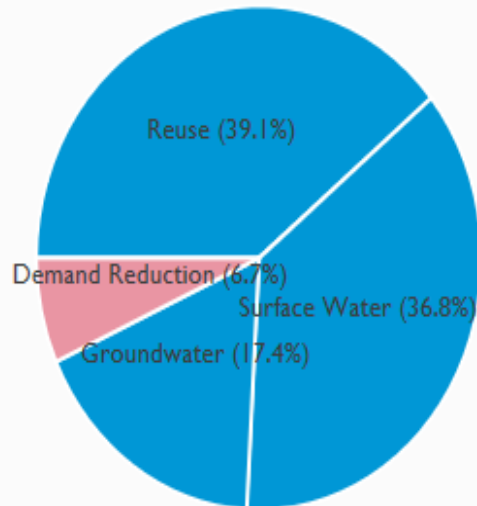


Each water user group is mapped to a single point near its primary location; therefore, an entity with a large or multiple service areas may be displayed outside the specific area being queried. Red triangles indicate capital projects associated with strategy supplies that have been assigned to a Water User Group. [Hide Projects](#)



Strategy Supplies Breakdown - 2020 (acre-feet/year)

Share by Water Resource



Share by Strategy Type

Strategy Type	Amount ▼
<u>OTHER DIRECT REUSE</u>	39.1% (11,080)
<u>OTHER SURFACE WATER</u>	20% (5,671)
<u>GROUNDWATER WELLS & OTHER</u>	17.4% (4,921)
<u>AQUIFER STORAGE & RECOVERY</u>	16.8% (4,761)
<u>MUNICIPAL CONSERVATION</u>	6% (1,693)
<u>OTHER CONSERVATION</u>	0.5% (138)
<u>IRRIGATION CONSERVATION</u>	0.2% (66)



2017

Texas State Water Plan by the Texas Water Development Board



AB

View data for

County

Select County

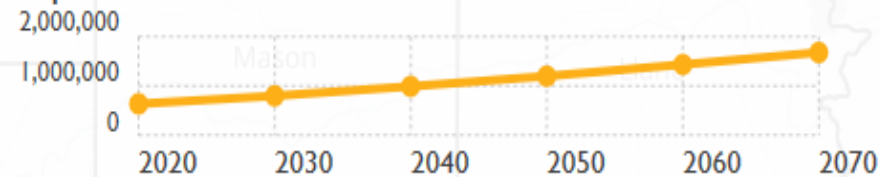


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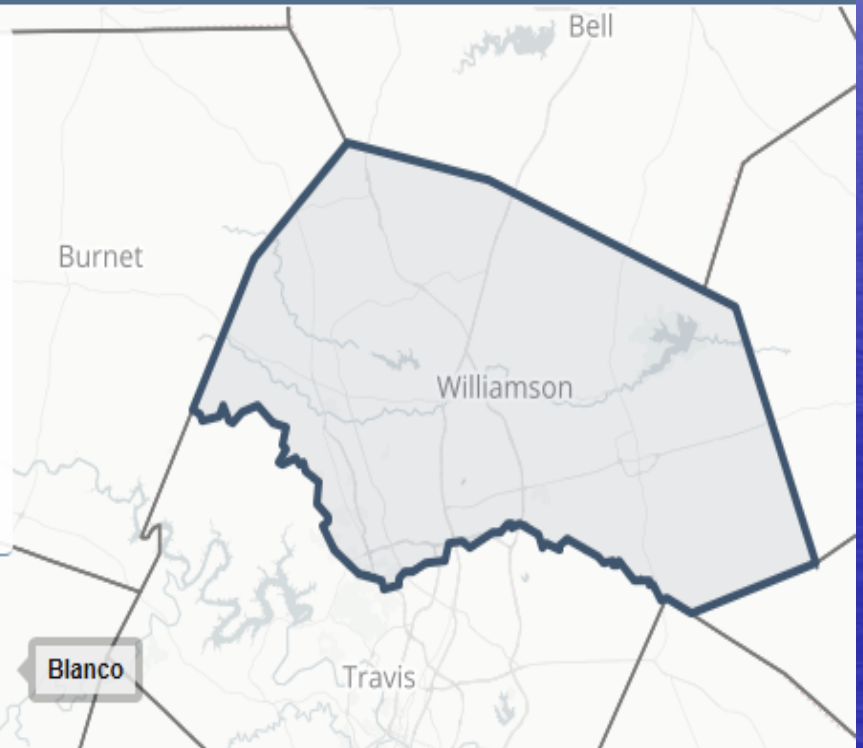
Williamson County

County in Region G and Region K

Population

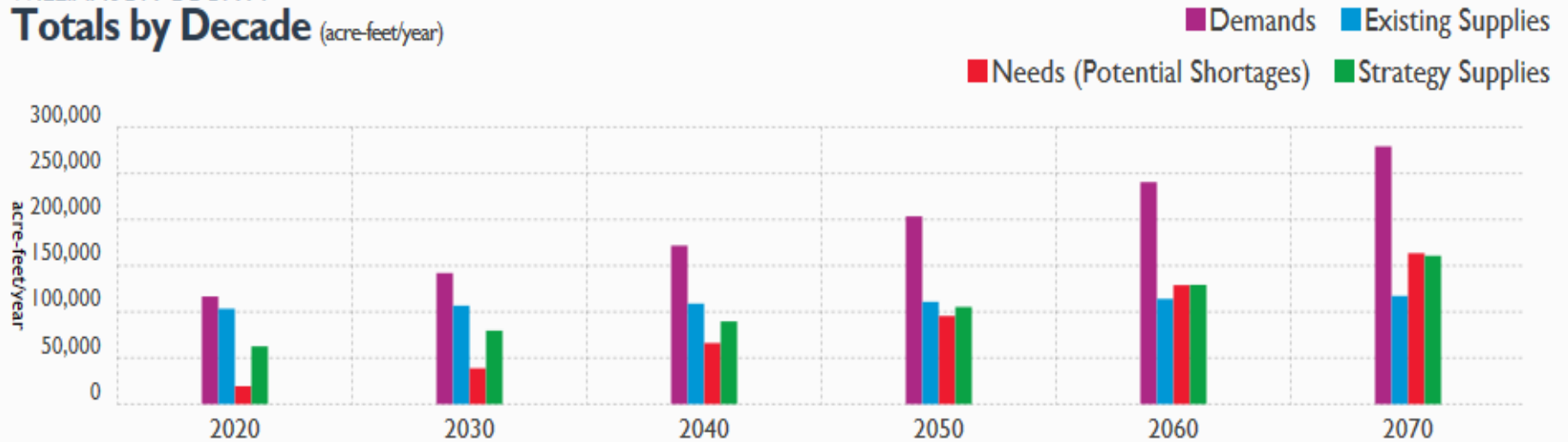


[SHOW DATA TABLE](#)



WILLIAMSON COUNTY

Totals by Decade (acre-feet/year)

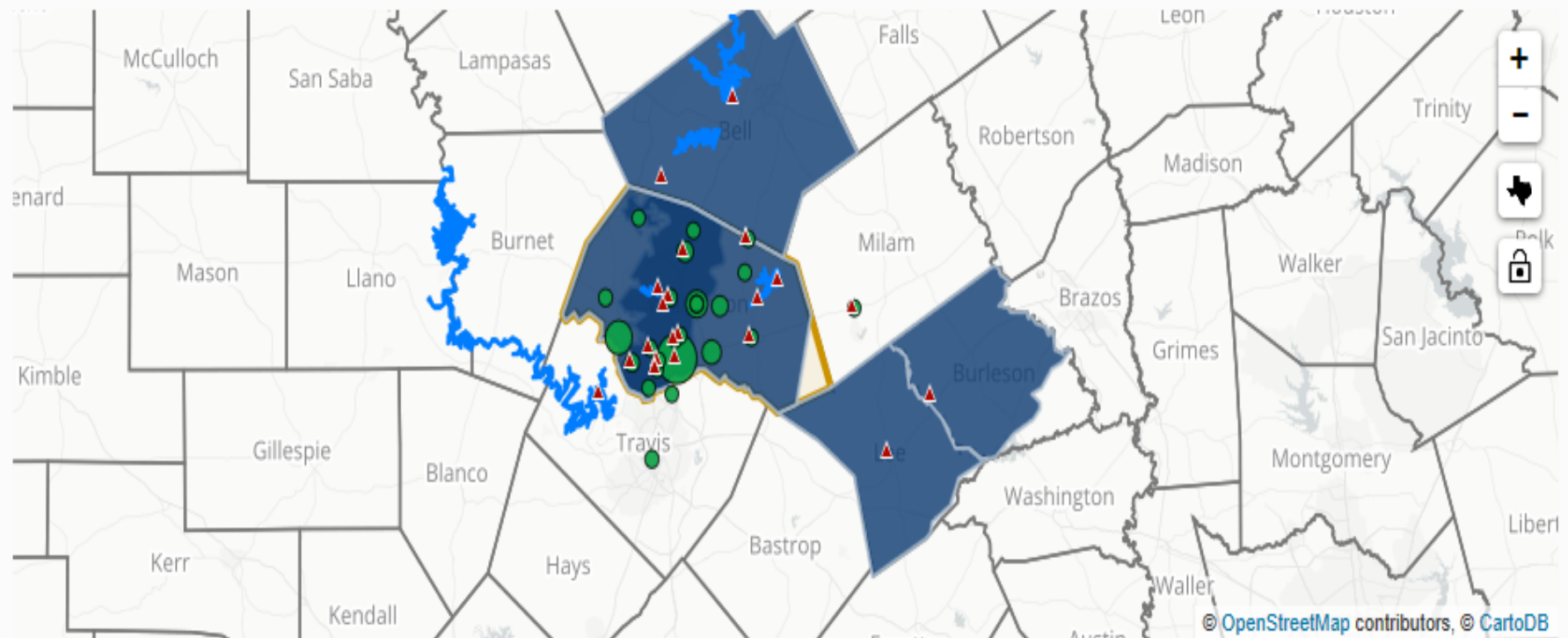


	2020	2030	2040	2050	2060	2070
<u>Demands</u>	116,603	141,949	171,703	203,306	240,376	279,040
<u>Existing Supplies</u>	103,307	106,653	108,881	110,806	113,995	117,193
<u>Needs (Potential Shortages)</u>	19,421	38,847	66,131	95,500	128,842	163,432
<u>Strategy Supplies</u>	62,563	79,614	89,602	105,240	129,175	160,638



WILLIAMSON COUNTY

Water User Groups - 2020 - Strategy Supplies (acre-feet/year)



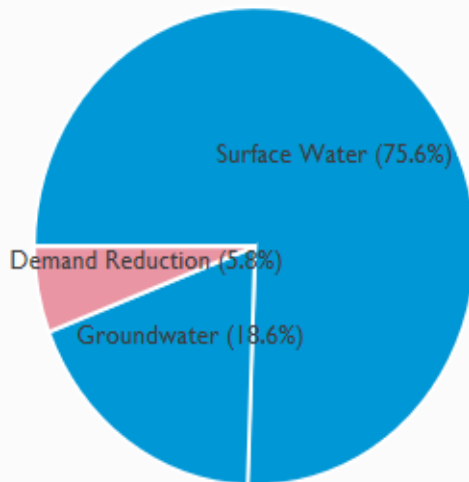
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Red triangles indicate capital projects associated with strategy supplies that have been assigned to a Water User Group. [Hide Projects](#)



Strategy Supplies Breakdown - 2020 (acre-feet/year)

Share by Water Resource



Share by Strategy Type

Strategy Type	Amount ▼
<u>OTHER SURFACE WATER</u>	70.8% (44,289)
<u>GROUNDWATER WELLS & OTHER</u>	18.6% (11,659)
<u>AQUIFER STORAGE & RECOVERY</u>	4.8% (3,000)
<u>MUNICIPAL CONSERVATION</u>	4% (2,492)
<u>DROUGHT MANAGEMENT</u>	1.4% (892)
<u>OTHER CONSERVATION</u>	0.4% (226)
<u>IRRIGATION</u>	0% (5)
<u>CONSERVATION</u>	0% (5)
<u>NEW MAJOR RESERVOIR</u>	0% (0)



Water Demands Projected for Williamson County (acft/yr)

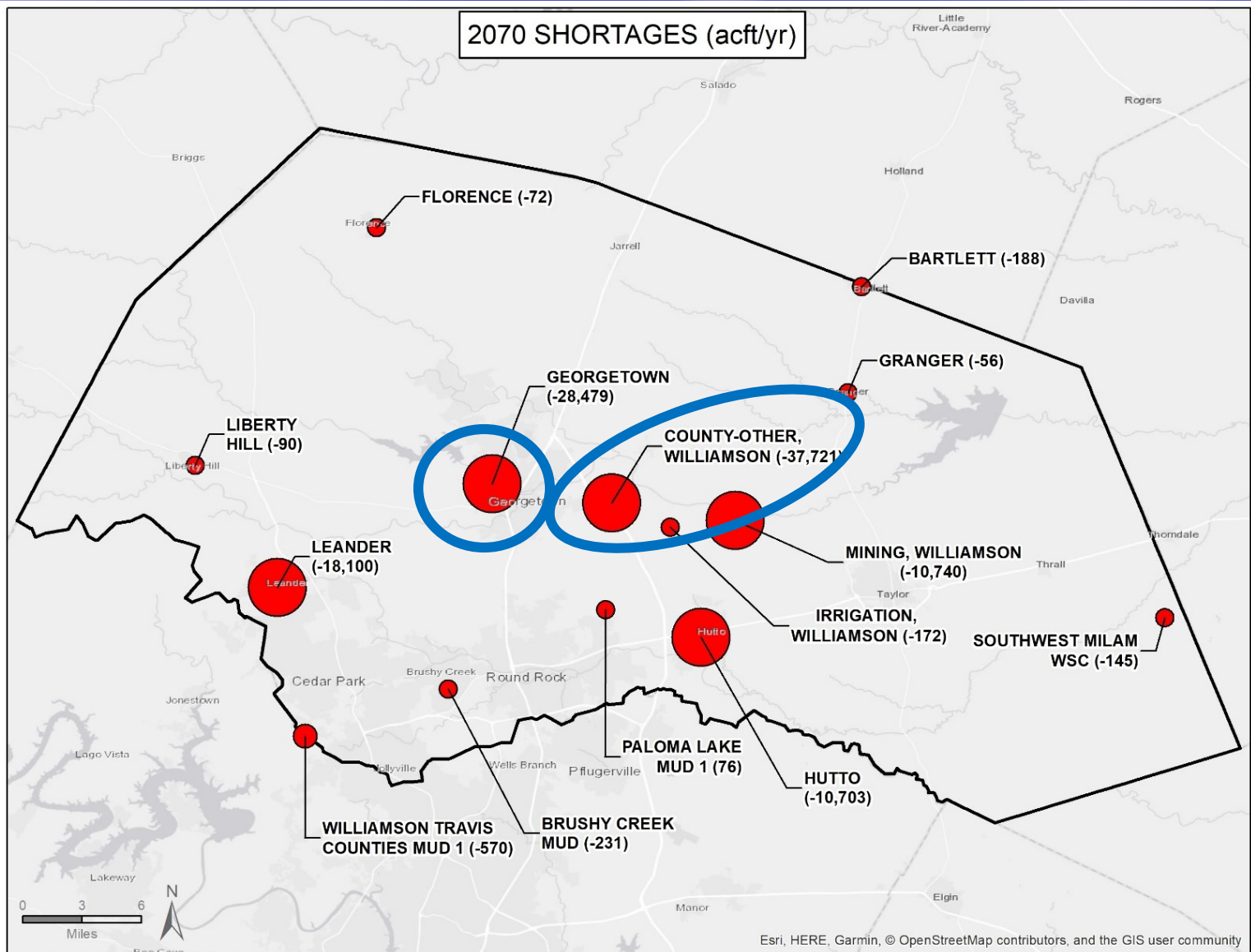
	2020	2030	2040	2050	2060	2070
Irrigation	333	333	333	333	333	333
Livestock	1,656	1,656	1,656	1,656	1,656	1,656
Manufacturing	812	963	963	963	963	963
Mining	5,163	6,247	7,364	8,555	9,782	11,186
Municipal	97,248	116,255	140,979	170,240	207,123	244,045
Total Demands	105,212	125,454	151,295	181,747	219,857	258,183

Water Shortages Projected for Williamson County (acft/yr)

	2020	2030	2040	2050	2060	2070
BARTLETT	(100)	(99)	(102)	(117)	(134)	(151)
BRUSHY CREEK MUD	(187)	(206)	(191)	(193)	(210)	(231)
FLORENCE	(35)	(38)	(42)	(50)	(59)	(72)
GEORGETOWN	(7,633)	(13,300)	(17,878)	(23,128)	(32,459)	(43,080)
GRANGER	21	13	2	(14)	(33)	(56)
HUTTO	(907)	(3,046)	(3,304)	(5,437)	(8,596)	(10,703)
LEANDER	(129)	(3,446)	(6,520)	(9,612)	(13,497)	(18,100)
LIBERTY HILL	(90)	(90)	(90)	(90)	(90)	(90)
PALOMA LAKE MUD 1	(168)	(243)	(198)	(123)	(25)	76
ROUND ROCK	2,351	(1,815)	(8,181)	(15,520)	(15,821)	(16,172)
SOUTHWEST MILAM WSC	351	188	76	46	(35)	(145)
WILCO COUNTY-OTHER	(498)	1,457	(3,535)	(8,146)	(23,801)	(37,721)
Total Needs	(9,647)	(22,183)	(39,939)	(62,313)	(94,626)	(126,370)

Municipal Water Shortages with Treatment Constraints Removed (acft/yr)

	2020	2030	2040	2050	2060	2070
BARTLETT	(100)	(99)	(102)	(117)	(134)	(151)
BRUSHY CREEK MUD	(187)	(206)	(191)	(193)	(210)	(231)
FLORENCE	(35)	(38)	(42)	(50)	(59)	(72)
GEORGETOWN	10,006	4,094	(727)	(6,223)	(15,798)	(26,663)
GRANGER	21	13	2	(14)	(33)	(56)
HUTTO	(907)	(3,046)	(3,304)	(5,437)	(8,596)	(10,703)
LEANDER	(129)	(3,446)	(6,520)	(9,612)	(13,497)	(18,100)
LIBERTY HILL	(90)	(90)	(90)	(90)	(90)	(90)
PALOMA LAKE MUD 1	(168)	(243)	(198)	(123)	(25)	76
ROUND ROCK	21,819	17,516	11,014	3,539	3,102	2,614
SOUTHWEST MILAM WSC	351	100	76	46	(35)	(145)
WILCO COUNTY-OTHER	(498)	1,457	(3,535)	(8,146)	(23,801)	(37,721)
Total Needs	(2,014)	(7,069)	(14,607)	(29,888)	(62,144)	(93,933)



Water Management Strategies Being Considered for Williamson County

- Water Treatment Plan Expansion – fully utilize existing sources
- Conservation – efficiently use existing sources
- Water Contract Revisions – share surplus supplies with others
- Reuse
- Aquifer Storage and Recovery (ASR)
 - Lake Georgetown
 - Lake Granger
- Lake Granger Augmentation (with groundwater)
- Highland Lakes Supply (LCRA)
- Groundwater Development (Milam, Lee and Burleson Counties)
- Supplies from Alcoa Property

Water Management

- Most of what I have talked about is water supply and water demand
- But our success in addressing our water issues really rests on a three legged stool
 - Supply
 - Demand
 - Management

Water Management

- Water management is part of State water plan
- Primary onus on 3 water user groups for water management
 - Ranchers and farmers
 - Industry
 - Local governments

Water Management

- For surface water
 - Contracts
 - Rates
 - Laws
- For groundwater
 - Groundwater control districts
 - Subdivision ordinances
 - Combination of both

- Bell County ASR Assessment

- Regional, collaborative effort about to kick-off relating to ASR in Bell County
- Multiple entities are coming together to begin assessing the viability of ASR in Bell County
 - Clearwater UWCD
 - Bell County WCID#1
 - City of Temple
 - Brazos River Authority
 - Bell County
- First deliverable will be due in Spring, 2020 ... identification of potential sites for ASR



- My honor to be here today
- Water isn't an issue for us to address and solve in the days ahead ...
- Water is ***the*** issue to address and solve

