

# Hill Country Water Issues

Robert E. Mace, Ph.D., P.G.

Texas Water Development Board

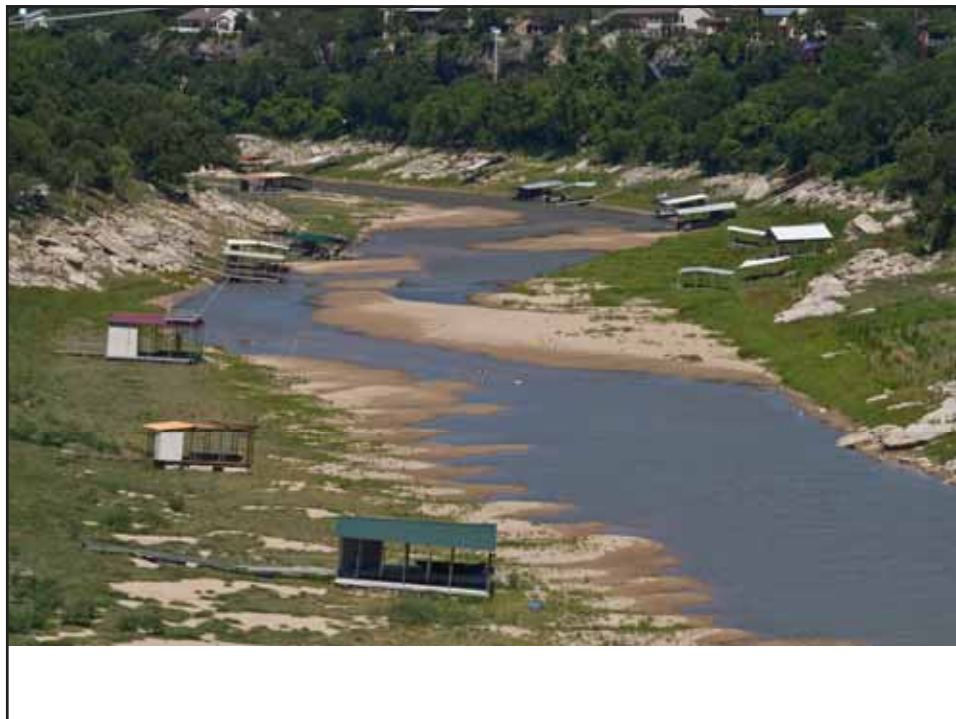
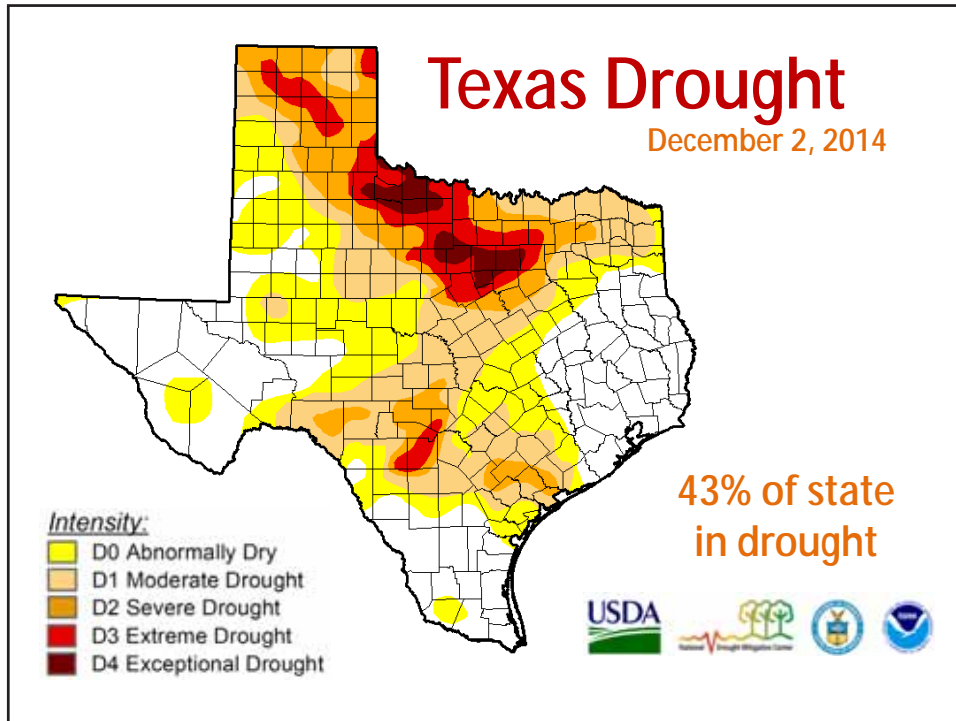
*presented to*

Texas Hill Country Water Summit

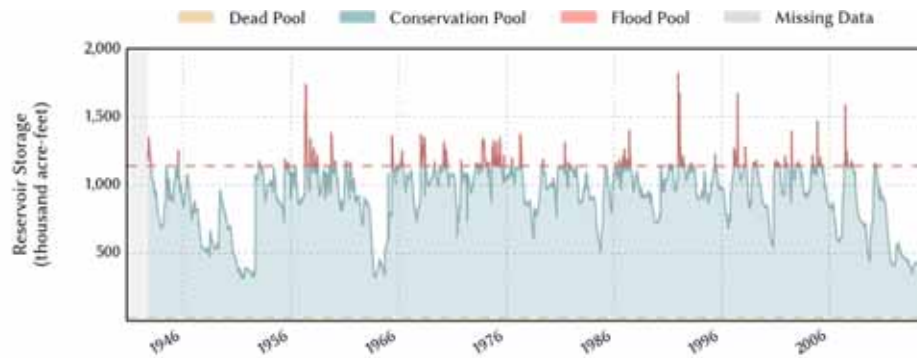
December 5, 2014; Austin, Texas

The following presentation is based upon professional research and analysis within the scope of the Texas Water Development Board's statutory responsibilities and priorities but, unless specifically noted, does not necessarily reflect official Board positions or decisions.



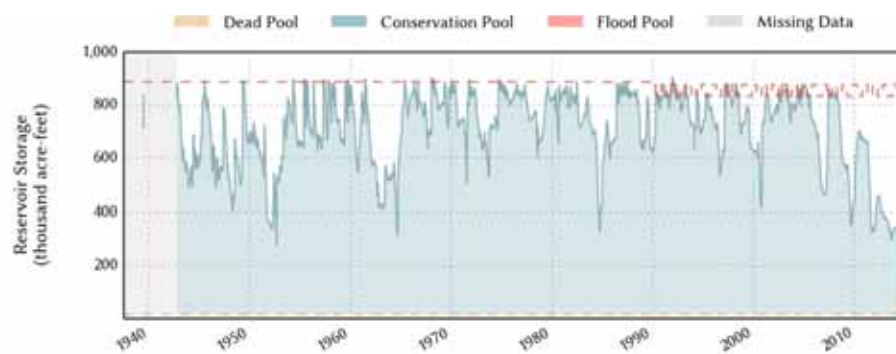


# Lake Travis



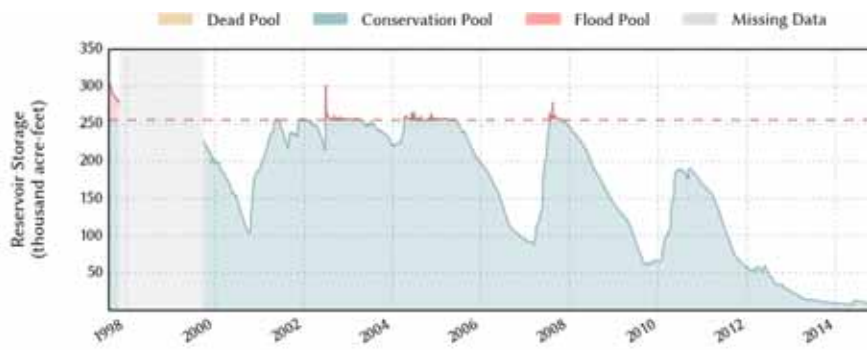
**currently 32.5% full**  
December 2, 2014

# Lake Buchanan



**currently 33.9% full**  
December 2, 2014

# Lake Medina



currently 3.4% full

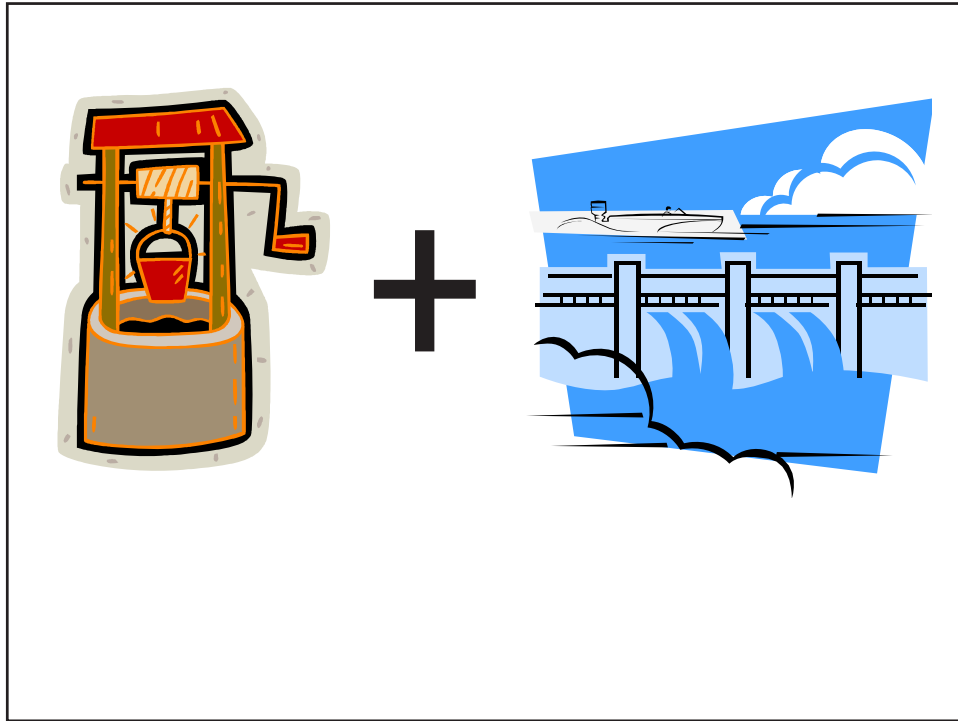
December 2, 2014



Photo By Christina Gomez-Mira/FDR THE CHRONICLE

◀ 2 of 2 ▶

Wayland Clark gives water to his many cats in Dripping Springs. The drought has run his well dry, forcing him to have water delivered to him.

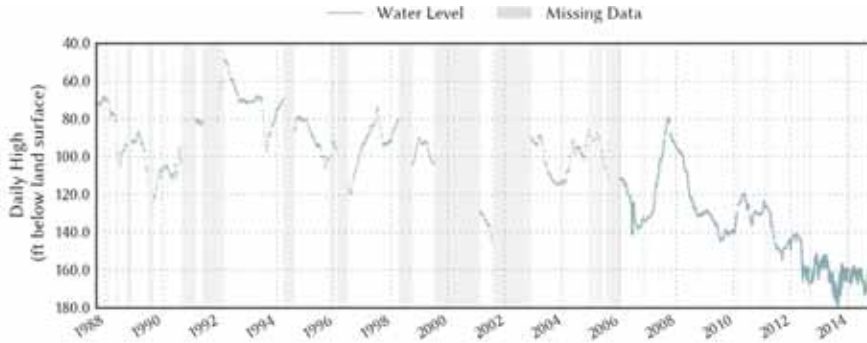


## Fredericksburg



**well 57-50-108**  
Ellenburger-San Saba  
December 2, 2014

# Comfort

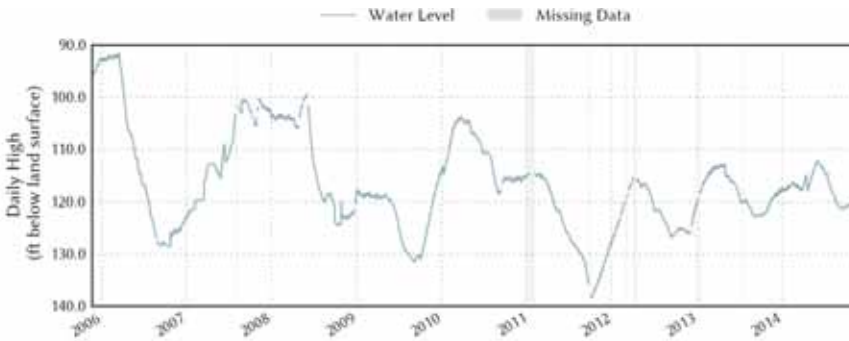


**well 68-01-314**

Trinity

December 2, 2014

# Wimberley

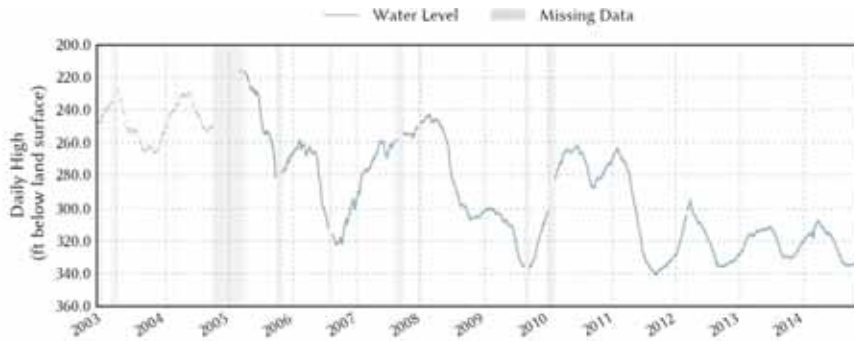


**well 57-64-705**

Trinity

December 2, 2014

# Kerrville

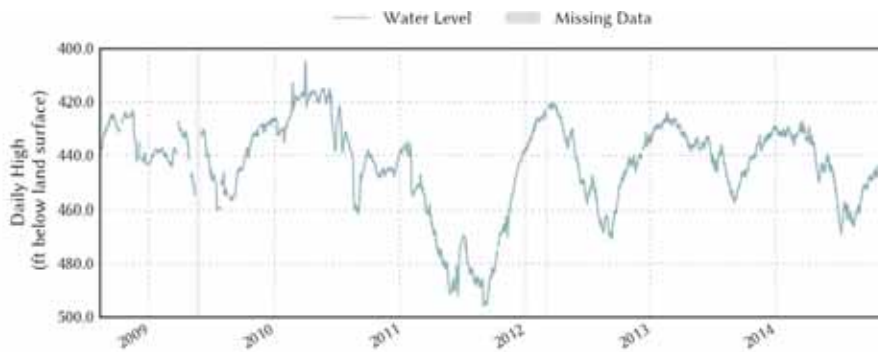


**well 56-63-922**

Trinity

December 2, 2014

# Bandera

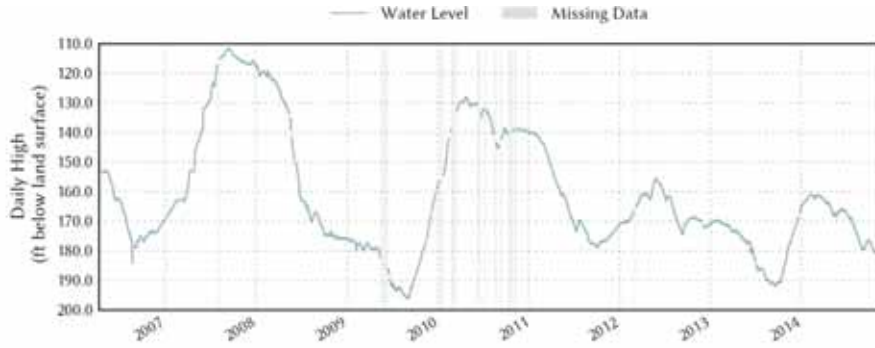


**well 69-24-225**

Trinity

December 2, 2014

# Dripping Springs



**well 57-55-607**

Trinity

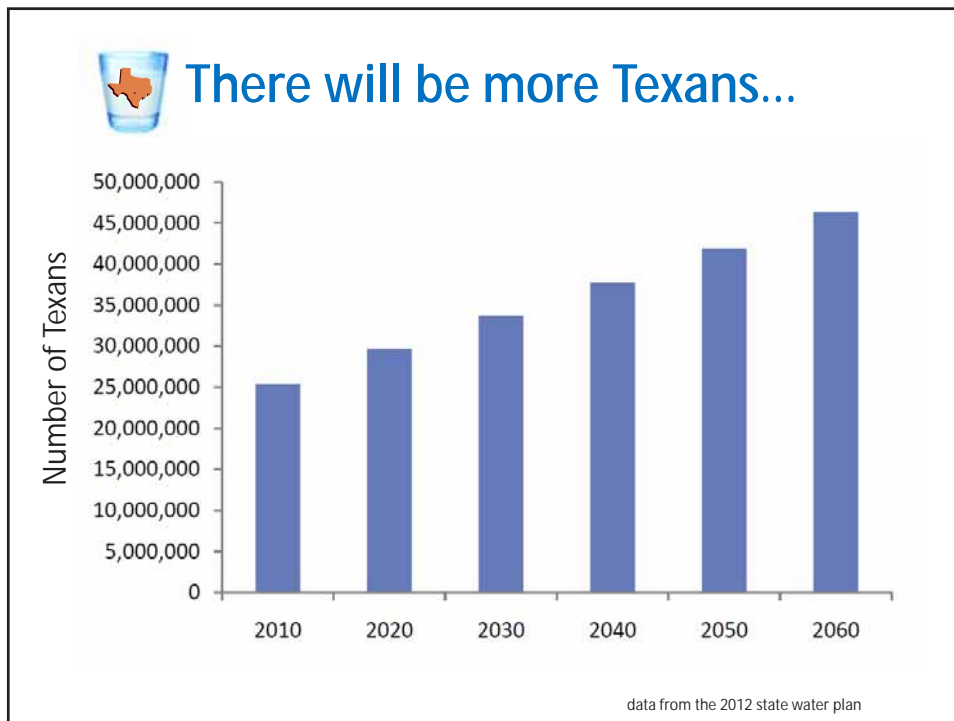
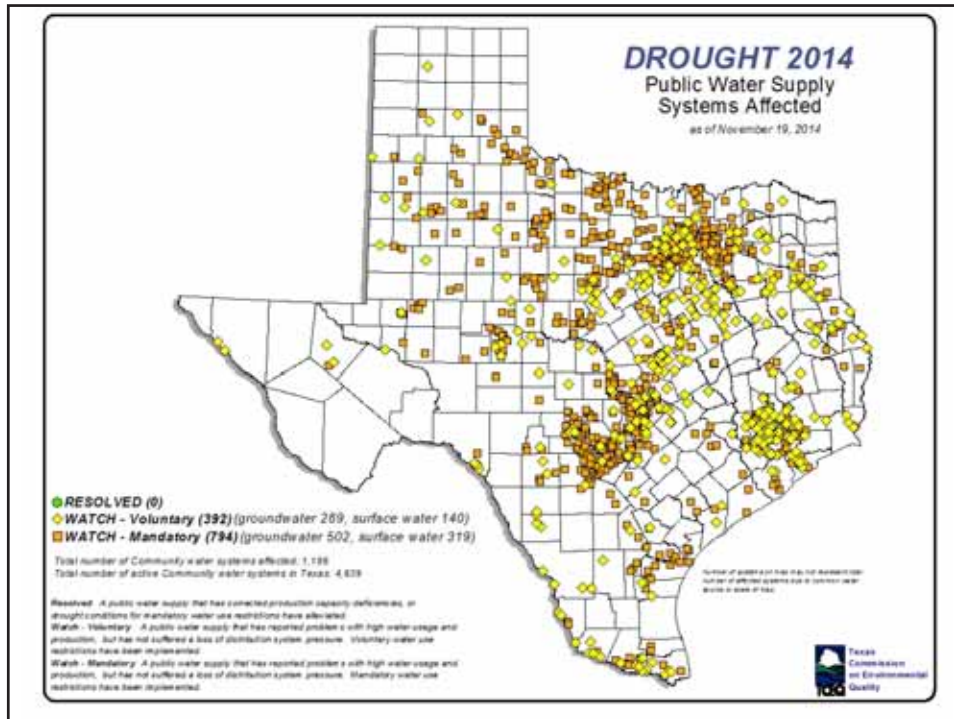
December 2, 2014

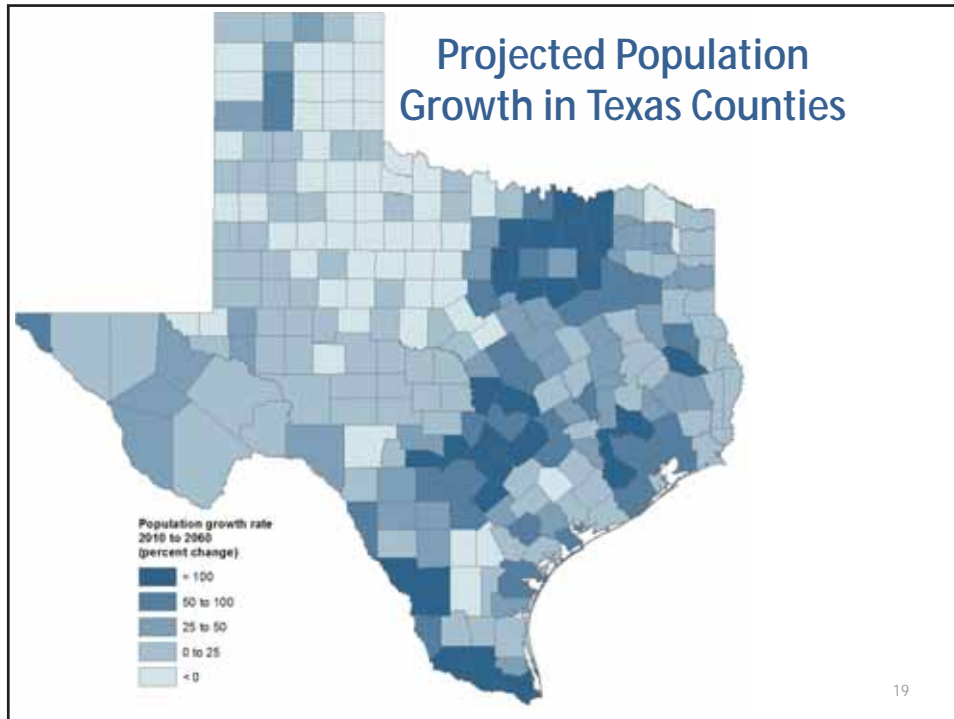


Llano, Texas

photo by Erich Schlegel, New York Times

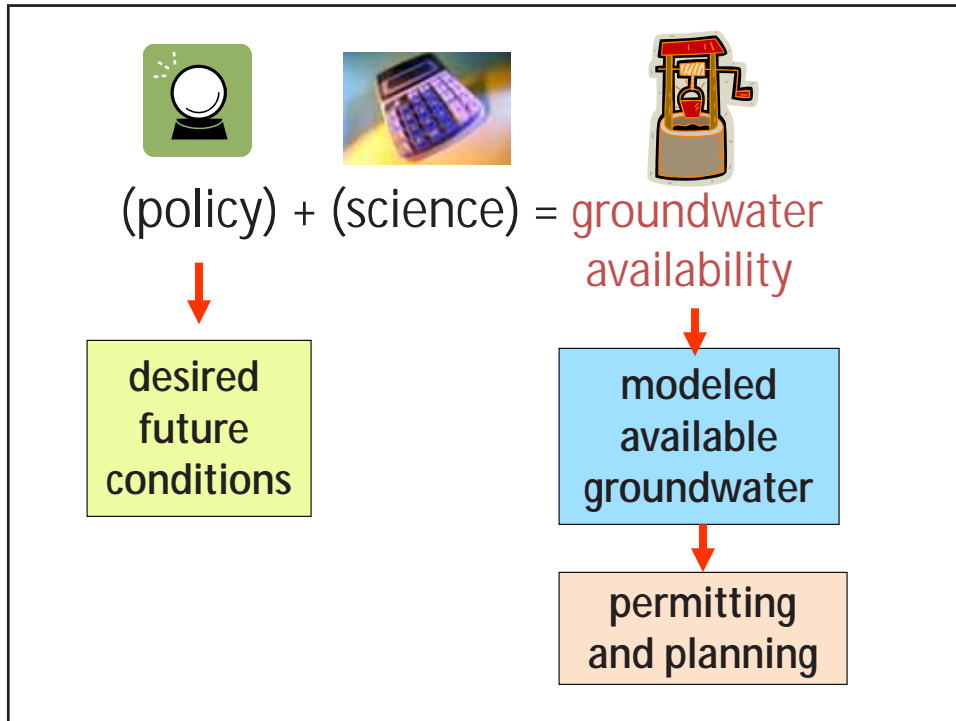






### Hill Country Growth

	2010		2060	
• Bandera Co:	26,373	to	32,537	23%
• Kerr Co:	49,250	to	60,725	23%
• Gillespie Co:	25,258	to	36,142	43%
• Blanco Co:	9,946	to	18,472	86%
• Kendall Co:	35,720	to	94,549	165%
• Comal Co:	108,219	to	330,099	205%
• Hays Co:	166,342	to	728,344	338%
• Loving Co:	67	to	82	22%



## Desired Future Conditions in Groundwater Management Area 9

Aquifer	Desired Future Condition Summary	Date Desired Future Condition Adopted
Edwards Group of Edwards-Trinity (Plateau)	No net increase in average drawdown in Kendall and Bandera counties. Not relevant in Kerr and Blanco counties.	7/26/2010
Ellenburger-San Saba	Allow for an increase in average drawdown of no more than 2 feet [in Blanco County].	8/29/2008
Hickory	Allow for an increase in average drawdown of no more than 7 feet [in Blanco County].	8/29/2008
Marble Falls	Allow for no net increase in average drawdown [in Blanco County].	8/29/2008
Trinity	Allow for an increase in average drawdown of approximately 30 feet through 2060.	7/26/2010



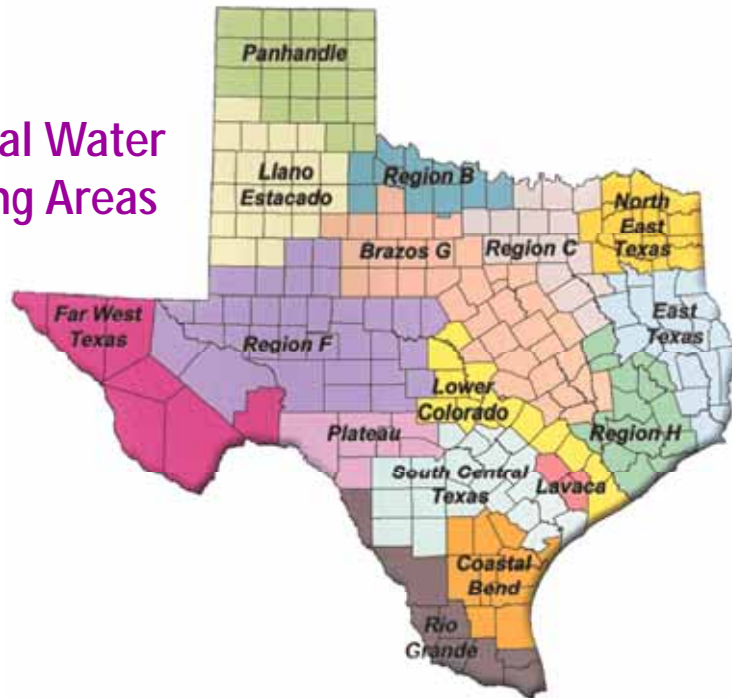
## Modeled Available Groundwater in Groundwater Management Area 9

	MAG	Pumping (Q)	MAG-Q
<b>Bandera</b>	7,284	4,160	3,124
<b>Bexar</b>	44,854	18,530	26,324
<b>Blanco</b>	2,573	1,762	811
<b>Comal</b>	39,498	4,678	34,820
<b>Gillespie</b>	2,482	2,603	(121)
<b>Hays</b>	12,935	6,110	6,825
<b>Kendall</b>	11,139	5,038	6,101
<b>Kerr</b>	14,918	4,922	9,996
<b>Travis</b>	13,203	43	13,160

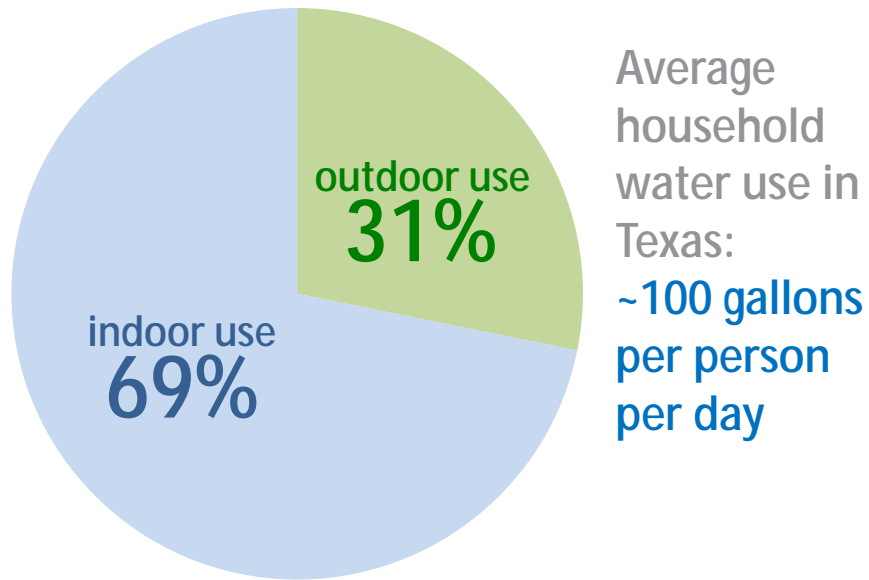
acre-feet per year; Trinity Aquifer only

Note that the number for Comal County is for all of Comal County

## Regional Water Planning Areas



### Texas residential water use

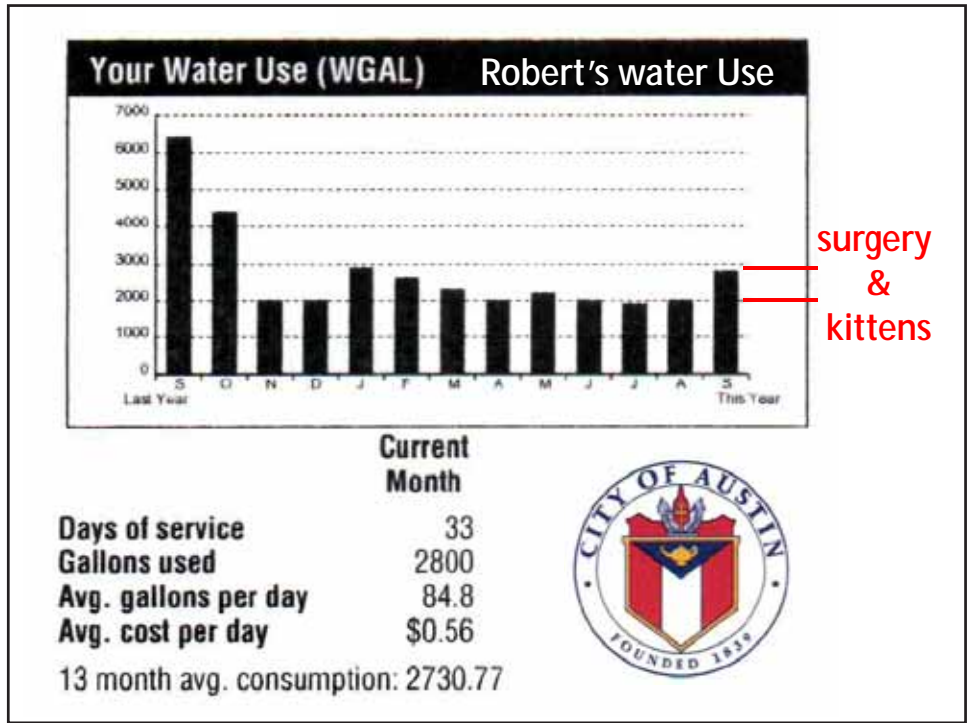


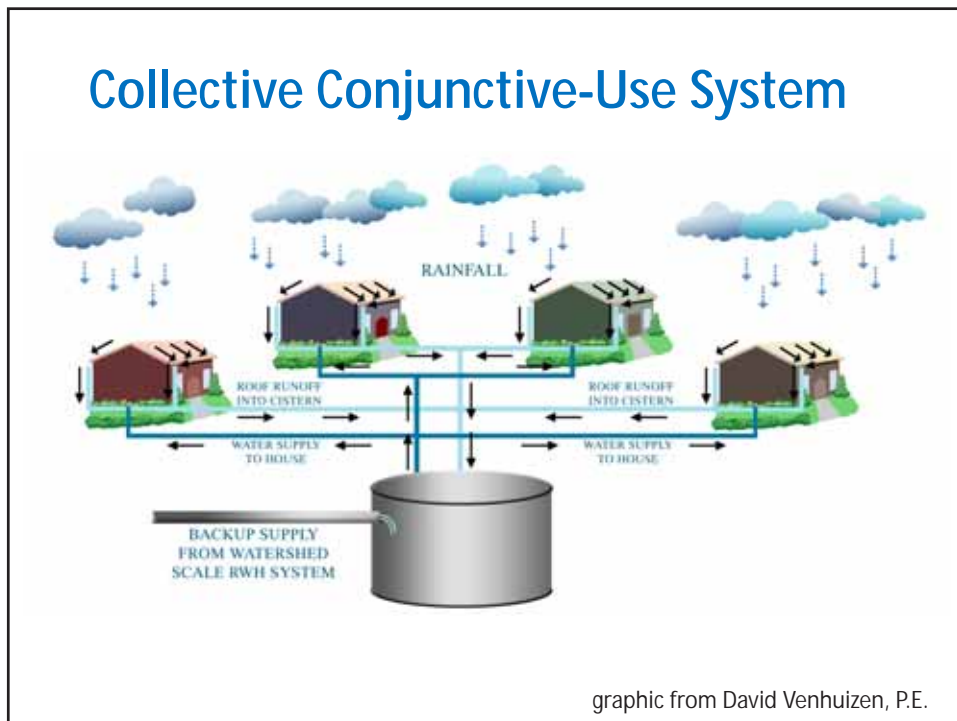
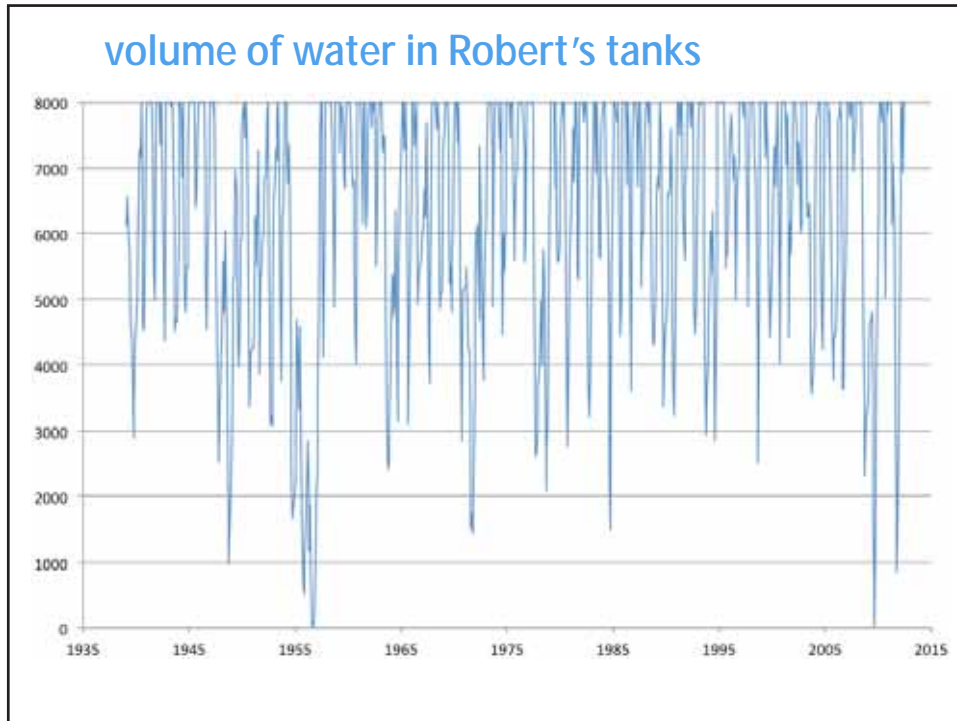
Average household water use in Texas:  
 ~100 gallons per person per day

### percent of total indoor use

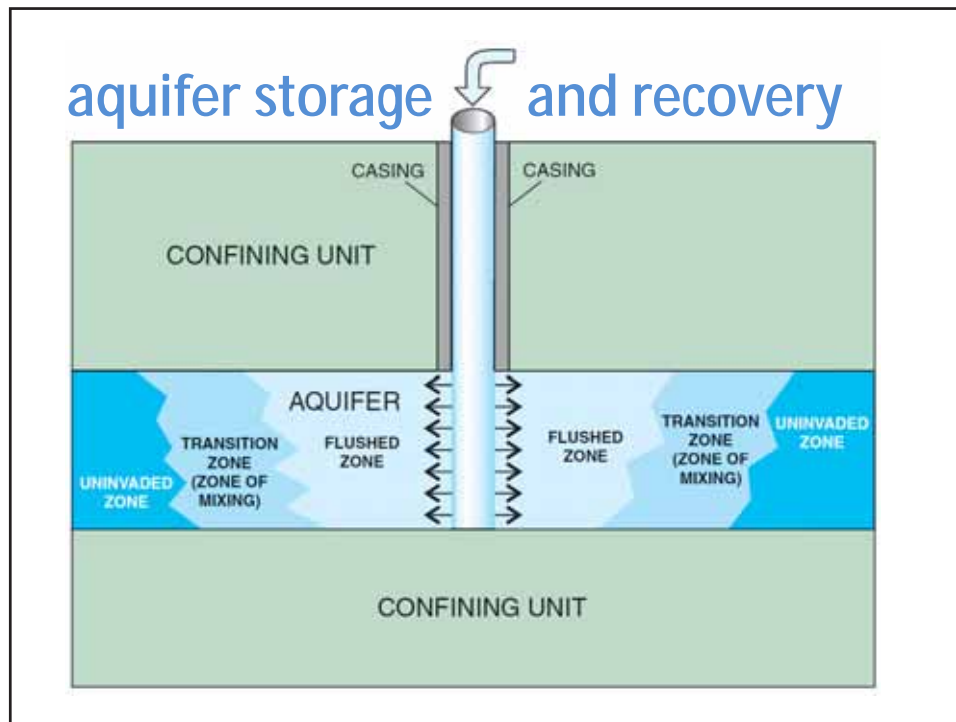


averages for U.S.





graphic from David Venhuizen, P.E.



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**Texas Water**   
**Development Board**