

Water for the Hill Country: Who, What, and When?

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

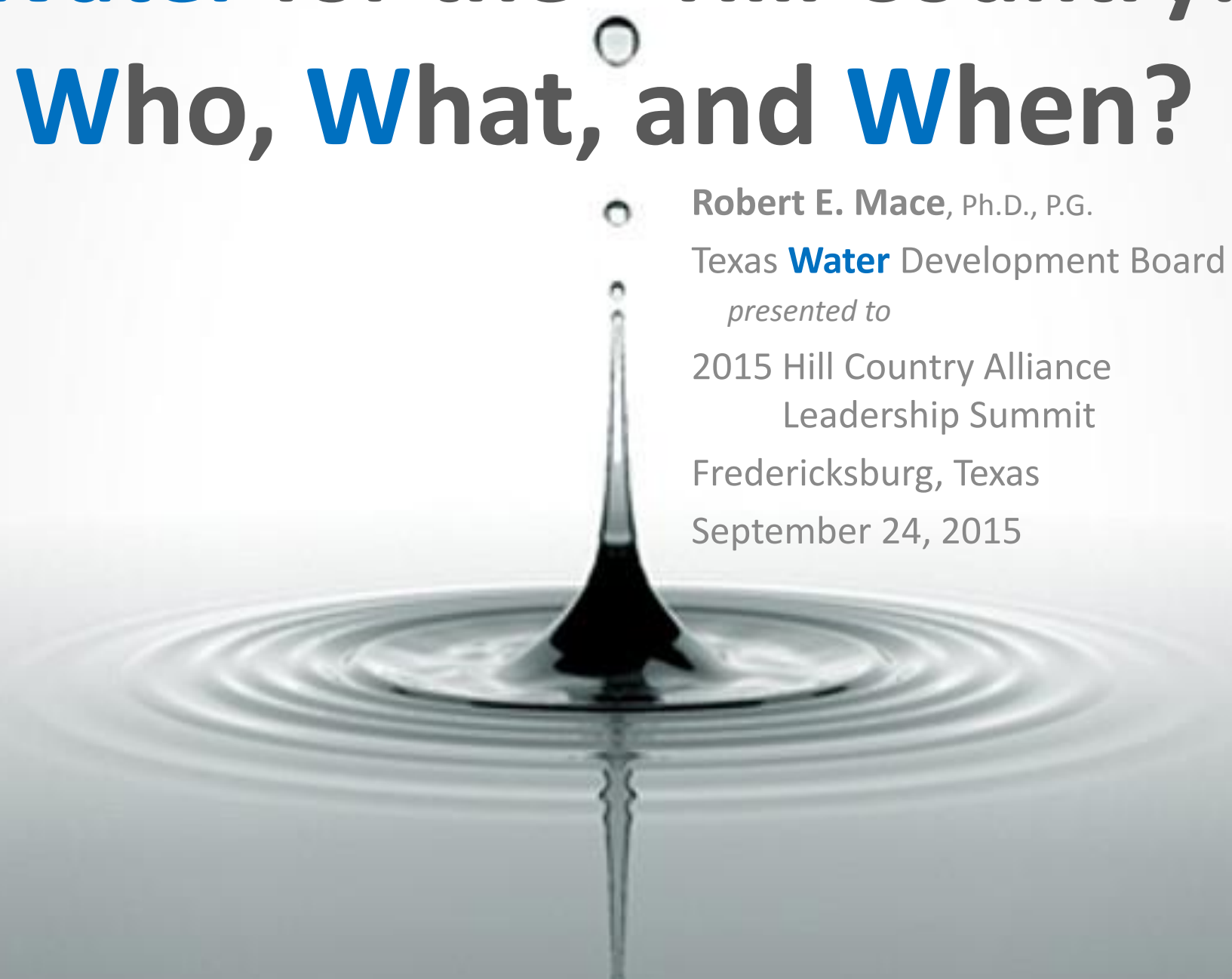
Texas **Water** Development Board

presented to

2015 Hill Country Alliance
Leadership Summit

Fredericksburg, Texas

September 24, 2015



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.



“Water, not oil, is the lifeblood of Texas.”

– James A. Michener

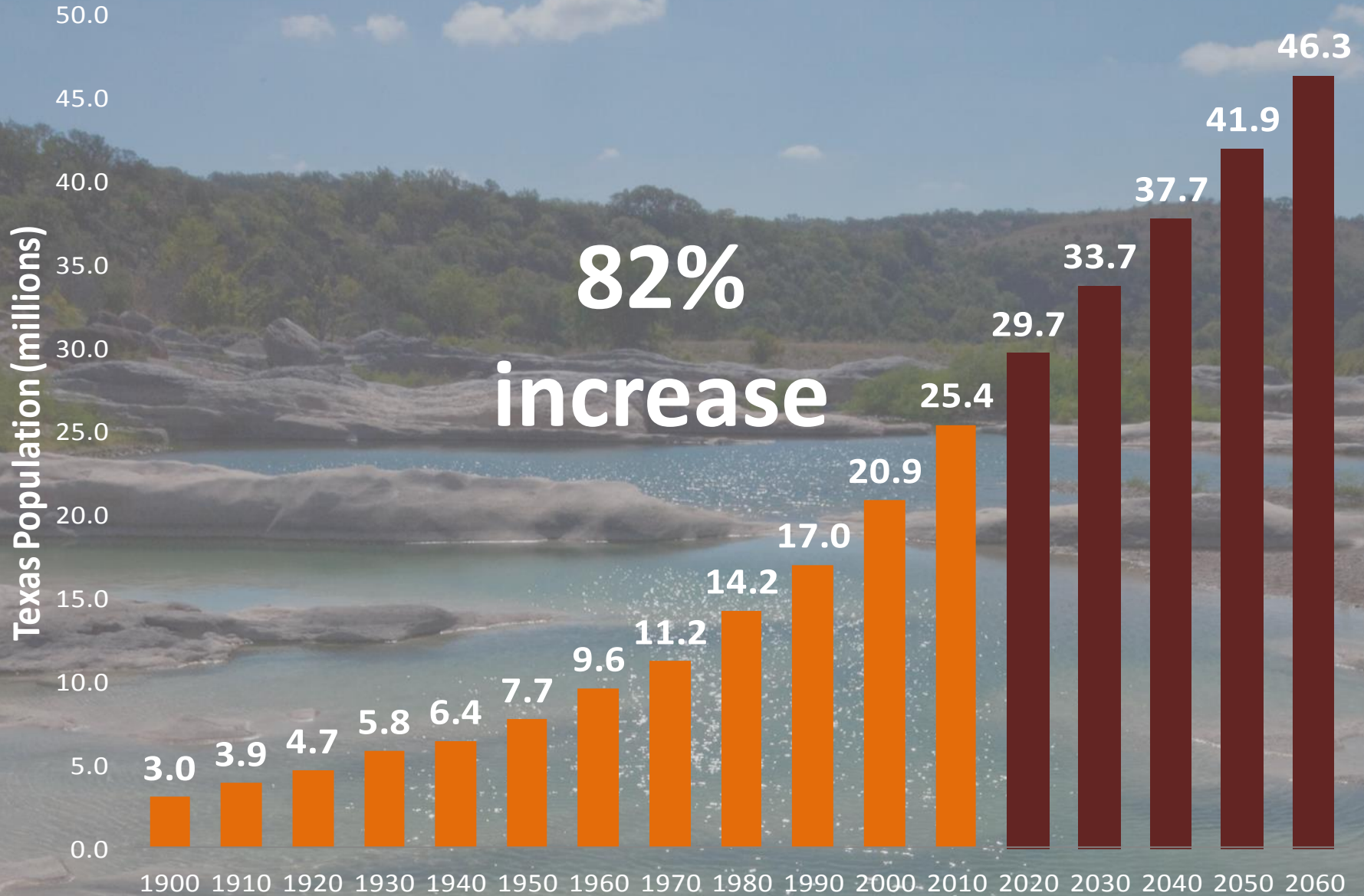


**“I wish we water boys were paid like them
oil boys.”**

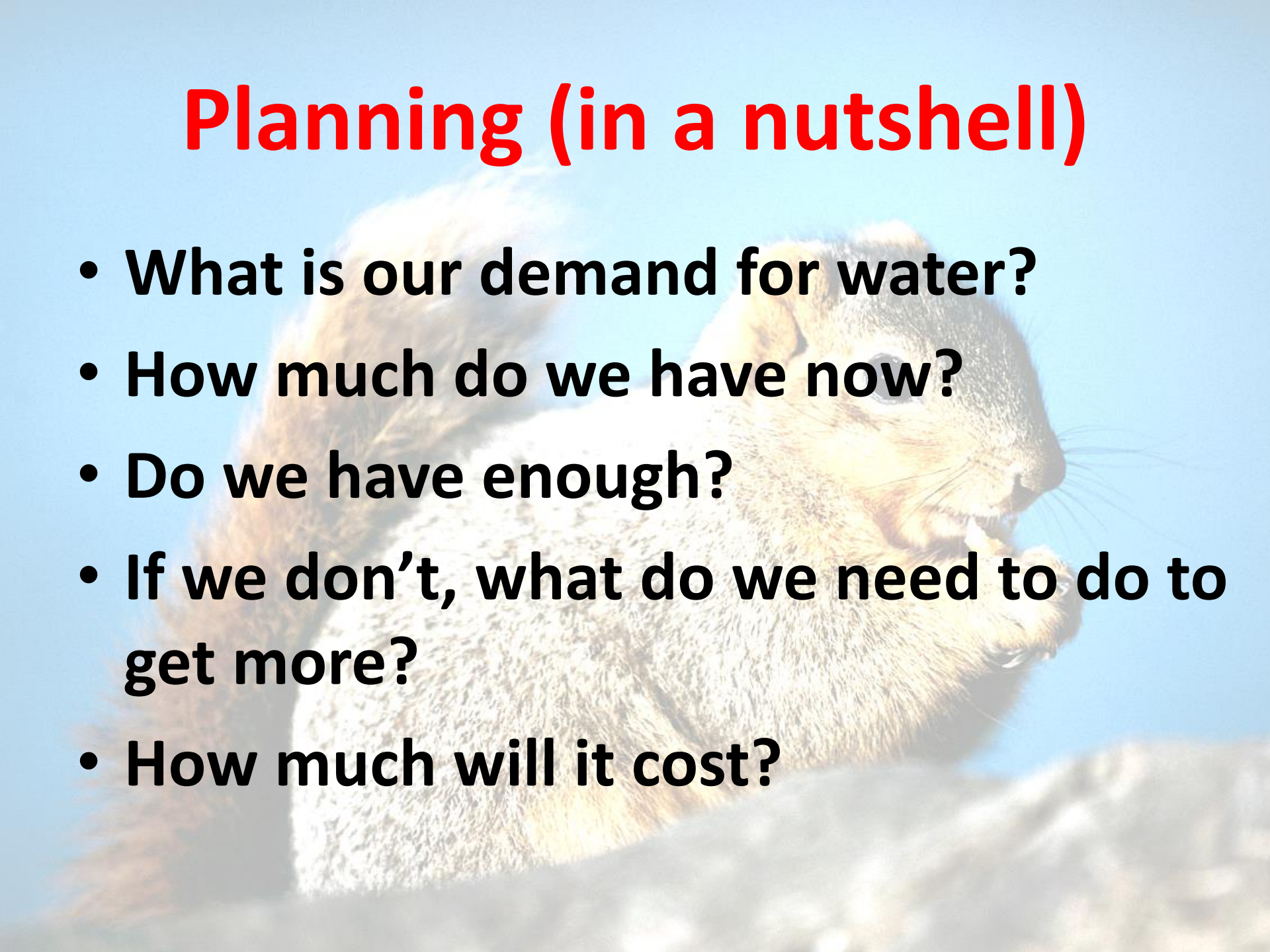
– Robert E. Mace



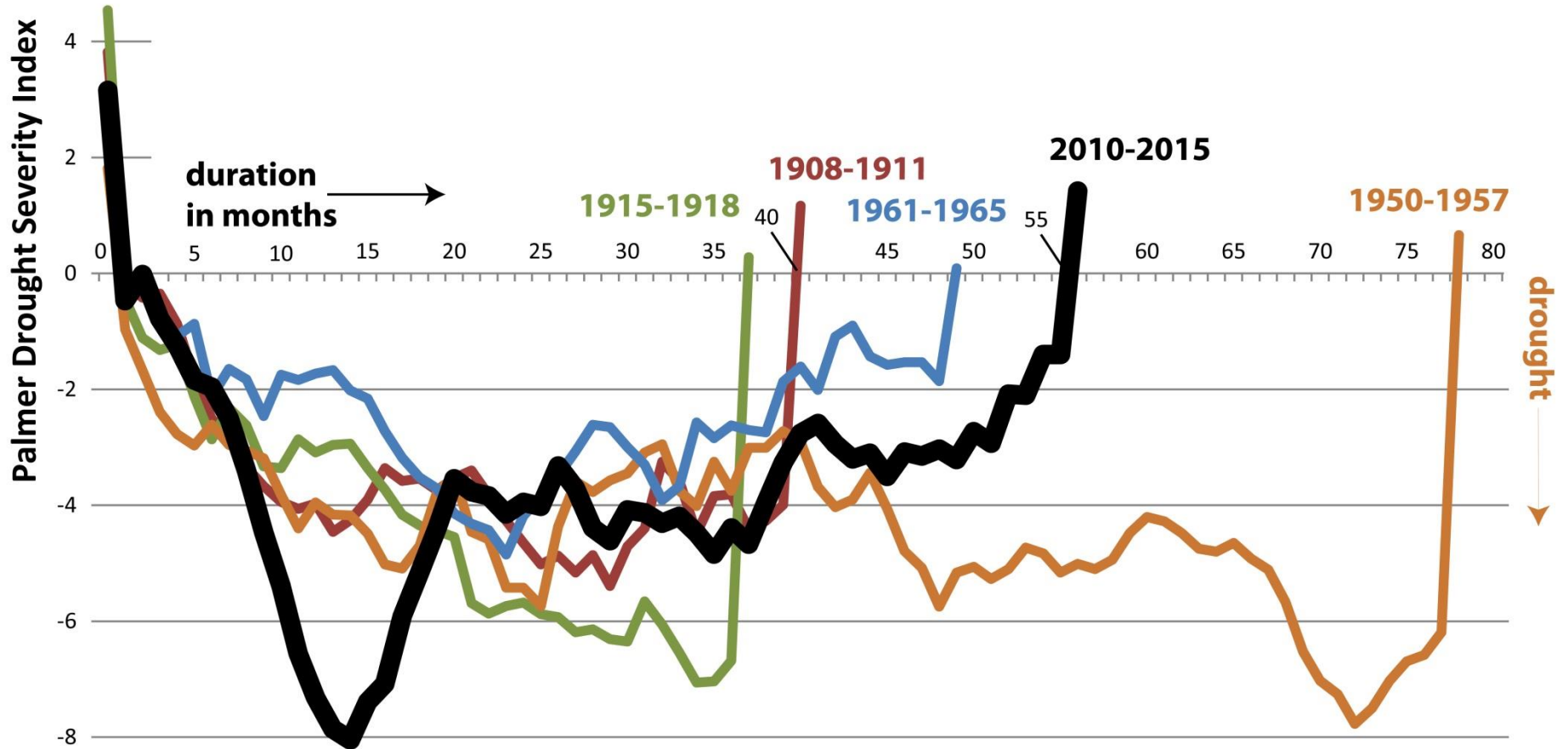
HISTORIC AND PROJECTED TEXAS POPULATION GROWTH



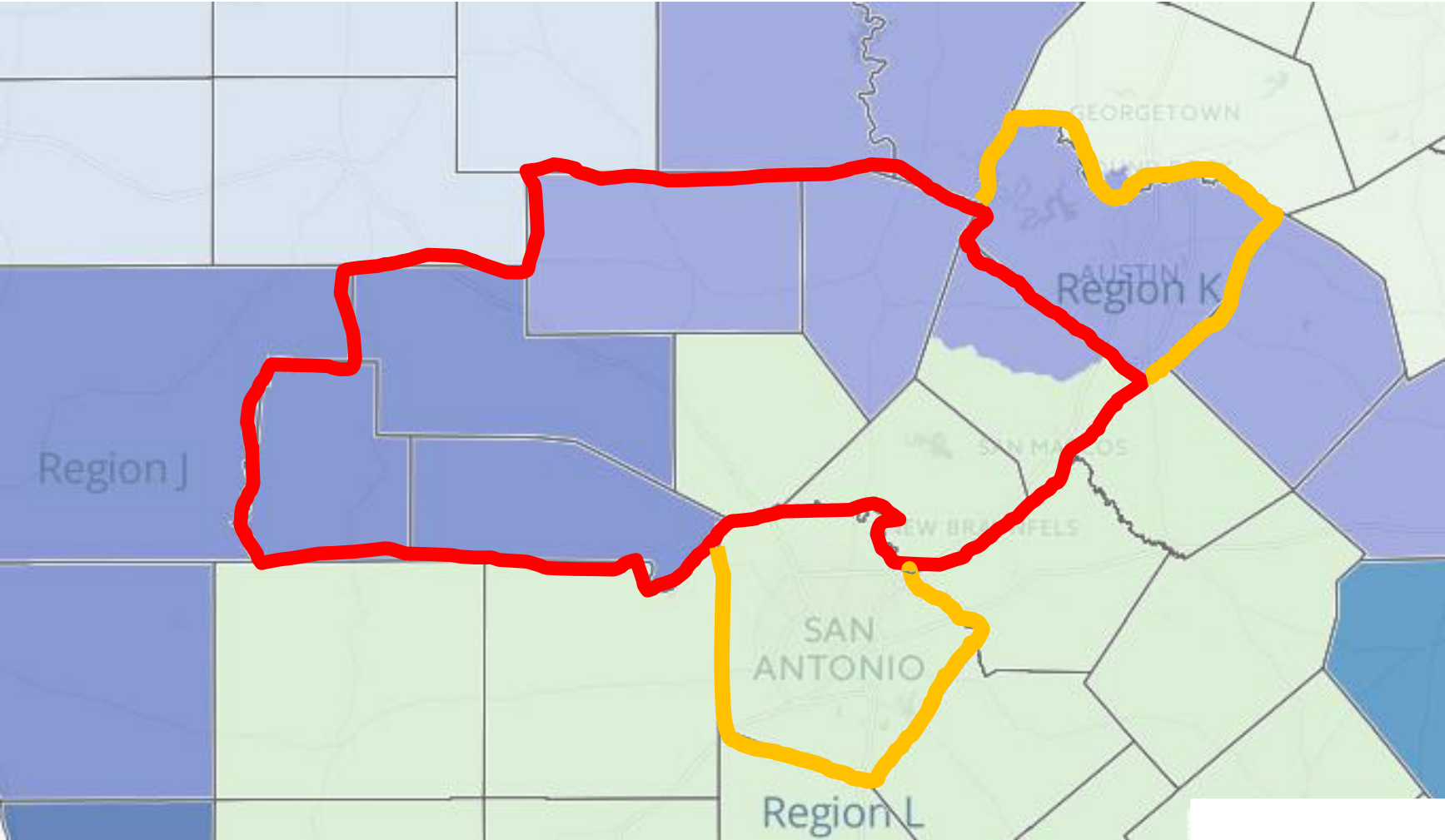
Planning (in a nutshell)

- **What is our demand for water?**
 - **How much do we have now?**
 - **Do we have enough?**
 - **If we don't, what do we need to do to get more?**
 - **How much will it cost?**
- 
- A close-up photograph of a squirrel with brown and grey fur, sitting on a rock and eating a nut. The squirrel is the central focus of the image, with its head turned slightly to the right. The background is a bright, clear blue sky. The overall image is slightly faded, serving as a background for the text.

Five Worst State-Wide Droughts in Texas



based on information from John Nielsen-Gammon



i This application displays water planning information on which the 2012 State Water Plan is based. 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. The map views are schematic, summarizing and displaying available data with some limitations. Some water sources, for example, may not be shown on the map but will appear in tables below.

For additional information see the [2012 State Water Plan](#) or the [2011 Regional Water Plans](#).

Demands	Existing Supplies	Needs (Potential Shortages)	Recommended Strategy Supplies
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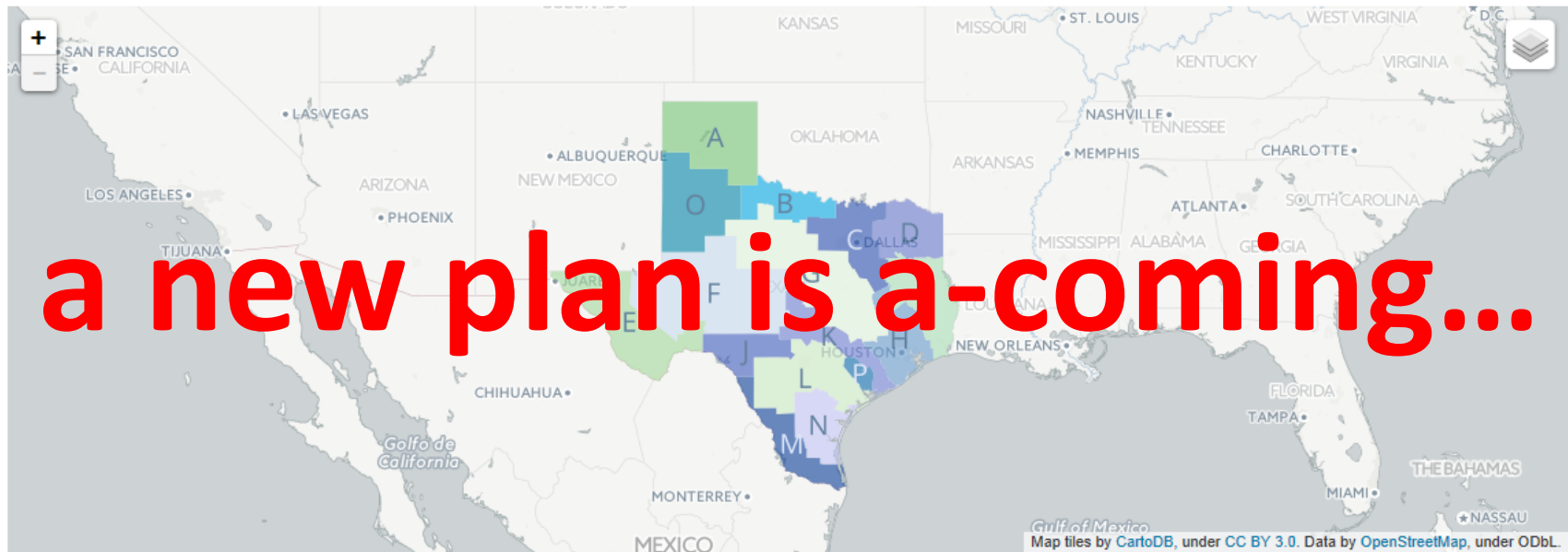
Projected water **demand** is the quantity of water projected to meet the overall necessities of a water user group in a specific future year.

View data by ▼

Regional Water Demand Summary - 2010

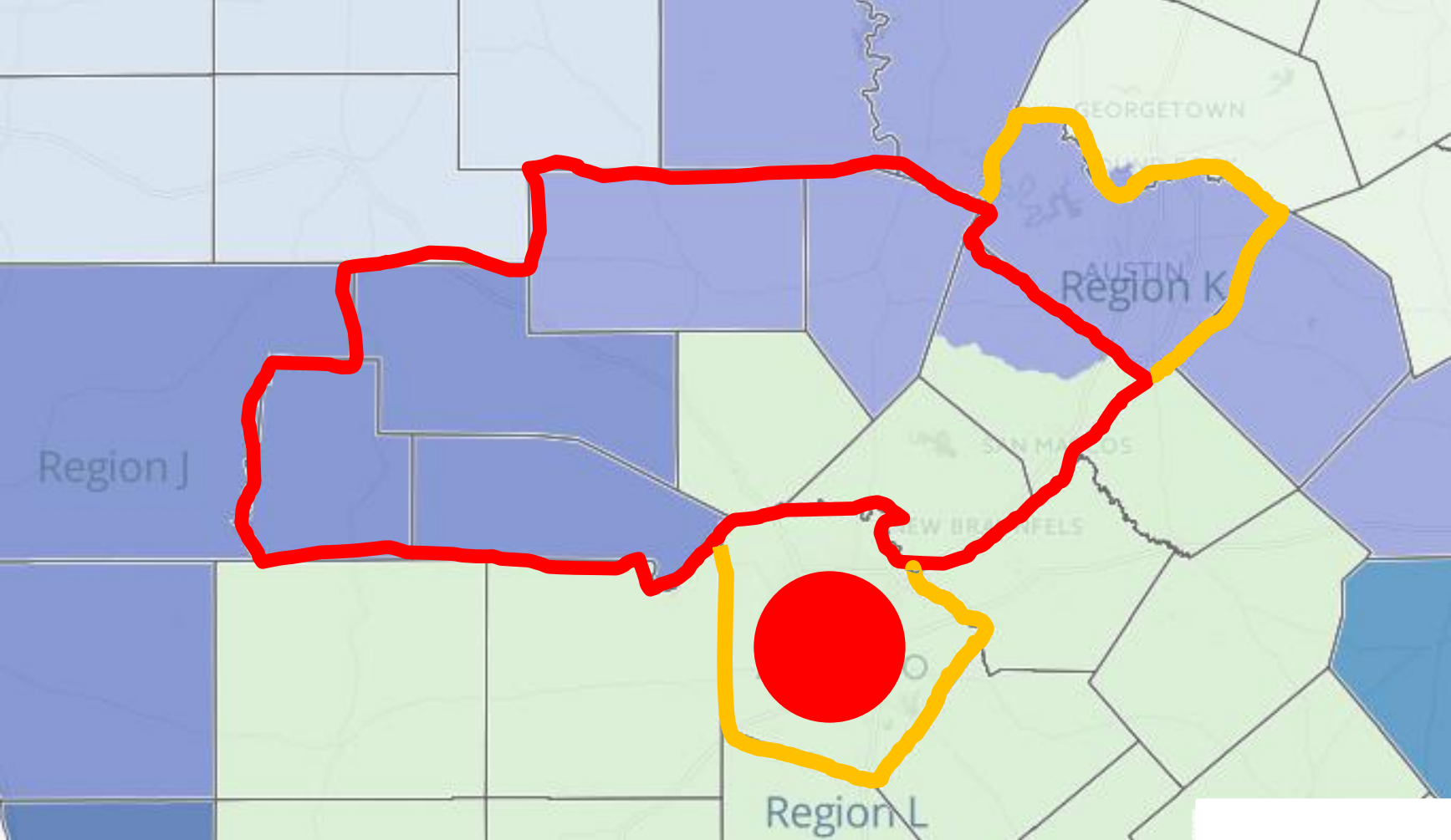
DECADE: 2010 2020 2030 2040 2050 2060

Lock Map Zoom to Texas Hide Map

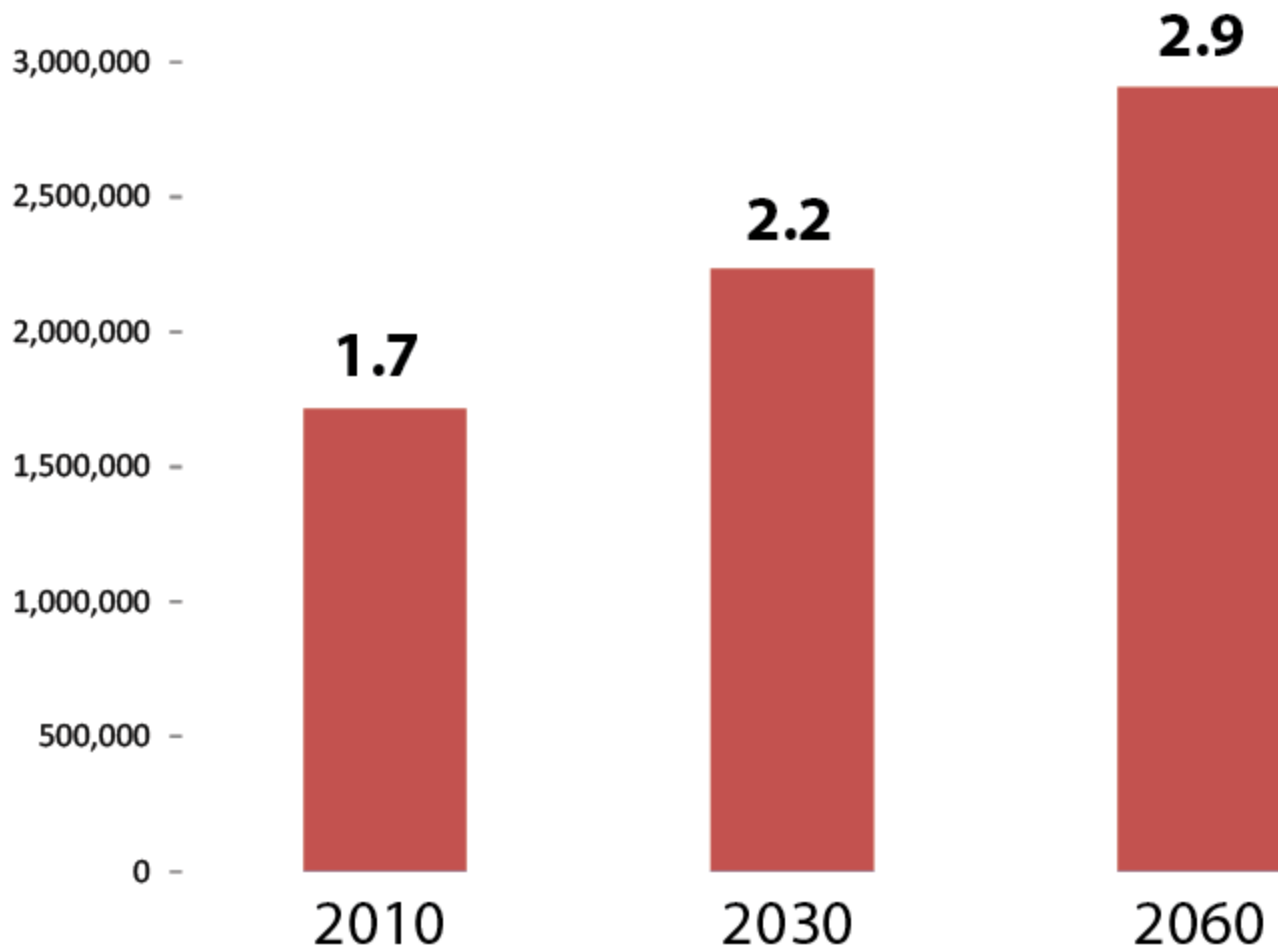


Map shows Regional Water Planning Areas that may be selected using cursor.

Bexar County

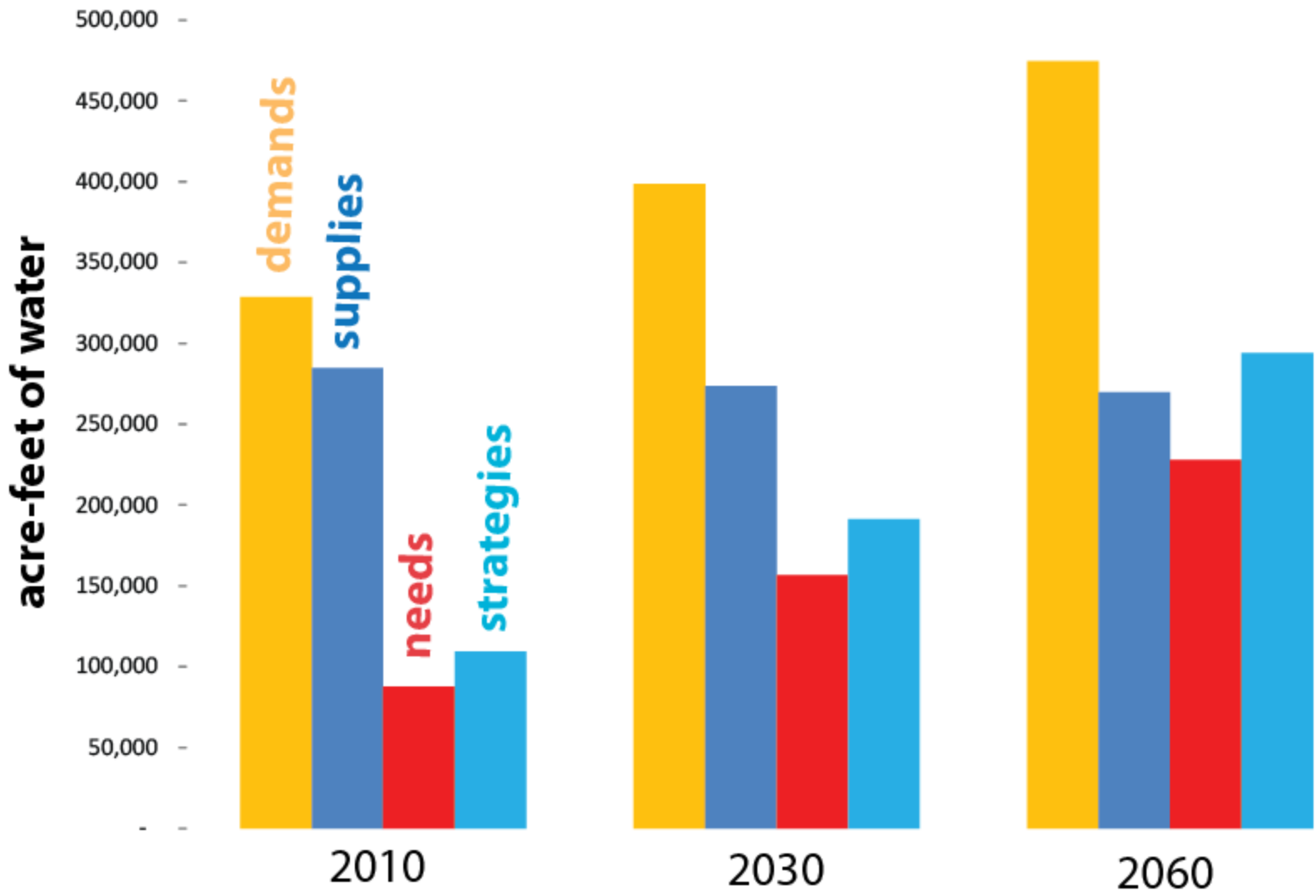


Number of Bexarers



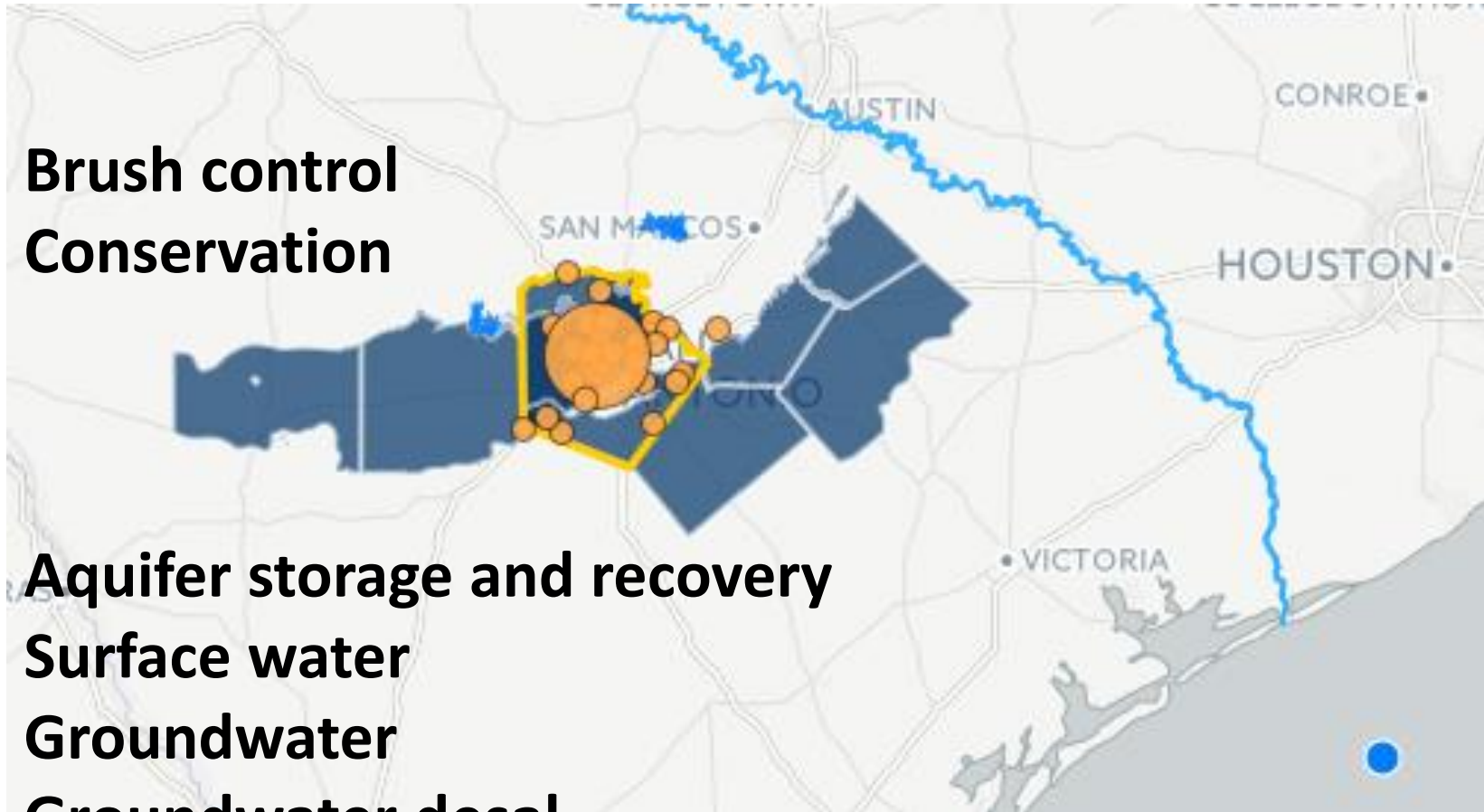
**71%
increase**

Bexar County

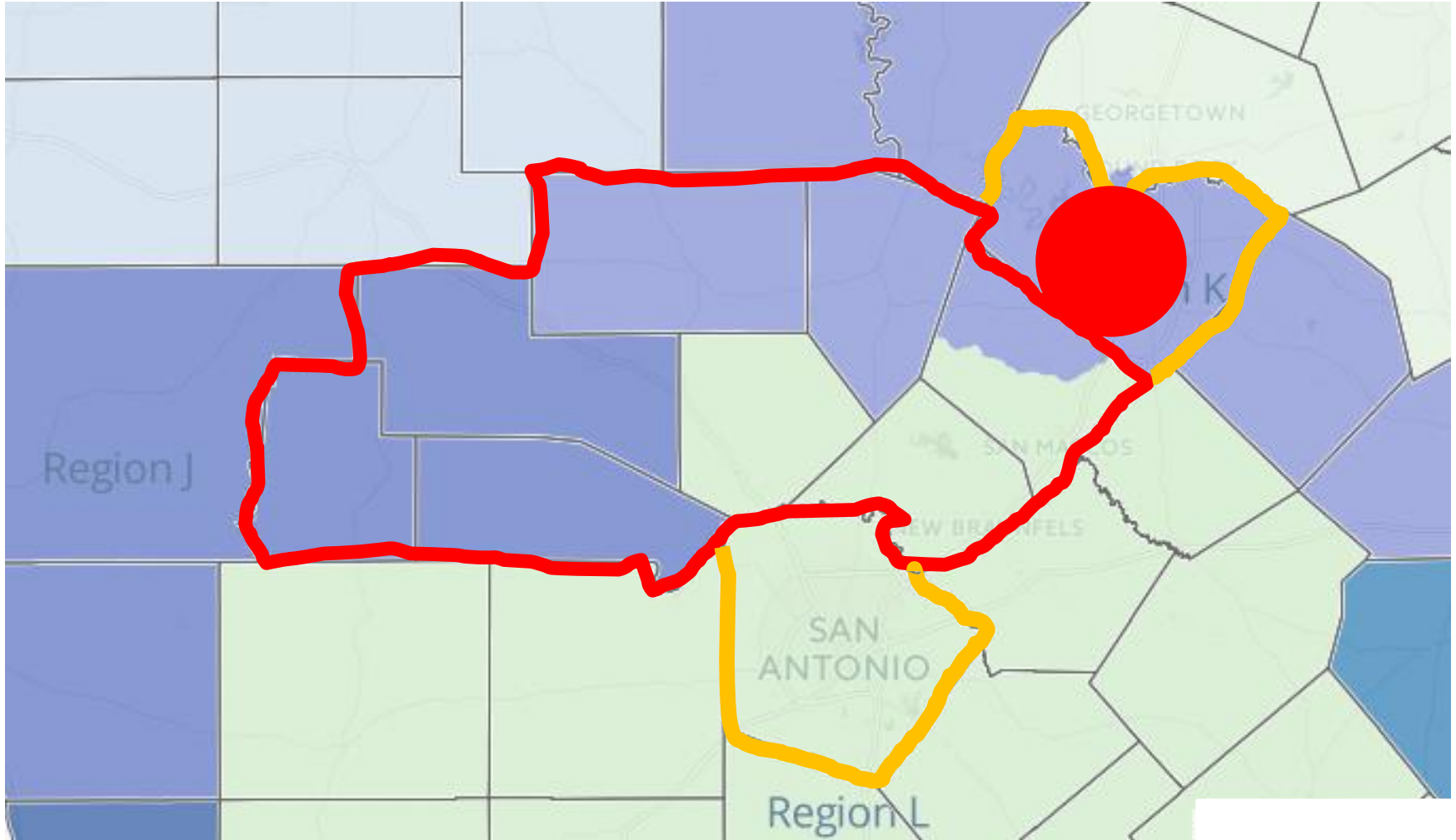


Bexar County

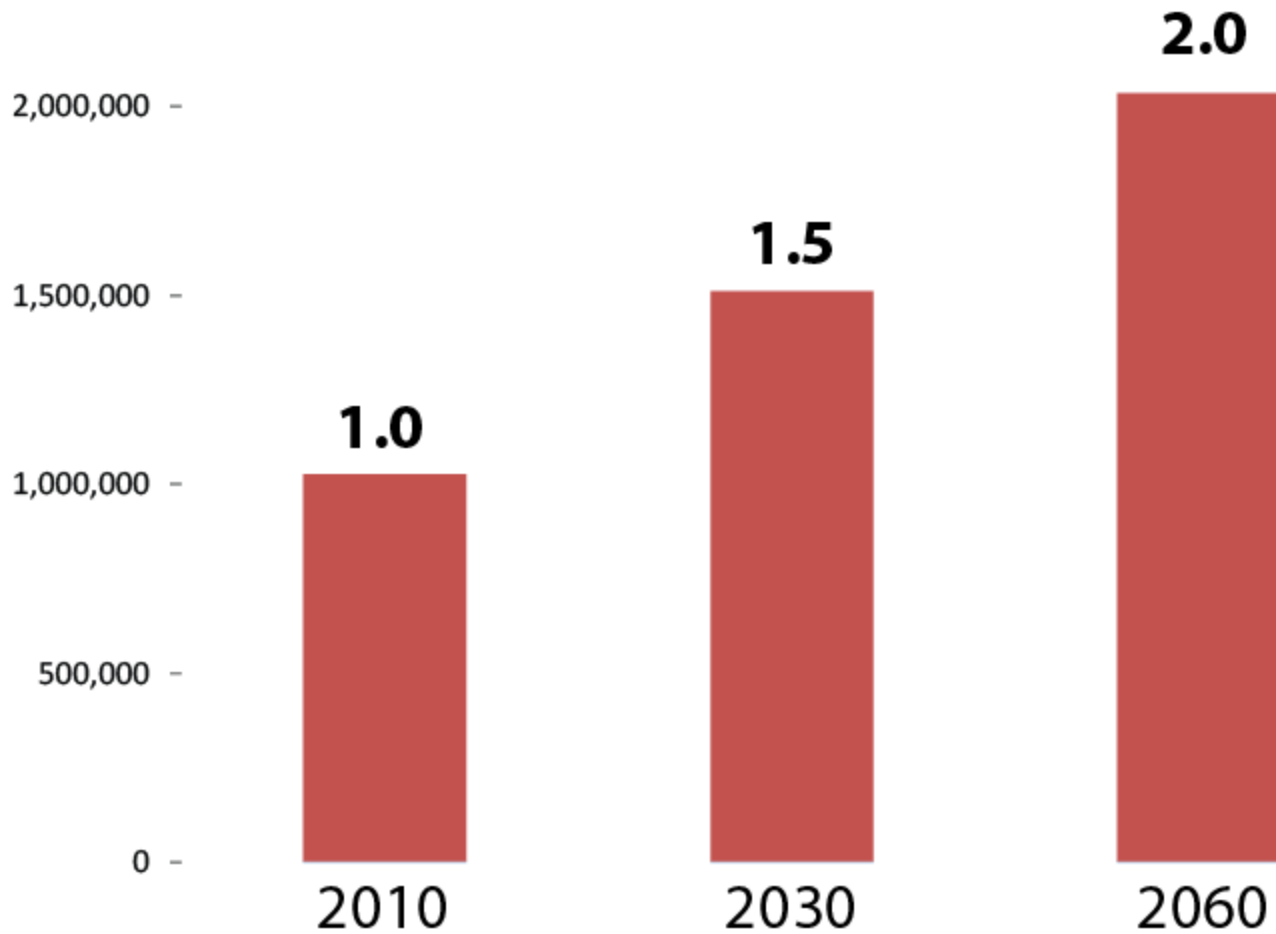
- **Brush control**
- **Conservation**
- **Aquifer storage and recovery**
- **Surface water**
- **Groundwater**
- **Groundwater desal**
- **Seawater desal**
- **Reuse**
- **Other surface water**



Travis County

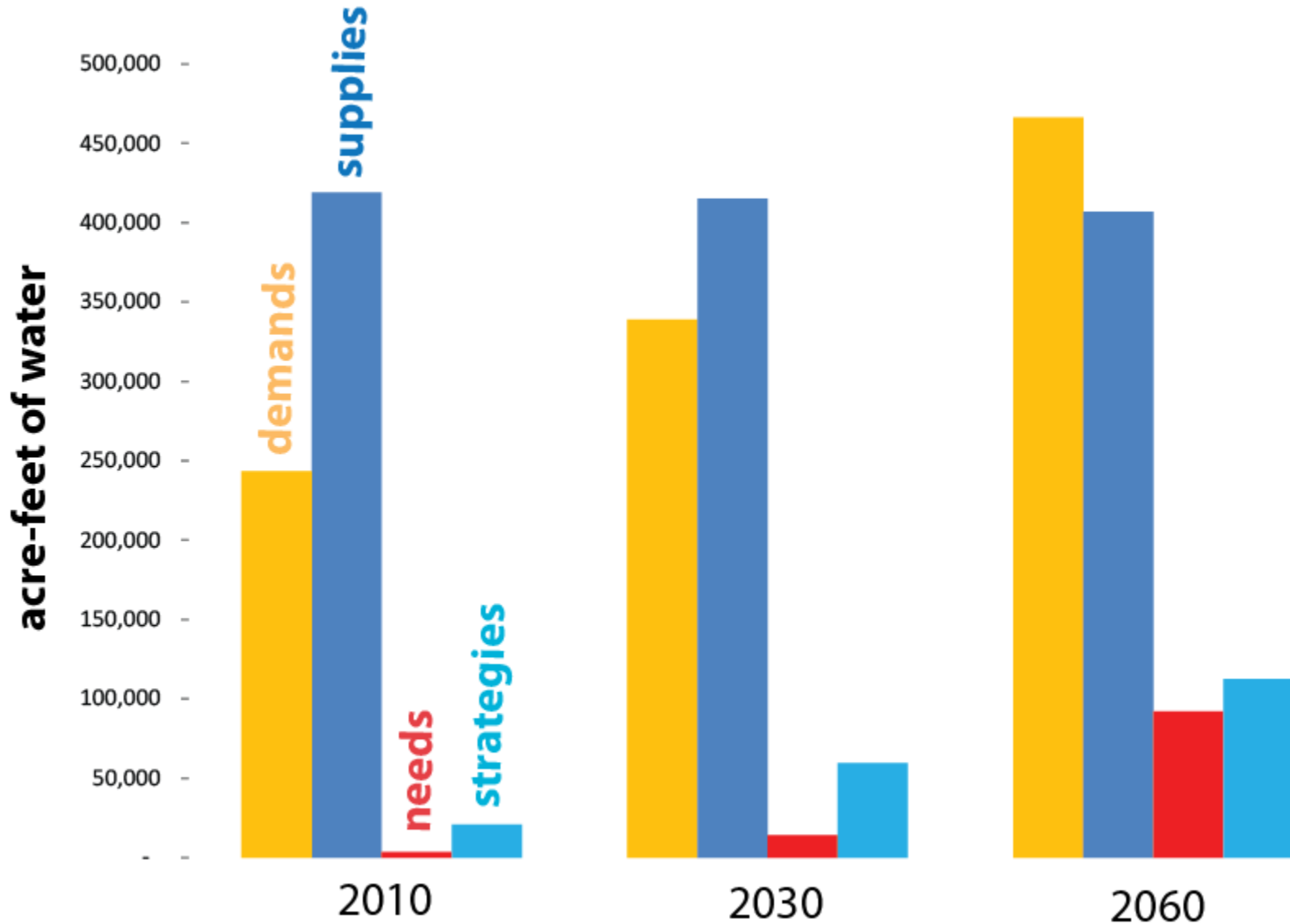


Number of Travisties



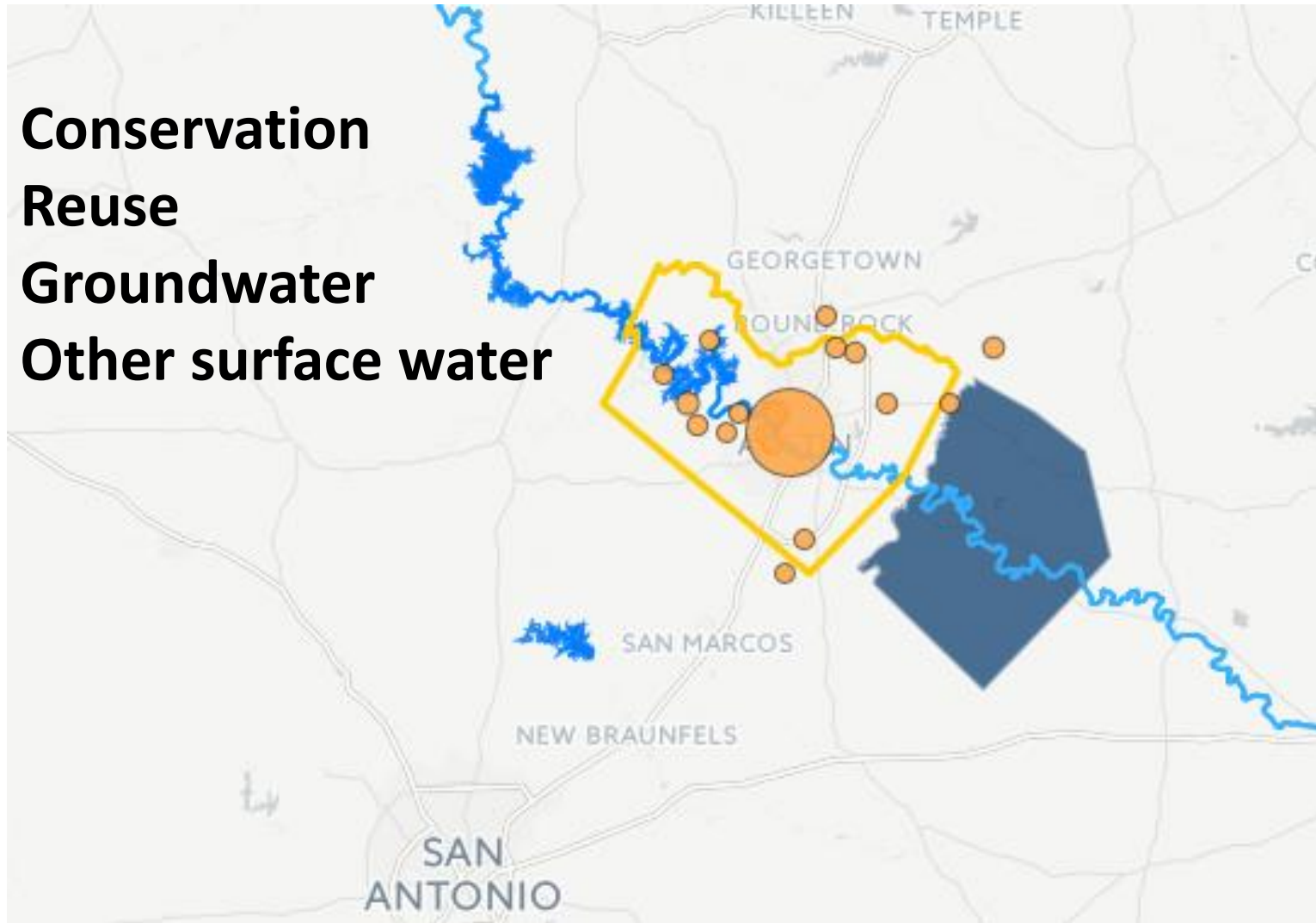
**100%
increase**

Travis County

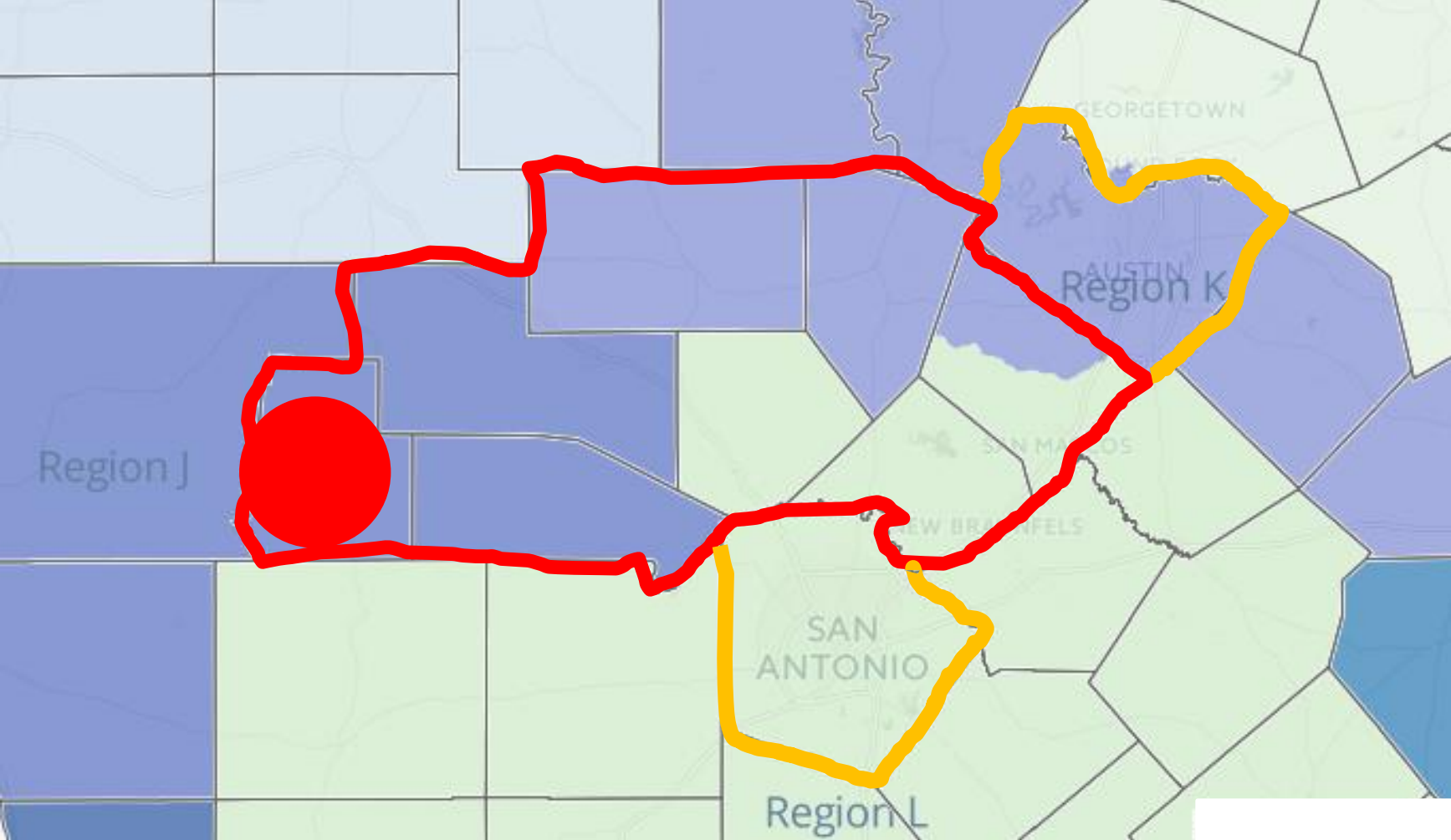


Travis County

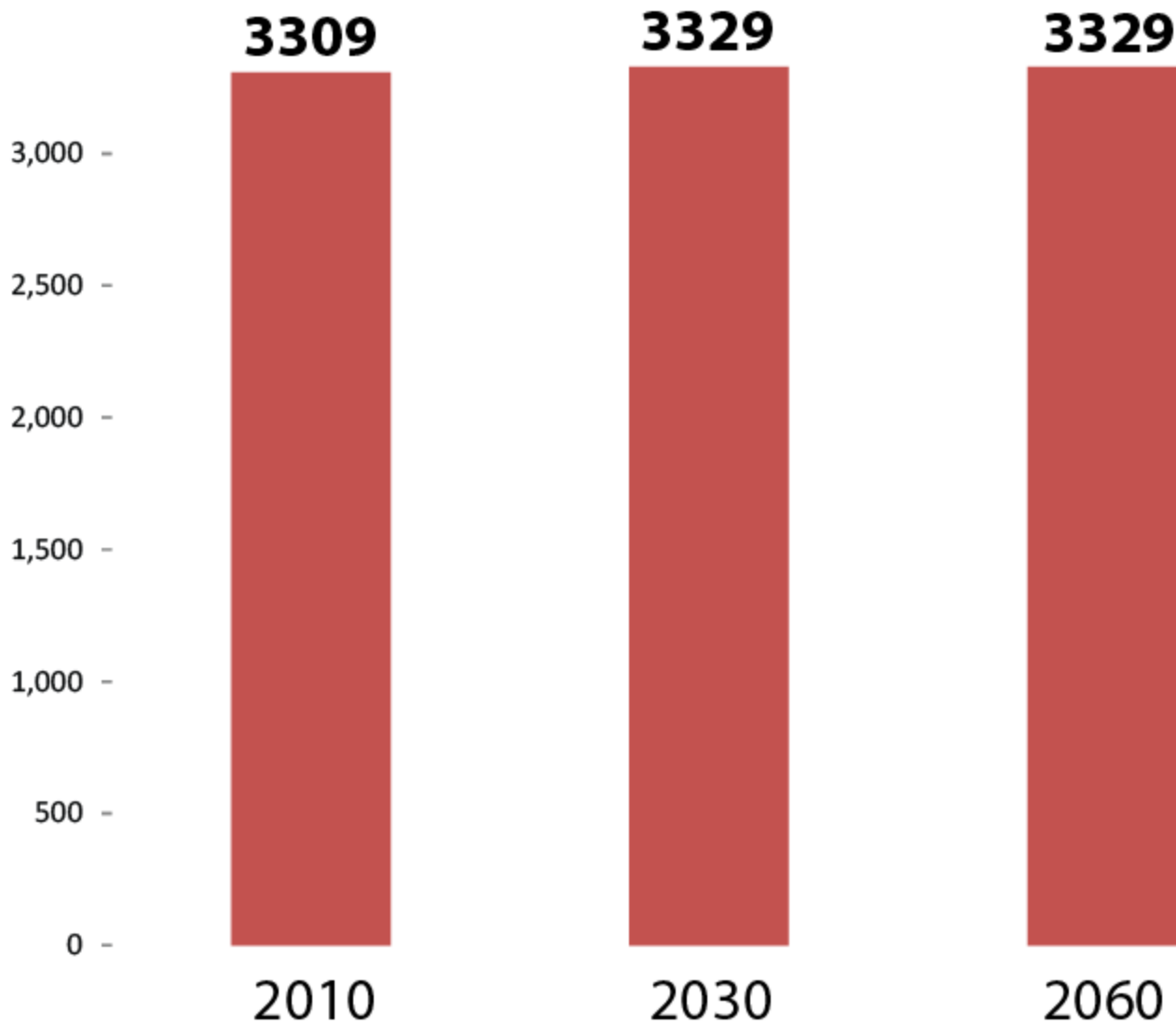
- Conservation
- Reuse
- Groundwater
- Other surface water



Real County

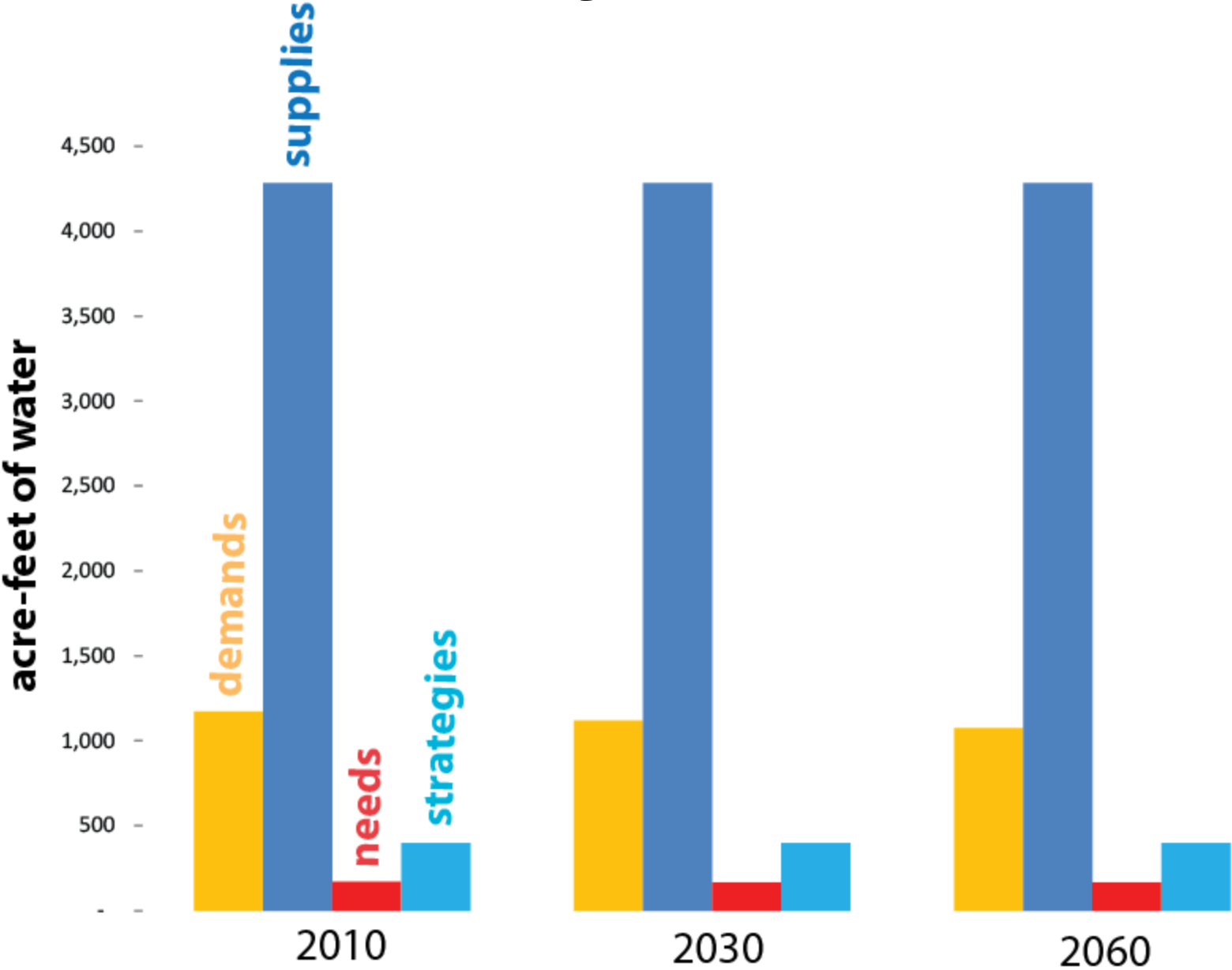


Number of Realists

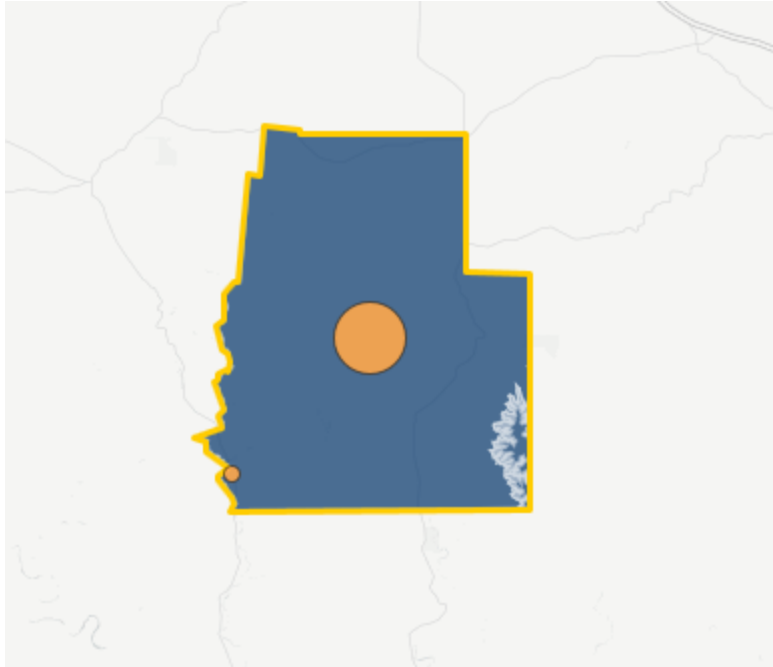


**<1%
increase**

Real County

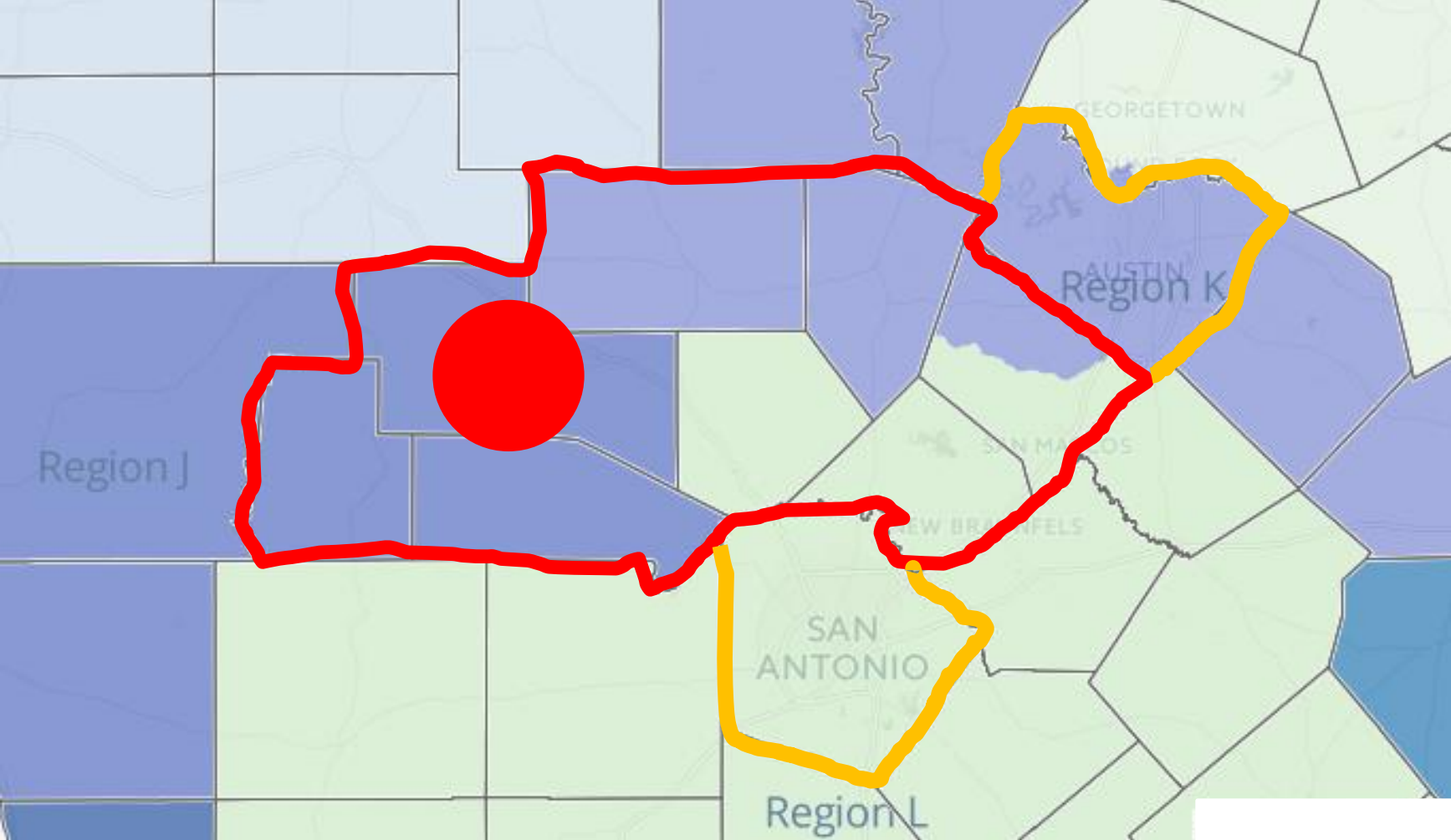


Real County

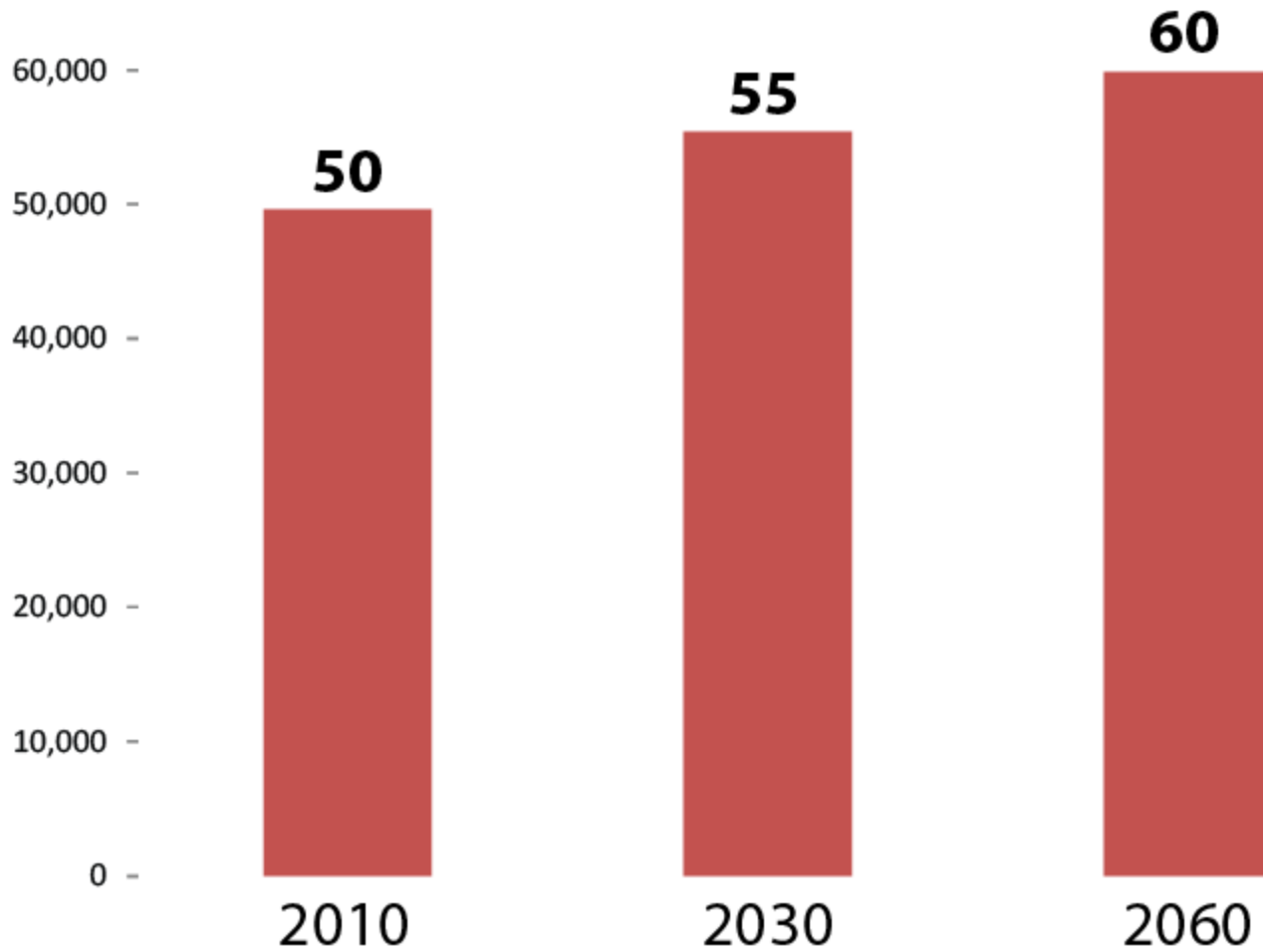


- **Conservation**
- **Groundwater**

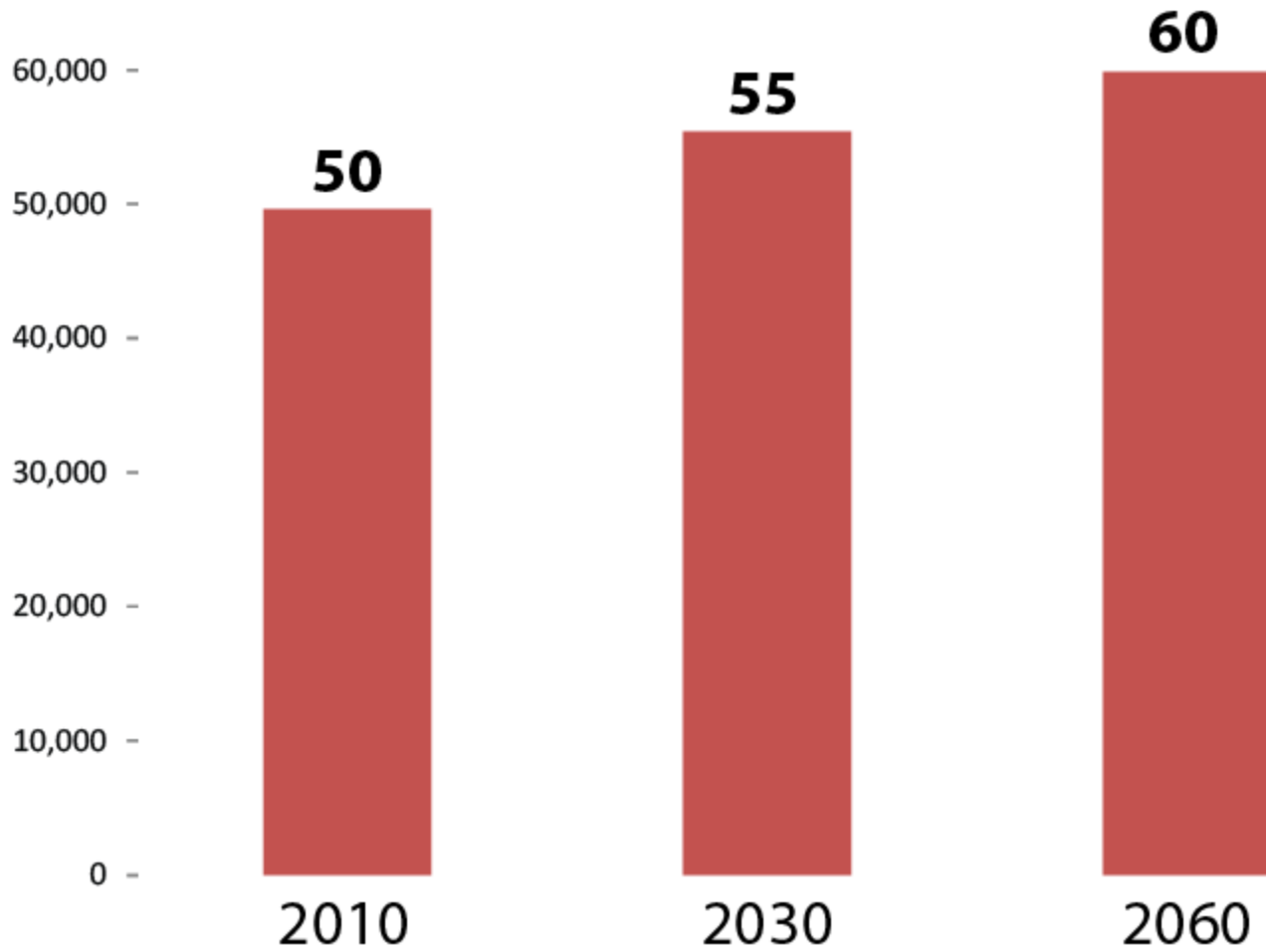
Kerr County



Number of Kerrsives

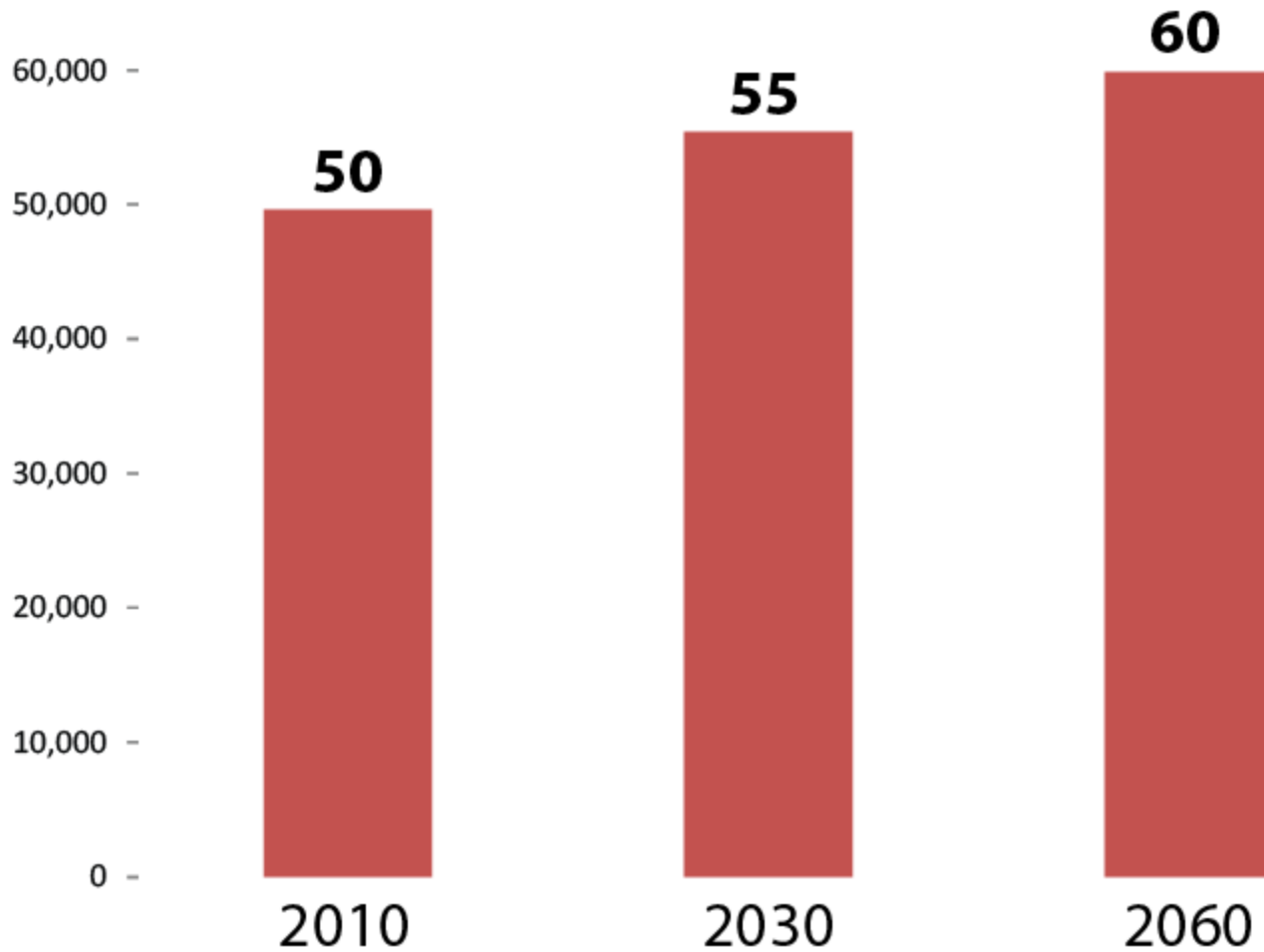


Number of Kerrmudgeons

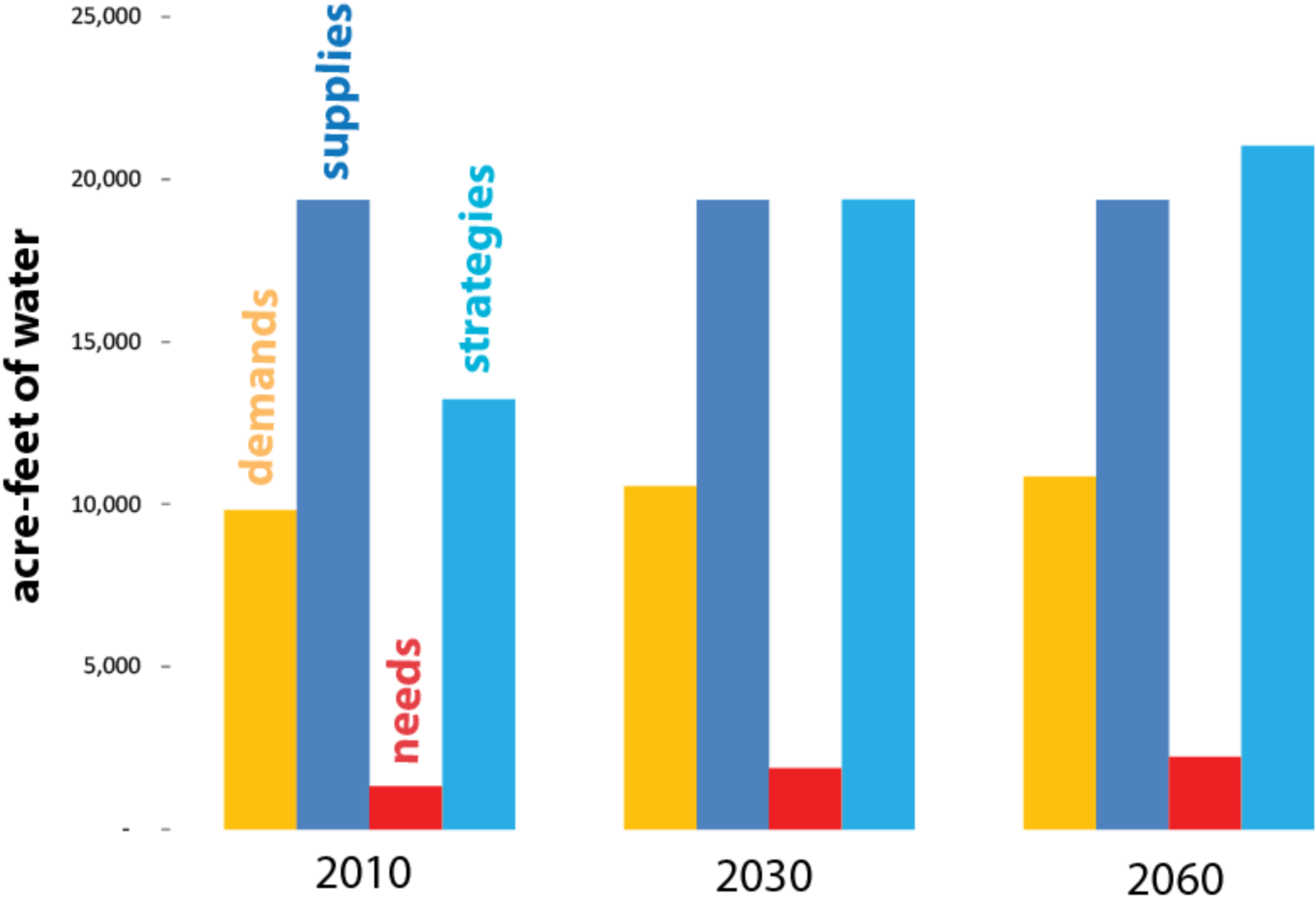


Number of Kerrsives

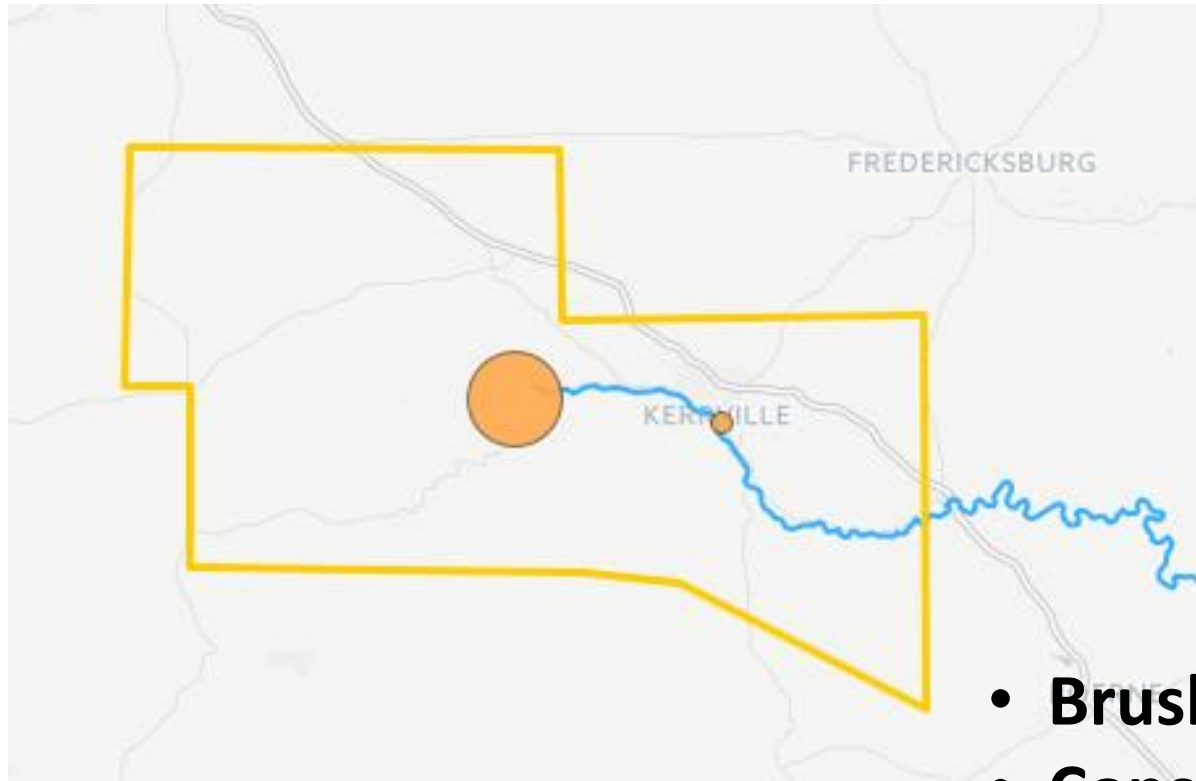
**20%
increase**



Kerr County

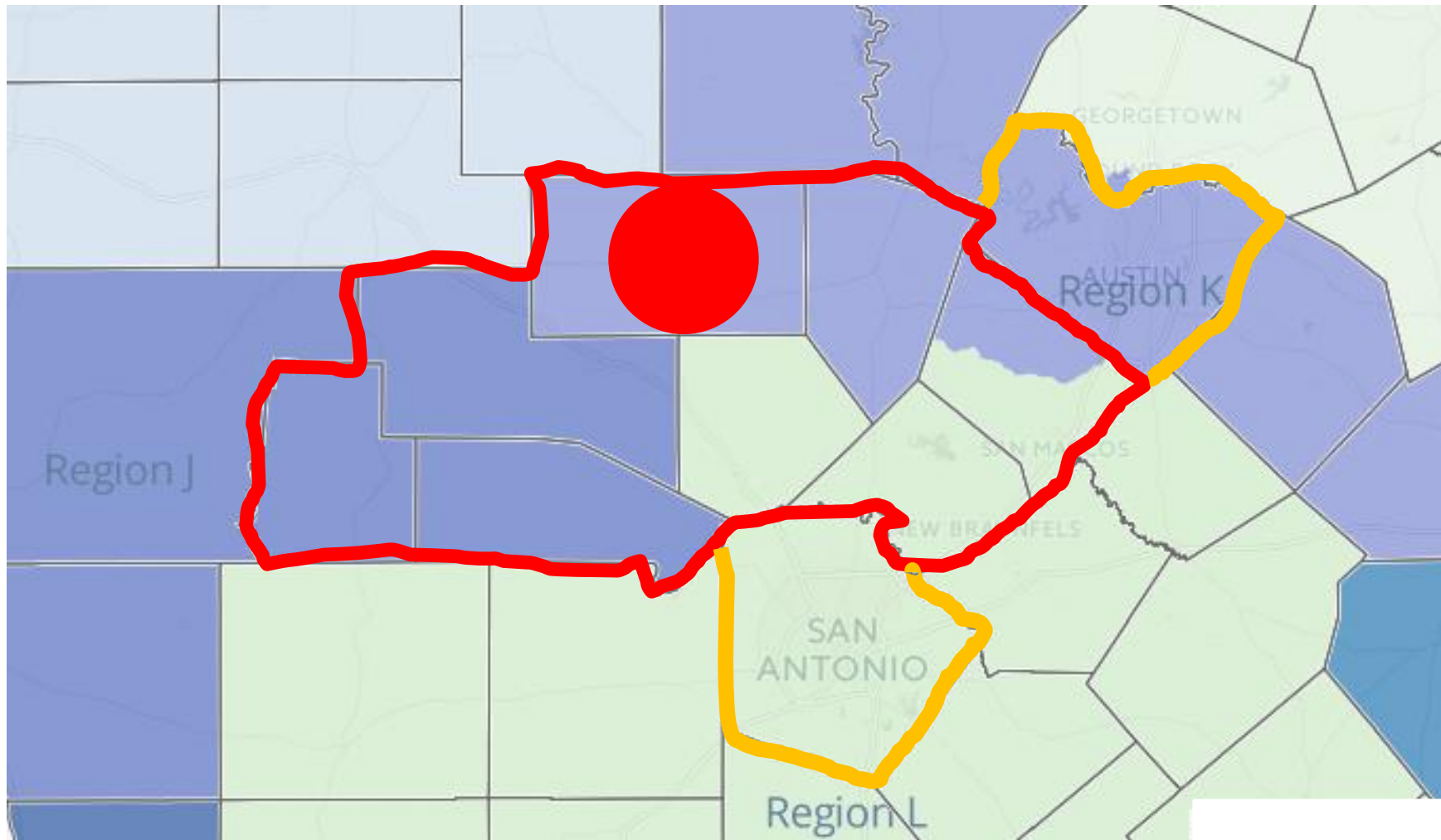


Kerr County



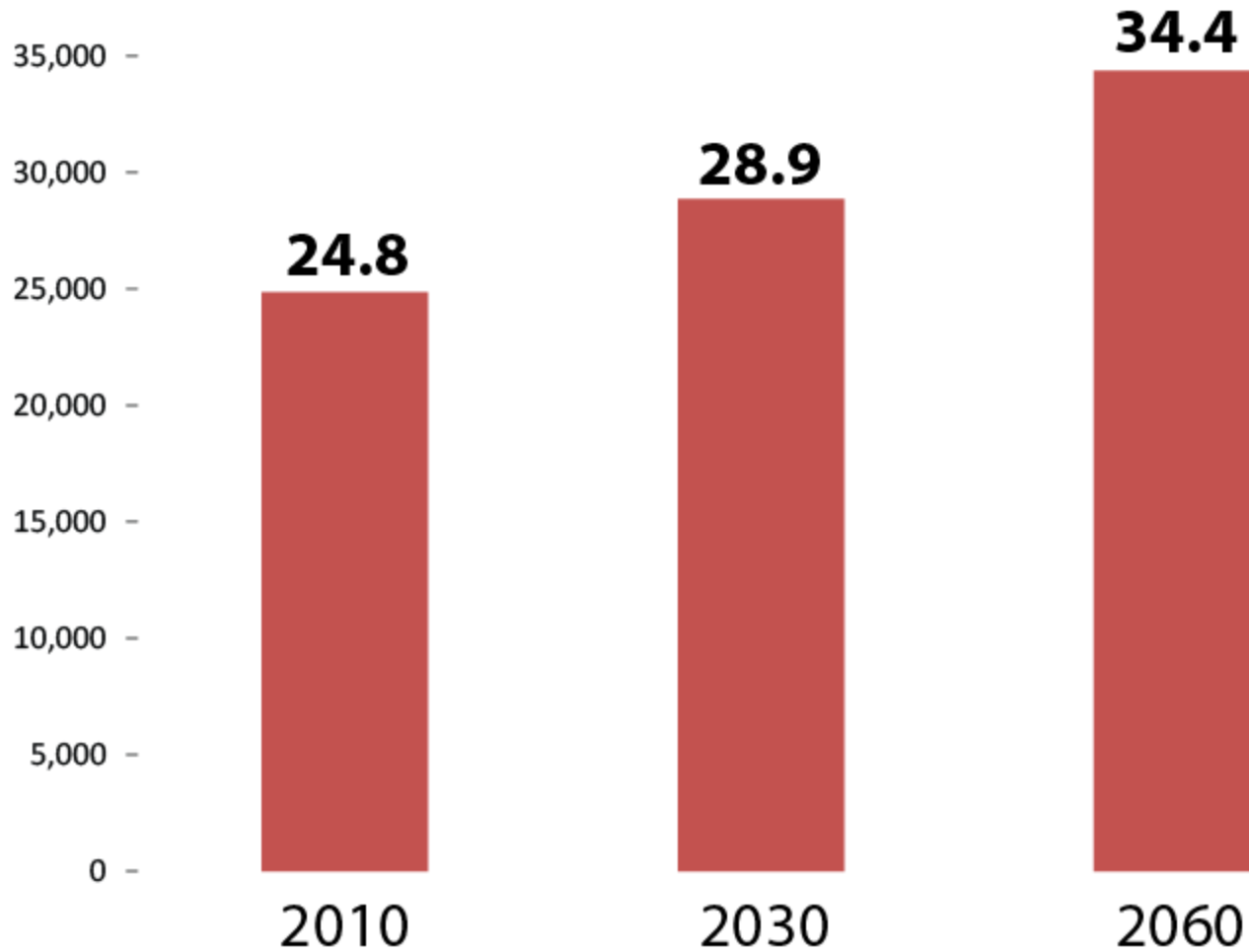
- **Brush control**
- **Conservation**
- **Aquifer storage and recovery**
- **Other surface water**

Gillespie County

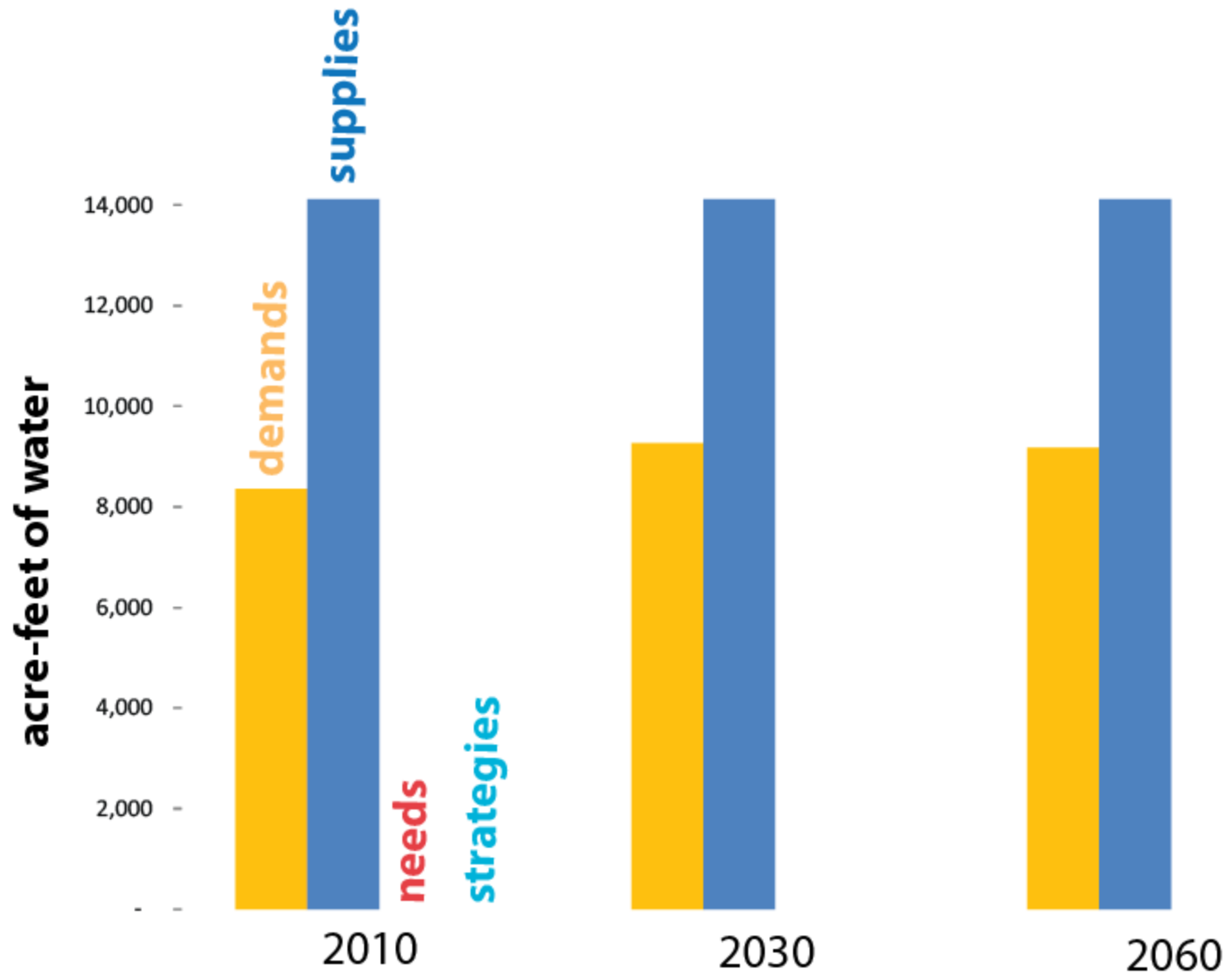


Number of Gillespians

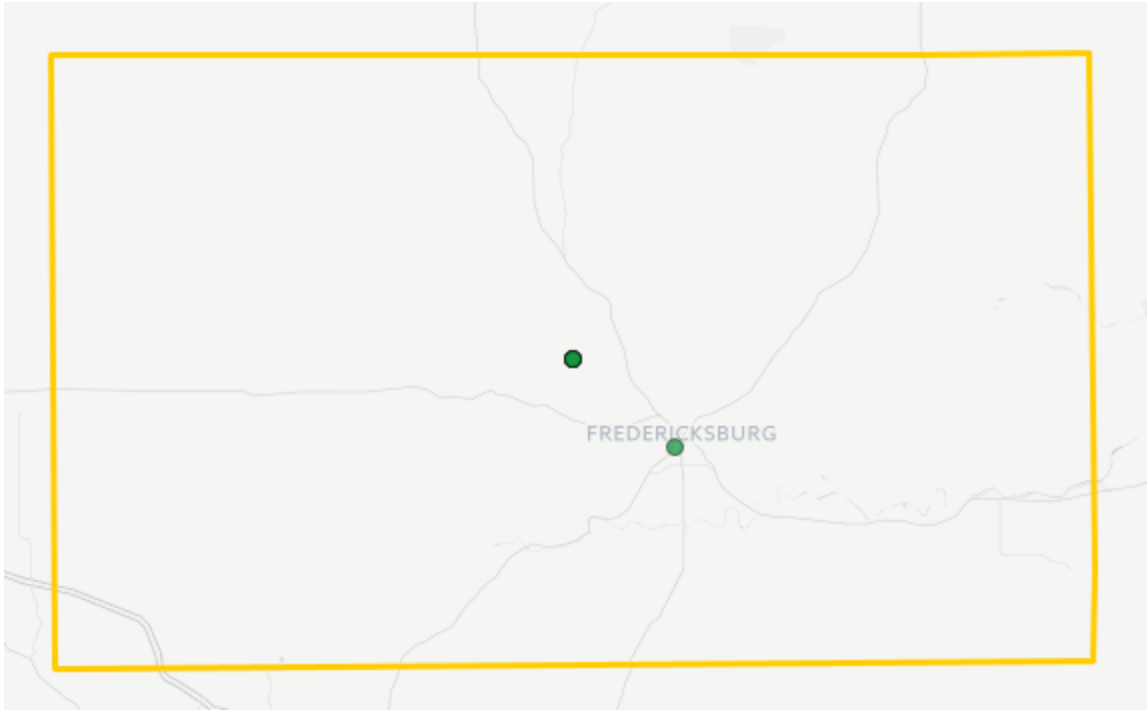
**39%
increase**



Gillespie County

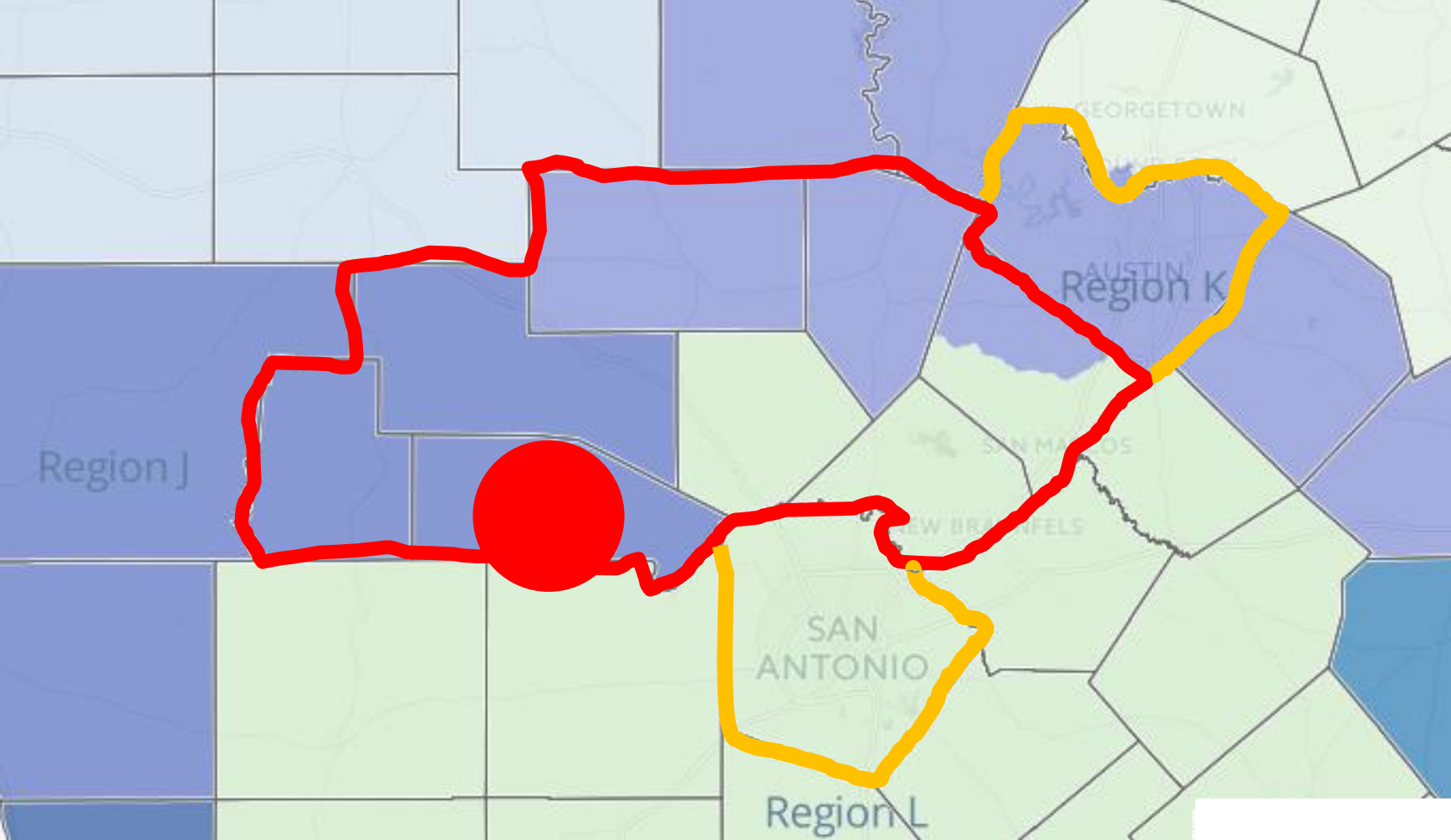


Gillespie County

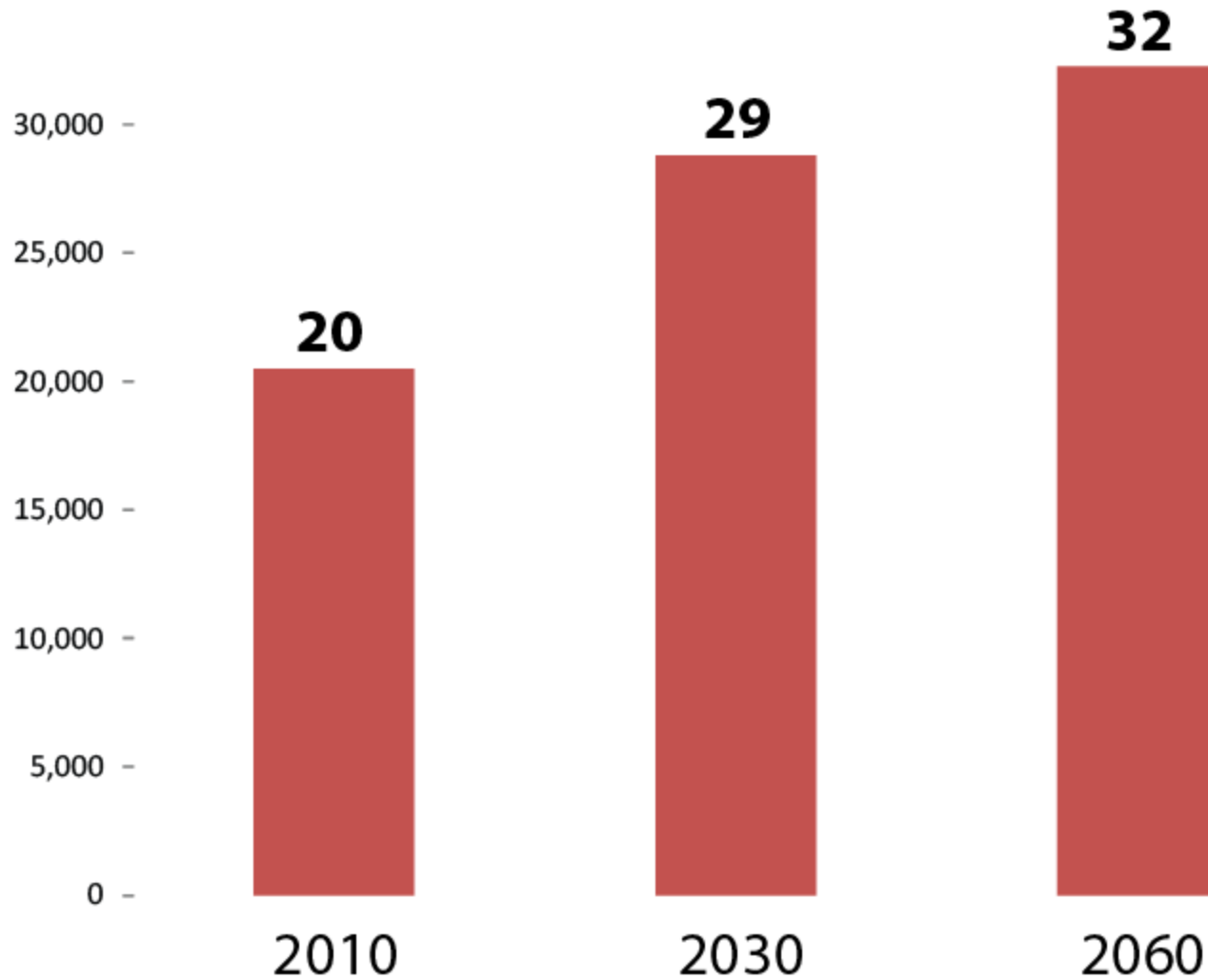


- **Kick back and drink an Enchanted Red Rock Ale**

Bandera County

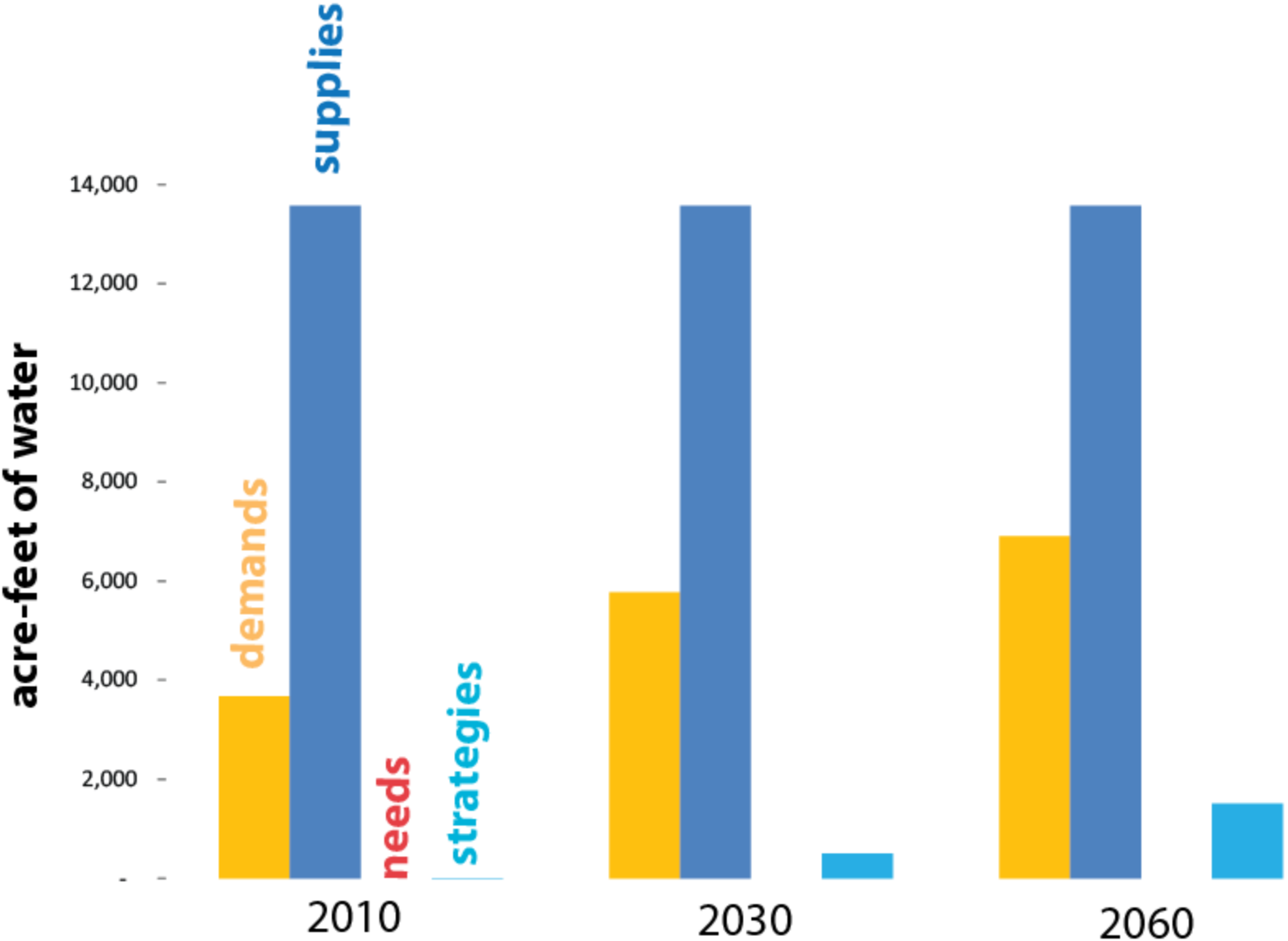


Number of Banderastrolilarians

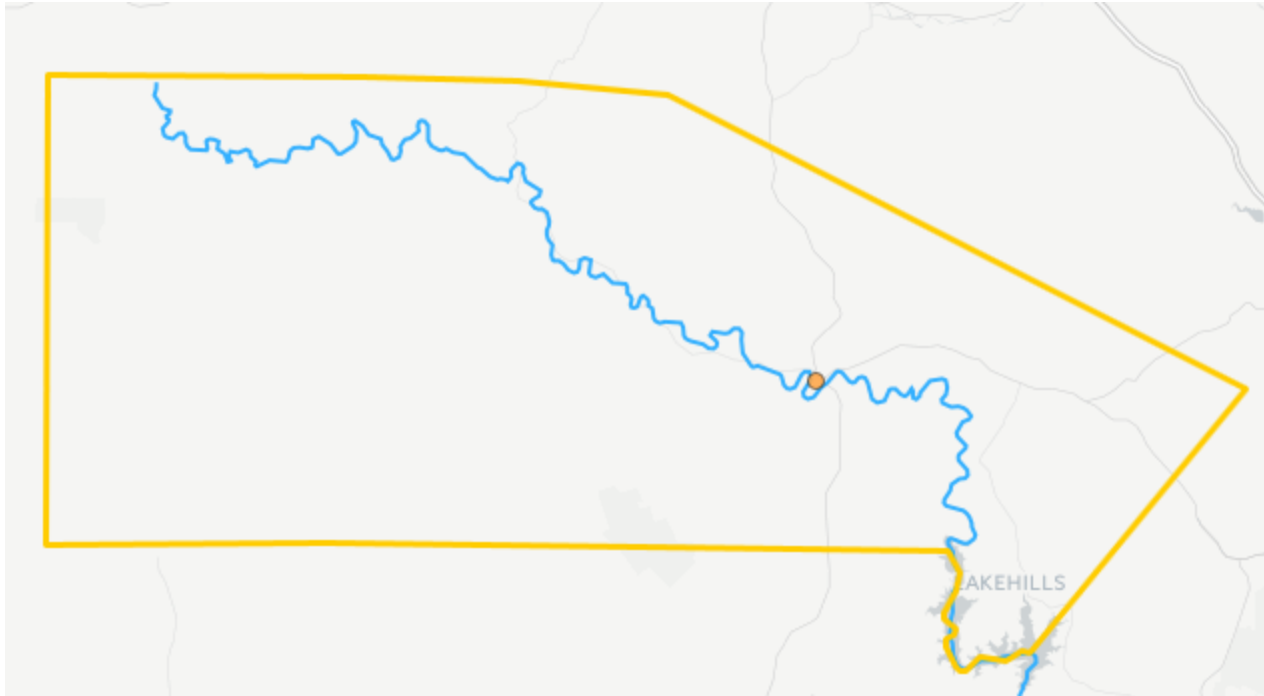


60%
increase

Bandera County

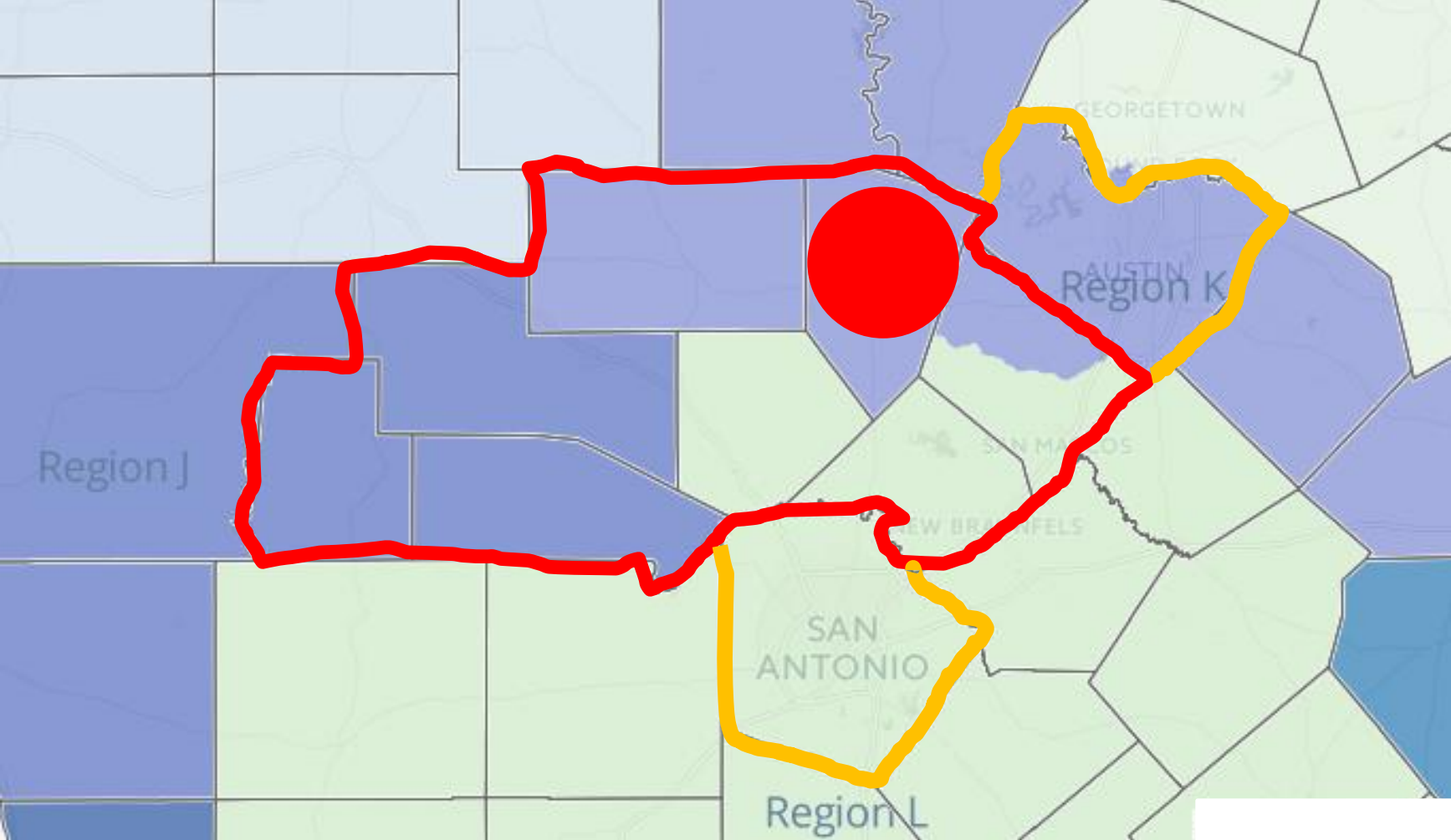


Bandera County

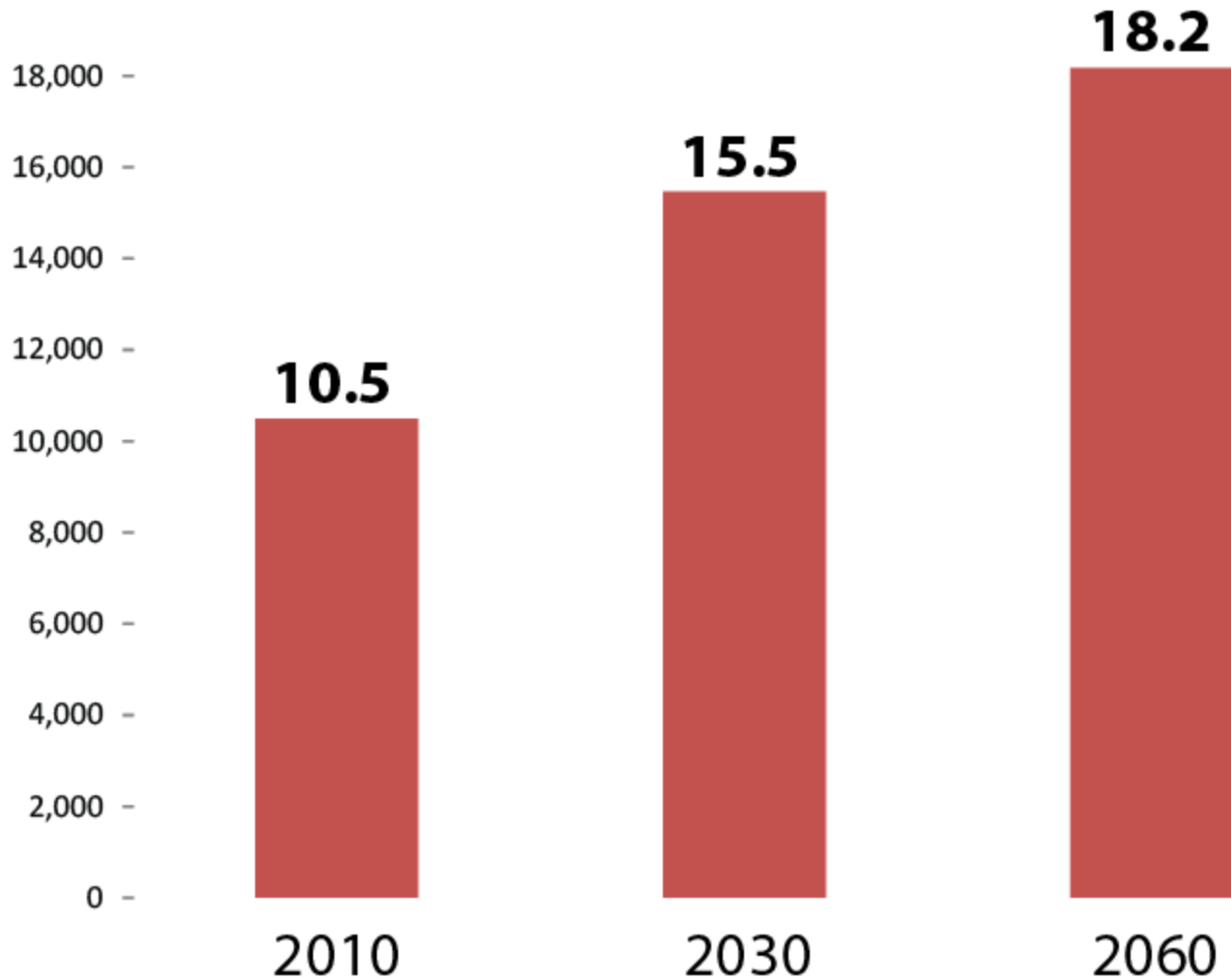


- **Conservation**
- **Aquifer storage and recovery**

Blanco County

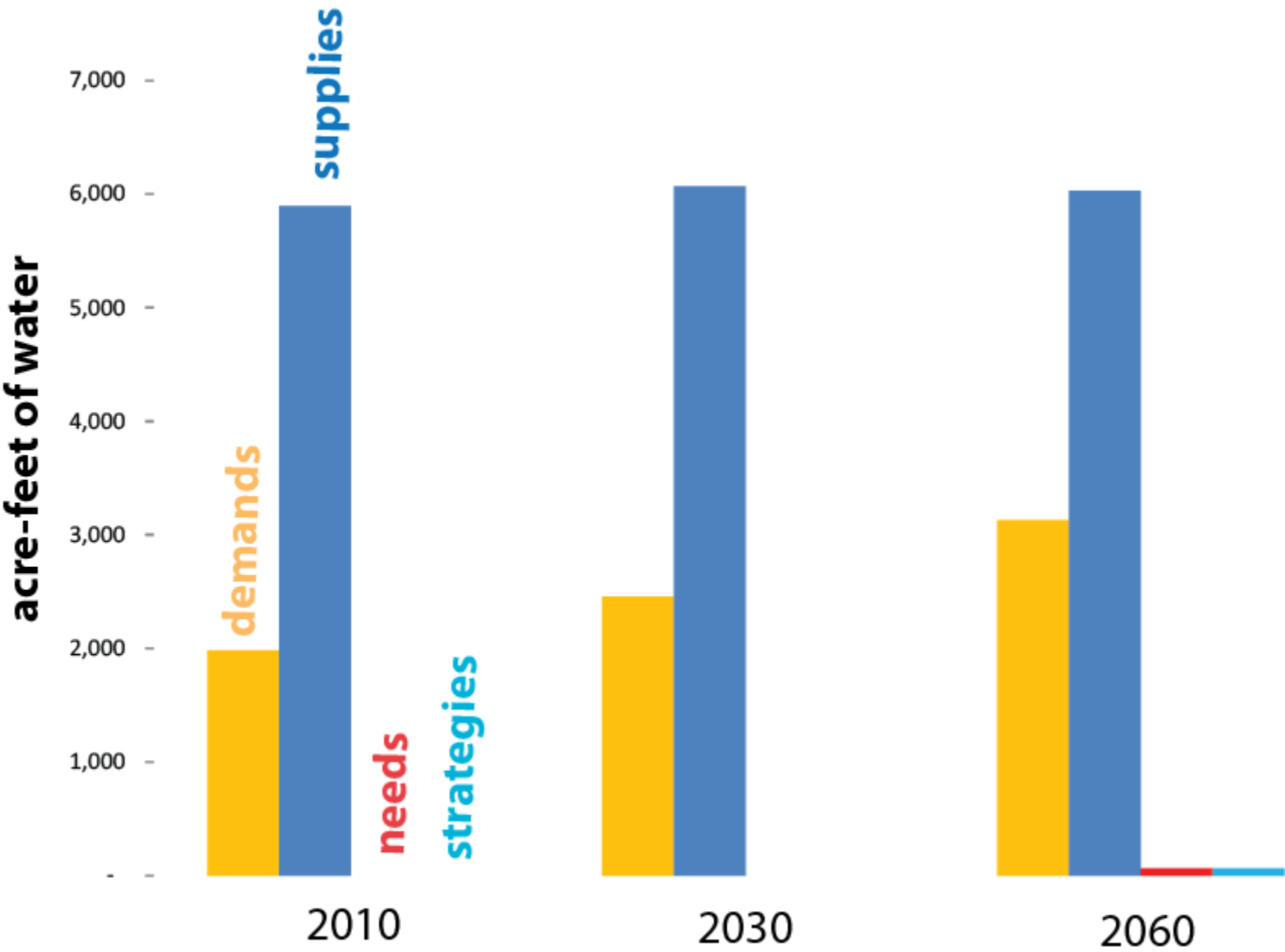


Number of Blancostas



73%
increase

Blanco County

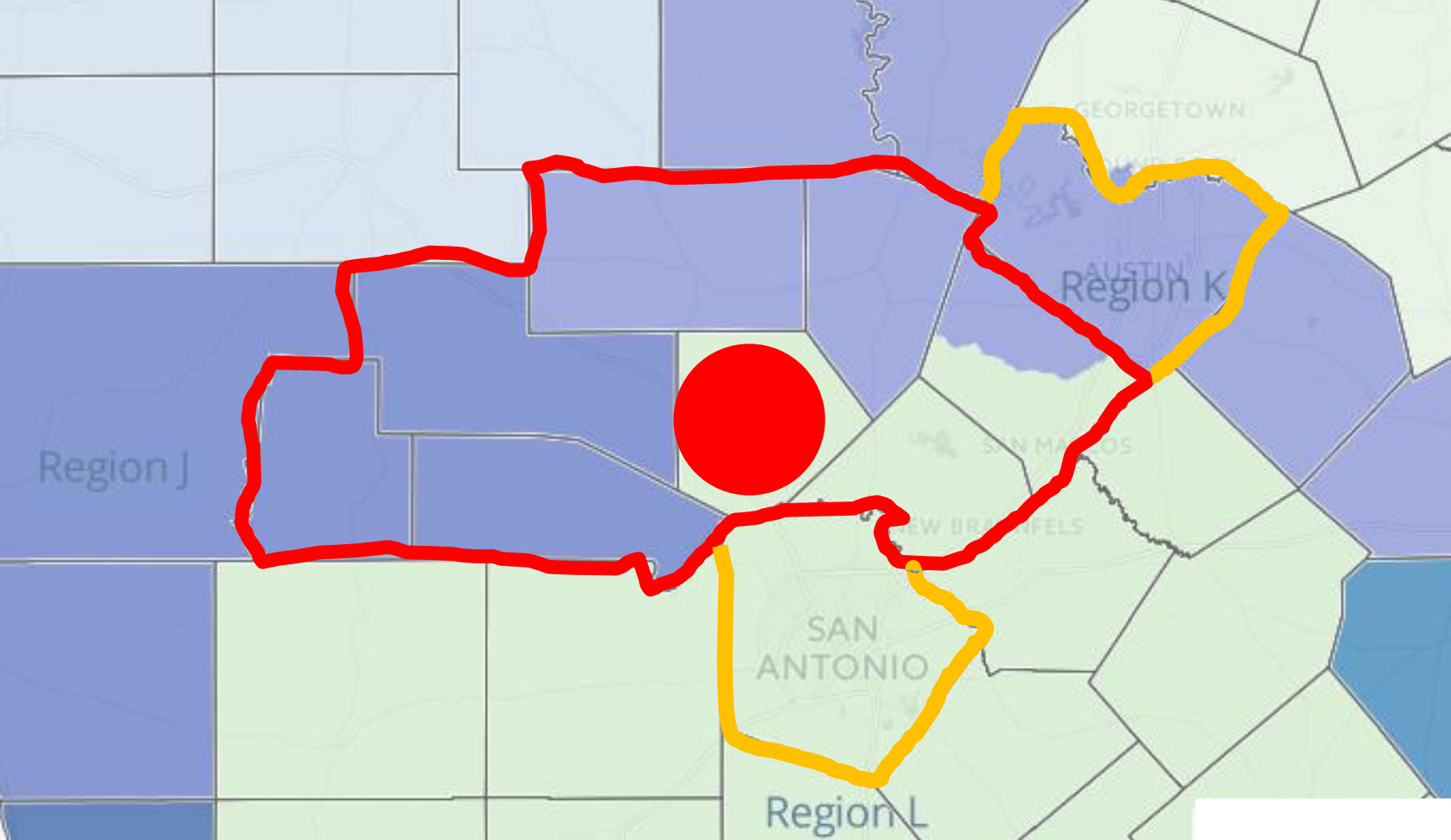


Blanco County

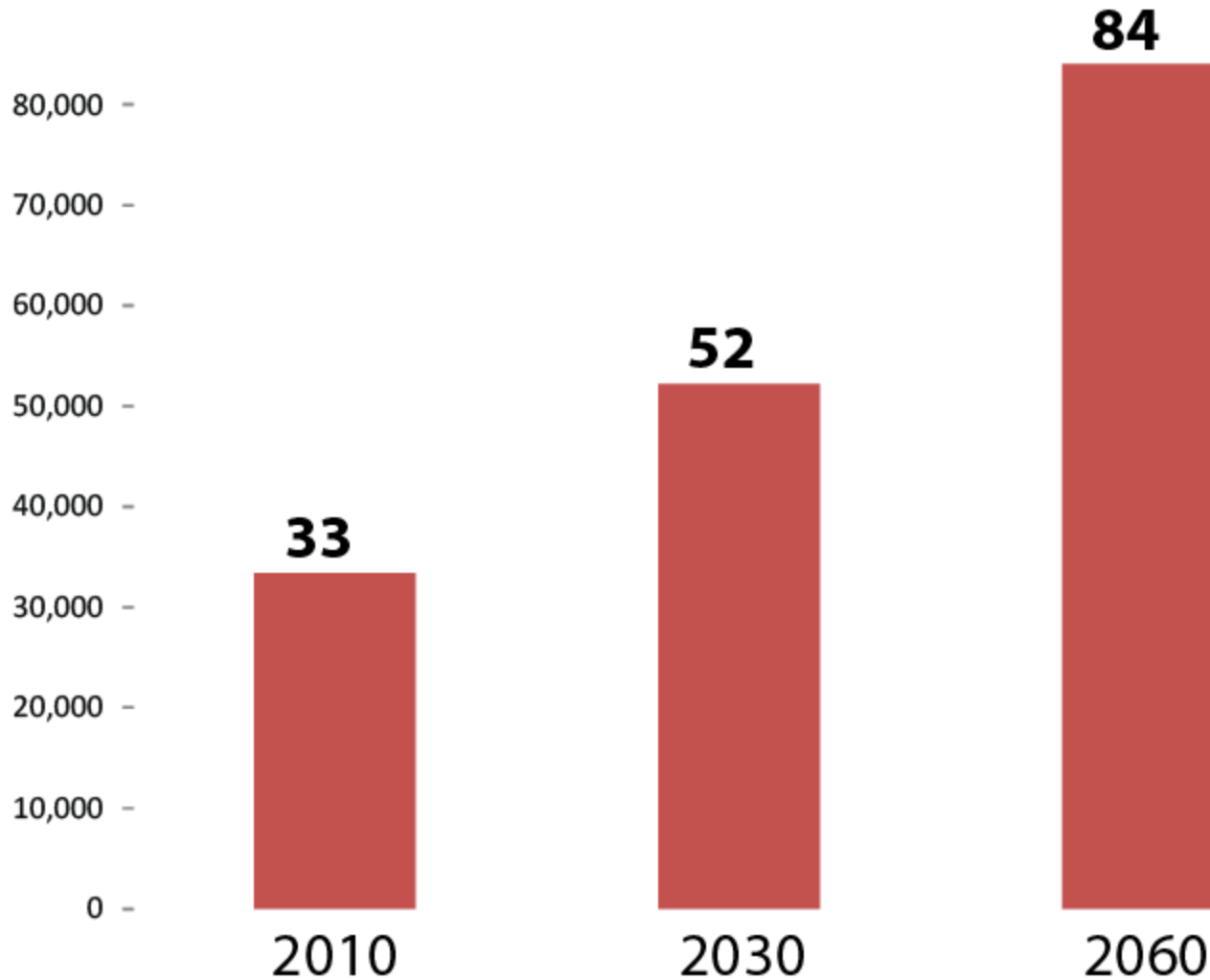


- **Groundwater**

Kendall County

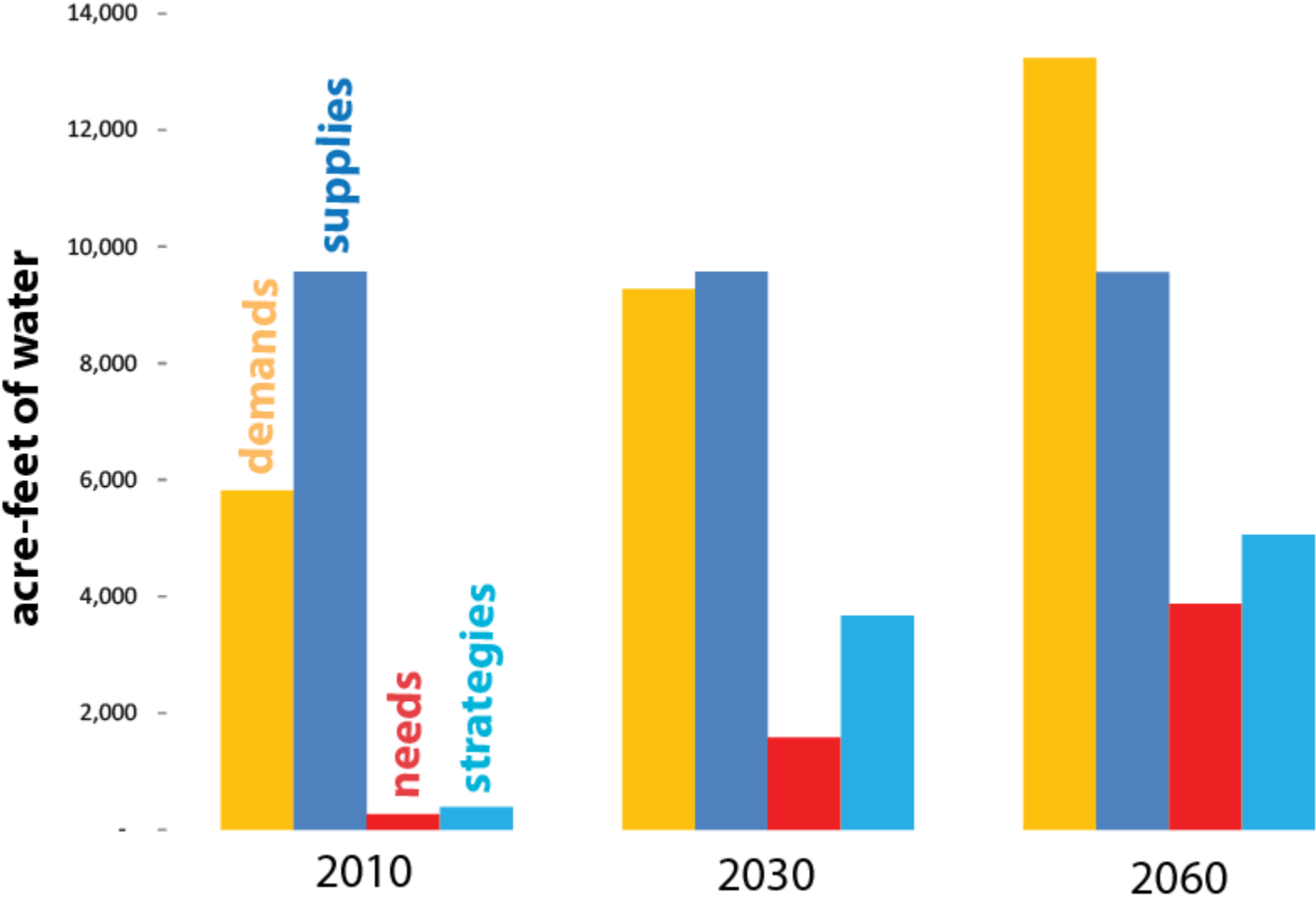


Number of Kendallilamas



155%
increase

Kendall County

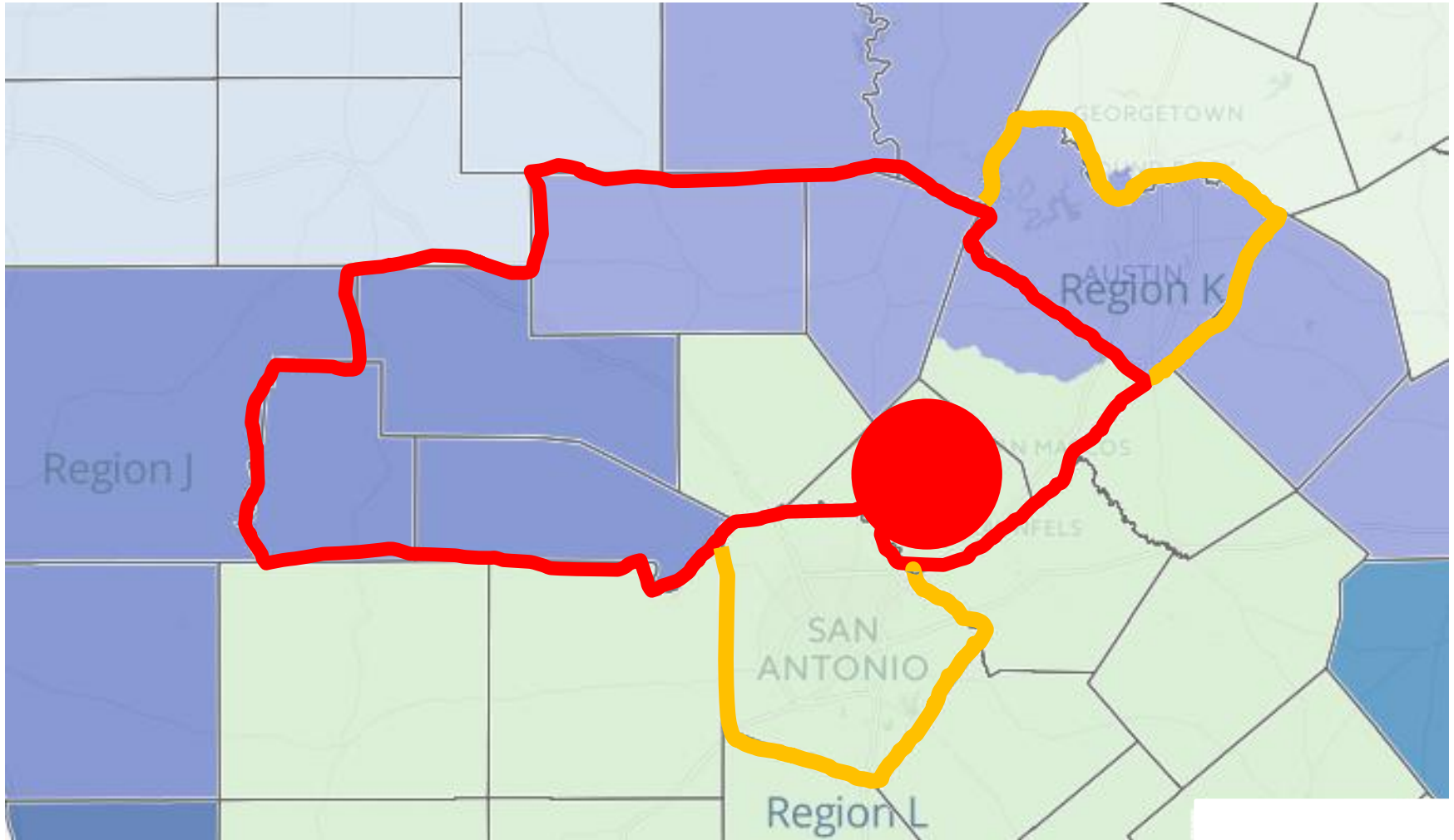


Kendall County



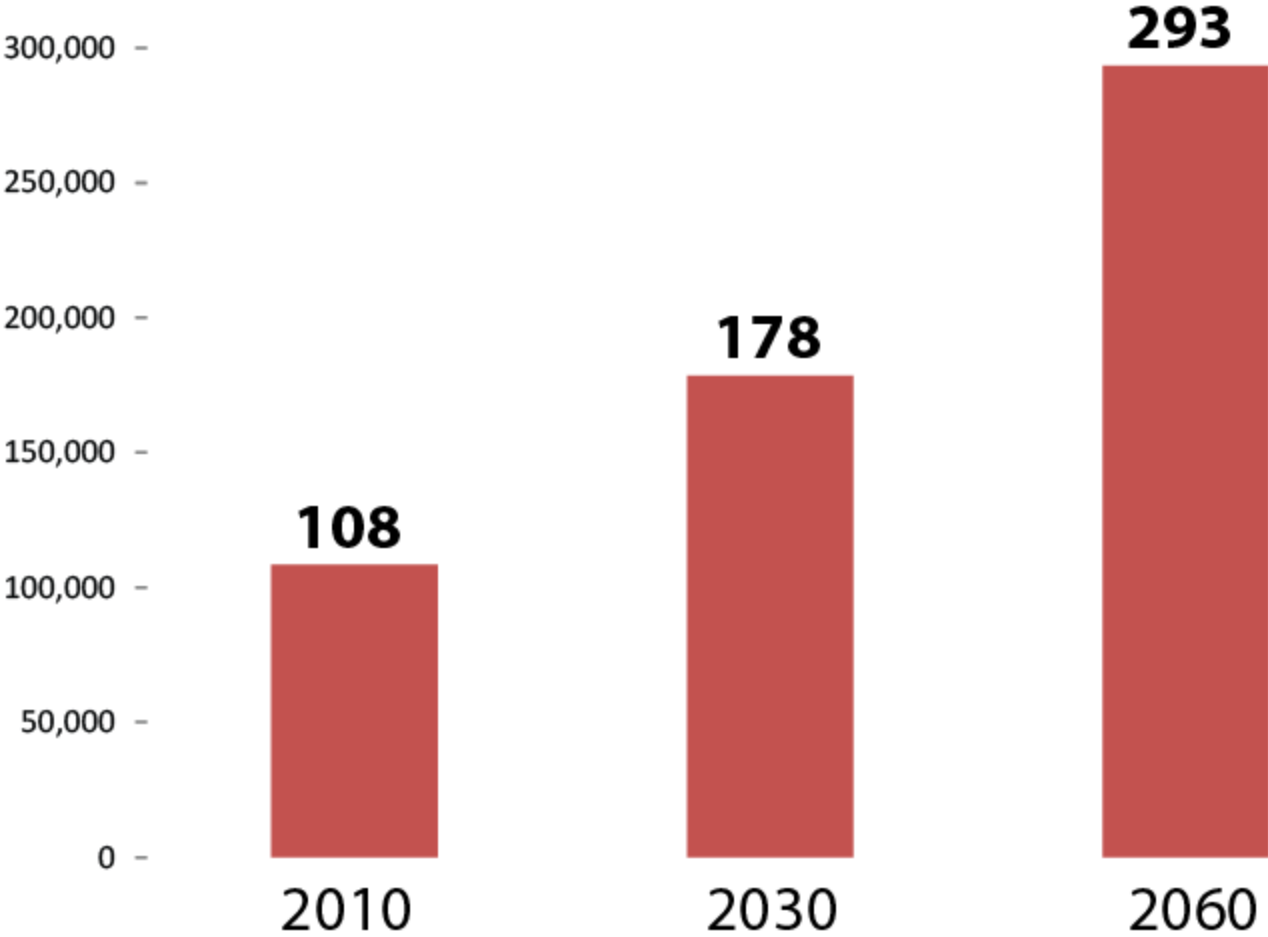
- **Conservation**
- **Aquifer storage and recovery**
- **Groundwater**
- **Other surface water**

Comal County

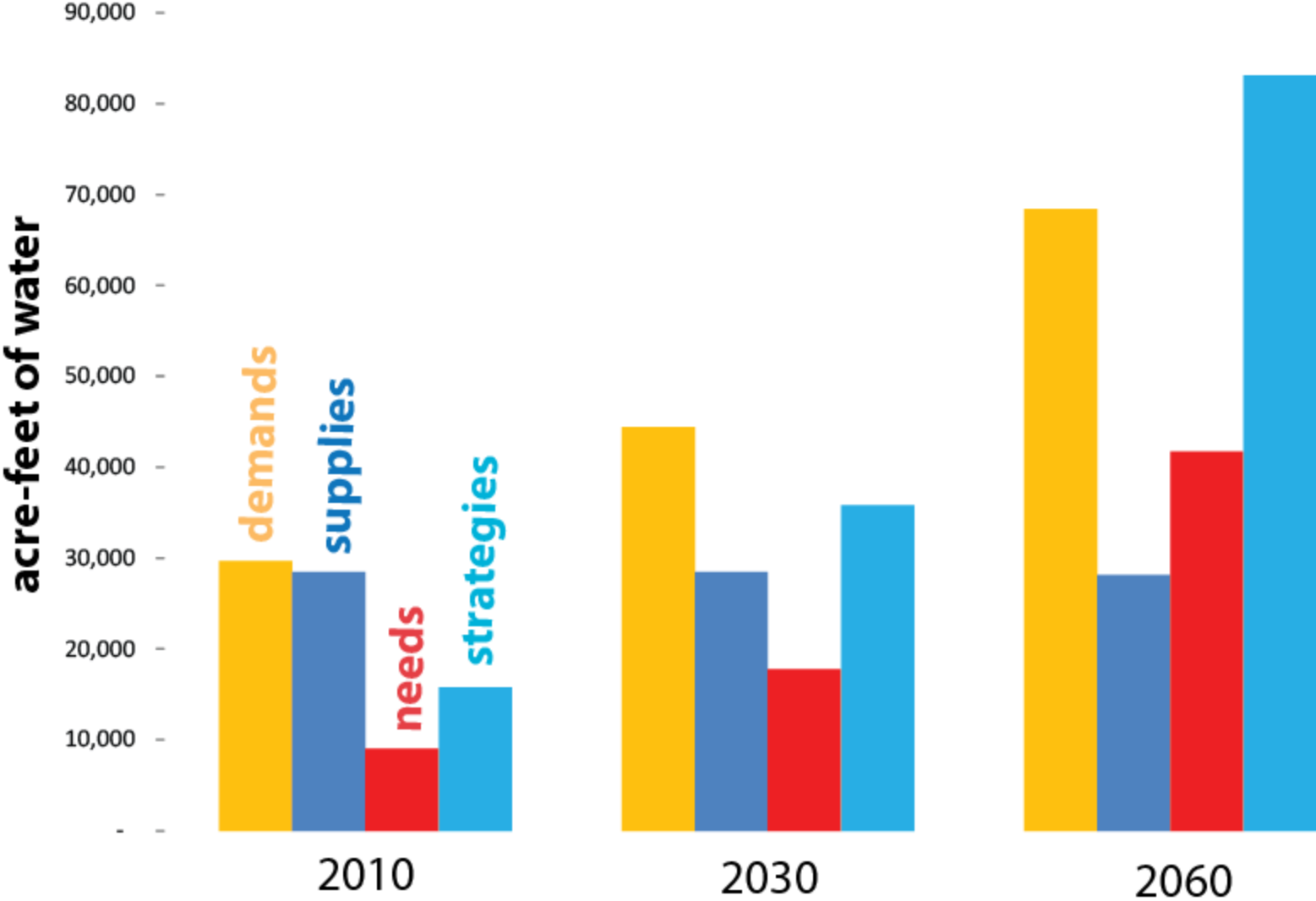


Number of Comalarrians

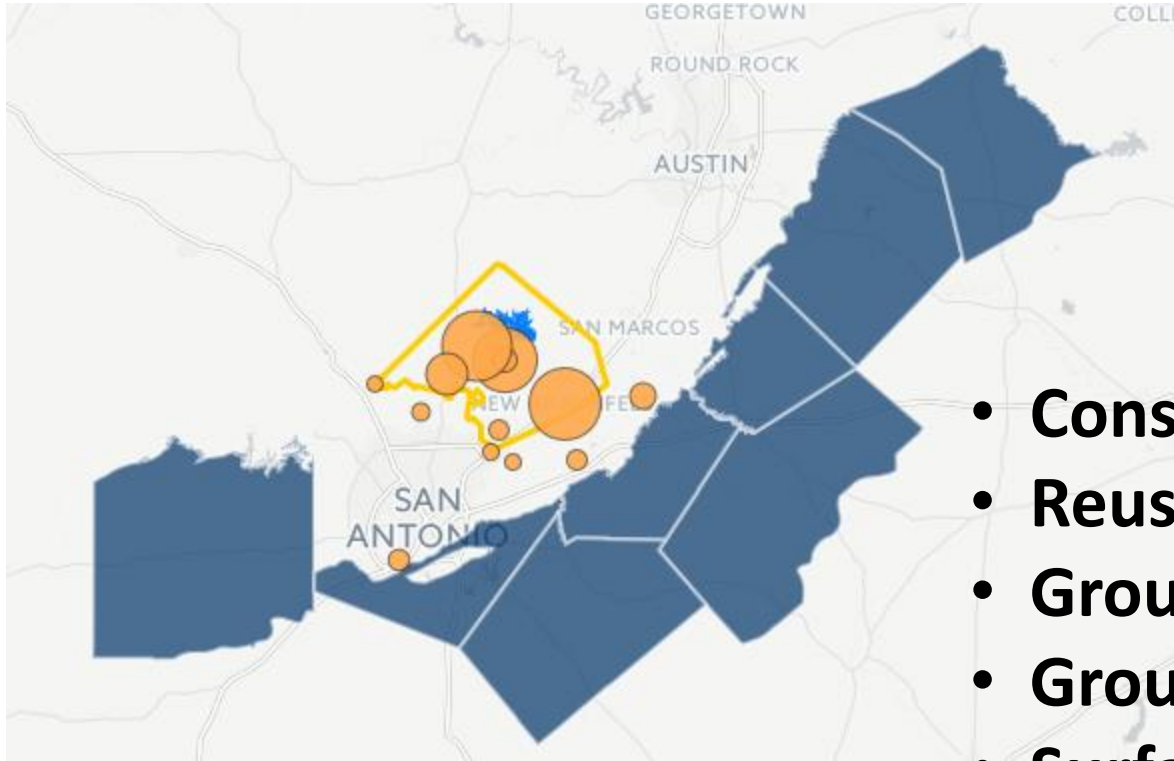
**171%
increase**



Comal County

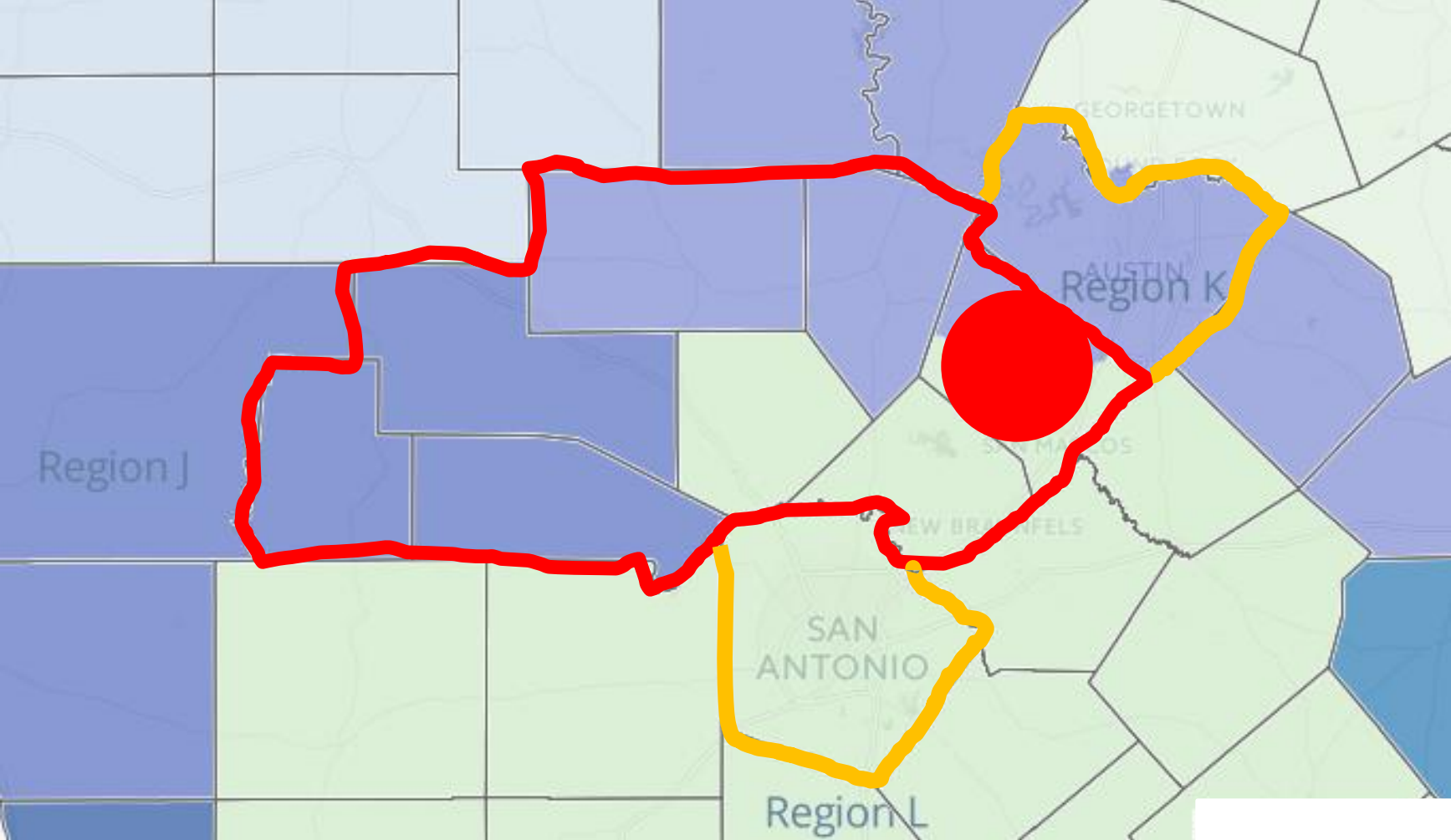


Comal County

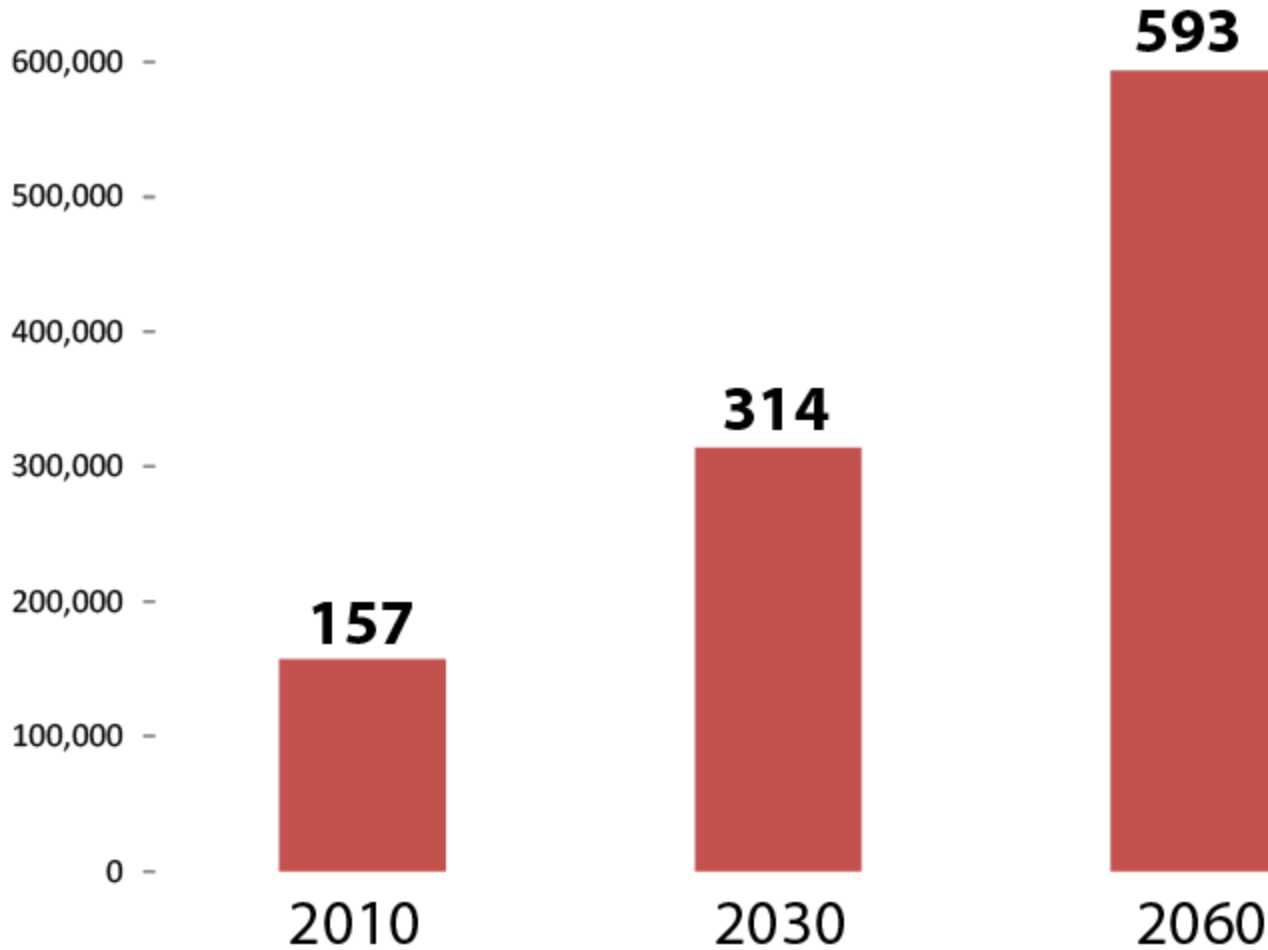


- **Conservation**
- **Reuse**
- **Groundwater**
- **Groundwater desal**
- **Surface water**

Hays County

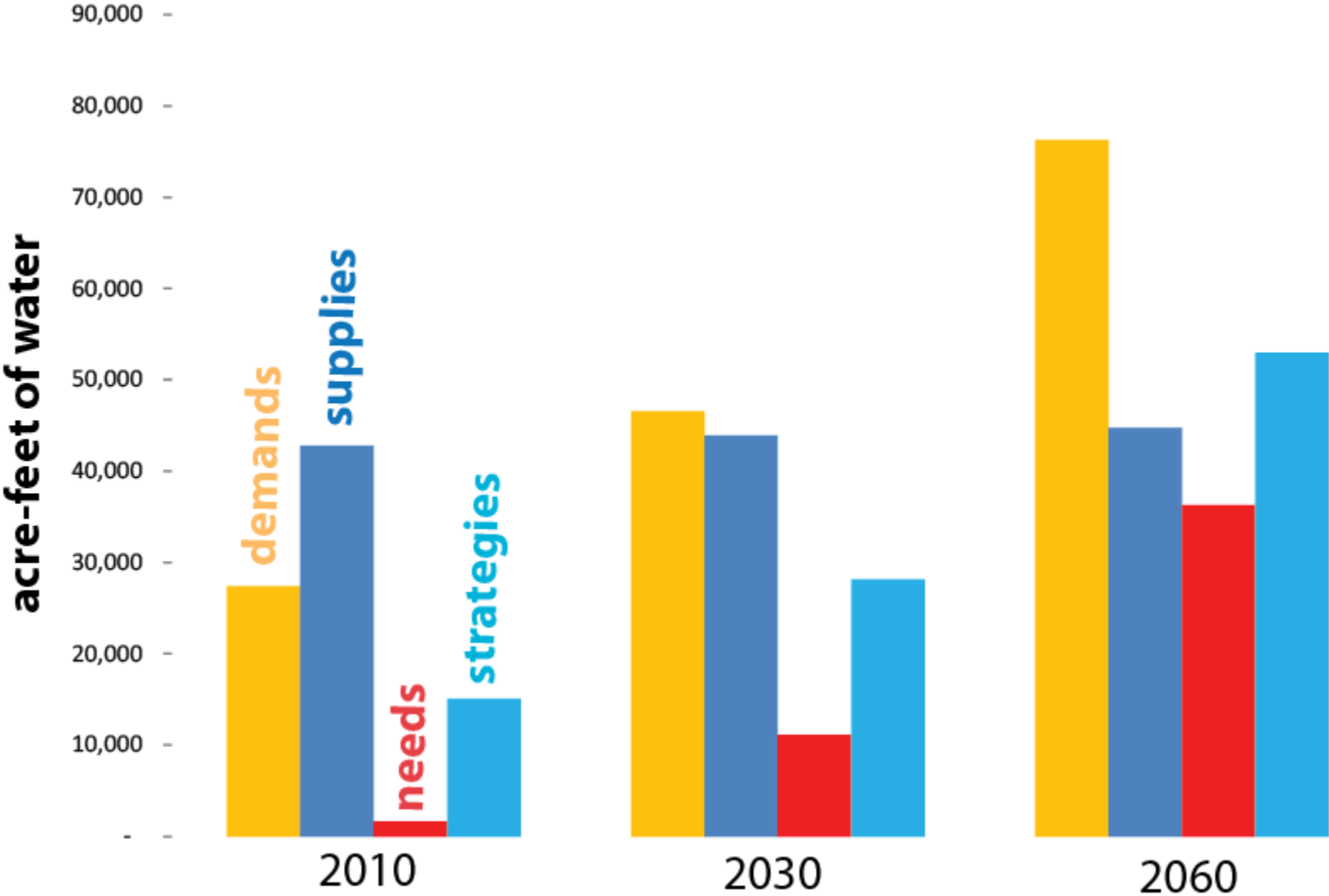


Number of Hayses

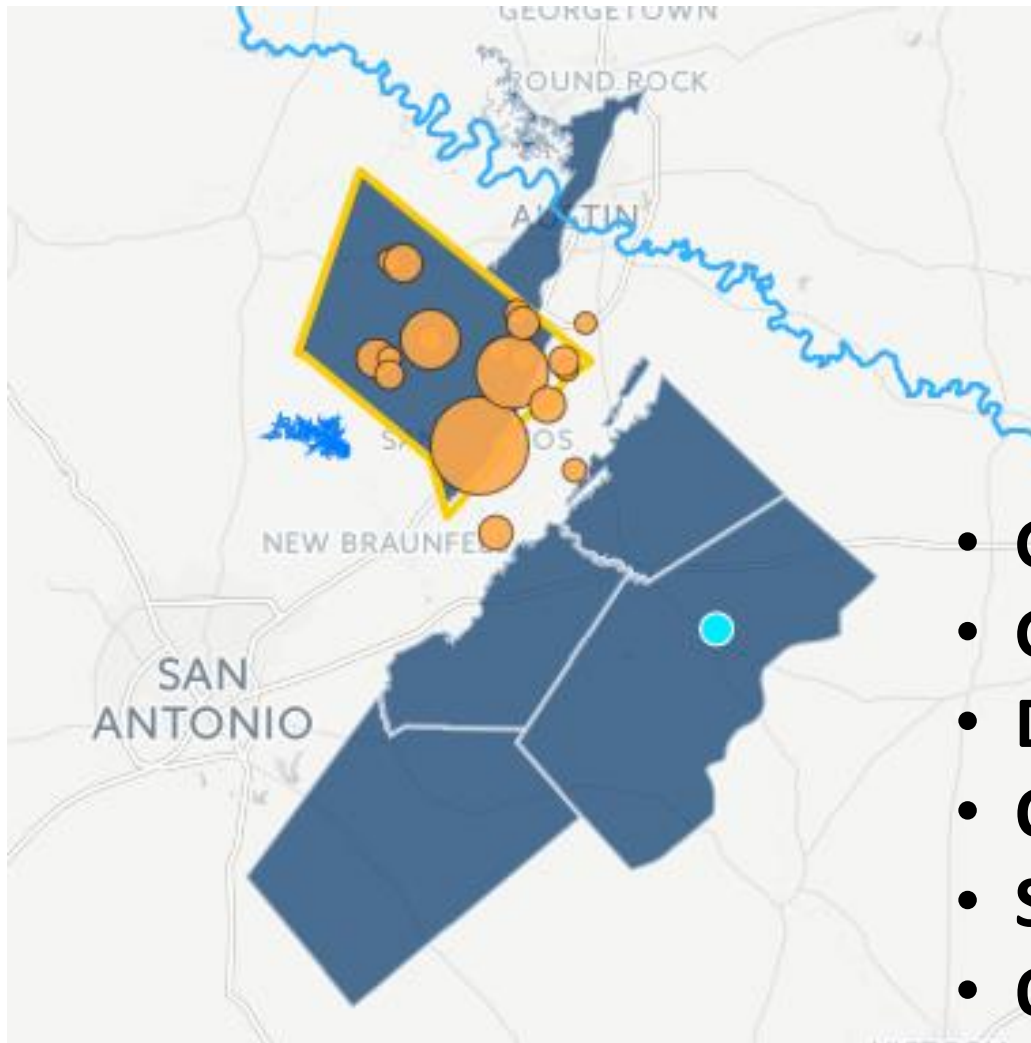


278%
increase

Hays County

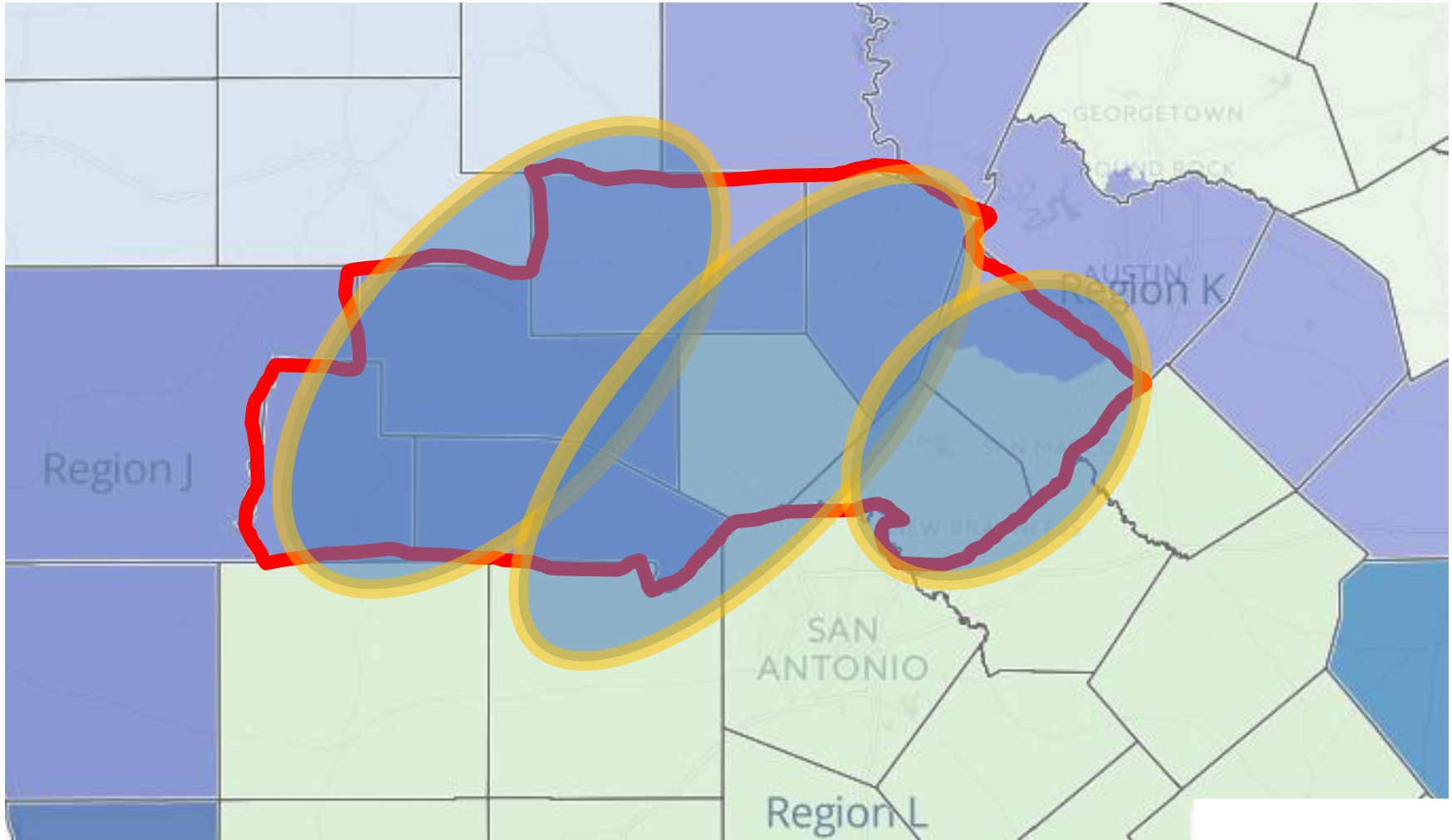


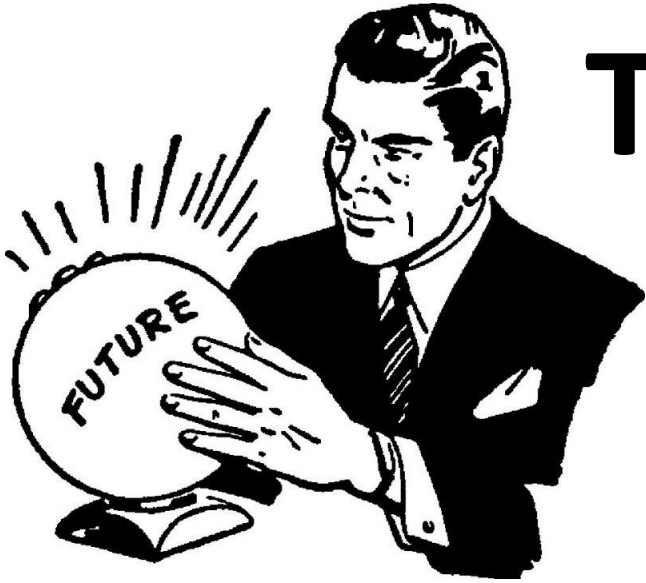
Hays County



- Groundwater
- Groundwater desal
- Drought management
- Conservation
- Surface water
- Other surface water

A gradient of impact...



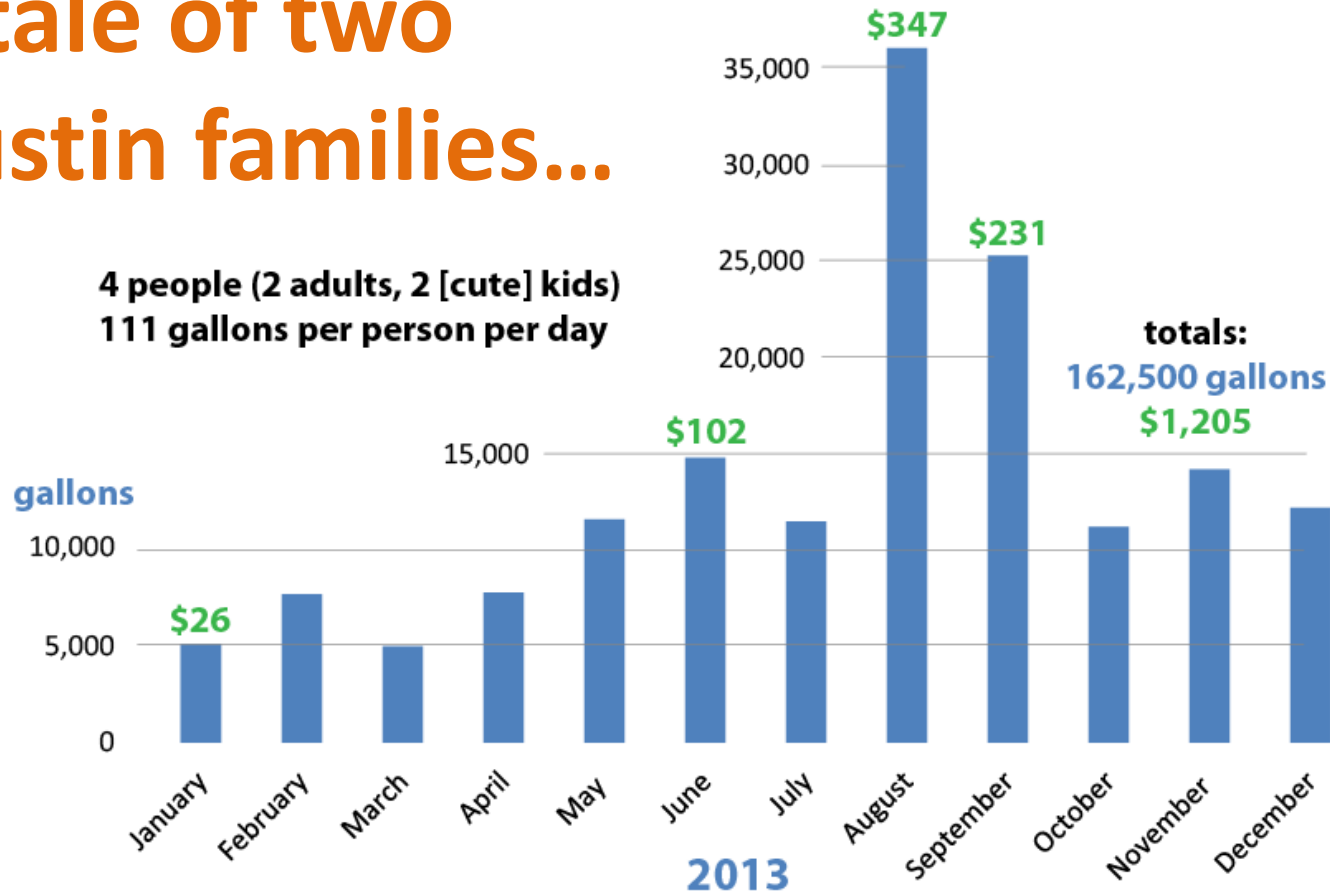


The Future?

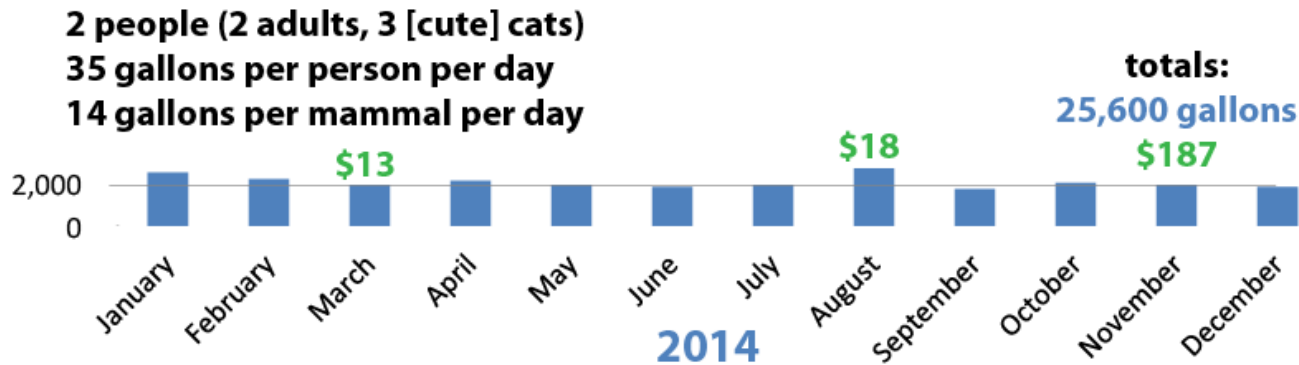
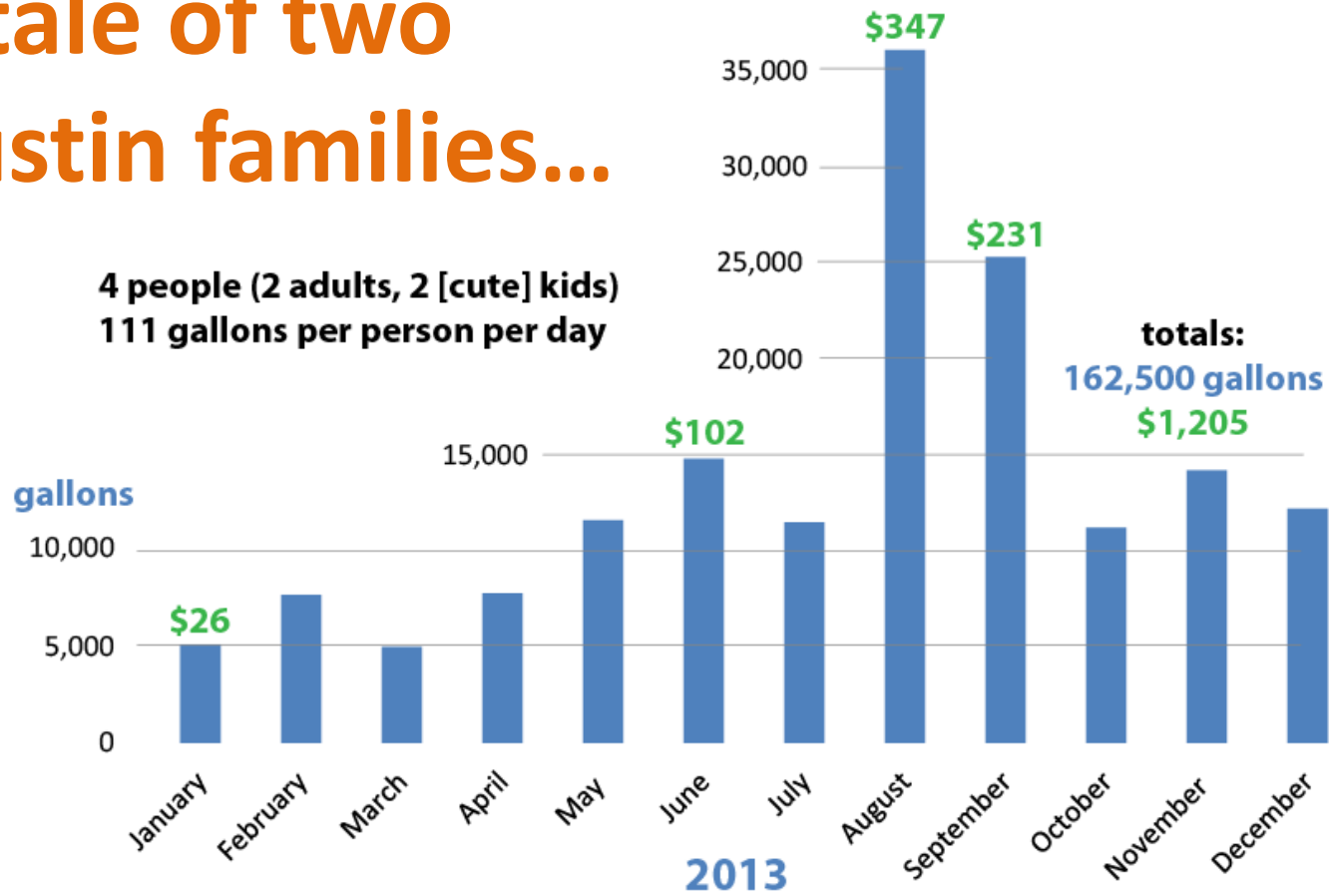
- **Conservation**
- **Reuse**
- **Rainwater/greywater harvesting**
- **Desalination (ground- & sea water)**

A tale of two Austin families...

4 people (2 adults, 2 [cute] kids)
111 gallons per person per day



A tale of two Austin families...



It's understandable why some folks can be **Kerrmudgeons** and talk like **Gillespithespians** when someone is a **Bexarer** of perceived **Travisties**. There are no blank checks or **Blancostas** when solving water problems. But sometimes we need to think outside the box, gazing in deep thought at the stars through the **Hayses** sky like **Banderastrolilarians** (hopefully lathered in bug spray so we don't die of **Comalaria...**). At the end of the day, we need to be chill like **Kendallilamas** and work together as **Realists** to ensure **Texas** has enough water for our future.





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