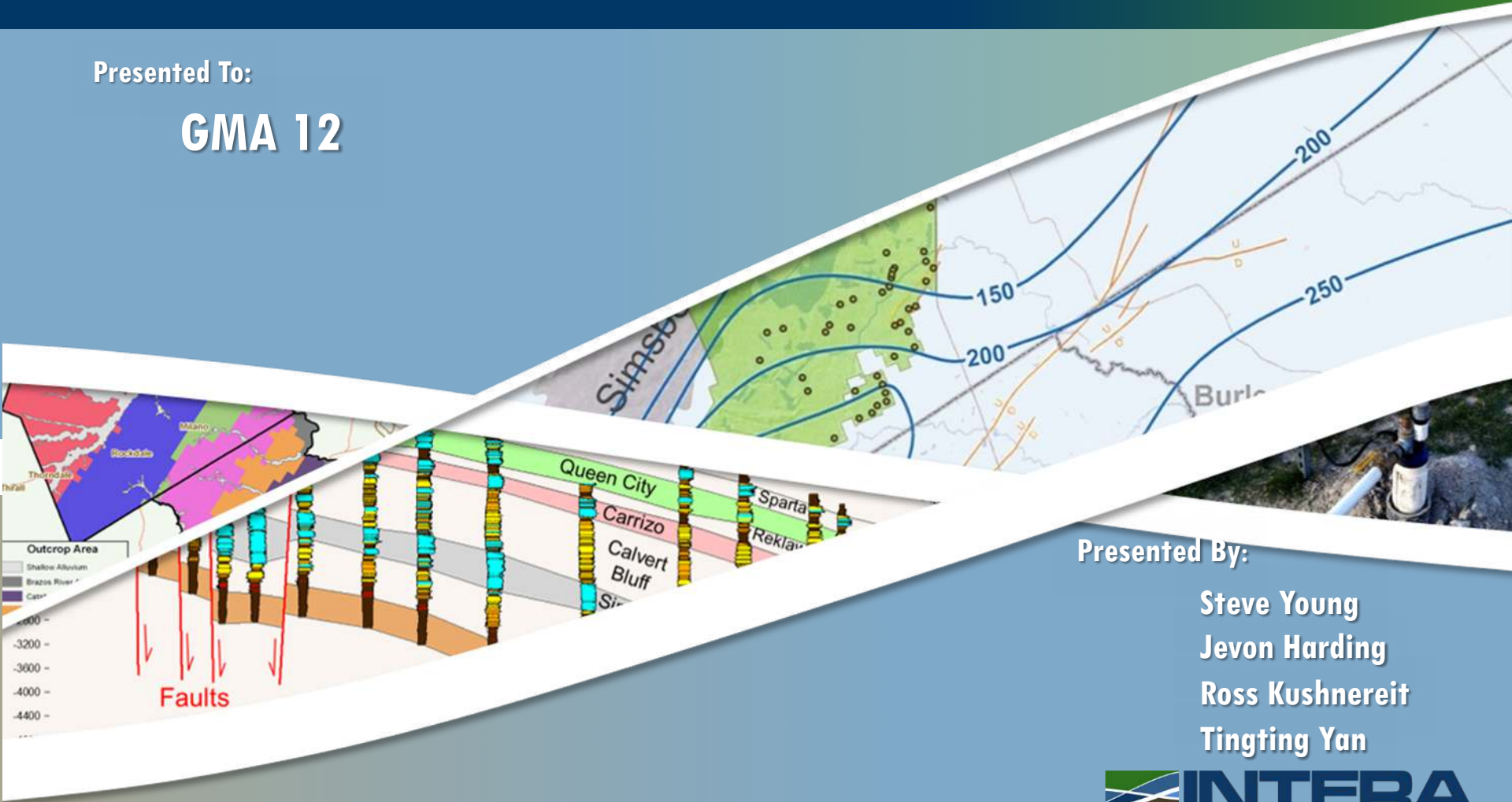


# POSGCD Reported Pumping and Operating Permits

Presented To:

**GMA 12**



Presented By:

Steve Young  
Jevon Harding  
Ross Kushnereit  
Tingting Yan

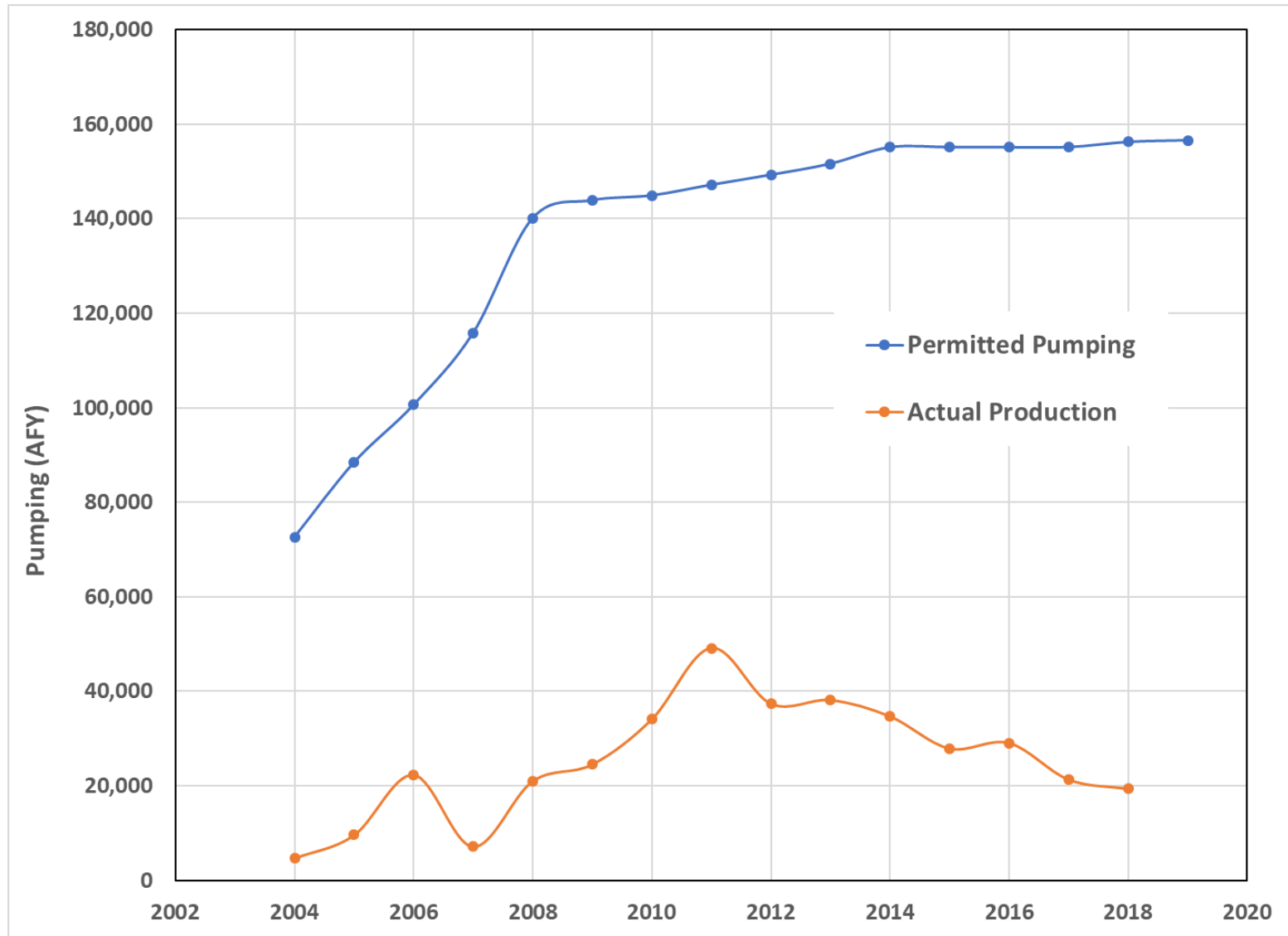
**INTERA**  
GEOSCIENCE & ENGINEERING SOLUTIONS

May 30, 2019

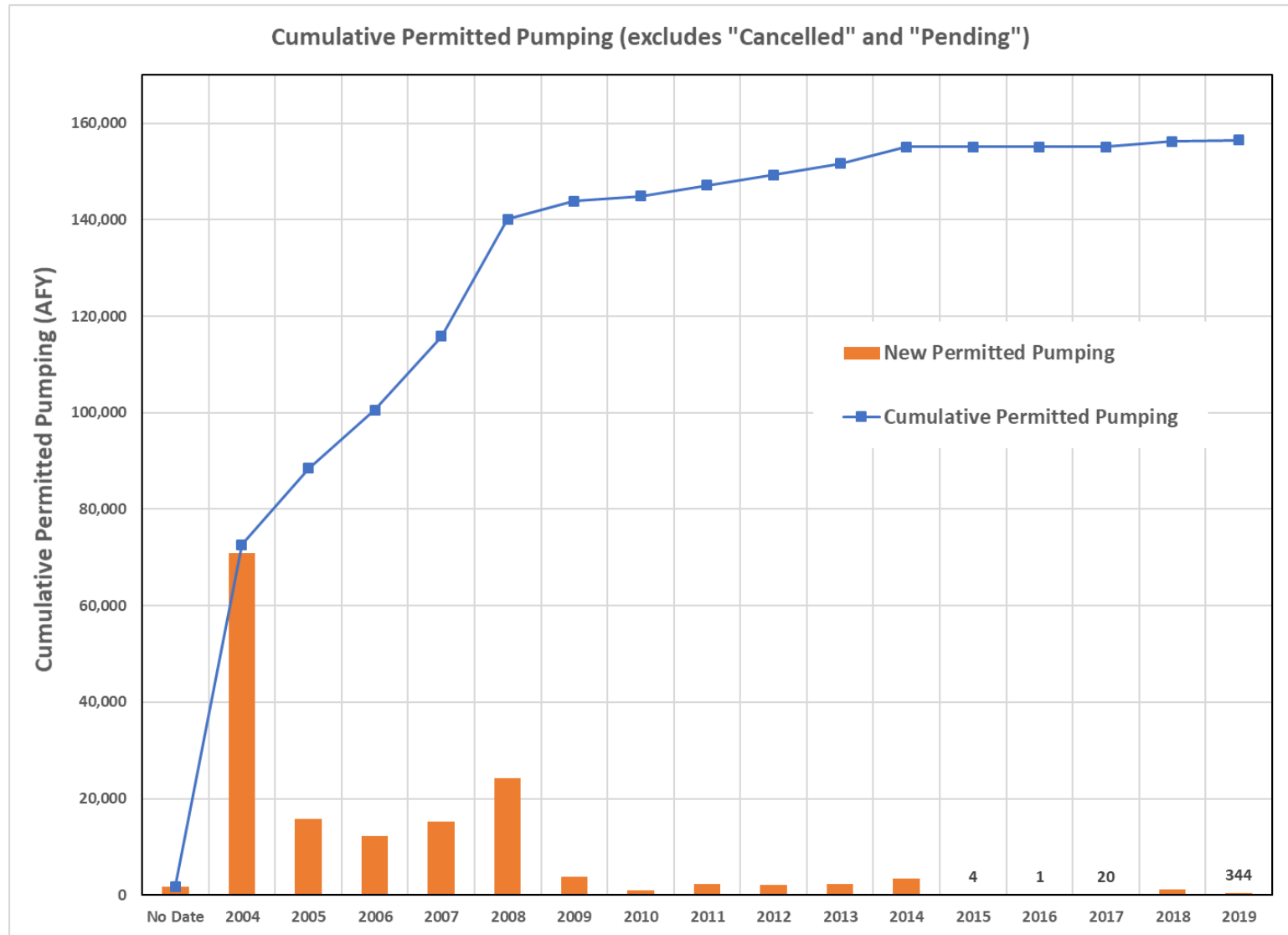
# Agenda

- Reported Pumping and Permitted Pumping
- Permitted Pumping
  - Well Locations
  - Wells by Aquifer
  - Amount by Aquifer
- Exempted and Permitted Wells by Aquifer
  - Hooper
  - Simsboro
  - Calvert Bluff
  - Carrizo
  - Queen City
  - Sparta
- Create of Well Files for GAM

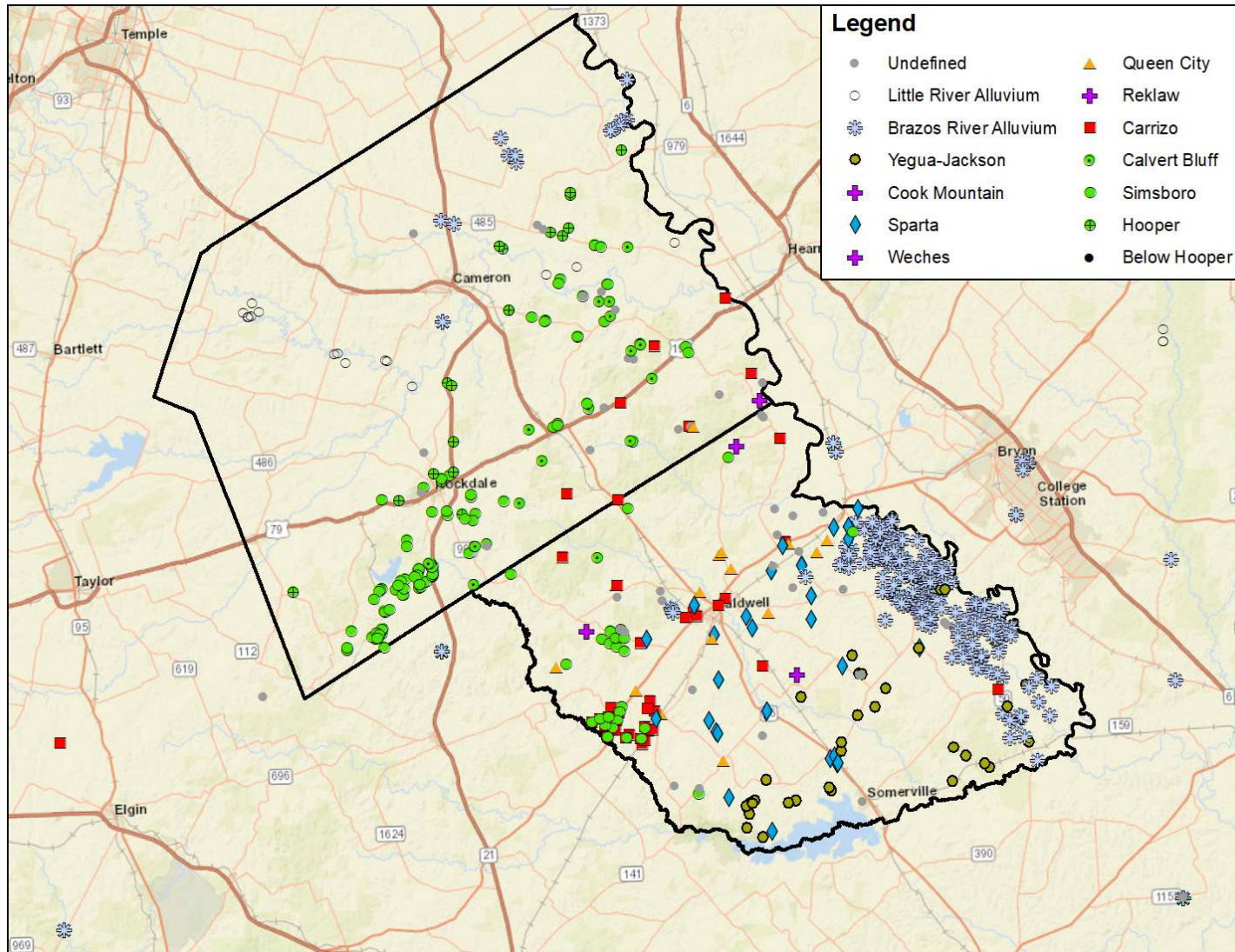
# Permitted versus Reported Pumping



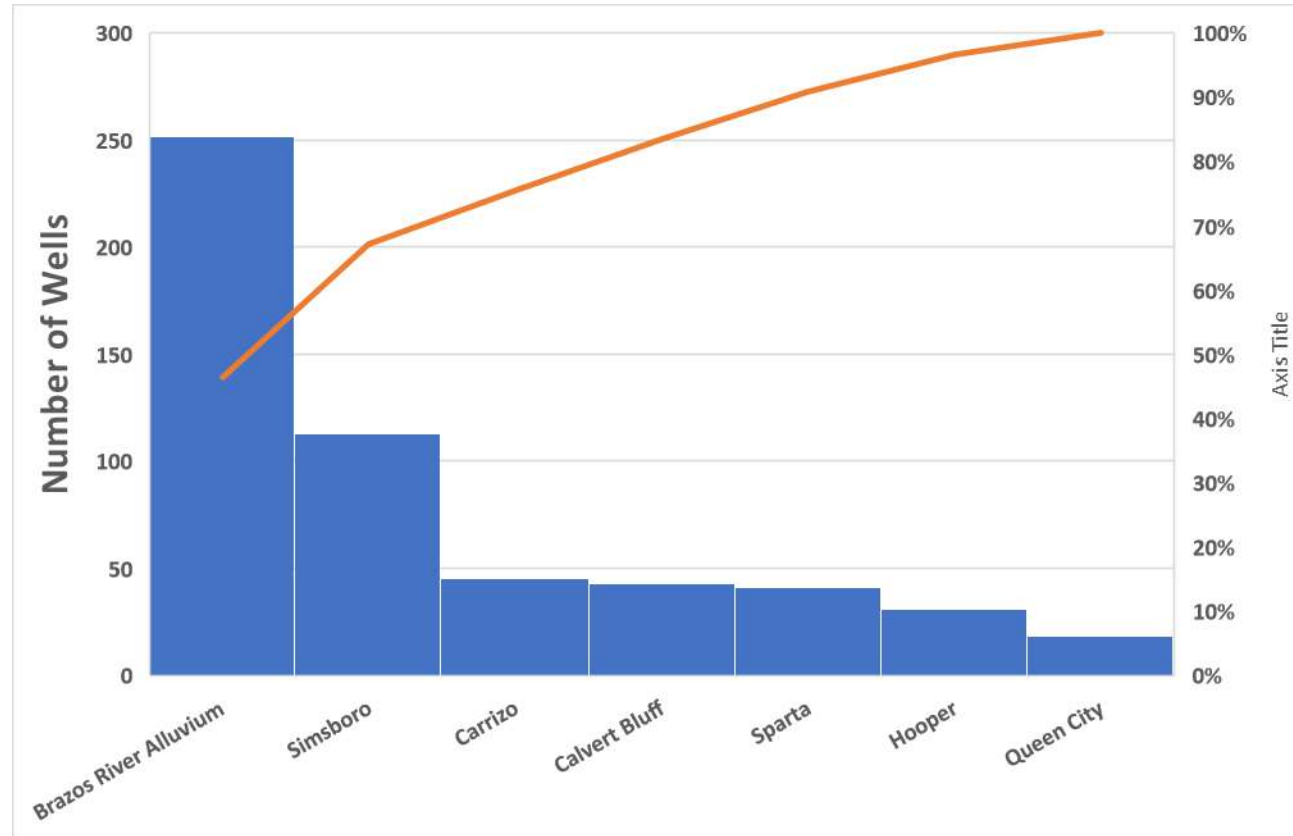
# POSGCD Permitted Pumping



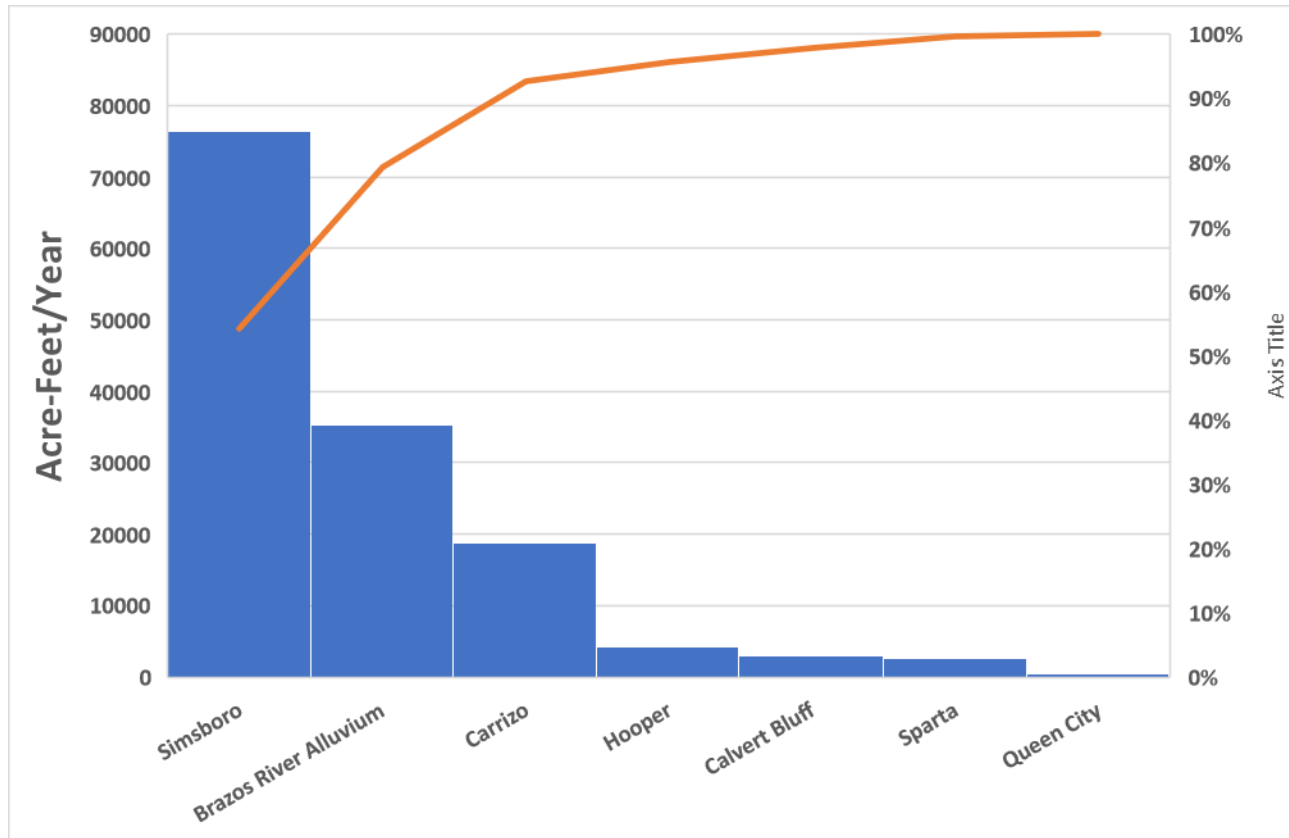
# Location of Permitted Wells



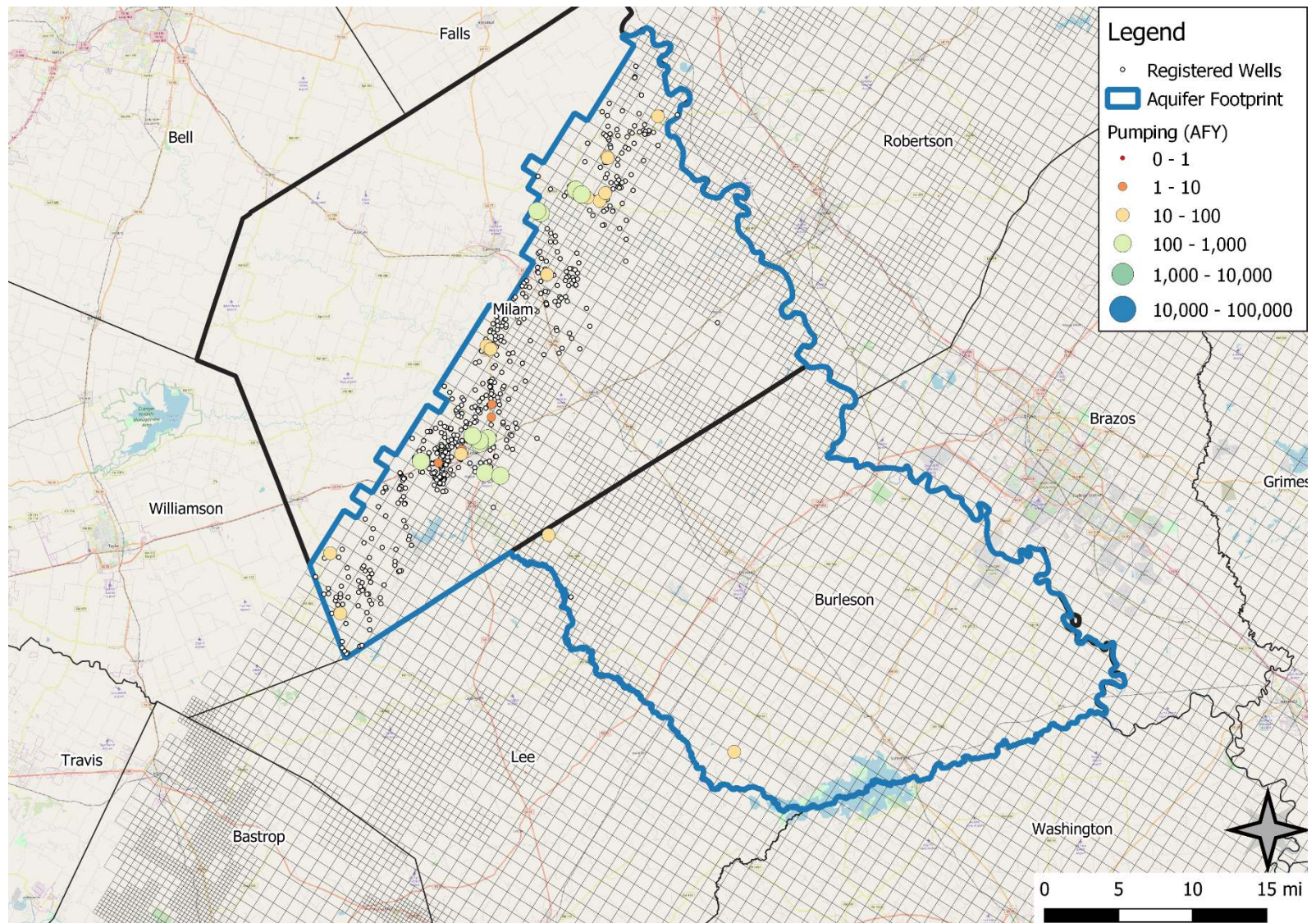
# Distribution of Permitted Wells Among Aquifers



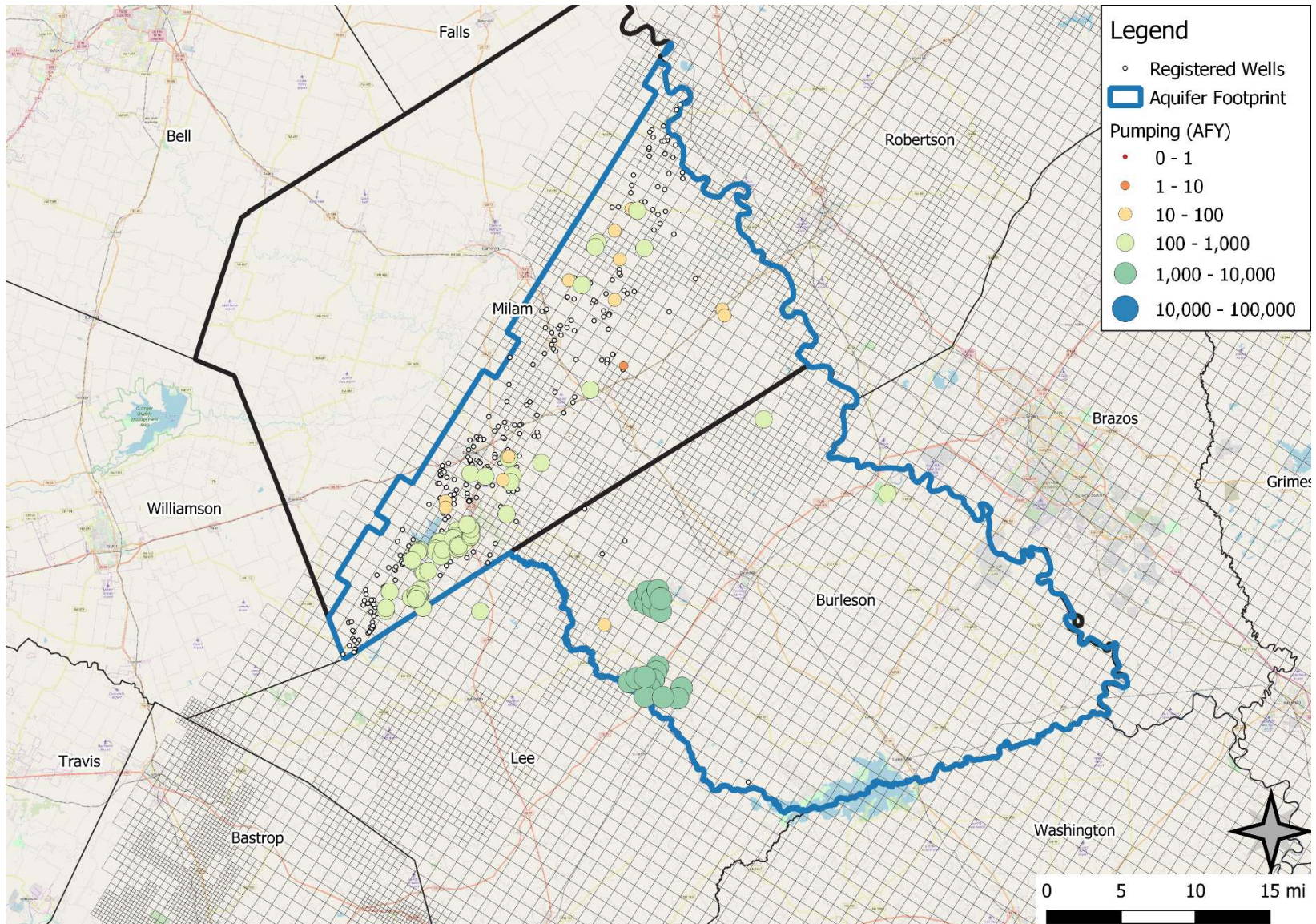
# Distribution of Permitted Amounts Among Aquifers



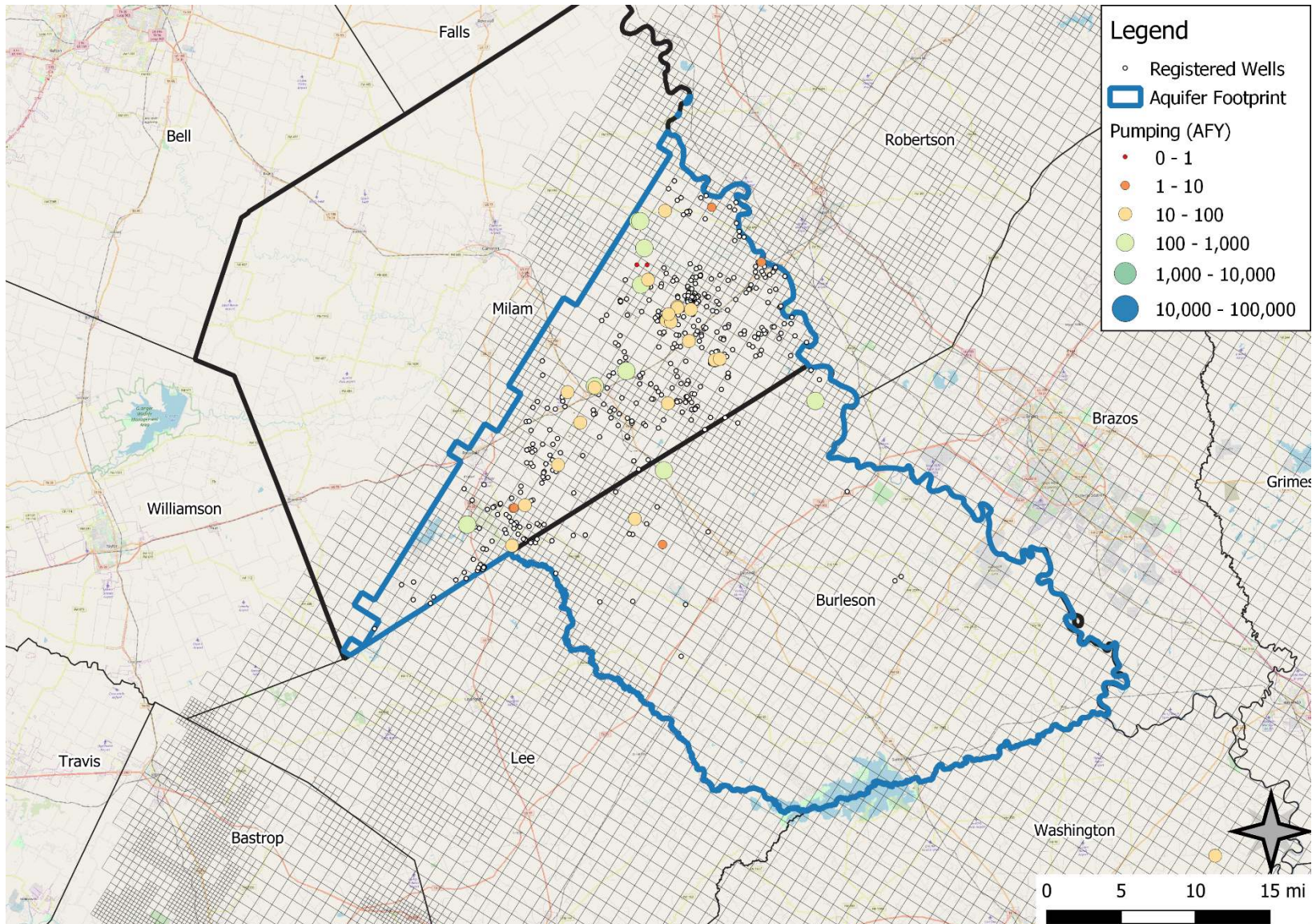
# Hooper Formation



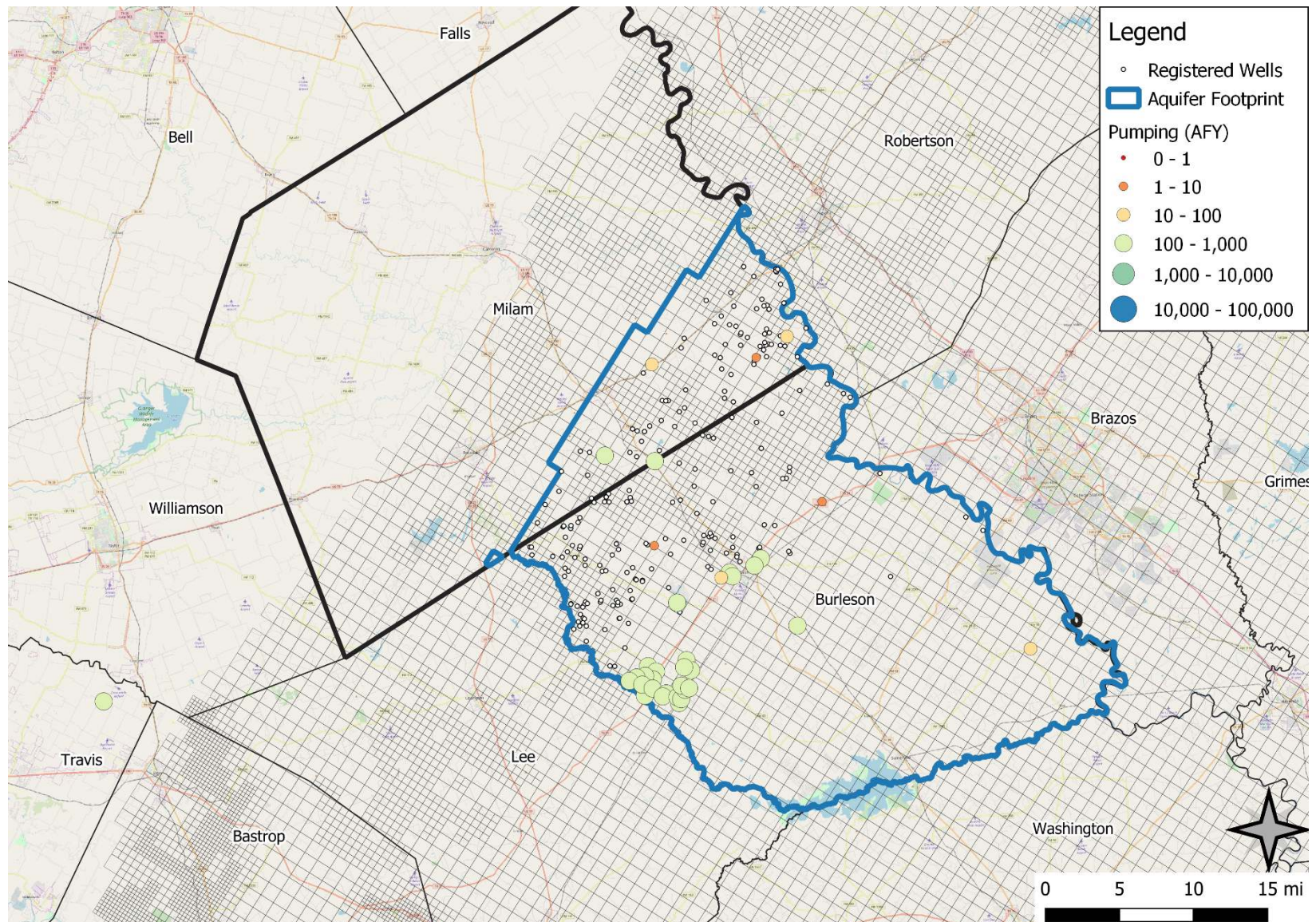
# Simsboro



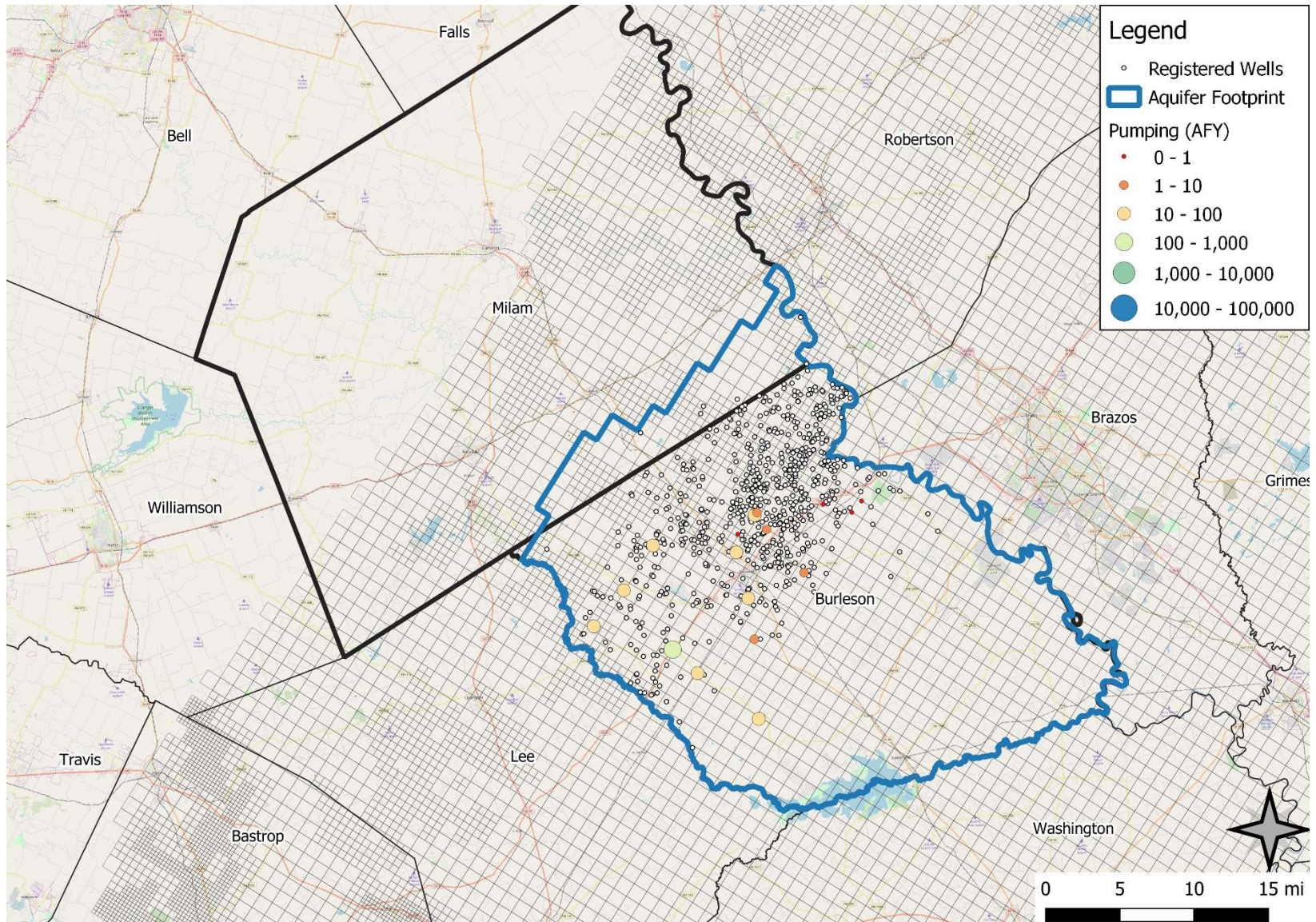
# Calvert Bluff



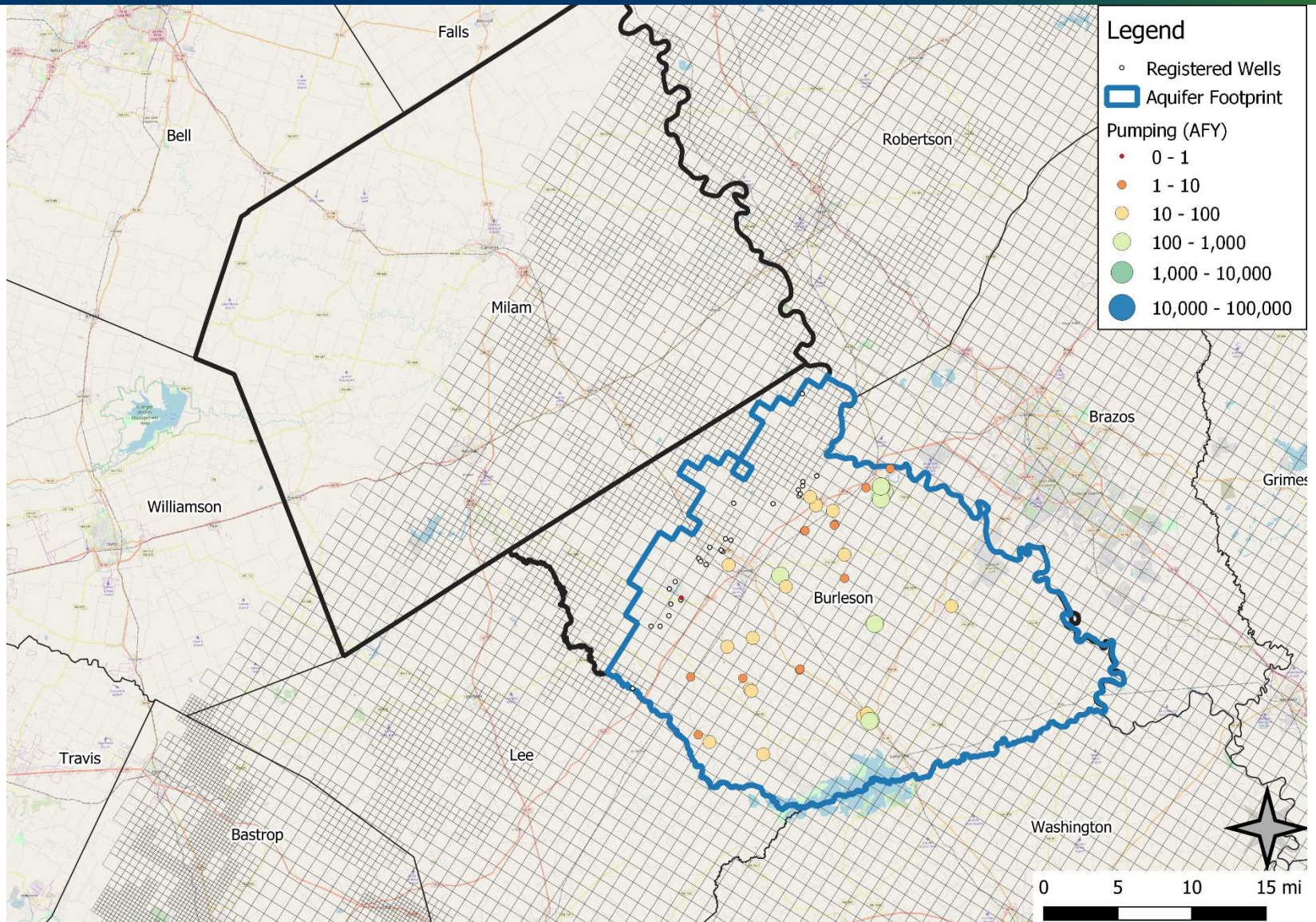
# Carrizo



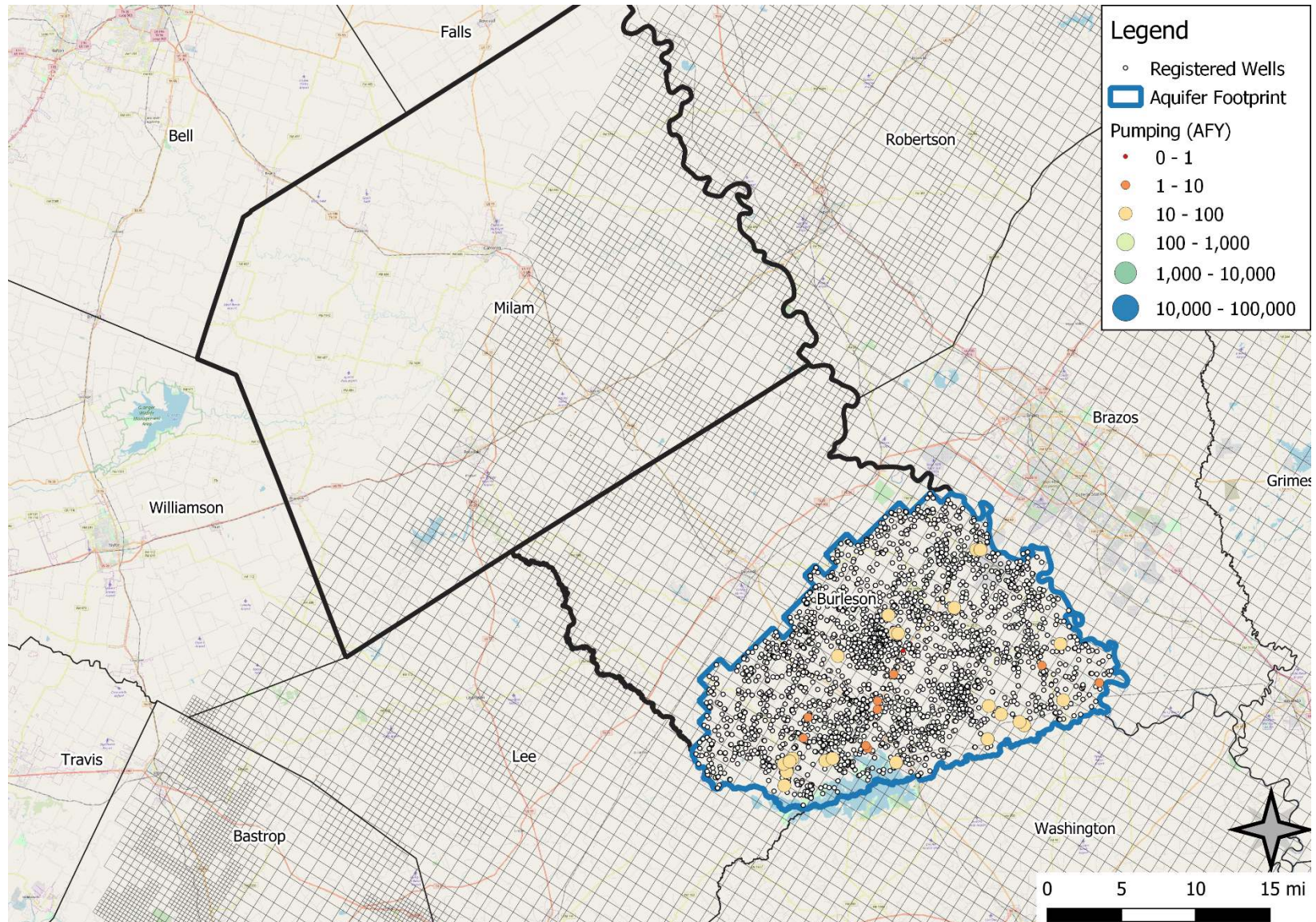
# Queen City



# Sparta



# Yegua Jackson



# Development of Future Pumping Scenario

- Starting Year
  - 2010 (end of current calibration)
  - 2015 or 2018 ?
- Boundary Conditions at Model Edges
  - Coordination with adjacent GMAs
  - Pumping in counties outside of GCDs
- Recharge
  - Average conditions
  - Considerations for drought conditions
- Pumping
  - Low end
  - High end

# Construction of Well File for Scoping GAM Runs

- Exempt Pumping
  - Areal coverage (population census, land use)
  - Incremental growth over time
- Permitted Pumping
  - Assign wells to a grid cell
  - Interpolate from reported pumping to permitted pumping based scenario assumption



Questions ?