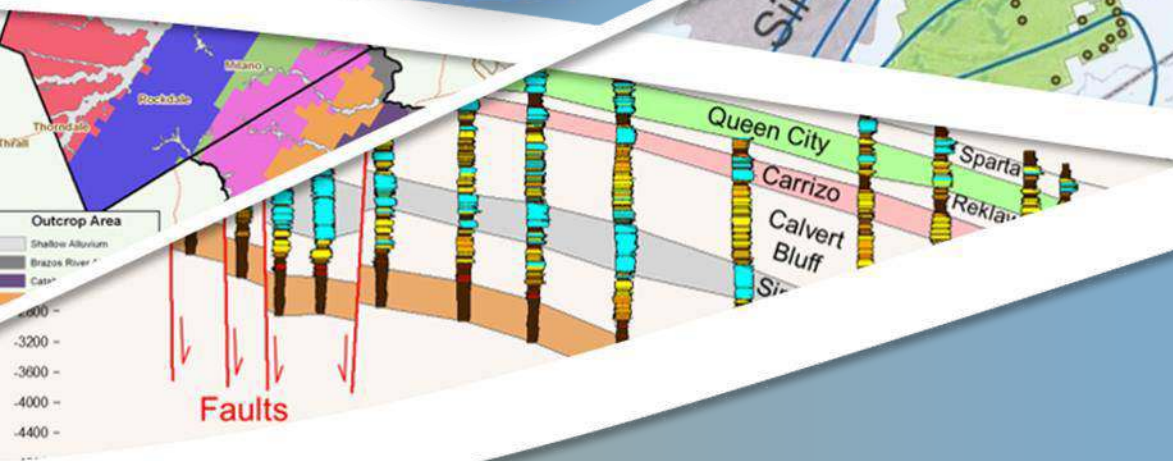


# Update on Evaluation of Monitoring Data

Presented at:  
POSGCD Board Meeting



Presented By:  
Steve Young



November 10, 2020

# Rule 16.4. Actions Based on Monitoring Results

- Threshold 1 Perform studies to improve quantification of pumping effects, characterization of aquifer, and prediction of changes in future water levels
- Threshold 2 Re-evaluate the Management Plan and rules regarding management zones, collection and analysis of monitoring data, and DFCs.
- Threshold 3
1. Conduct public hearing to discuss aquifer conditions. Develop a Response Action Work Plan to achieve DFCs and PDLs.
  2. If drawdowns are exceeded, the maximum water production permitted per acre for the Management Zone and the water authorized to be produced under any permit issued by the District for that zone will be reduced.

# Section 16.4 Threshold Exceedances

Threshold	Description	Aquifer(s)
Level 1	> 60% of MAG	Queen City (468 AF), Carrizo(4,706 AFY)
Level 1	> 50% of DFCs	Sparta (28 ft)
Level 1	> PDLs in 15 years	Carrizo (20 ft), Calvert Bluff (20 ft), Simsboro (20 ft)
Level 2	> 70% of MAG	Queen City (468 AFY), Carrizo(4,706 AFY)

Note 1: Modeled Available Ground (MAG) is for 2020  
Desired Future Conditions (DFC) is for 2070  
Protective Drawdown Limit (PDL) is for 2070

Note 2: Black colored aquifers identified in April 2020  
Green colored aquifers identified in September 2020

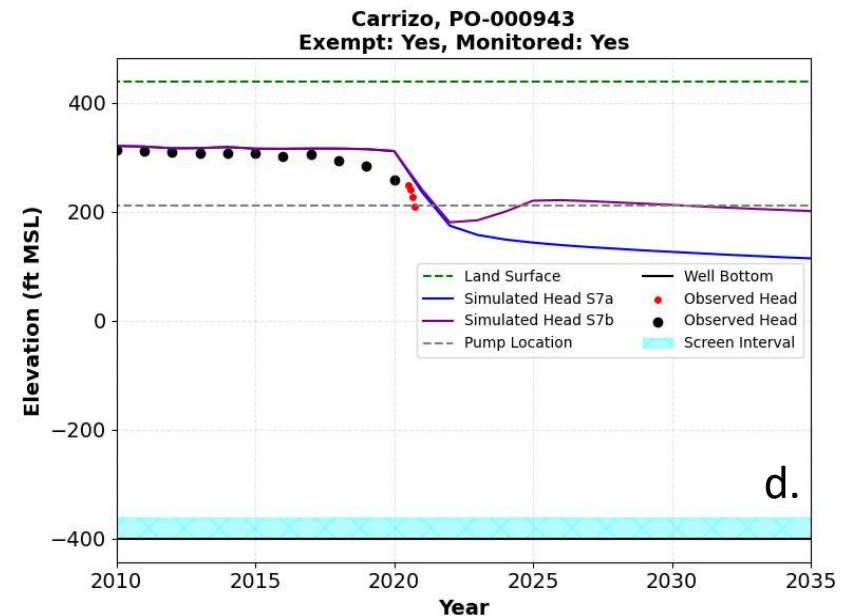
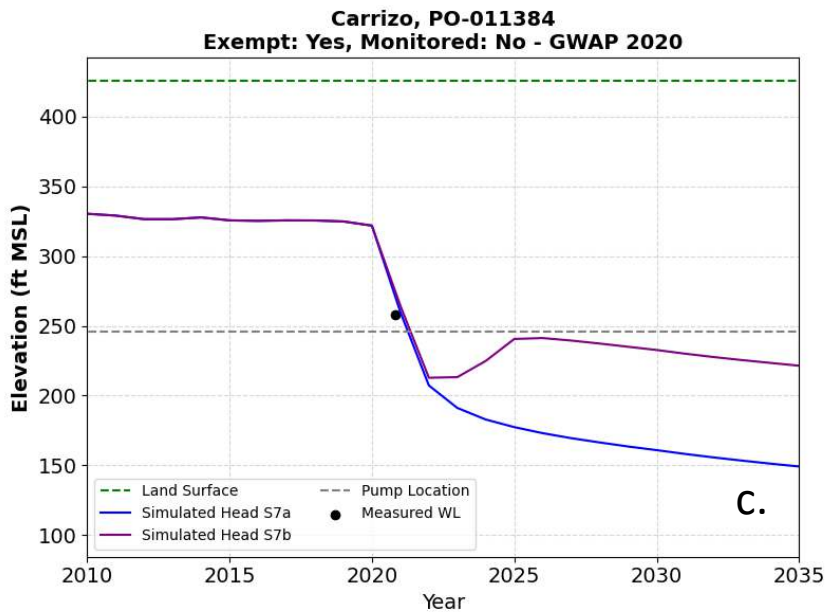
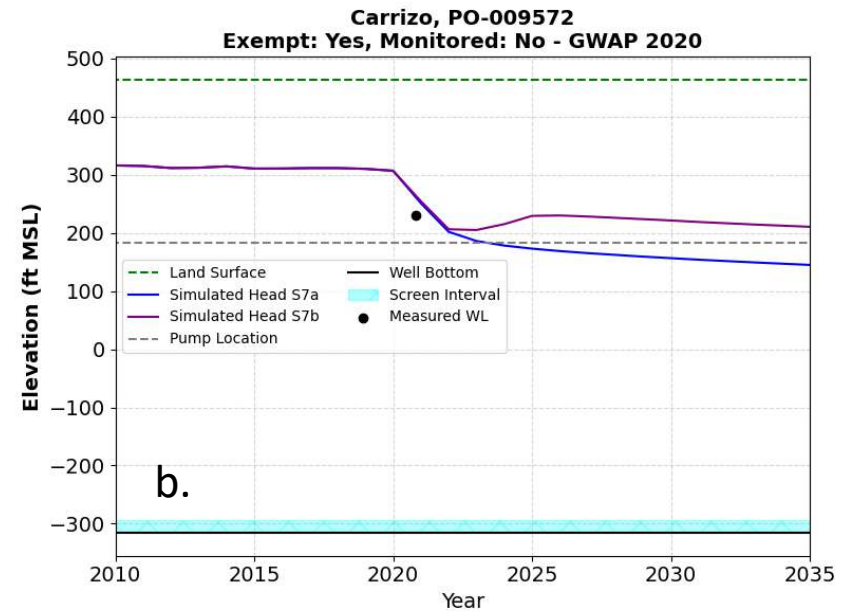
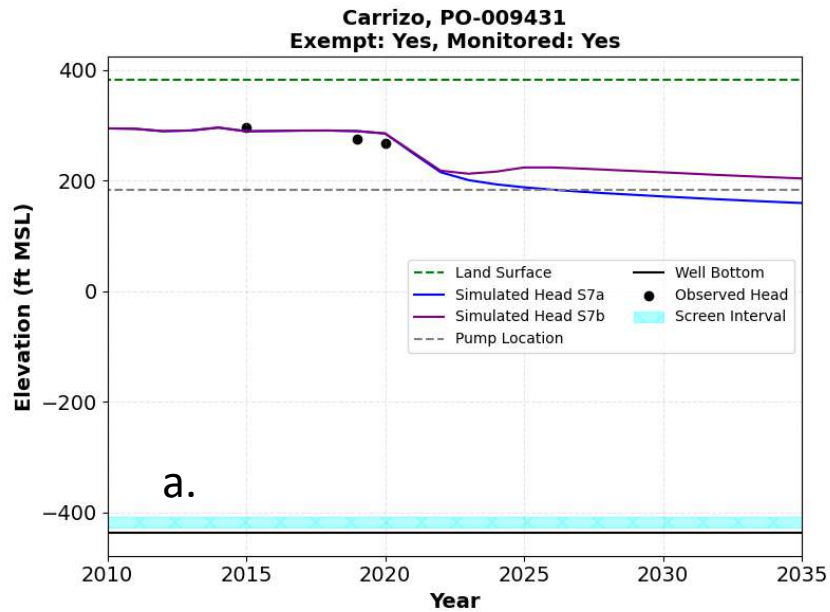
# Actions Since April 2020

- Outlined Contents of Three Reports to Help Guide Aquifer Management
  - GWAP Annual Needs Assessment Report (modified)
  - Compliance Report for DFCs and PDLs (new)
  - Management Strategy (new)
- Performed Monitoring Studies
  - Improved analysis of monitoring data to evaluate compliance with DFCs and PDLs (INTERA and UT at Austin)
  - Conducted Fall groundwater monitoring campaign
  - Instrumented additional ~25 monitoring wells to automatically record water levels

# Actions Since April 2020

- Planned for Improvement to Sparta/Queen City/ Carrizo-Wilcox GAM
  - Performed bulk GMA 12 work to update properties of Simsboro near Vista Ridge wells
  - Developed proposal for updating GAM properties using monitoring data
    - District 55 wells with data logging equipment
    - Vista Ridge monitoring data at 18 wells
- Expanded Analysis associated with the GWAP Annual Needs Assessment Report
  - Include multiple pumping scenarios
  - Include wells with no pump elevation data
  - Focus on Carrizo Aquifer

# Examples





Questions ?