

# Paso Robles Subbasin GSP

## First Annual Report (2017-2019)

### March 18, 2020

Presented to:  
Paso Basin Cooperative Committee  
and the Groundwater Sustainability Agencies

# Presentation Outline

- DWR Regulations and Process
- Groundwater Elevations
- Groundwater Extractions
- Surface Water Use
- Total Water Use
- Change in Groundwater in Storage
- Progress toward Meeting Basin Sustainability

## DWR Process and Regulations (§ 356.2)

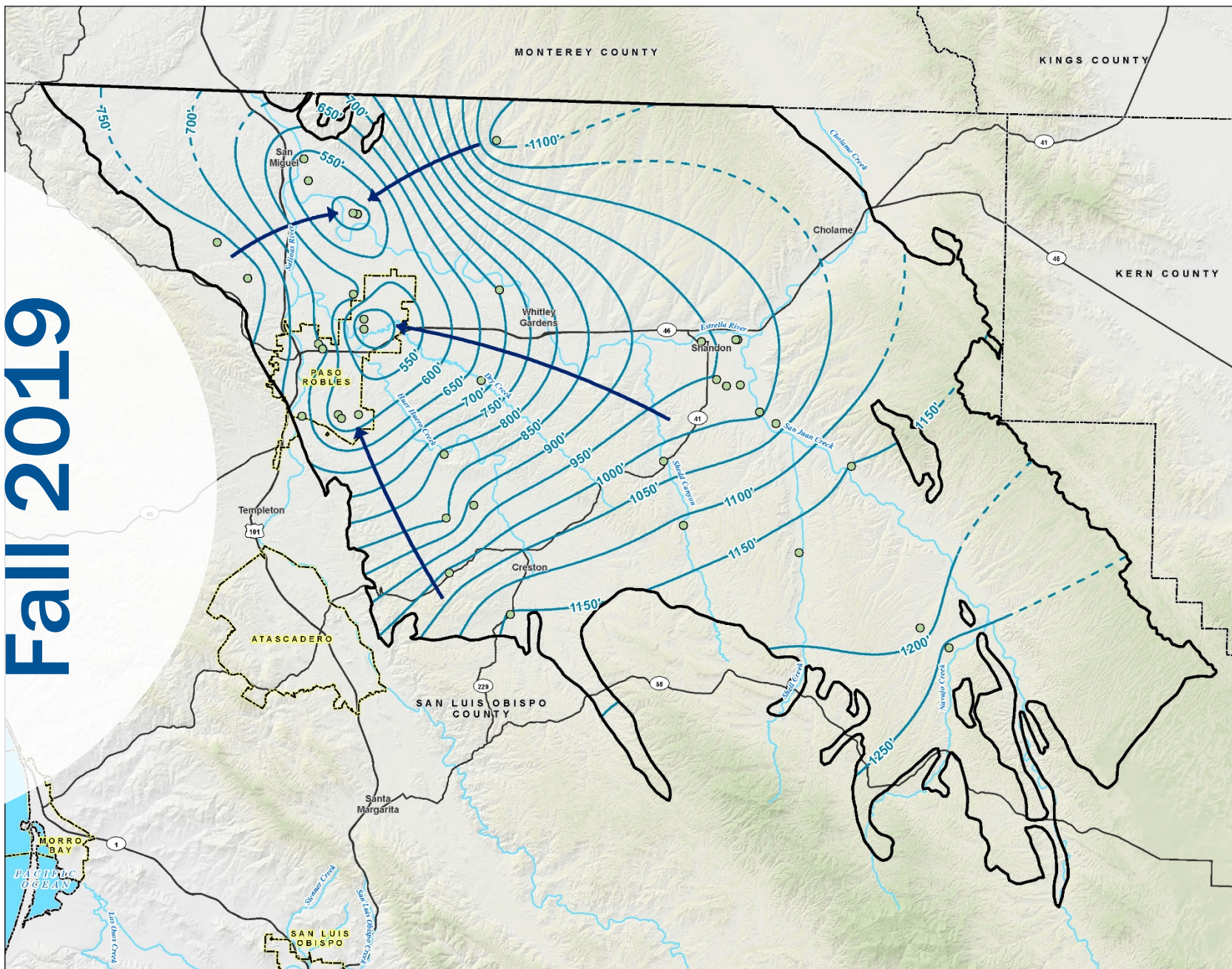
“Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan.”

## Groundwater Elevations (§ 356.2[b][1])

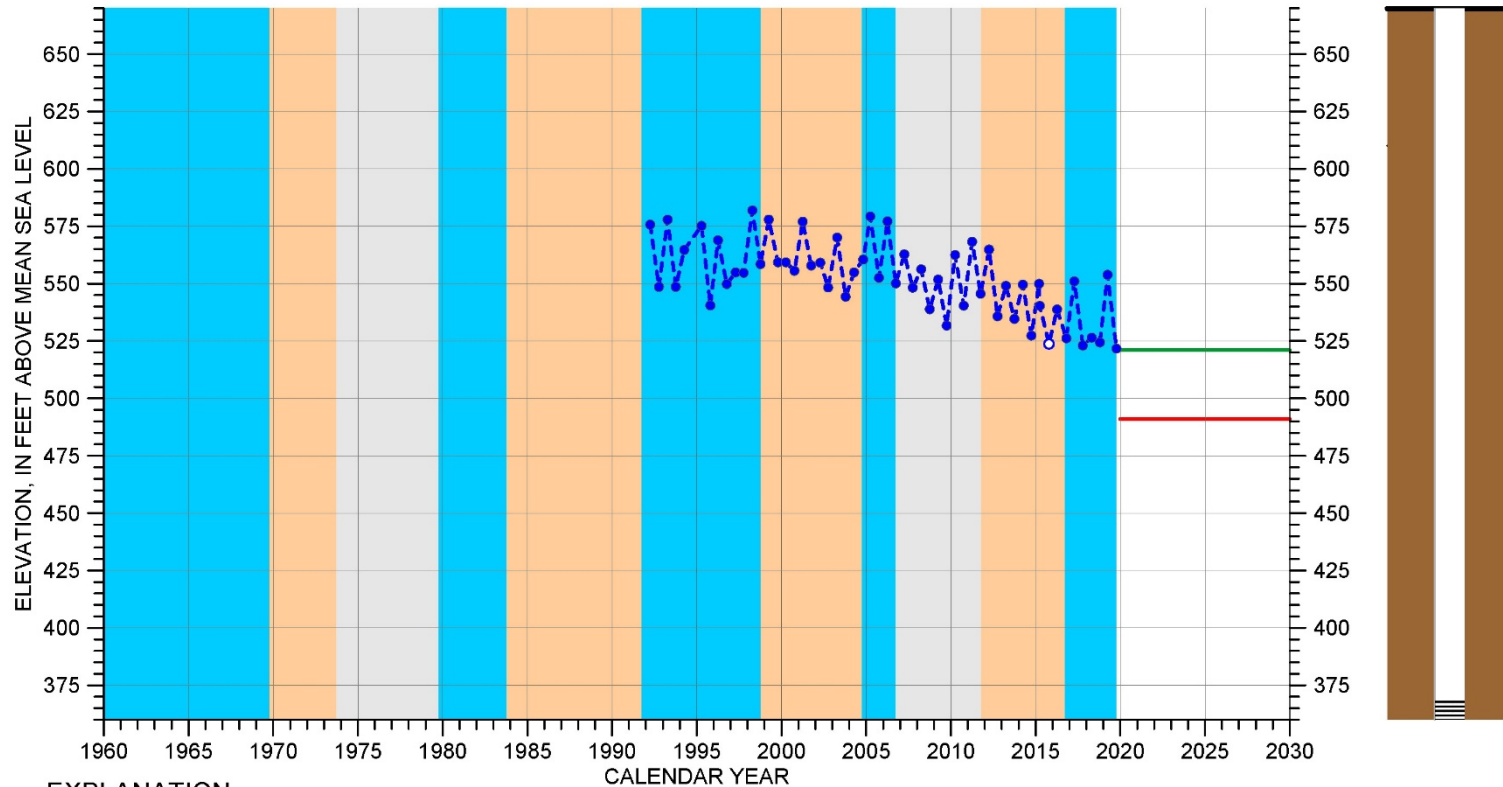
- Fall 2017 through Fall 2019
- Paso Robles Formation Aquifer
- Seasonal High and Low (Spring and Fall) Contour Maps
- Hydrographs



# Fall 2019



# 25S/12E-16K05



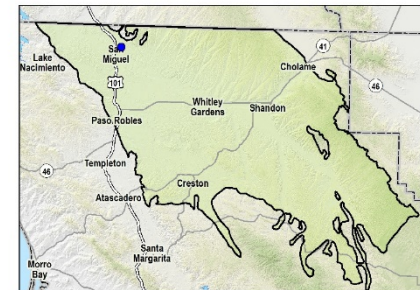
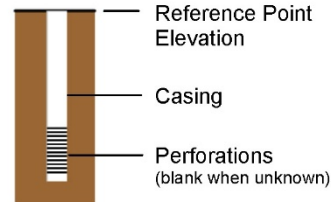
## EXPLANATION

- GROUNDWATER ELEVATION
- MEASURABLE OBJECTIVE
- MEASUREMENT NOT VERIFIED\*
- MINIMUM THRESHOLD

## CLIMATE PERIOD CLASSIFICATION

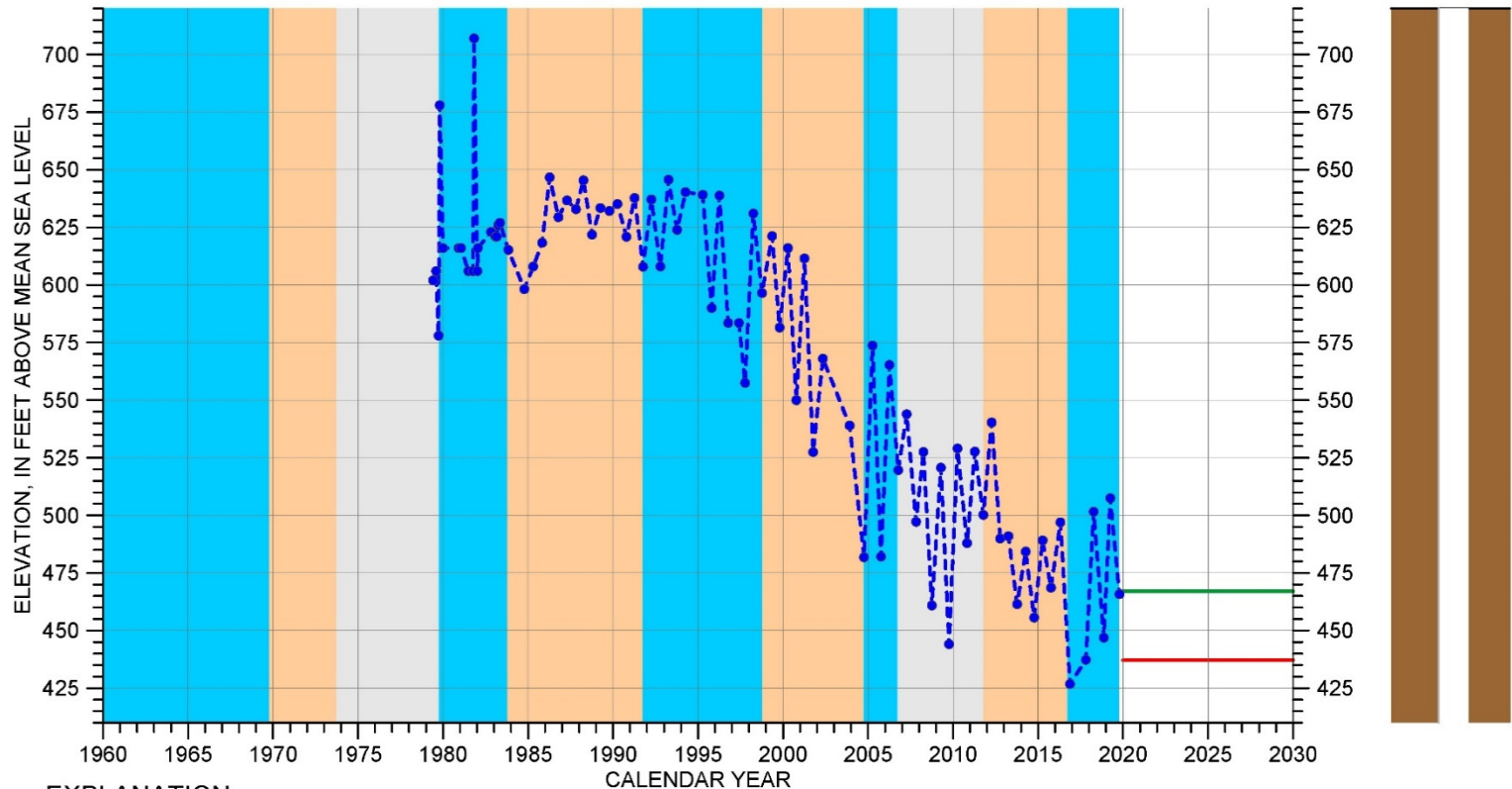
- DRY
- AVERAGE/ALTERNATING
- WET

Well Depth: 350 feet  
 Screened Interval: 300-310, 330-340 feet below ground surface  
 Reference Point Elevation: 669.8 feet above mean sea level





# 26S/12E-14K01



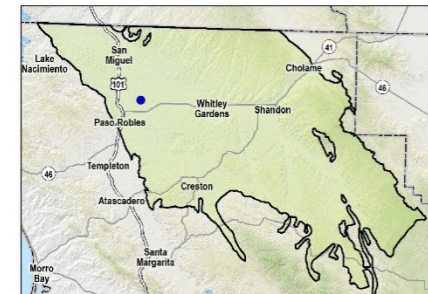
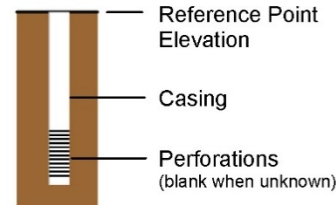
## EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED\*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

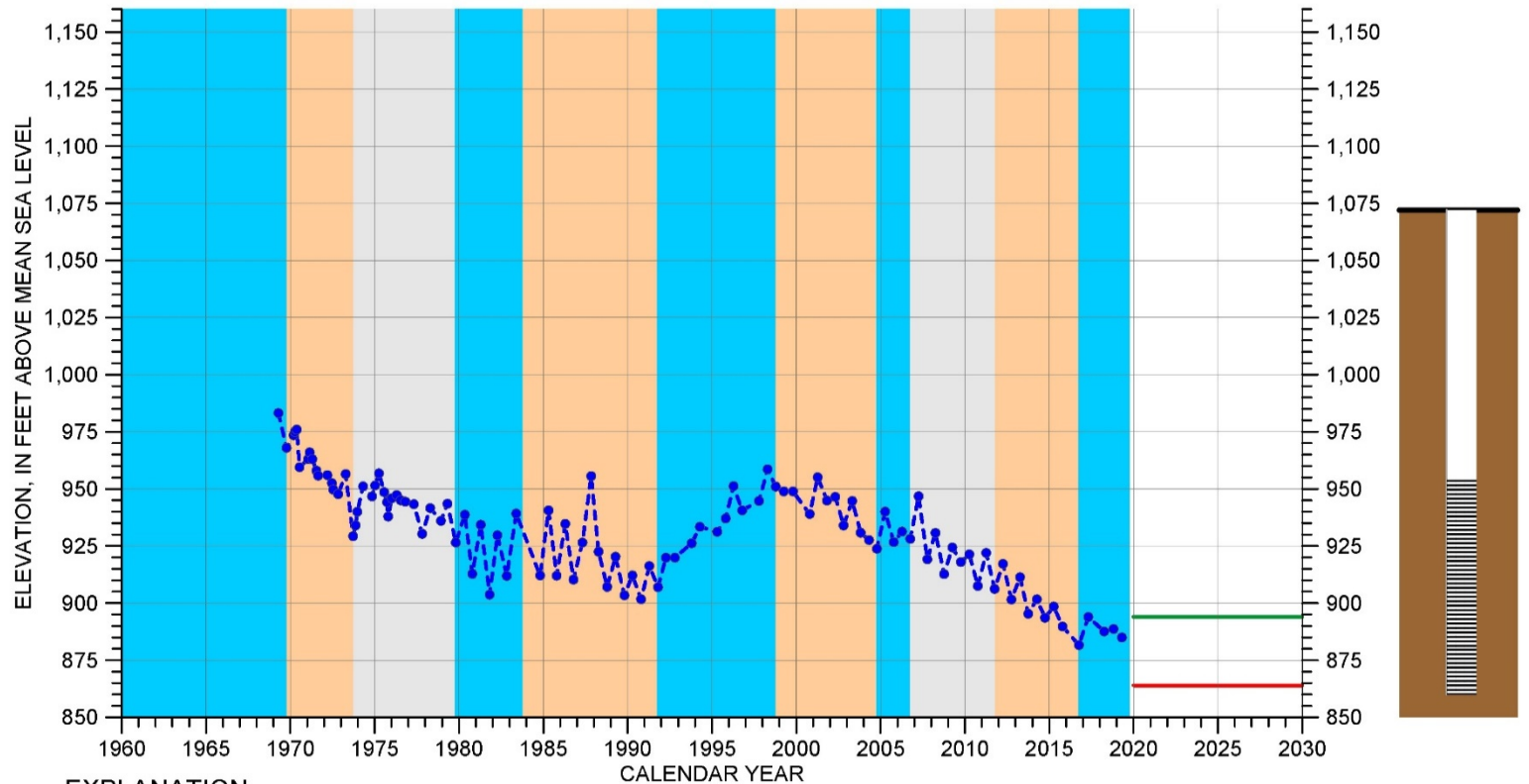
## CLIMATE PERIOD CLASSIFICATION

DRY AVERAGE/ALTERNATING WET

Well Depth: 1100 feet  
 Screened Interval: unknown  
 Reference Point Elevation: 786 feet above mean sea level



# 27S/13E-28F01



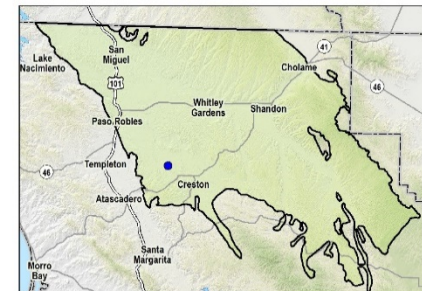
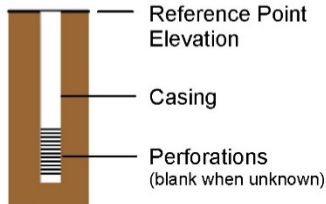
## EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED\*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

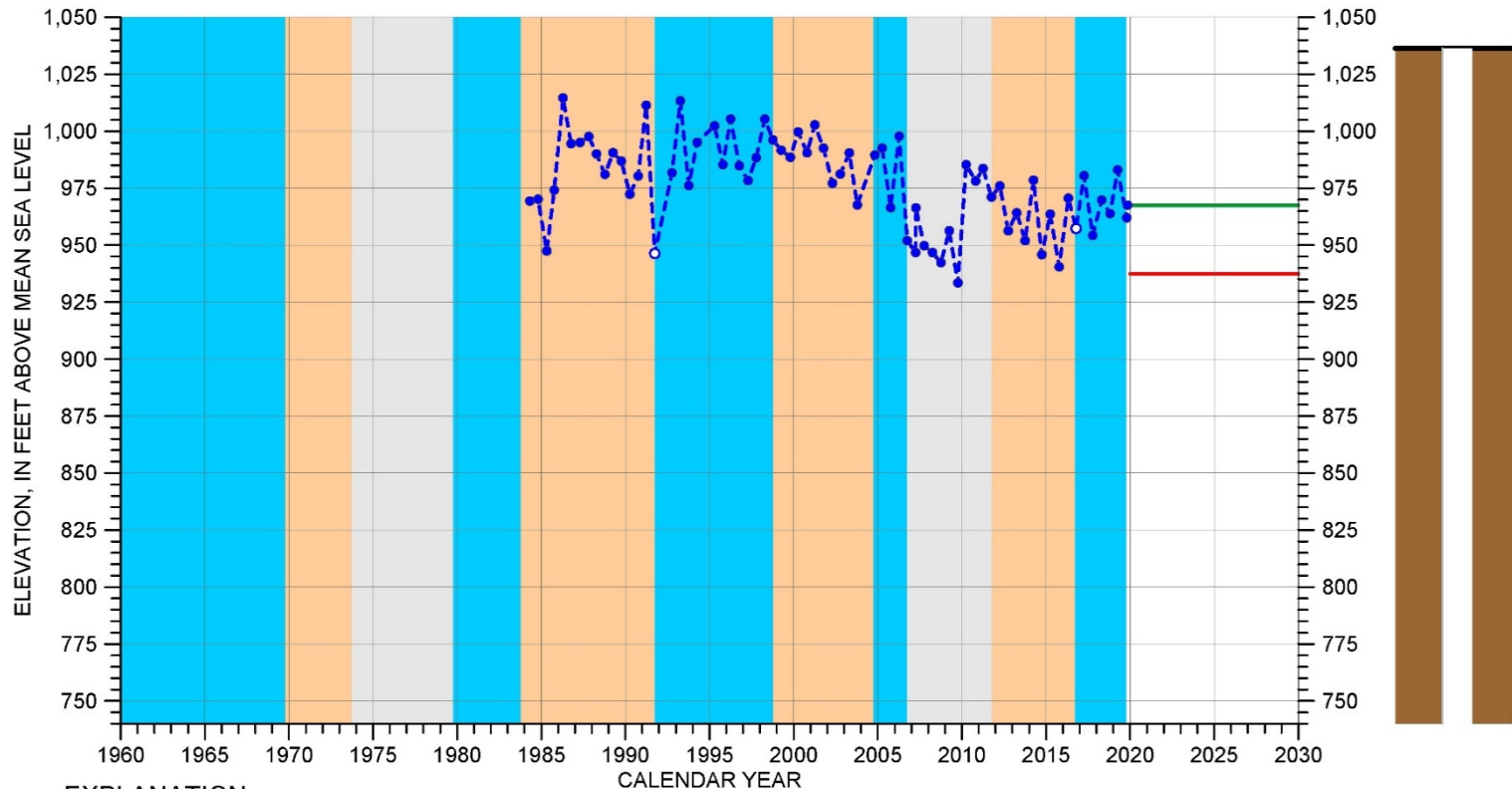
## CLIMATE PERIOD CLASSIFICATION

- DRY
- AVERAGE/ALTERNATING
- WET

Well Depth: 212 feet  
 Screened Interval: 118-212 feet below ground surface  
 Reference Point Elevation: 1072 feet above mean sea level



# 26S/15E-20B04



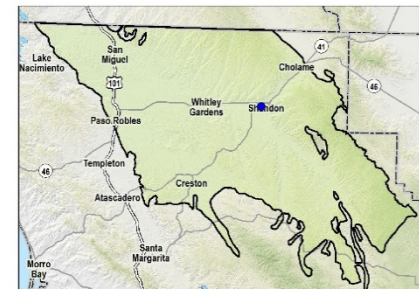
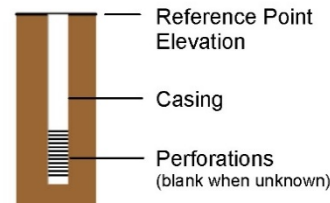
## EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED\*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

## CLIMATE PERIOD CLASSIFICATION

- DRY
- AVERAGE/ALTERNATING
- WET

Well Depth: 461 feet  
 Screened Interval: 297-461 feet below ground surface  
 Reference Point Elevation: 1036.36 feet above mean sea level



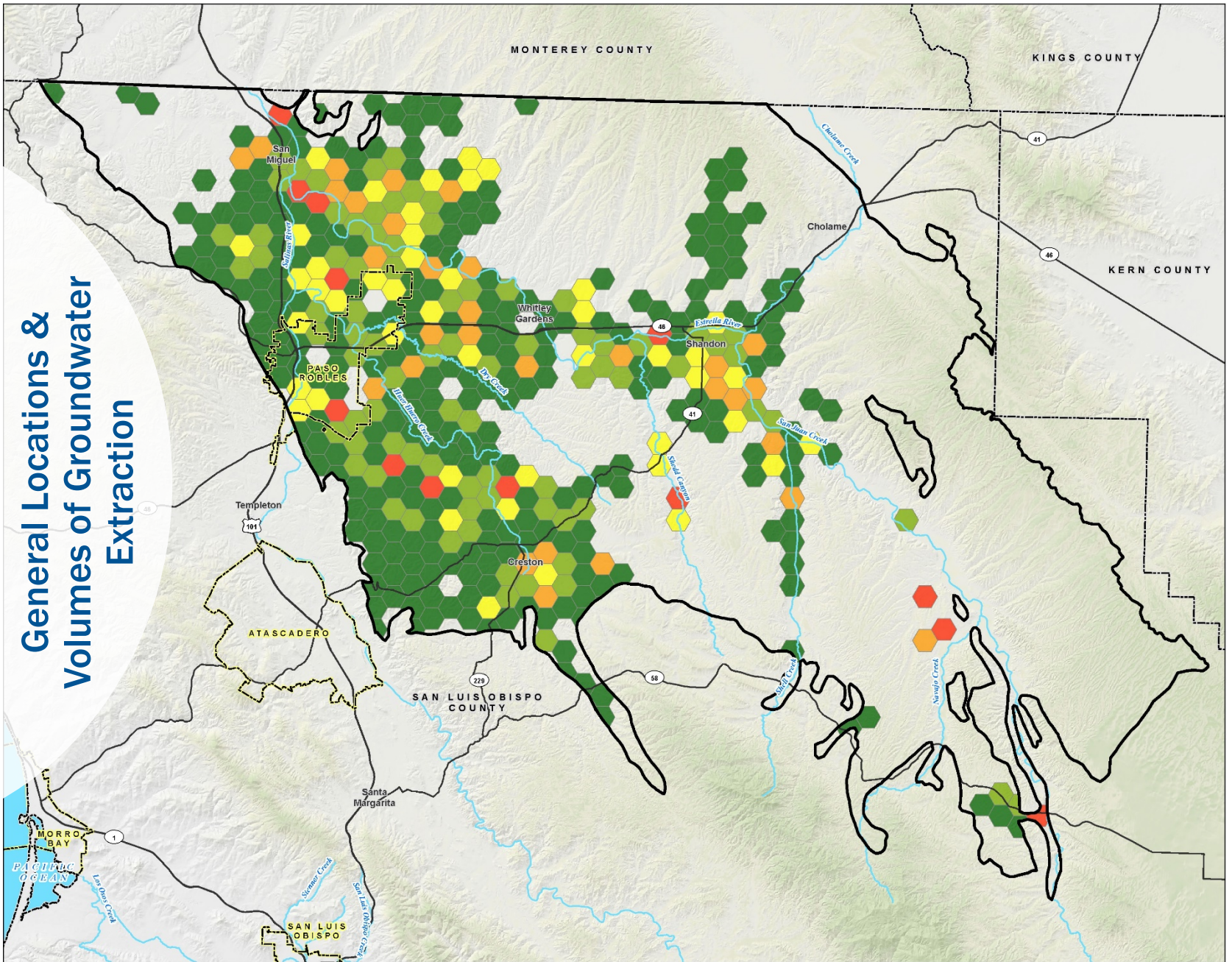
## Groundwater Extractions (§ 356.2[b][2])

- Metered Municipal Well Production
- Estimated Agricultural Extraction
- Estimated Rural Domestic and Small Public Water System Extraction



# Total Groundwater Extractions

Water Year	Groundwater Extractions by Water Use Sector			Total (AF)
	Municipal (AF)	PWS and Rural Domestic (AF)	Agriculture (AF)	
2017	4,235	5,060	72,500	81,800
2018	5,029	5,060	71,000	81,100
2019	4,804	5,060	72,200	82,100



## Surface Water Use (§ 356.2[b][3])

- Surface Water Available for Use
- Total Surface Water Use

# Surface Water Use

## Surface Water Available for Use

Water Year	Nacimiento Water Project (AF)	State Water Project (AF)	Total Available Surface Water (AF)
2017	6,488	100	6,588
2018	6,488	100	6,588
2019	6,488	100	6,588

## Total Surface Water Use

Water Year	Nacimiento Water Project (AF)	State Water Project (AF)	Total Surface Water Use (AF)
2017	1,784	42	1,826
2018	2,284	55	2,339
2019	1,498	43	1,541

**Total Water  
Use  
(§ 356.2[b][4])**

- Total Annual Water Use  
by Source
- Total Annual Water Use  
by Water Use Sector

# Total Water Use

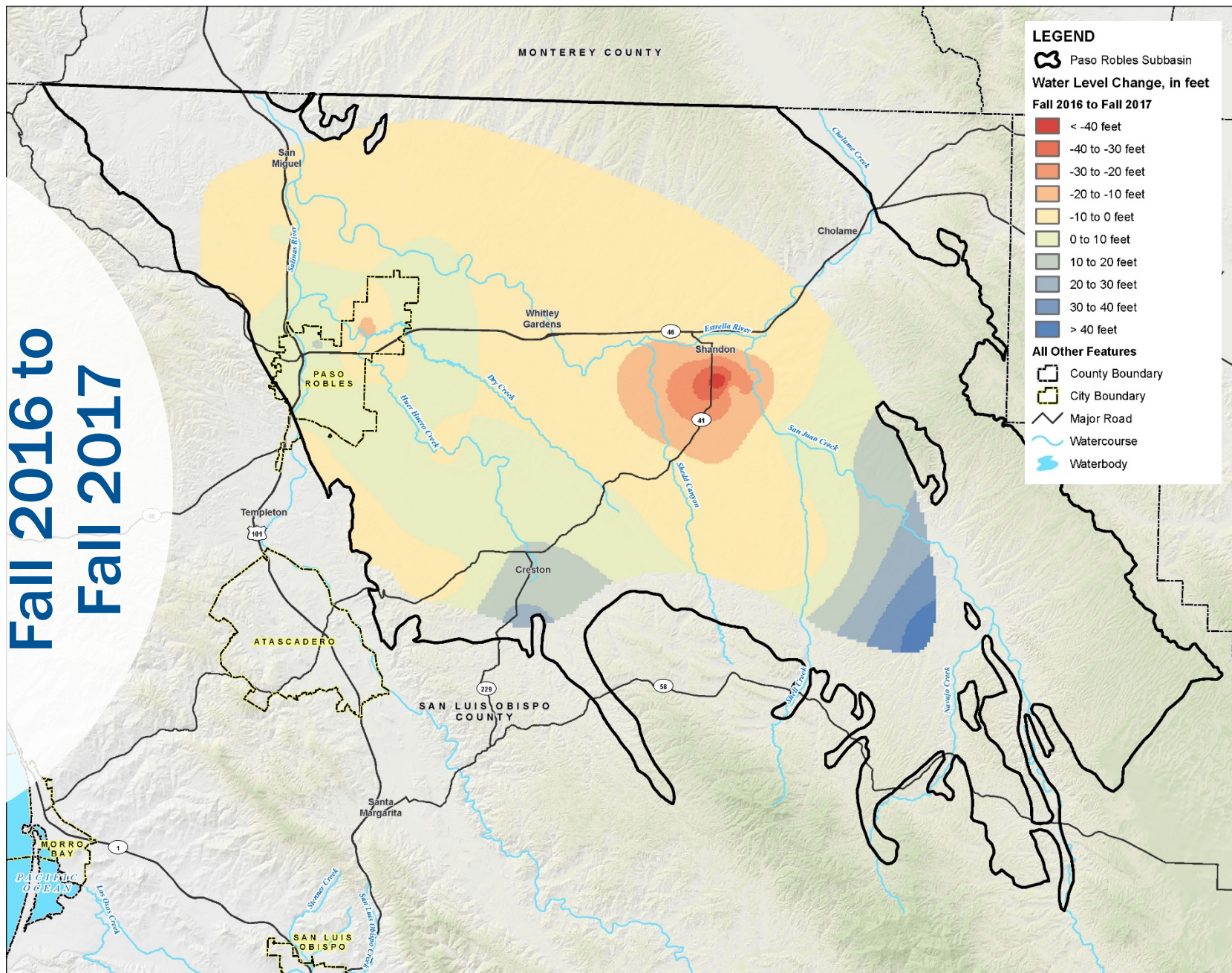
Water Year	Municipal (AF)		PWS and Rural Domestic (AF)	Agriculture (AF)	Total (AF)
Source:	Groundwater	Surface Water	Groundwater	Groundwater	
2017	4,235	1,826	5,060	72,500	83,600
2018	5,029	2,339	5,060	71,000	83,400
2019	4,804	1,541	5,060	72,200	83,600



## Change in Groundwater in Storage (§ 356.2[b][5])

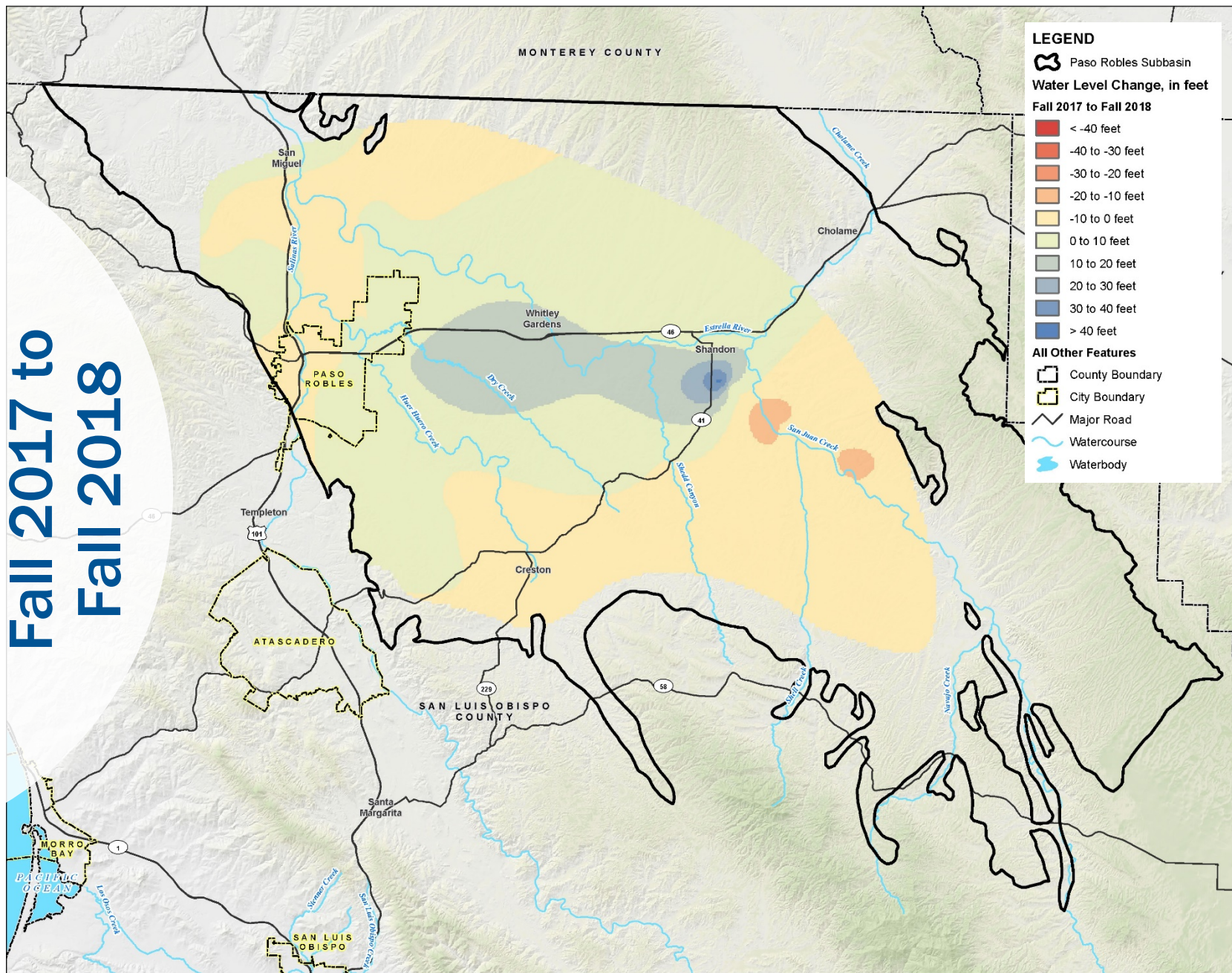
- Annual Changes in Groundwater Elevation
- Annual and Cumulative Change in Groundwater in Storage Calculations

# Fall 2016 to Fall 2017





# Fall 2017 to Fall 2018





**Fall 2018 to Fall 2019**

**LEGEND**

**Paso Robles Subbasin**

**Water Level Change, in feet**

**Fall 2018 to Fall 2019**

- < -40 feet
- 40 to -30 feet
- 30 to -20 feet
- 20 to -10 feet
- 10 to 0 feet
- 0 to 10 feet
- 10 to 20 feet
- 20 to 30 feet
- 30 to 40 feet
- > 40 feet

**All Other Features**

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

**Paso Robles Subbasin**

**Water Level Change, in feet**

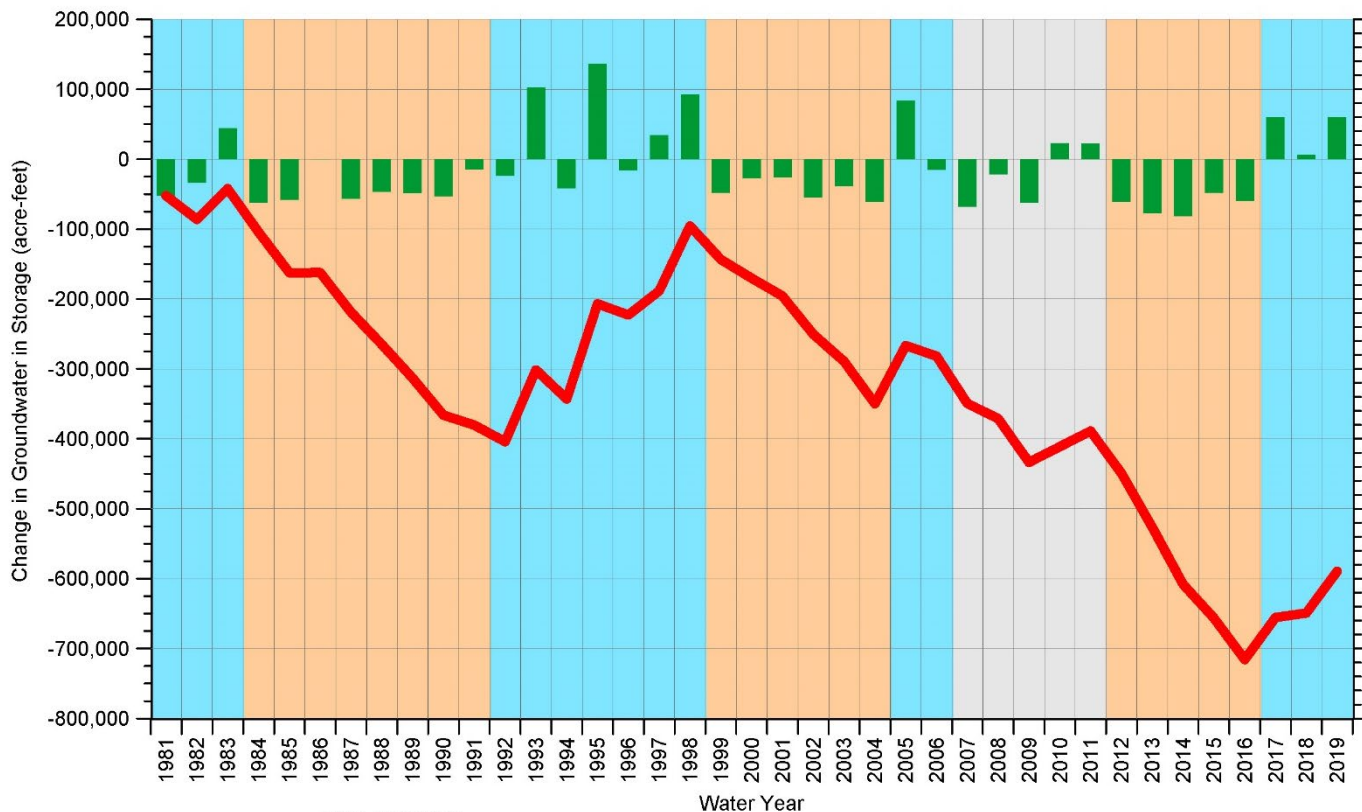
**Fall 2018 to Fall 2019**

- < -40 feet
- 40 to -30 feet
- 30 to -20 feet
- 20 to -10 feet
- 10 to 0 feet
- 0 to 10 feet
- 10 to 20 feet
- 20 to 30 feet
- 30 to 40 feet
- > 40 feet

**All Other Features**

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

# Annual and Cumulative Change in Groundwater in Storage



## EXPLANATION

— Cumulative Change in Groundwater Storage ■ Annual Change in Groundwater Storage

## CLIMATE PERIOD CLASSIFICATION

Dry  Average/Alternating  Wet

Water Year	Annual Change (AF)
2017	60,100
2018	6,400
2019	59,700

**Progress  
toward  
Meeting  
Basin  
Sustain-  
ability  
(§ 356.2[c])**

- Emerging Subbasin Conditions:
  - Declining Groundwater Elevations
  - Decline of Groundwater in Storage
- Projects and Management Actions Goals:
  - Reduce Groundwater Pumping
  - Achieve Groundwater Sustainability by 2040



# Projects and Management Actions

- Basin-Wide Management Actions and Projects
  - Amendment #1 to the MOA
  - Extension of Water Neutral New Development Program
  - Paso Basin Aerial Groundwater Mapping Pilot Study

# Projects and Management Actions

- Area-Specific Projects
  - Expand Alluvial Aquifer Monitoring Network and Install New Stream Gages
  - City of Paso Robles Recycled Water Program
  - San Miguel CSD Recycled Water Project
  - Blended Water Project
  - Stormwater Capture and Recharge Projects
    - City of Paso Robles Municipal Stormwater Program
    - SSJWD/EPCWD Stormwater Capture and Recharge Feasibility Study

**Questions?**

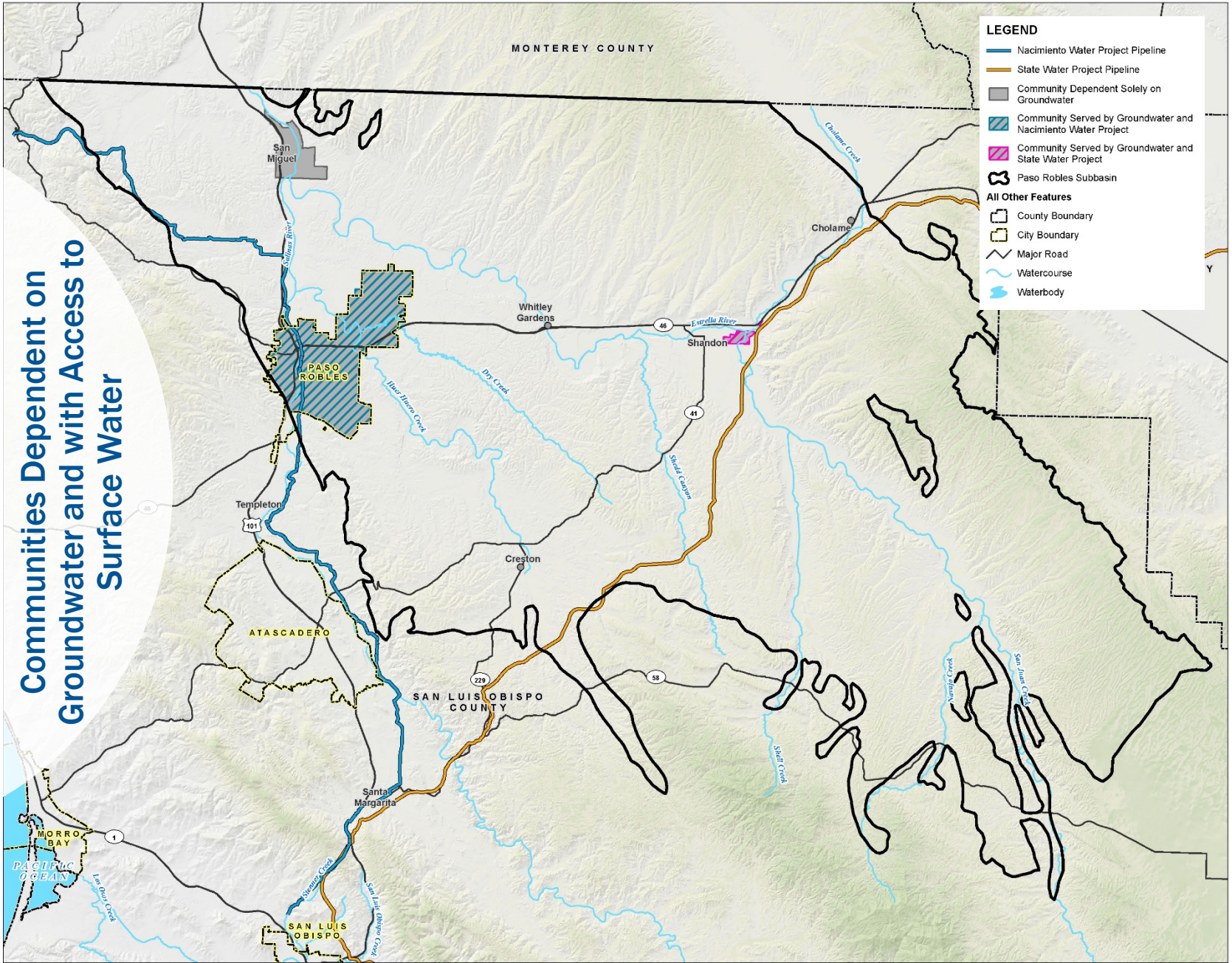
**Communities Dependent on Groundwater and with Access to Surface Water**

**LEGEND**

- Nacimiento Water Project Pipeline
- State Water Project Pipeline
- Community Dependent Solely on Groundwater
- Community Served by Groundwater and Nacimiento Water Project
- Community Served by Groundwater and State Water Project
- Paso Robles Subbasin

**All Other Features**

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody





# Fall 2017

