SALINAS VALLEY -PASO ROBLES AREA GROUNDWATER SUBBASIN Status of GSP Implementation

July 27, 2023

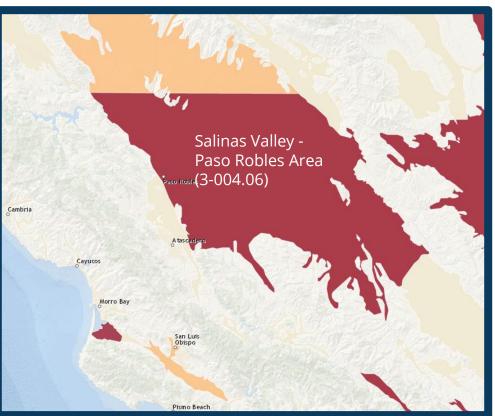
**Blaine Reely, Director** Groundwater Sustainability Department County of San Luis Obispo





## **SGMA and B-118 Boundaries**





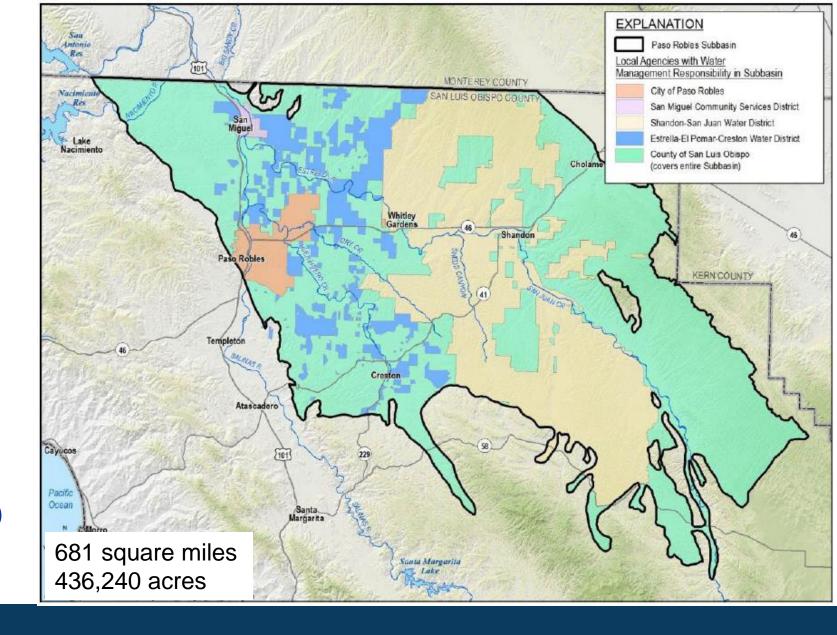
# **GSA / GSP Timeline**

- **2014:** SGMA adopted by Legislature
- 4 GSAs formed in the Basin
- Jan 2020: GSP submitted to DWR
- Jan 2022: DWR Initial Review of GSP "Incomplete"
- Jul 2022: Amended GSP submitted to DWR
- Mar 2023: GSP recommended "approved" with suggested corrective changes (Official Letter from DWR Received June 20, 2023)
- Jan 2025: GSP 5-yr Evaluation due (May result in GSP Update)
- **Annually:** Water Year Annual Reports on basin conditions and GSP implementation



#### Paso Basin Cooperative Committee

- SLO County GSA
- City of Paso Robles GSA
- San Miguel CSD GSA
- Shandon-Jan Juan GSA
- Estrella-El Pomar-Creston (EPC) Water District
   (GSA Approved on June 6, 2023 )

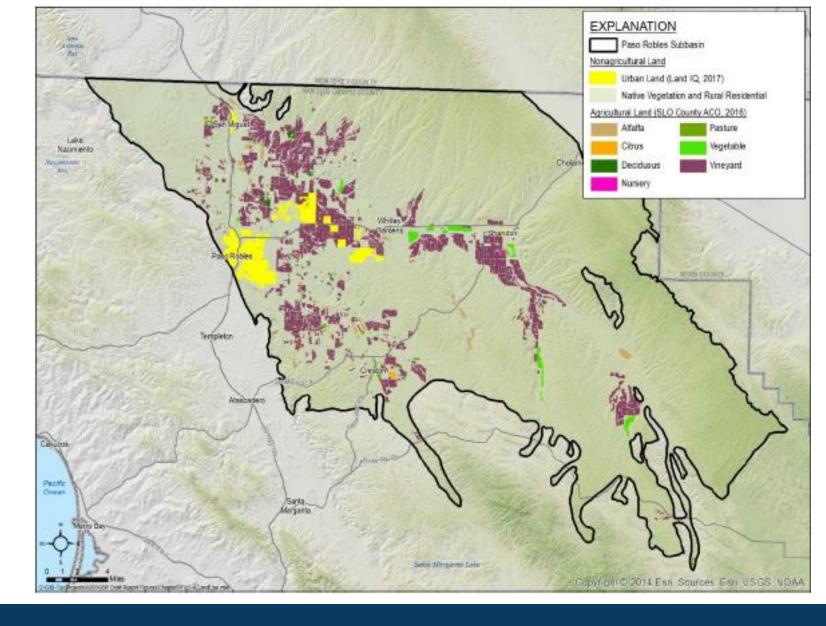




# Land Use

Land Use Category	Acres
Citrus	397
Deciduous	471
Alfalfa	1,590
Nursery	63
Pasture	667
Vegetable	1,691
Vineyard	35,349
Native vegetation	387,435
Urban	8,577
Total	436,240

Total Agriculture = 40,228 AC (9.2%) Native Vegetation = 387,435 AC (88.8%)





## Water Use

Water Year	Munici	pal (AF)	PWS and Rural Domestic (AF)	Agriculture (AF)	Total (AF)	
Source:	Groundwater	Surface Water1	Groundwater	Groundwater		
2017	1,626	4,301	5,060	64,100	75,100	
2018	1,677	4,829	5,060	75,500	87,100	
2019	1,729	4,259	5,060	55,800	66,800	
2020	1,509	4,589	5,060	60,700	71,900	
2021	1,553	4,861	5,060	75,500	87,000	
Method of Measure:	Metered	Metered	2016 Groundwater Model	Soil-Water Balance Model		
Level of Accuracy:	high	high	low-medium	medium		

Notes:

Includes imported Salinas River underflow, which is regulated as surface water by the State Water Resources Control Board

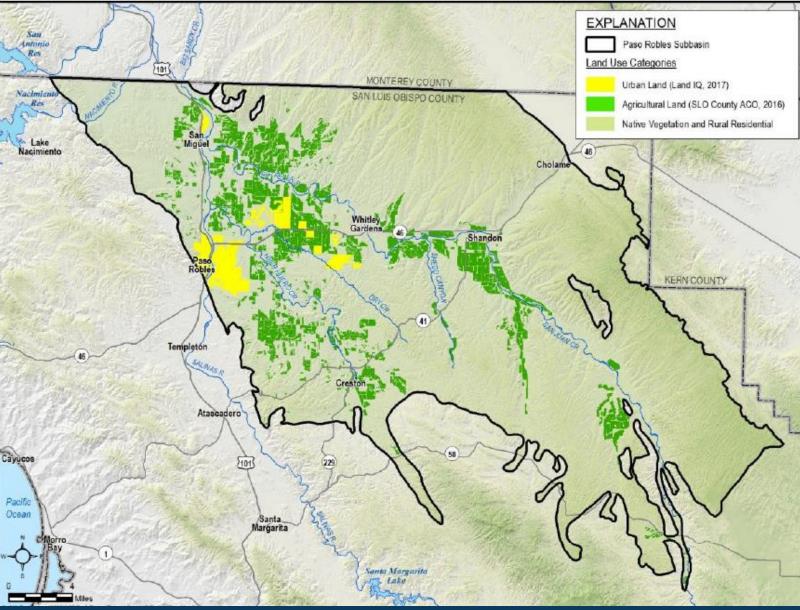
AF = acre-feet

Agricultural GW Pumping = PWS = public water systems 85% (+/-) of Water Use

### Water Budget (Future Conditions)

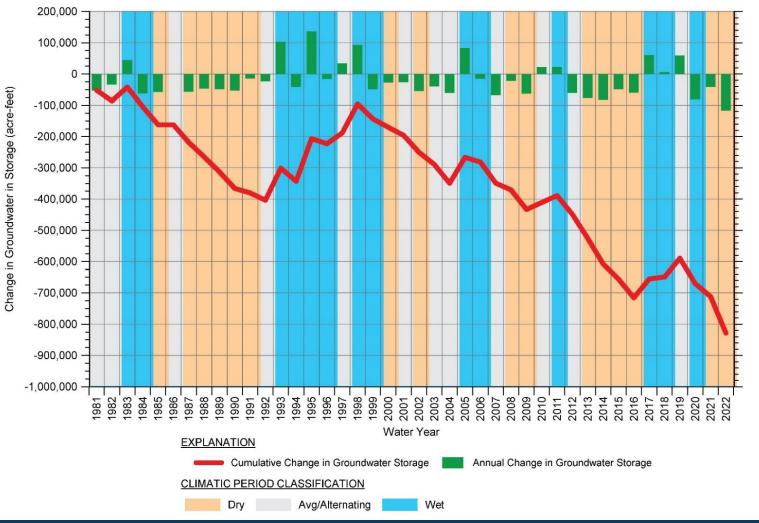
- Sustainable Yield = 61,100 AFY ٠
- Average GW Storage Deficit = 13,700 AFY •

NEED TO REDUCE GW PUMPING BY 13,700 AFY





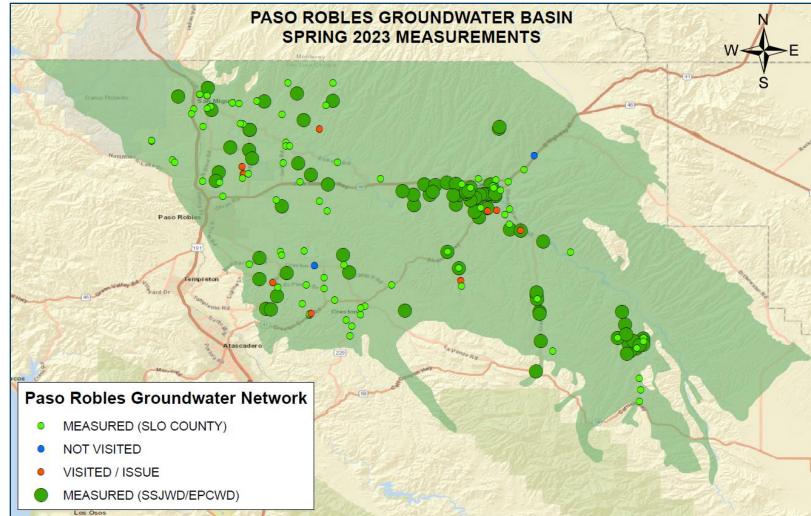
### **Annual and Cumulative Change in Groundwater in Storage**



Water Year	Annual Change (AF)	
2022	-117,100	



### Spring 2023 Change in Groundwater in Levels





### Spring 2023 Change in Groundwater in Levels

- PASO ROBLES GROUNDWATER BASIN DISTRIBUTION OF WATER LEVEL CHANGES FROM SPRING 2022 TO SPRING 2023 [-61, -51] (-51, -41] (-41, -31] (-31, -21] (-21, -11] (-11, -1] (-1, 9] (9, 19] (19, 29](29, 39] (39, 49] (49, 59] (59, 69]
- 138 Wells Measured
- 119 Well Levels Increased (86%)
- 19 Well Levels Decreased (14%)



## **Reported Dry Wells** 2015-2023

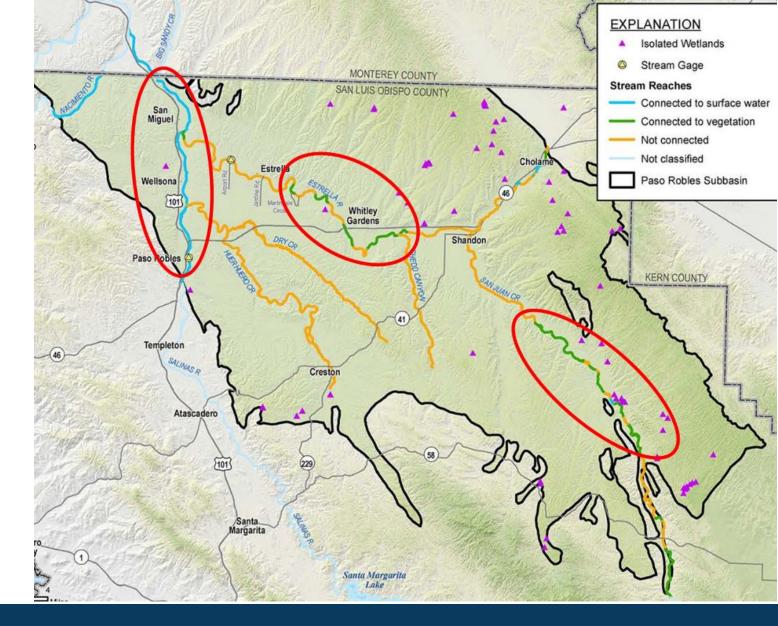
Source: California's Groundwater Live: Well Infrastructure https://storymaps.arcgis.com/stori es/f2b252d15a0d4e49887ba94ac1 7cc4bb





# Interconnected Surface Water Locations

- Used multiple data sets to identify interconnected stream reaches and GDEs
- Delineated interconnected stream reaches
  - Salinas River (Alluvial Aquifer)
  - $\circ\,$  Estrella River middle reach
  - o Upper San Juan Creek





# **GSP Projects and Management Actions**

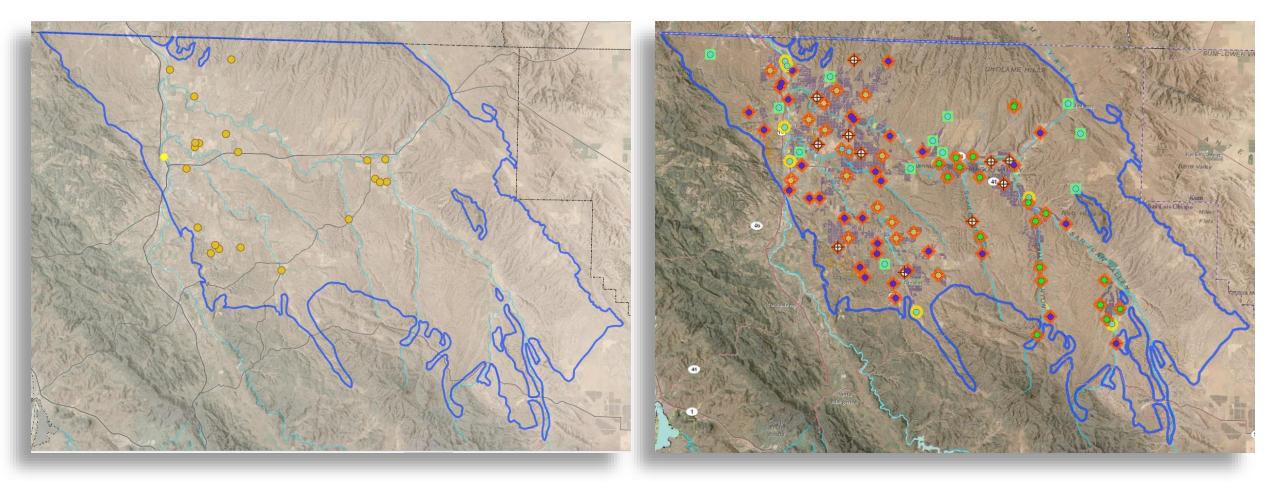
- Basin-wide management actions include:
  - Expanded monitoring network
  - o Identification of potential rural domestic well impacts
  - Enhance understanding of areas of potential surface water and groundwater interaction
  - Promoting voluntary fallowing of irrigated crop land (MILR Program)
- Projects include:
  - Tertiary treated wastewater supplied and sold by City of Paso Robles and the San Miguel CSD to private groundwater extractors to use in lieu of groundwater
  - $\circ$  State Water Project (SWP) water
  - Nacimiento Water Project (NWP) water
  - Salinas Dam/Santa Margarita Reservoir water
  - Flood flows/stormwater from local rivers and streams



	No.	Description	Awarded	Est. Cost
<section-header></section-header>	1	Grant Admin	$\checkmark$	\$250,000
	2	Recycle Water Project a. City of Paso Salinas Segment	~	\$3,500,000
	3	Recycle Water Project a. San Miguel CSD	✓	\$1,000,000
	4	<ul> <li>Data Gaps - High Priority</li> <li>a. Expand/Improve Existing Basin Monitoring Network</li> <li>b. Supplemental Hydrogeologic Investigations</li> <li>c. Install New Monitoring Wells, Stream Gauges, Climatologic Stations</li> </ul>	~	\$1,400,000
	5	<ul> <li>Management Actions - High Priority</li> <li>a. Well Verification and Registration Program</li> <li>b. Groundwater Extraction Measurement Program</li> <li>c. Well Interference Mitigation Program</li> <li>d. Multi-Benefit Land Repurposing Program</li> </ul>	~	\$800,000
	6	<ul> <li>Supplemental Water Supply Feasibility / Engineering Studies</li> <li>a. Nacimiento Lake</li> <li>b. State Water Project</li> <li>c. Santa Margarita Lake</li> <li>d. Well Impact Mitigation and Alternative Water Supply Projects</li> </ul>	~	\$650,000
		TOTAL FUNDED		\$7,600,000

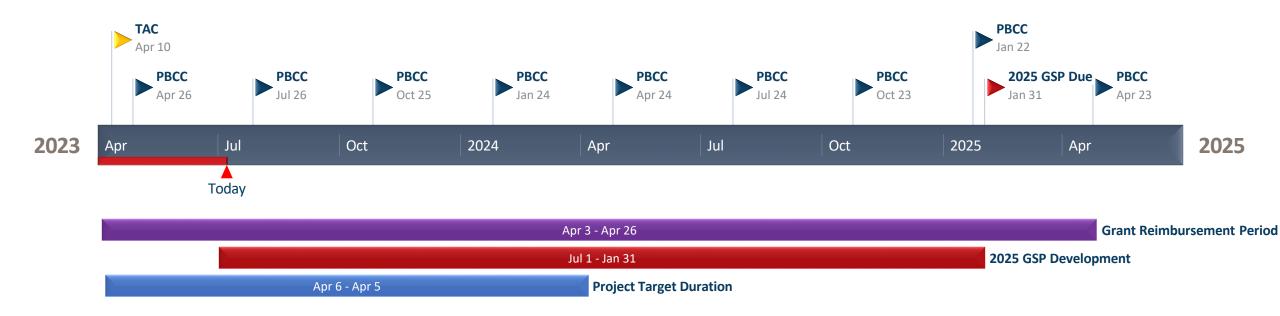


# **Expanded Monitoring Network**





### **Expanded Monitoring Network Implementation Schedule**



TAC to infill milestones for the expanded monitoring network.



# **MILR Program**

#### Phase 1: Voluntary Component<sup>1</sup>

- o Relative groundwater usage estimates
- Proof of concept interactive pricing model
- Program funding structure
- Financial incentives to repurpose land\*
- Accounting method\*
- Enabling ordinance\*
- Implementation\*
- Phase 2: Mandatory Component (if required)
- Multibenefit Agricultural Land Repurposing (MALR) Plan
  - Identification and prioritization of land repurposing strategies and projects\*
- Project Development and Permitting
  - High-level CEQA and permitting assessment in MALR Plan and Enabling Ordinance\*
  - o Detailed, site-specific repurposing project/program CEQA and permitting review provided by RCD with third-party consultant assistance
- Project Implementation\*
  - o Participants submit preliminary interest application for review
  - o Applications will be reviewed and ranked to determine maximum benefit to the basin
  - Work with Collaborator, Partner and/or third-party to lead implementation for site-specific repurposing project/program
  - Support development of contracts for land repurposing and site-specific MILR Plans for project implementation
  - o Landowner implements project/program
  - "Seed funding" coupled with fees for incentive payments provided to participant landowner/lessee for repurposing

#### <sup>1</sup>DWR SGMA Grant funded work

\* Integration of DWR SGMA Grant funded work and DOC MLRP Grant funded work



#### Purpose

Identify and assist with implementation of repurposing projects that provide benefit to:

- Least viable areas for irrigated agriculture while preserving prime farmland
- DACs, "at-risk communities of concern"
- Rural residential areas with dry wells
- Flood plain areas with potential for recharge
- Others to be determined

## **MILR Program**

- Partner Capacity Needs
  - Work is shared by the project Partners, Collaborators, Stakeholders, and participants
  - o Identify and procure third-party, consultants or experts to assist in the process if needed
- Outreach, Education and Training\*
  - Work with Partners and Collaborators to perform outreach/communication with potential participants throughout all previous efforts listed
  - Mix of traditional large public workshops and smaller, nuanced meetings/discussions
  - Educational collateral, website(s), social media, etc.
- Monitoring
  - Coordinate with Partners and Collaborators to work with repurposing participants to develop and implement contracts and monitoring programs
  - o SLO County will oversee implementation and funding requirements as the lead agency

**Use of Partnerships and Collaboration –** The Paso Basin Cooperative Committee (PBCC) will continue to facilitate coordination among all Partners, Collaborators, and Stakeholders. Additionally, the MILR Program Technical Advisory Committee (TAC) has been formed with comprehensive basin stakeholder representation including the following:

- Public
- Water agencies/GSAs
- Members of the agricultural community
- Non-profit organizations (NPOs) with environmentally related missions
- Representatives from disadvantaged and "at-risk communities of concern" and individuals

#### MILR TAC / PBCC Purpose

TAC to advise and assist PBCC in development and implementation of the MILR Program by leveraging partnerships and collaboration





## **MILR Program Implementation Schedule**





## **GSP 5-Year GSP Evaluation Schedule**

- GSP 5-year evaluation due January 31, 2025
- May lead to recommendation to develop plan to update the GSP
- Only seven (7) regular PBCC meetings before GSP update due
- The Paso subbasin GSP was recommended for approval, but "DWR recommended corrective actions should be incorporated into the GSP when the plan is next updated"
- Potential recommendations:

 Develop GSP evaluation strategy with PBCC staff and present recommendation for 5-yr Evaluation on July 26<sup>th</sup> PBCC meeting



PBCC Jan 22



### **Questions?**

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