

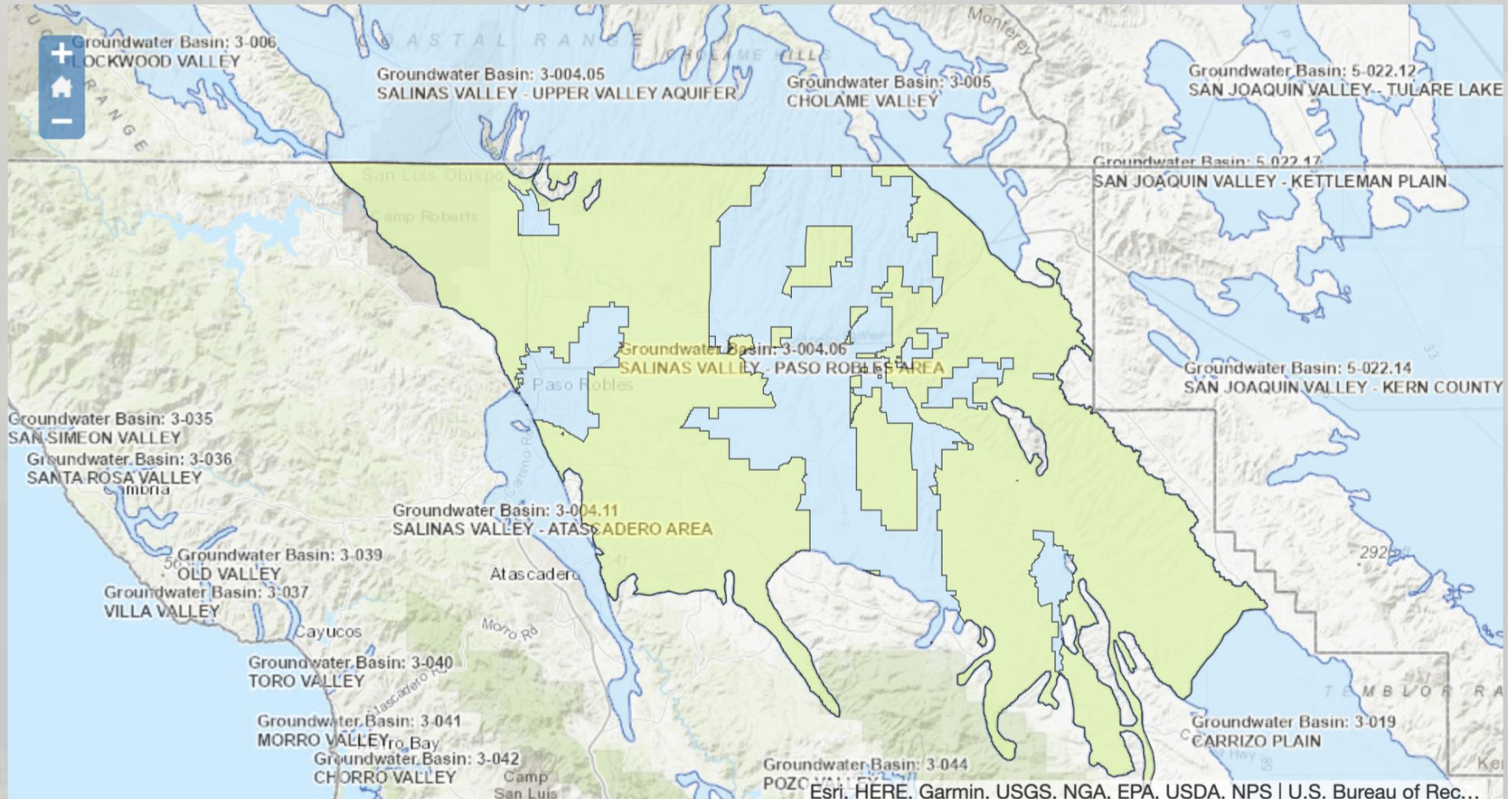
-WELCOME TO -
PASO ROBLES GROUNDWATER
TOWNHALL

February 15th 2023

Thank you for Hosting Robert Hall

County of San Luis Obispo GSA - Paso Robles Area

(3-004.06 SALINAS VALLEY PASO ROBLES AREA)



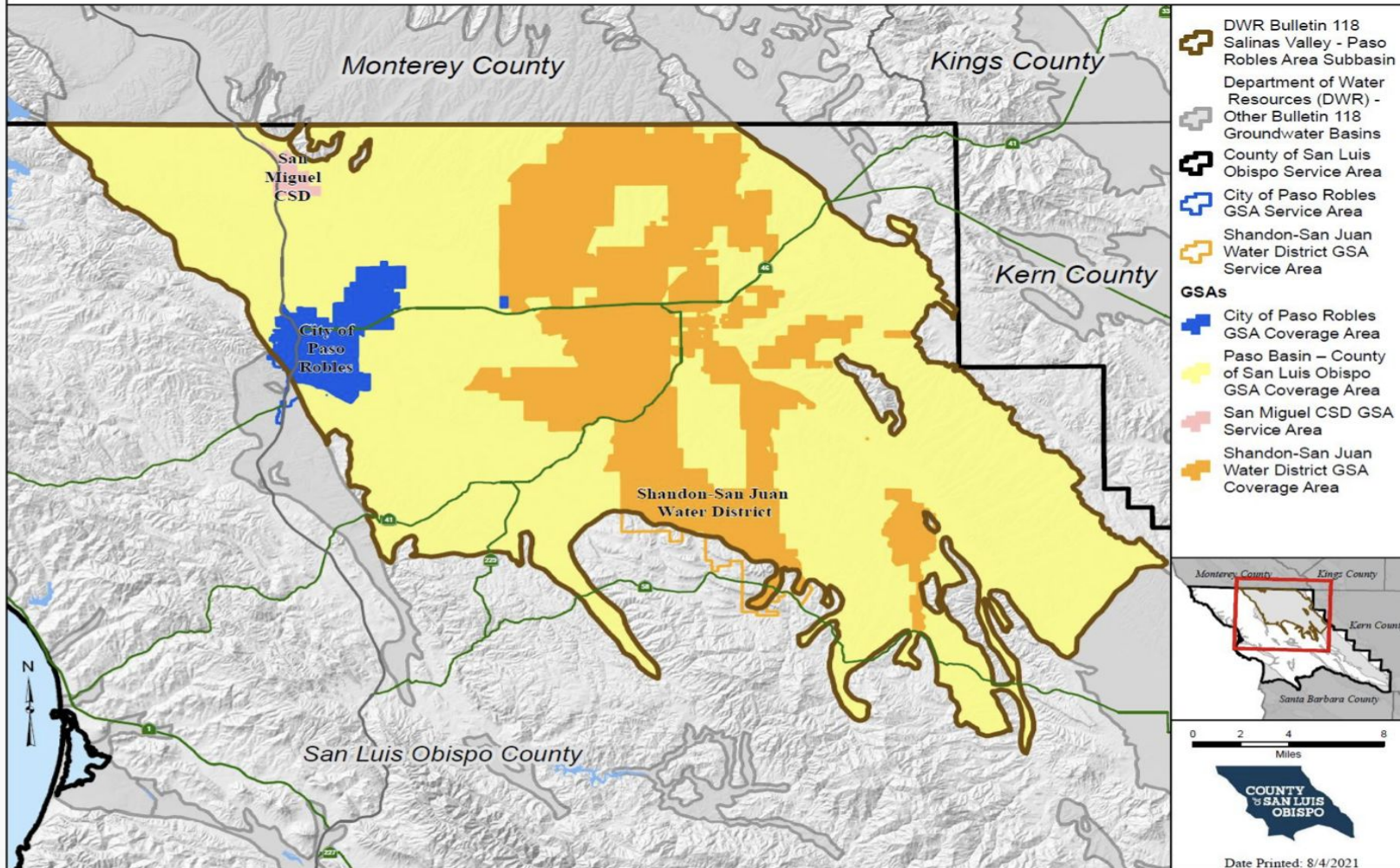
WHAT DOES GMP AND GSA STAND FOR?

Groundwater Management Plan

&

Groundwater Sustainability Agency

Paso Basin Groundwater Sustainability Agencies Boundaries



WHAT IS A GSA?

The **Groundwater Sustainability Agency** is one or more local agencies that implement the provisions of the Paso Robles subbasin plan . Or taking action to enforce a groundwater sustainability plan and its fees.

WATER DISTRICTS VS GSA

A GSA is created within a water district to create a GSP

A **GSP** is a **Groundwater Sustainability Plan**.

I'm in an all day Zoom on the current Planting/Irrigation Ordinance. It's eventual reading to BOS on December 6th (and likely defeat) has the potential to greatly change current irrigation and planning rules. Further, the GSA is expecting a response from Dept of Water Resources about our Groundwater Sustainability Plan's sufficiency by the end of the year. Hopefully it is a positive response and our GSA can start implementing plans that Growers need to know about (MILR is a proposed program to fallow land while retaining water credits). However....if we are again told we are not planning correctly, then DWR may start a State-takeover of PBLUMA and enforce their own version of pumping and irrigation restrictions.

ORDER OF THE ORDER

DWR – the state

GSA – the agency/area

GSP – the plan

BOS – Board of Supervisors

→ Create the plan, representing the agency, to the state.

WHAT IS PBLUMA?

Paso Basin Land Use Management Area

Planting Ordinances created within by BOS (Board of Supervisors)

Paso Basin Land Use Planting Ordinance

On December 6, 2022, the San Luis Obispo County Board of Supervisors adopted the Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance (LRP2021-00001), amending Title 8 and Title 22 of the San Luis Obispo County Code and the Agriculture and Conservation and Open Space Elements of the County General Plan to require “water neutral” ministerial planting permits for production agriculture irrigated from groundwater wells within the PBLUMA until 2045, with a 25-acre-foot per year (AFY) exemption allowed per site. The Board of Supervisors also certified a Final Program Environmental Impact Report (FPEIR) (SCH 2021080222) (ED22-183-PL) for the project pursuant to CEQA. See links to the adopted ordinance and FPEIR documents below.

Please click [here](#) to view a map of the PBLUMA area.

Please click [here](#) to view the PBLUMA area in our interactive web map.

Project Contacts

Comments and questions regarding the project may be submitted via email to khensley@co.slo.ca.us or mailed to the following address:

WHAT IS MILR?

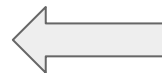
Multi-Benefit Irrigated Land Repurposing

...is a proposed
program to
fallow land
while retaining
water credits

GROUNDWATER SUSTAINABILITY PLAN Projects and Management Actions

Basin-wide management actions include:

- Monitoring, reporting and outreach
- Promoting best water use practices
- Promoting stormwater capture
- Promoting voluntary fallowing of irrigated crop land (MILR Program)



Area specific management actions include:

- Mandatory pumping limitations in specific areas

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
- State Water Project (SWP) water
- Nacimiento Water Project (NWP) water
- Salinas Dam/Santa Margarita Reservoir water
- Local recycled water
- Flood flows/stormwater from local rivers and streams



Water Use

Water Year	Municipal (AF)		PWS and Rural Domestic (AF)	Agriculture (AF)	Total (AF)
	Groundwater	Surface Water ¹	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:

¹ Includes imported Salinas River underflow, which is regulated as surface water by the State Water Resources Control Board

AF = acre-feet

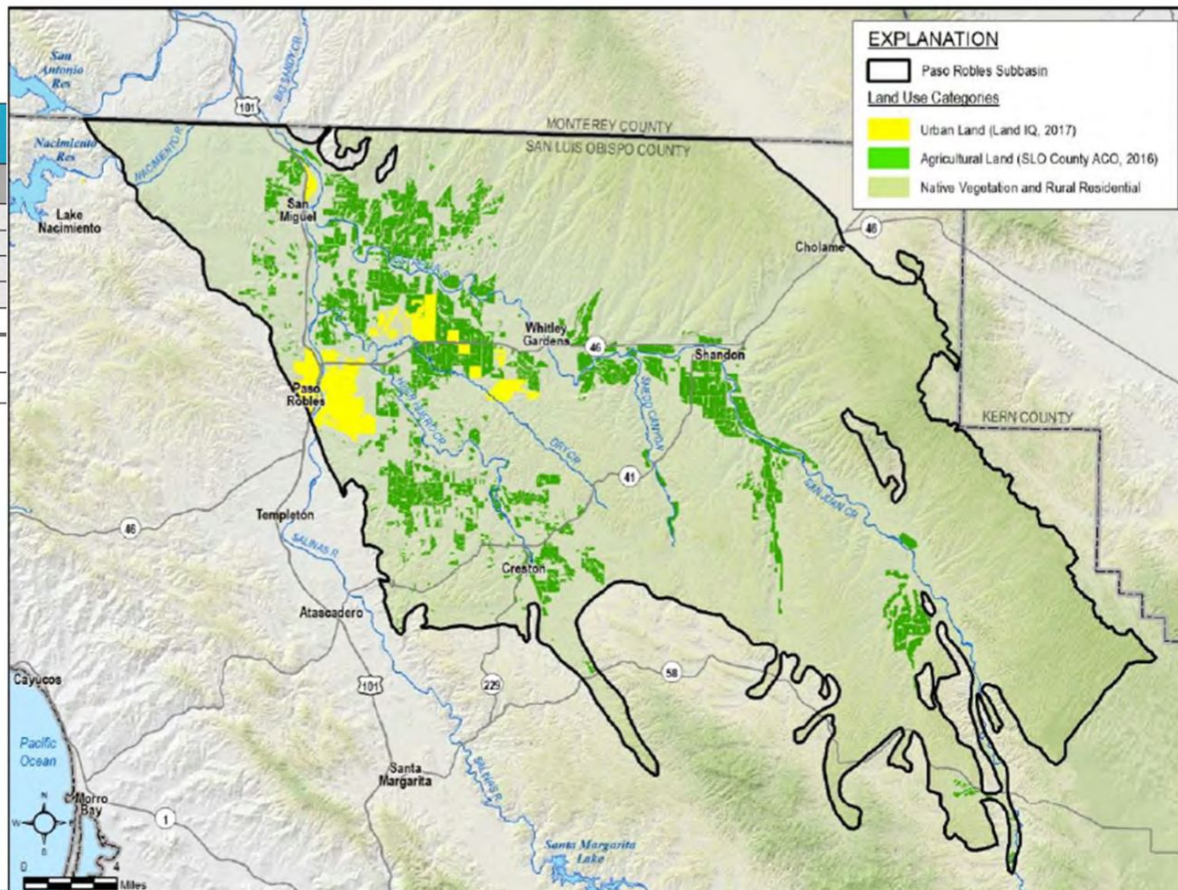
PWS = public water systems

Agricultural GW Pumping = 85% (+/-) of Water Use

Water Budget (Future Conditions)

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

NEED TO REDUCE GW PUMPING BY 13,700 AFY



EXPLANATION

□ Paso Robles Subbasin

Land Use Categories

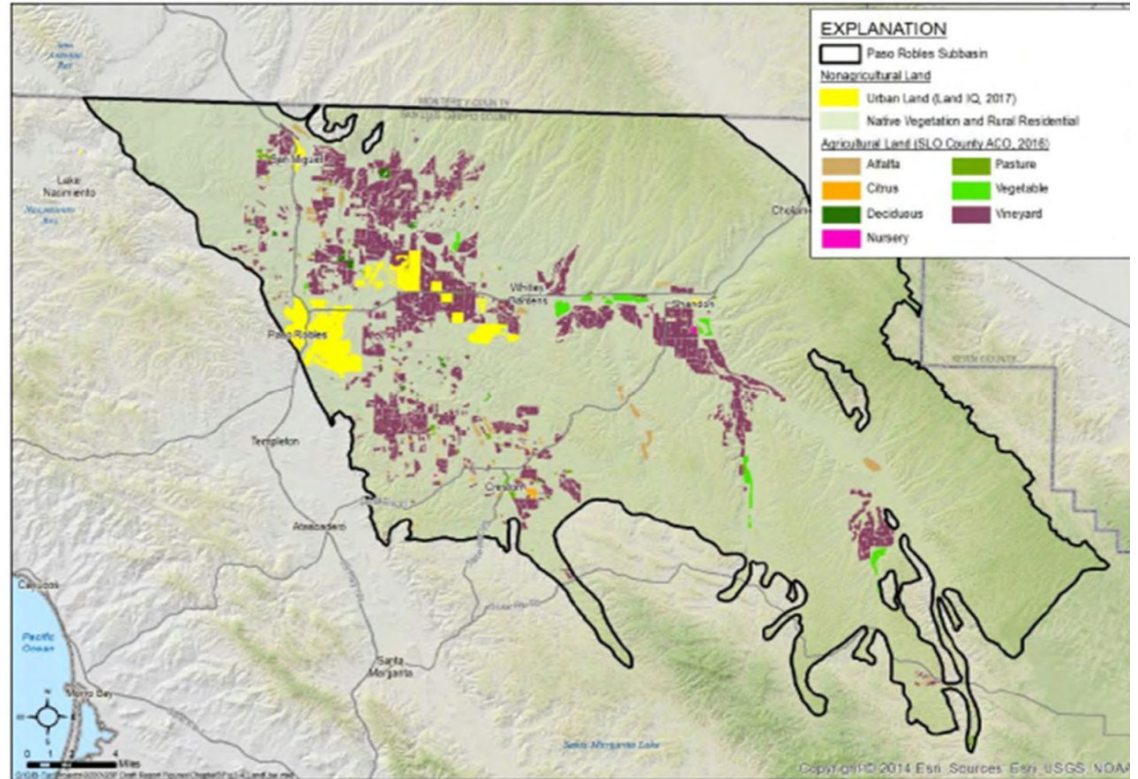
- Urban Land (Land IQ, 2017)
- Agricultural Land (SLO County ACC, 2016)
- Native Vegetation and Rural Residential



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%)



MORE INFO

Great PDF of the minutes from a Paso Basin Cooperative meeting...

Scan here →

MILR

Sustainability Plan

And more.



PURPOSE OF A GSP

Groundwater Sustainability Plan (GSP) –
A management plan developed by the GSAs
**to provide a framework in managing the
groundwater basin sustainably and to
meet the requirements of the SGMA.**

The **“Paso Robles Area Subbasin”** of the Salinas Valley Groundwater Basin locally referred to as the **“Paso Robles Groundwater Basin”**

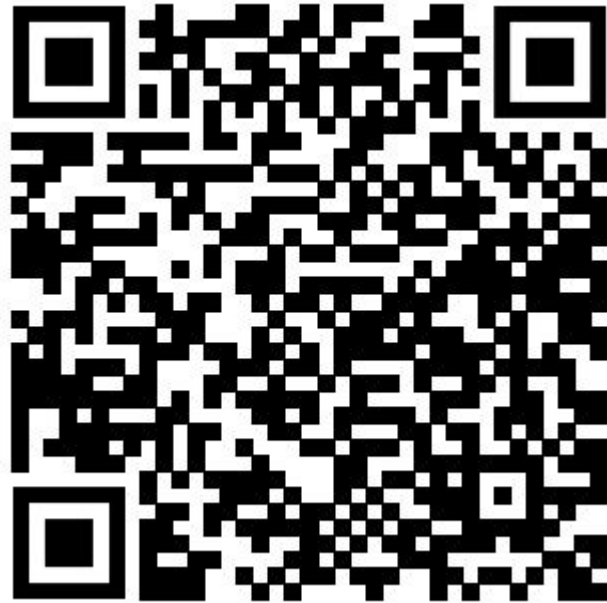
WHERE IS THE PR SUB-BASIN?

The subbasin is bounded by the Santa Lucia Range on the west, the La Panza Range on the South, and the Temblor and Diablo Ranges on the east.

The basin overlies approximately 436,000 acres (681 square miles).

SAN LUIS OBISPO COUNTY WATER RESOURCES MAILING LIST

Scan to get on the
Email list...



PLANTING/IRRIGATION ORDINANCE

County Government: SLO County Supervisors Repeal New Paso Robles Planting Ordinance



Paso Robles farmers ask for fair water rules after supervisors repeal planting ordinance

The San Luis Obispo County Board of Supervisors voted 3-2 on Tuesday to repeal the planting ordinance for the Paso Robles Groundwater Basin before it could take effect on March 1, as farmers called for a more fair approach to managing the resource.

[Read More](#)





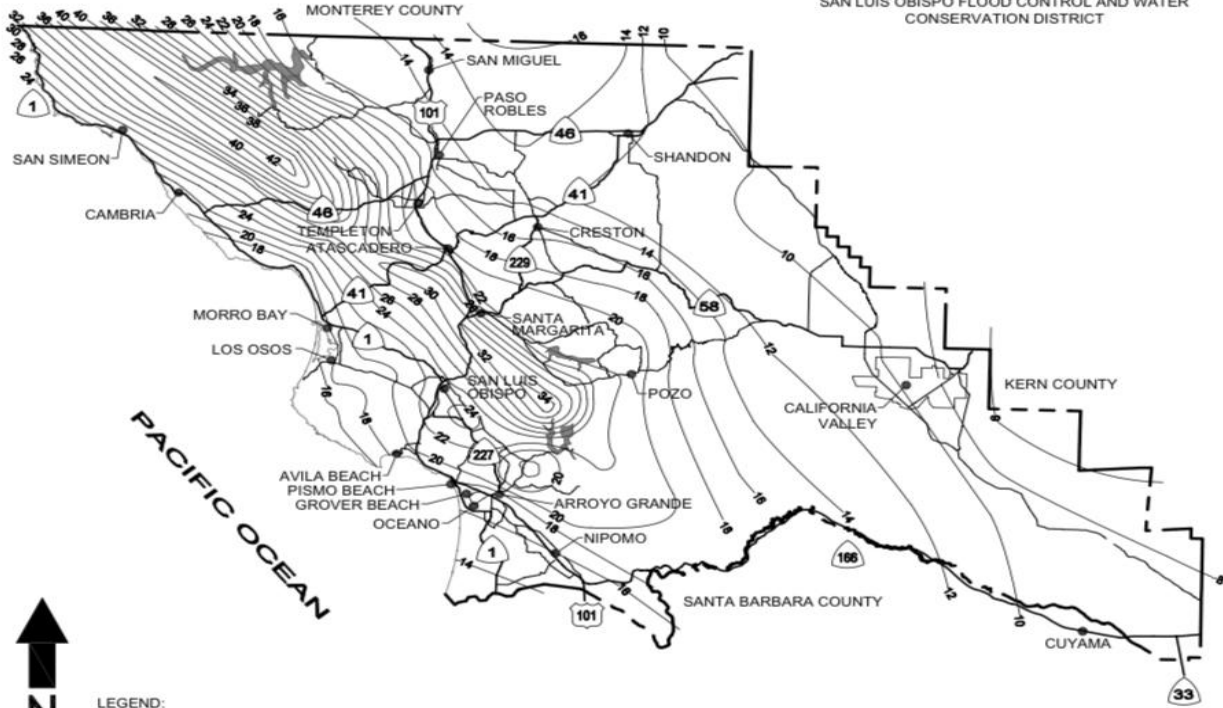
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
AVERAGE ANNUAL RAINFALL

Scale: NTS
 Drawing No: **H-1**
 Adopted: 2011
 Sheet No: 1 OF 1

**SAN LUIS OBISPO COUNTY
 AVERAGE ANNUAL PRECIPITATION**

(JULY 1 THROUGH JUNE 30) FOR 42 YEAR PERIOD
 FROM 1955-56 THROUGH 1997-98)

SAN LUIS OBISPO FLOOD CONTROL AND WATER
 CONSERVATION DISTRICT



LEGEND:
 22 - AVERAGE ANNUAL PRECIPITATION (INCHES)

Description

Approved

Date

Description

Revisions

Approved

Date

RESERVOIR CAPACITY %

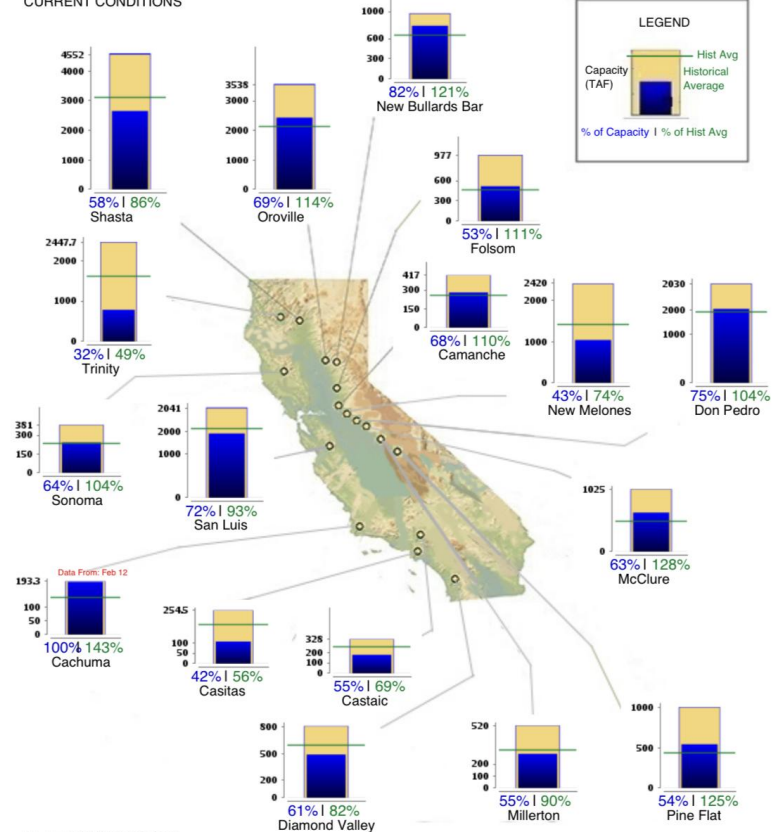
Primary reservoirs in California and % full.

Could we use more infrastructure?

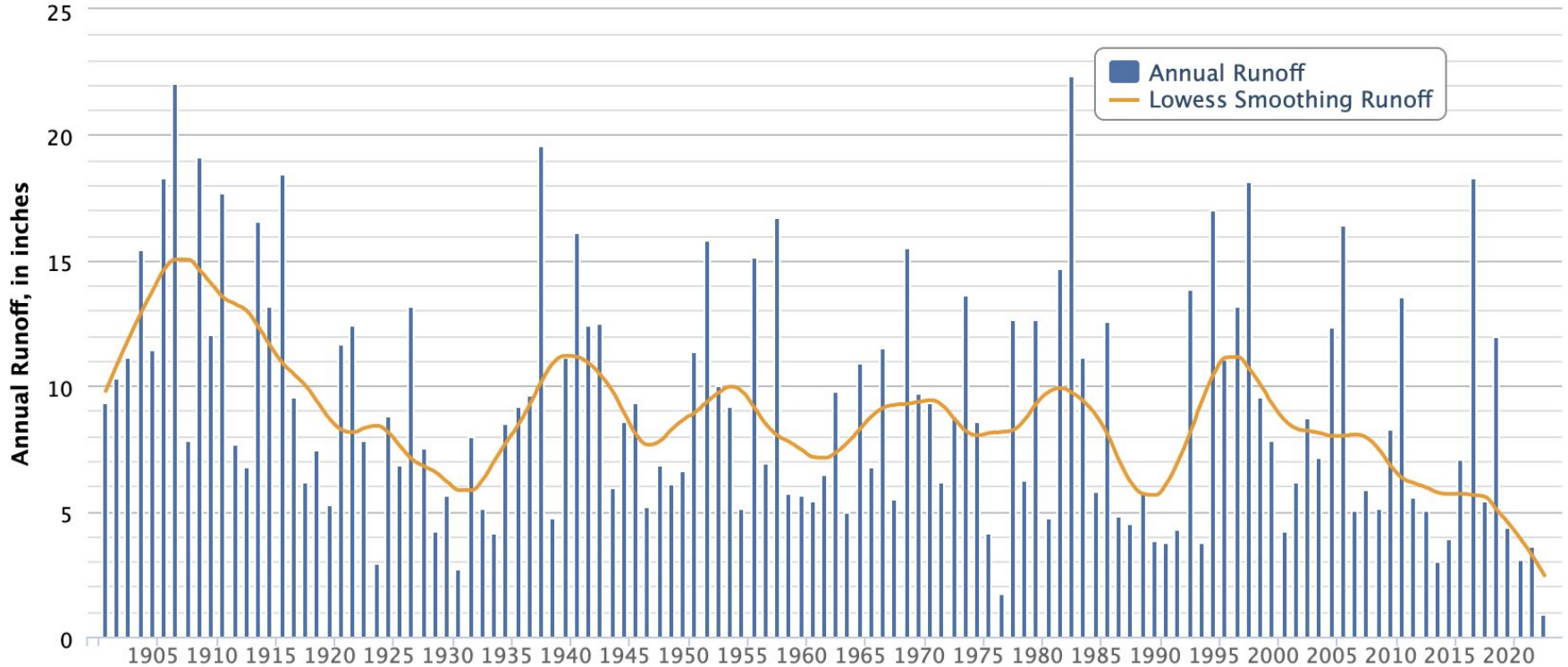


CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS
CURRENT CONDITIONS

Midnight - February 13, 2023



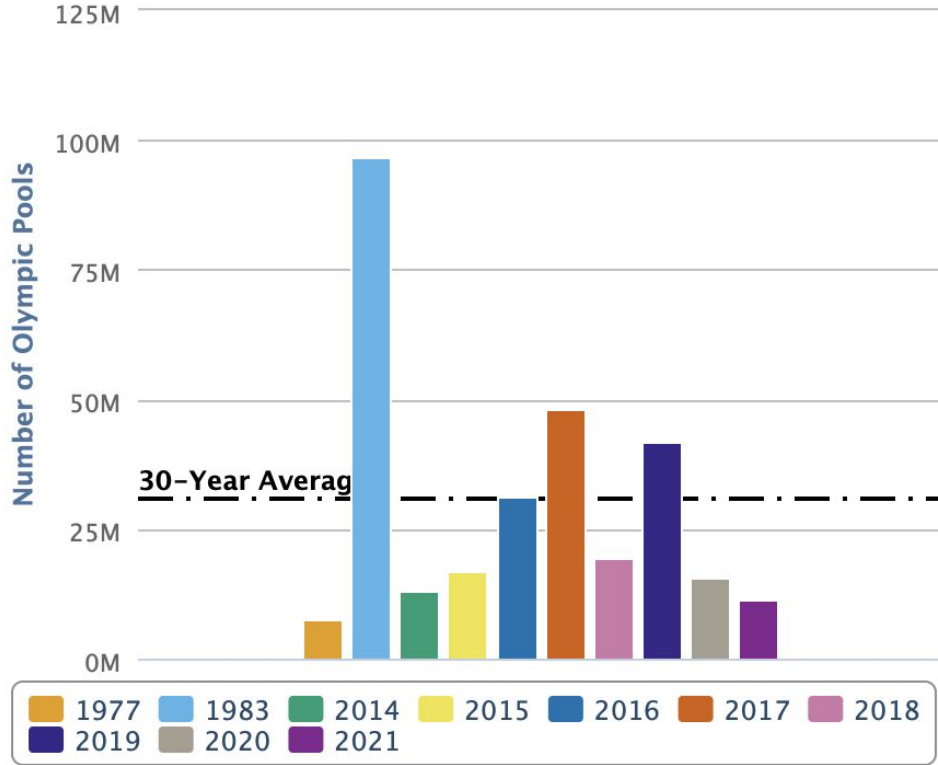
Annual California Runoff



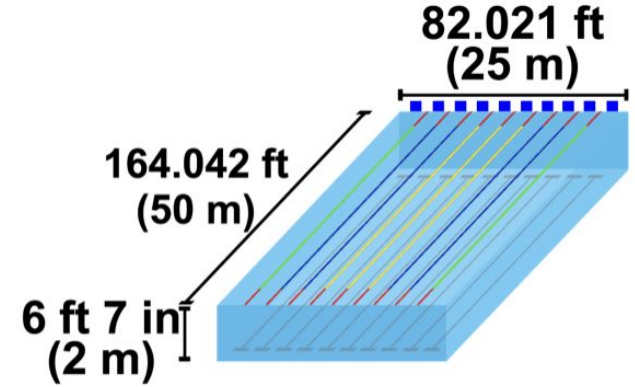
The Lowess Smoothing Runoff line presents the best fit curve through the annual runoff data to help see the relation between variables and foresee trends.

2022 and 2023 water year data are provisional and subject to change.

How many olympic pools is that?



What's the size of an Olympic pool?



Volume: 660,000 US gal

2022 and 2023 water year data are provisional and subject to change.

Water year data are from October 1 to September 30.

WHAT IS DWR?

Department of Water Resources

 CA.gov · <https://water.ca.gov> :
Department Of Water Resources

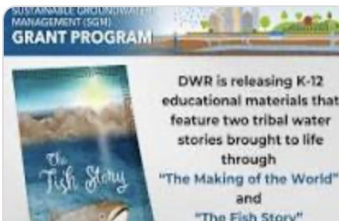
https://twitter.com/CA_DWR :

[CA - DWR \(@CA_DWR\) · Twitter](#)



Underground storage makes water available during times of drought. Projects like this in Dunnigan, Yolo County helps to capture excess...

Twitter · 6 hours ago



DWR is excited to announce new K-12 #education materials for all 10 hydrologic regions in the state. These education materials help promote #water literacy and meet the state's Next Generation Science Standards.

Download the materials for your classroom at water.ca.gov/Work-With-...

Twitter · 1 day ago



DWR today awarded \$15 million to Central Valley communities (specifically Fresno, Kern, & Tulare counties) to support #flood control, water supply reliability & #groundwater recharge through the Integrated Regional Water Management Program.

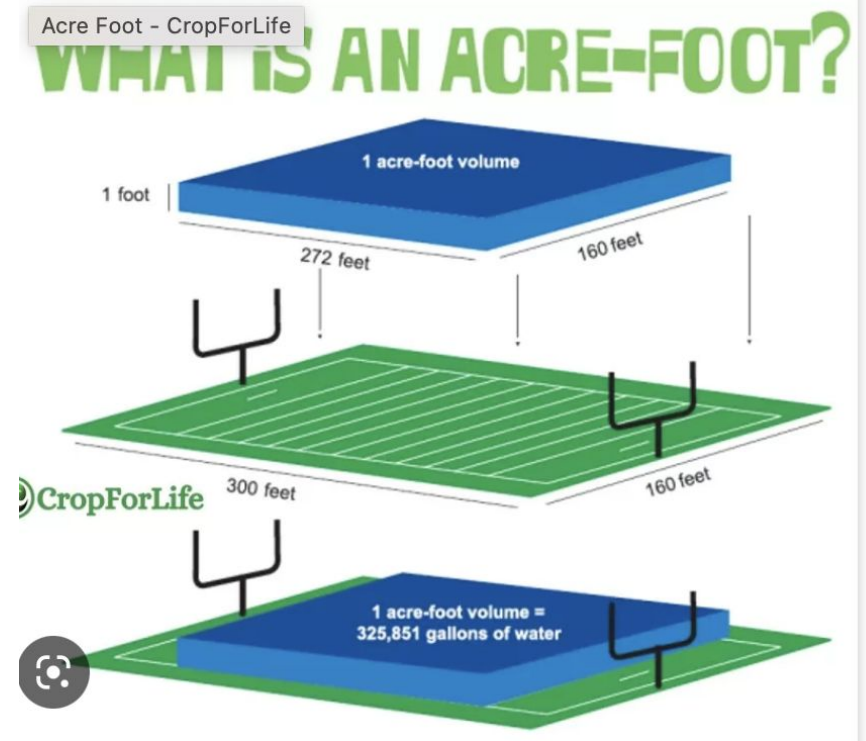
More  water.ca.gov/News/News-...

Twitter · 1 day ago

WHAT IS AN AC-FT ?

325,800 gallons

One foot/12 inches of water on an acre of land.

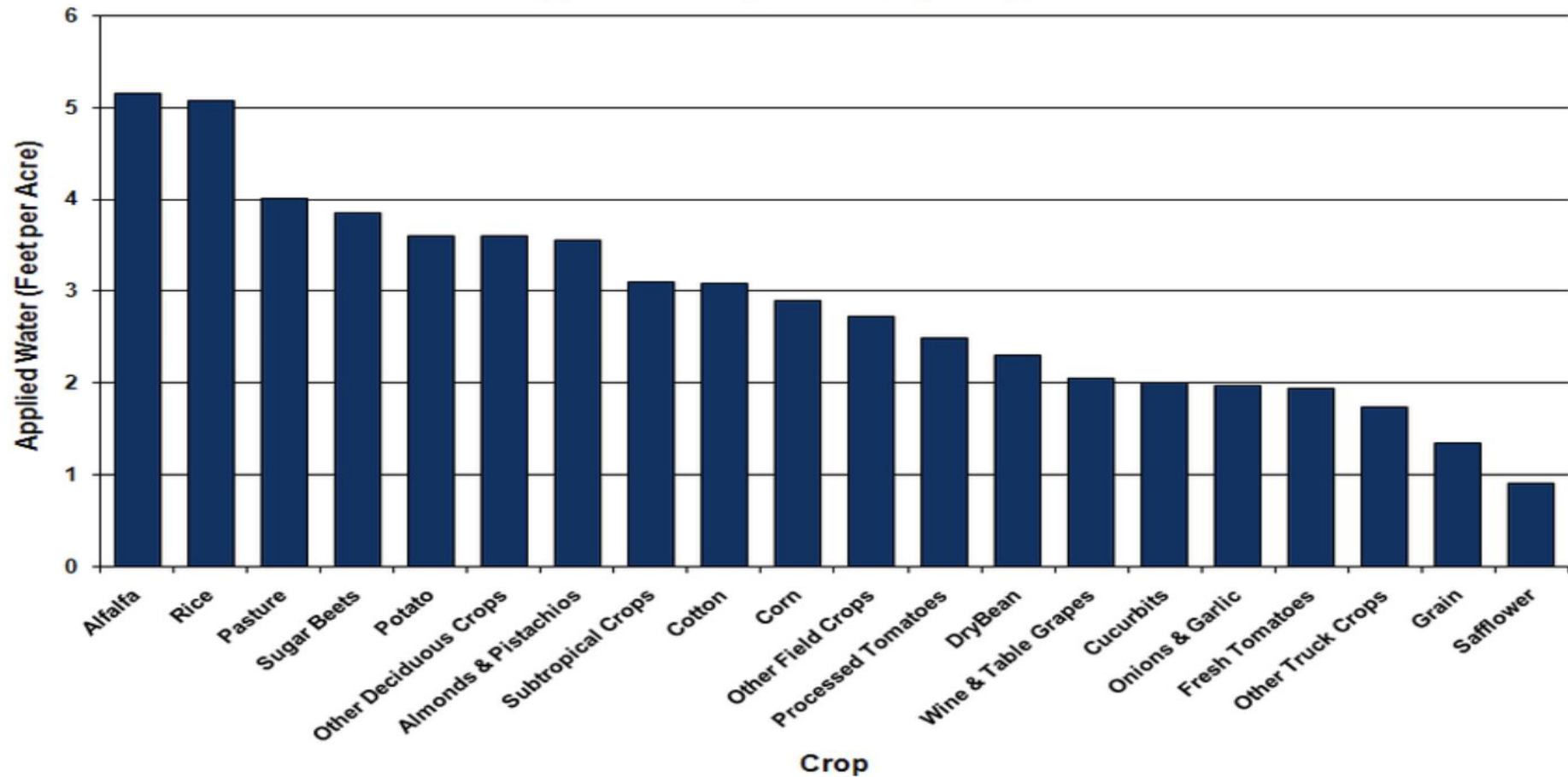


5AFY

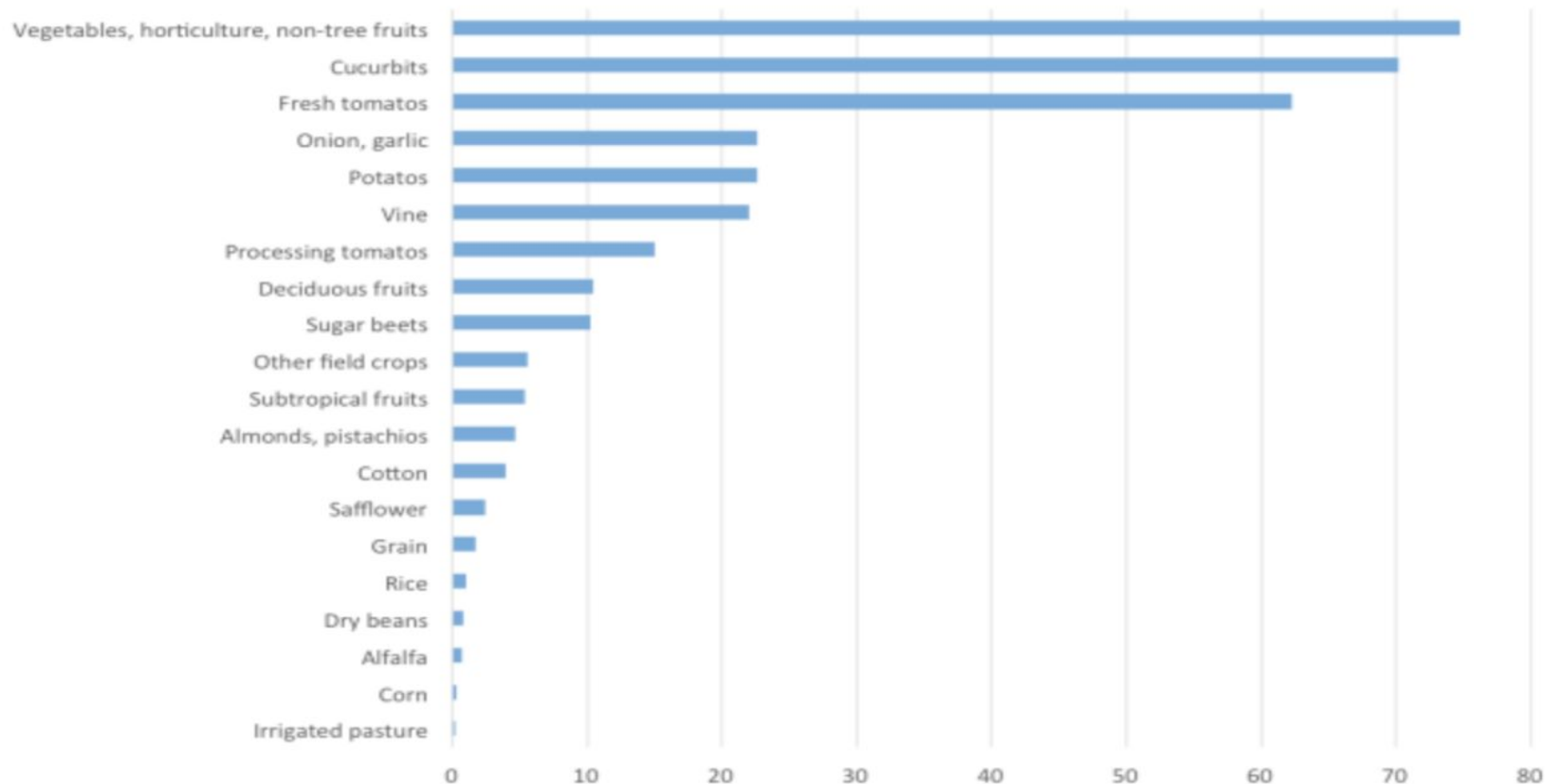
The most acronym for:

5 ac-ft per year

Applied Water per Acre, by Crop, 2003



Jobs per Drop Irrigating California Crops



Average number of jobs per 1,000 acre-ft of net water use

Net water use is volume consumed by crop.

(Water applied minus runoff and ground seepage)

**Paso Robles Weather Station Network
Daily Meteorological Summary
Monday, February 13, 2023**

Station:	Elev. ft	Temperature			Avg DewPt °F	Max RH %	Min RH %	Wind			Precipitation		Min Battery Volts	Feb 14 MinT °F
		Max °F	Min °F	Avg				Avg mph	Gust mph	Dir	24hr In.	Season 7/1→		
PR18 (West Adelaïda)	1019'	58.3	30.6	39.9	100	59	--	--	--	0.00	34.37	--	12.6	32.2
Tablas Creek	1389'	54.8	33.0	40.3	97	67	3.1	17.8	SSW	0.00	32.35	0.08	12.8	32.4
PR23 (Peachy Canyon Rd)	1515'	52.7	32.6	41.1	100	71	4.8	24.6	--	0.00	30.19	--	12.6	36.9
Paso-West Hills	1821'	56.1	41.3	43.3	99	66	4.7	20.9	SW	0.00	19.89	0.08	12.2	36.9
Paderewski (Peachy Canyon R	1195'	54.8	35.2	40.8	97	65	5.4	21.8	SW	0.00	19.54	0.08	12.7	37.7
Templeton Gap	876'	55.4	29.5	39.8	98	65	3.7	19.4	WSW	0.00	20.22	0.07	12.6	35.8
Templeton West	1025'	53.6	32.7	40.9	99	69	5.0	23.5	SW	0.00	25.14	0.06	12.6	37.0
Upper Old Creek Ridge (Saxun	1678'	49.9	41.6	--	--	--	8.0	20.1	SW	--	--	0.02	12.6	38.3
Lower Old Creek Ridge (Saxun	1621'	47.1	40.2	42.2	100	68	--	--	--	0.00	34.02	--	12.8	37.0
York Mt Vineyard	1582'	47.7	38.5	42.2	100	72	5.1	17.0	W	0.00	33.78	0.03	12.6	37.8
V2 Ranch (Saxum)	1807'	47.1	37.5	40.3	99	71	3.9	15.6	SSW	0.00	39.94	0.04	12.6	36.6
James Berry Vineyard (Saxum)	1182'	53.2	30.3	40.4	99	70	3.1	13.6	SSW	0.00	28.97	0.07	12.6	32.7
Clos Solene Winery	1163'	53.9	29.9	39.8	99	69	4.0	18.3	SSW	0.00	27.42	0.07	12.6	32.6
PR21 (East San Miguel)	778'	61.8	32.6	40.8	98	49	3.8	17.6	N	0.00	13.33	0.09	12.6	39.7
PR6 (Airport)	780'	59.1	30.4	39.8	100	57	4.3	17.1	SW	0.00	14.48	0.08	12.5	39.6
Five Hills BLK29 B	1193'	56.8	34.4	--	--	--	6.5	23.9	WSW	0.00	13.75	0.15	12.3	38.0
PR20 (South Paso)	917'	57.8	26.8	38.8	98	57	3.5	16.1	W	0.00	17.25	0.08	12.6	37.1
S22 Upper (Creston Rd)	991'	58.0	29.5	40.4	99	64	4.2	17.6	WSW	0.00	17.99	0.08	12.5	40.1
S85 Lower (Creston Rd)	928'	58.8	27.7	--	--	--	--	--	--	--	--	--	12.8	37.9
S17 Lower (Creston Rd)	928'	59.3	28.6	40.7	100	62	--	--	--	--	--	--	12.8	39.5
Creston BLK2A B	1160'	59.6	30.3	38.1	97	49	4.8	18.0	SSW	0.00	16.75	0.09	12.6	37.7
Creston (Red Hills)	1149'	60.2	29.8	39.0	98	50	2.7	14.2	SW	0.00	15.26	--	12.6	36.8
PR24 (Beck)	1670'	58.0	41.0	39.6	94	44	7.7	20.2	W	0.00	26.38	0.10	12.3	37.5
Shandon	1155'	60.2	30.4	38.5	95	48	4.5	20.5	W	0.00	12.19	--	12.6	35.8

Latest precipitation data from 7/1 to now.

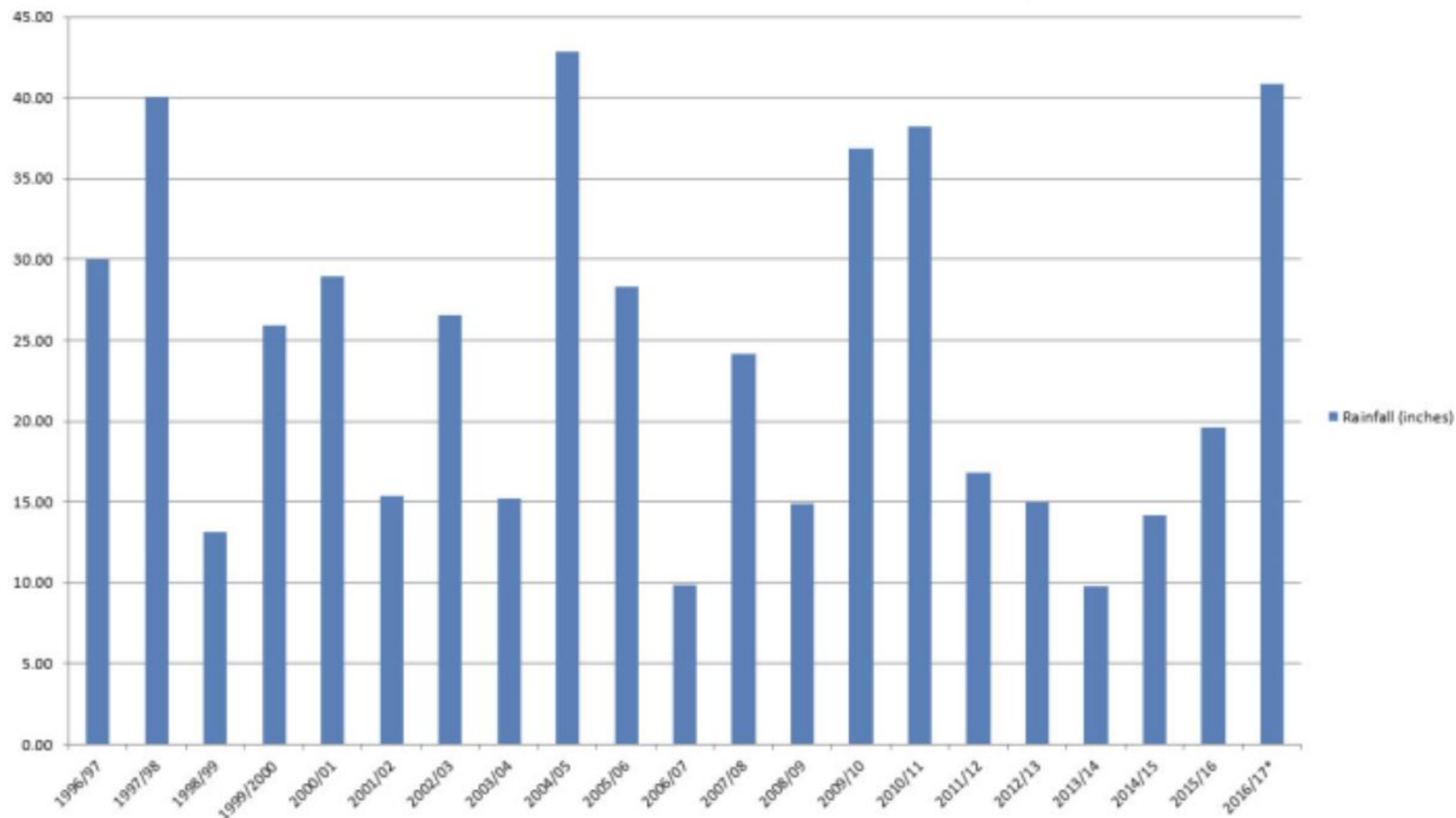
Above average rain year!

West Adelaïda - J Lohr (Cypress Mt Dr)
Peachy Canyon Rd - J Lohr
Paso-West Hills - Law Family Vineyards
S22, S05, S17 - Sunnybrook Ranch

East San Miguel - J Lohr (Cross Canyon Rd)
PR6 - J Lohr (Airport Rd)
Templeton Gap - Summerwood

Templeton West - Turley
South Paso - J Lohr (Neil Springs Rd)
Creston - (Red Hills Vineyard)

Rainfall at Tablas Creek by Winter 1996/97-2016/17



WHERE DOES THE PASO ROBLES RESIDENTIAL WATER COME FROM?

Water Sources

Currently, the City of Paso Robles relies on **a combination of surface water supplies and groundwater** to provide potable water to our water customers. In a normal year, over 50% of the City's water is supplied by seven relatively-shallow wells located along the Salinas River corridor.

 City of Paso Robles · <https://www.prcity.com> › About-Our... ⋮

[About Our Water | Paso Robles, CA](#)

WHAT IS A BASIN?

A basin is an aquifer or aquifer system whose boundaries are defined by surface-water divides, and topographical barriers. It can also be a structural basin in which the aquifers are isolated from adjacent aquifers.

WATER USE FOR VINEYARDS

A vineyard in Paso Robles AVA can use between .5 Ac-ft with natural rainfall on the westside to 1.25 Ac-ft or more depending on the need for overhead frost sprinkler applications.

WESTSIDE WATER...

The westside have not included yet into the GSA by the state as of now. They have too limited information on the basin in that area.

SHANDON/SAN JUAN DISTRICT

Resources:

ssjd.org/gsa-formation.com

Board of Directors and contact information:

Willy Cunha - willy.ssjwd@gmail.com

VP: Steve Sinton - ssinton@ssjwd.org

ESTRELLA/EL POMAR/CRESTON DISTRICT

Resources:

Epcwd.org

Contact Information

President: Dana Merrill dm@epcwd.org

VP: Hilary Graves hg@epcwd.org

SAN MIGUEL

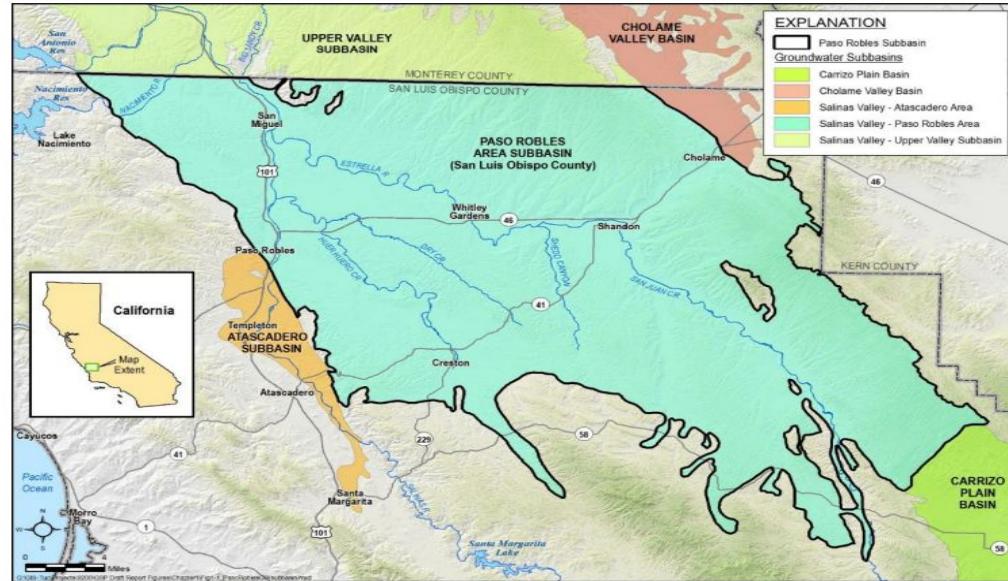


Figure ES-1: Paso Robles Subbasin Location

WHAT IS AMWC

Atascadero Mutual Water Company -
District

WHAT IS THE BASIN PLAN?

It is the Water quality control plan for the central coast basin...

WHAT ARE BPS AND BMPS?

Best Water Use Practices

&

Best Management Practices

WHAT DOES CASGEM, CCRWQCB AND CIMIS STAND FOR?

California Statewide Groundwater Elevation
Monitoring

&

Central Coast Regional Water Quality Control Board

&

California Irrigation Management Information System

WHAT DOES CWWCP, DMS AND ET STAND FOR?

Countywide Water Conservation Program

&

Paso Robles Subbasin Data Management System

&

Evapotranspiration

WHAT DOES GSP STAND FOR, AND WHAT DOES THAT MEAN?

A **Groundwater Sustainability Program** is a coordinated and ongoing activity undertaken to benefit a basin, to be carried out by a Groundwater Sustainability Agency.

WHAT DOES ILRP, IRWMP AND LID STAND FOR?

Irrigated Lands Regulatory Program

&

Integrated Regional Water Management
Program

&

Low Impact Development

WHAT DOES LOS, MT AND NDMC STAND FOR?

Level Of Severity

&

Minimum Thresholds

&

National Drought Mitigation Center

WHAT DOES NHD, NWIS AND PWIS STAND FOR?

National Hydrology Dataset

&

National Water Information System

&

CA Water Boards Public Water Information System

WHAT DOES RW, SB AND SPI STAND FOR?

Recycled Water

&

Senate Bill

&

Standardized Precipitation Index

WHAT DOES SLOFCWCD STAND FOR?

San Luis Obispo County Flood Control
and Water Conservation District

WHAT DOES SUBBASIN MEAN?

This is the Paso Robles Area Subbasin of the Salinas Valley Groundwater Basin.

WHAT IS AN ADJUDICATION ACTION?

This is an action filed in the superior or federal district court to determine the rights to extract groundwater from a basin or store water within a basin, including, but not limited to, actions to quiet title respecting rights to extract or store groundwater or an action brought to impose a physical solution on a basin.

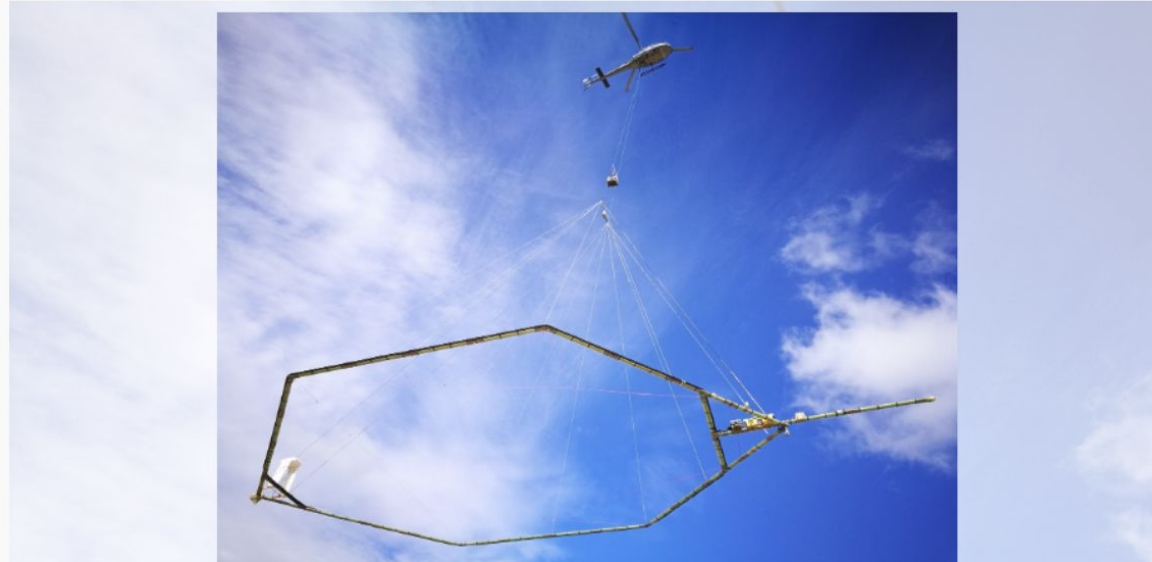
WHAT IS GROUNDWATER?

This is the groundwater beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

Paso Basin Aerial Groundwater Mapping Pilot Study

In November 2019, the County of San Luis Obispo joined two other California counties in a pilot study through Stanford University using innovative technology that could change the way California collects information about groundwater basins. The data collected will also help the Paso Basin Groundwater Sustainability Agencies comply with California's Sustainable Groundwater Management Act.

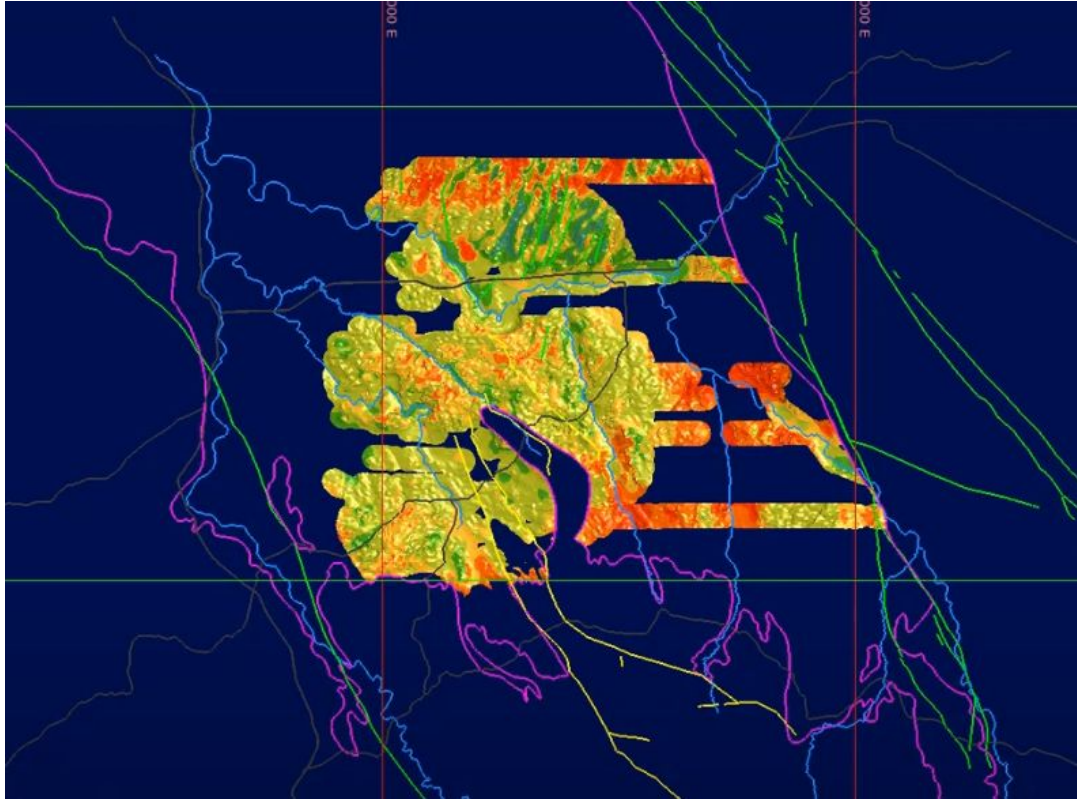
[For more information, please click here.](#)



Purpose:

To collect information about the location and details about our basin

PASO BASIN AERIAL GROUNDWATER MAPPING FOOTAGE

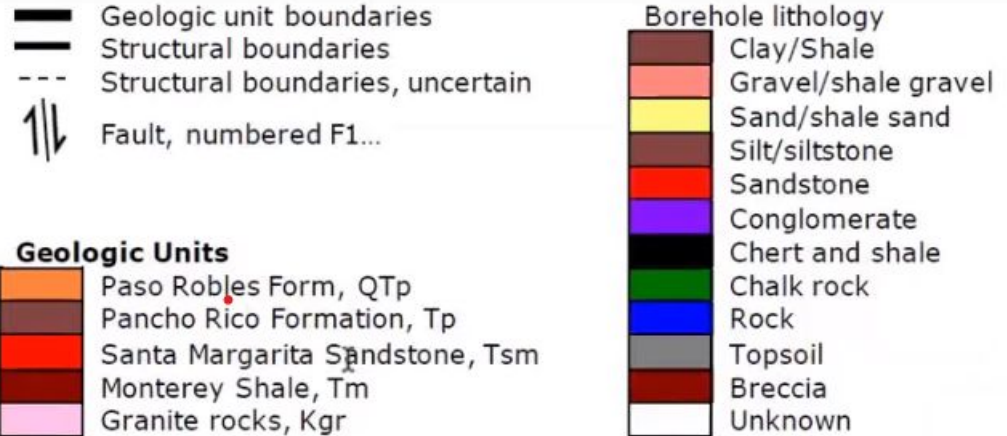


BASIN QUALITY MAP SIGNATURES

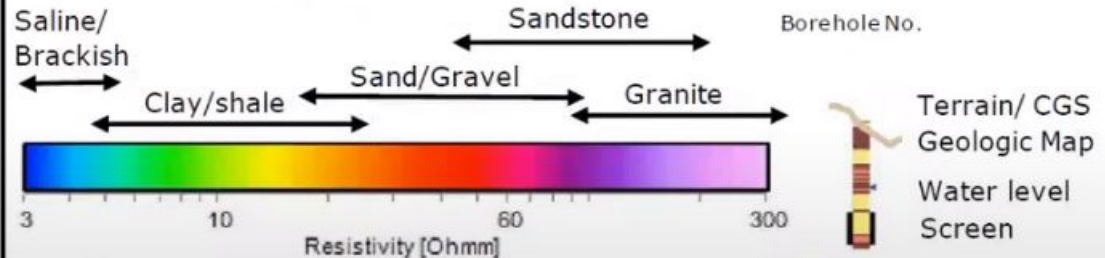
Map signatures



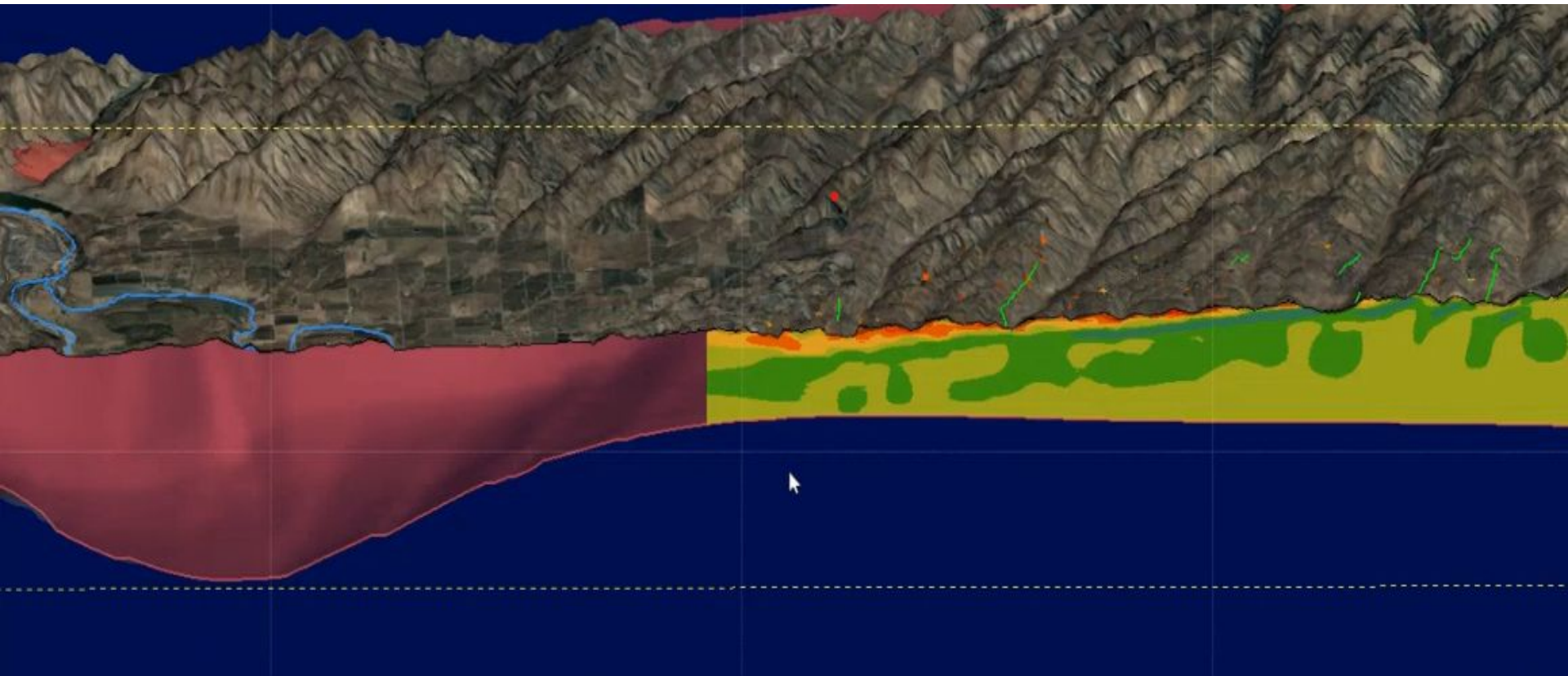
Cross section signatures



Groundwater Architecture Project (GAP)
 San Luis Obispo County
 Date: 2020.06.18
 By: TLM, MAXH
 Control: PATH
 Approved: MAXH
 Project No. 1690013412



BASIN WATER QUALITY



AVERAGE CALIFORNIA HOUSEHOLD WATER USE

An average California household uses between **one-half and one acre-foot** of water per year for indoor and outdoor use. California receives about 193 million acre-feet of water each year as precipitation (rain and snow), but there is great variability between regions.

Jun 24, 2020