PETALUMA VALLEY
GROUNDWATER
SUSTAINABILITY AGENCY

Sustainable Groundwater Fee Update

Community Information Workshop

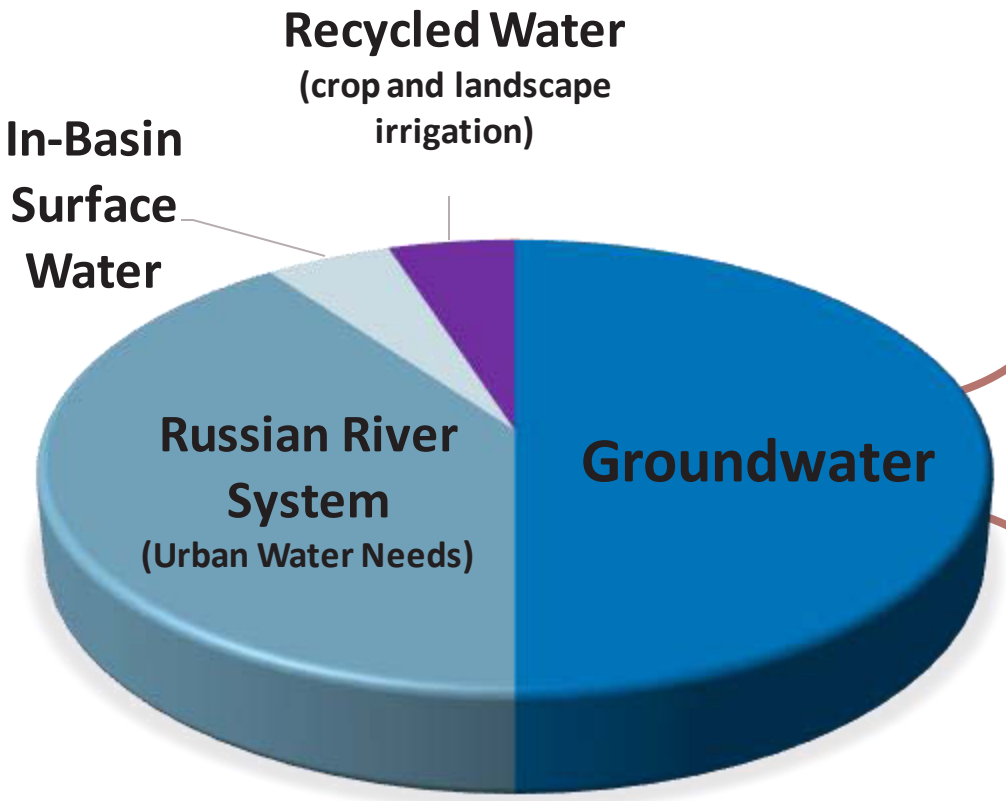
MARCH 6, 2024

Welcome, Introductions, and Agenda Review

- **SGMA and the Petaluma Valley GSA**
- **Our Groundwater Sustainability Plan**
- **Funding Sustainability**
  - Grant Award
  - Introduction to Existing Fee
  - County Contribution
- **Fee Study Update**
- **GUIDE Demo**
- **Next Steps**
- **Comments & Questions**

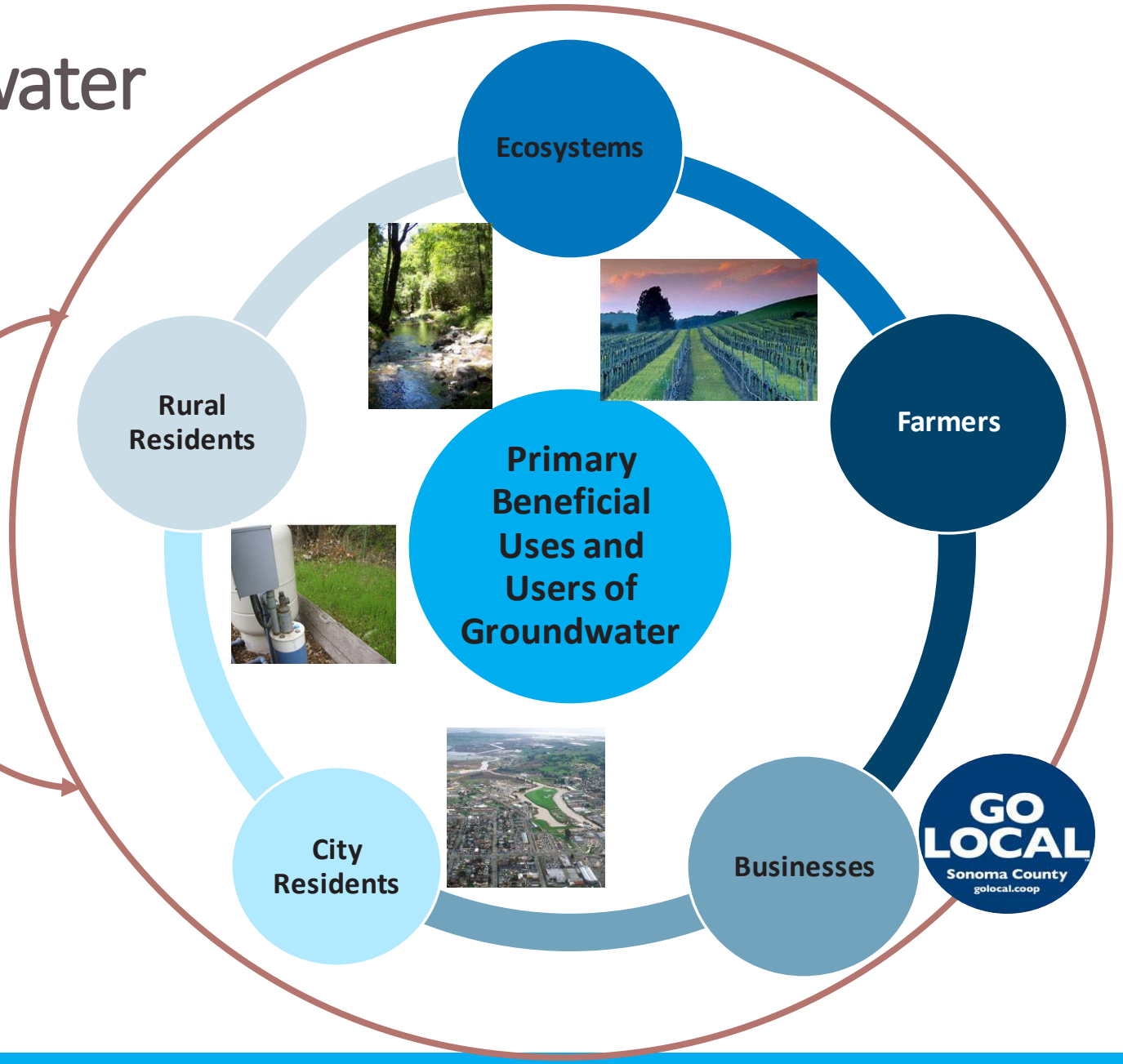
SGMA and the Petaluma Valley GSA

Importance of Our Groundwater



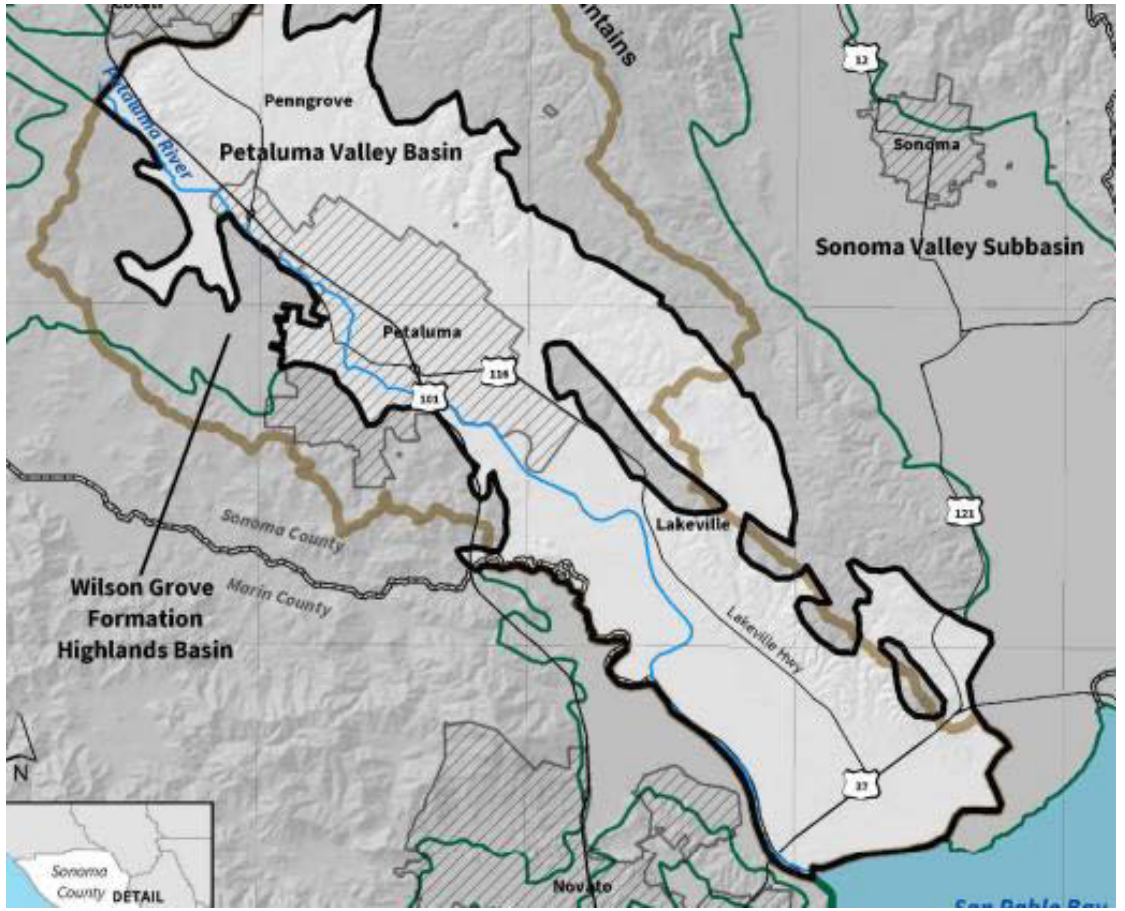
OUR WATER SUPPLIES

(APPROXIMATE AVERAGE PERCENT OF SUPPLY IN 3 SONOMA COUNTY SGMA BASINS)



The Sustainable Groundwater Management Act (SGMA)

- Law passed in 2015 to support local coordination of groundwater supplies
- Provides framework for **local** groundwater basin management
- Requires groundwater to be **sustainably** managed by 2042 through implementation of Groundwater Sustainability Plans (GSPs)
- Groundwater Sustainability Agencies (GSAs) formed by 2017



GSA Authorities include:

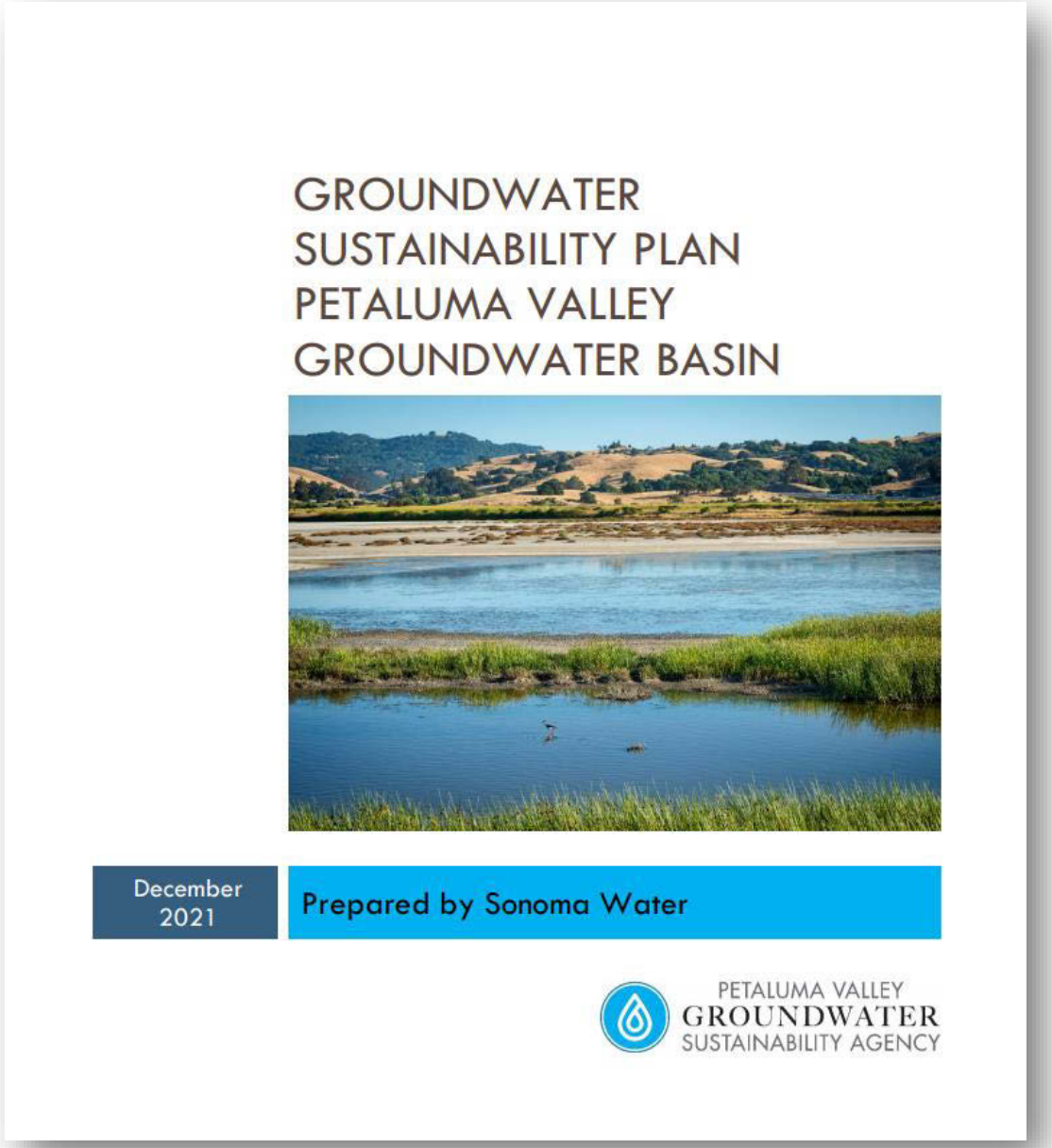
- Charging fees
- Requiring well registration and metering
- Limiting extractions
- Acquiring land

The GSA cannot …

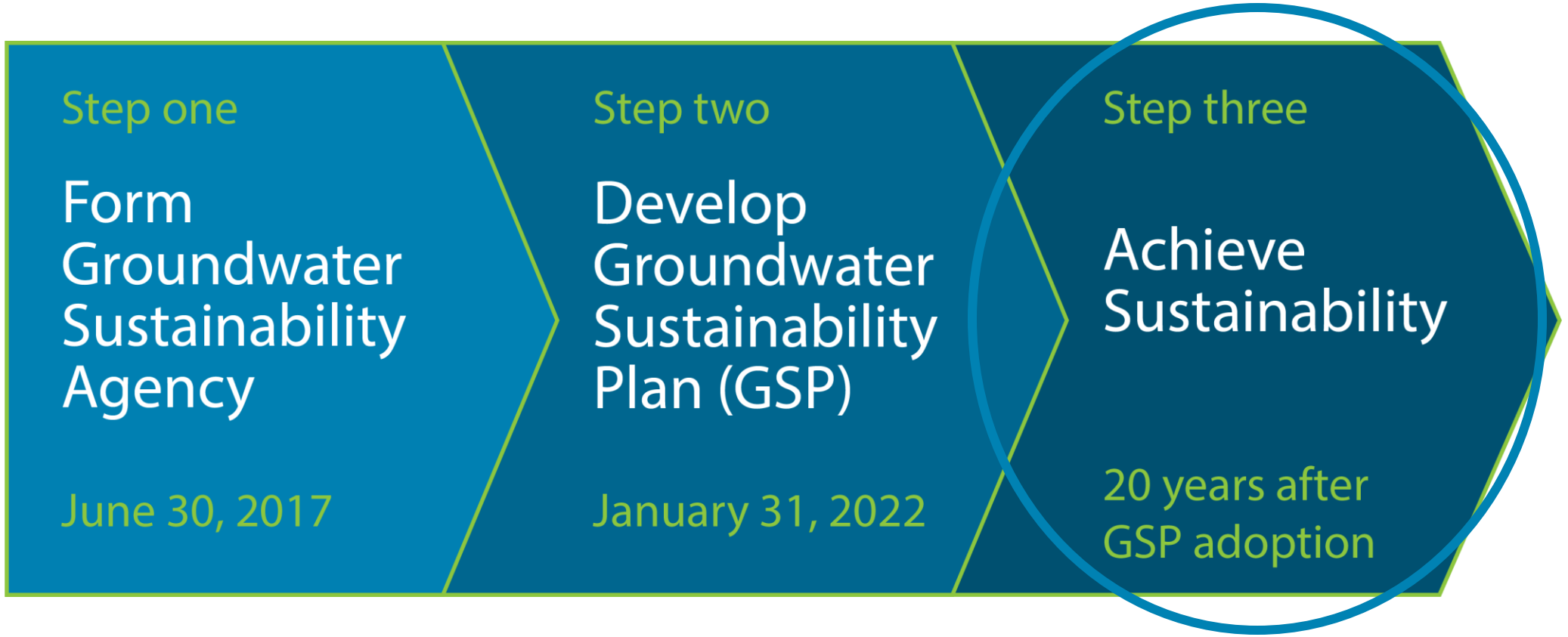
- Require meters for residential (de minimis) groundwater users
- Maintain, fix or drill your well
- Make land-use decisions about growth or development (but requires coordination with local General Plan)

Our Groundwater Sustainability Plan

- A Groundwater Sustainability Plan(GSP) adopted by GSA Board, December 2021
- Involved more than 50 public meetings
- Input from GSA Board & diverse stakeholder-based Advisory Committee
- Approved by DWR in January 2023!



The GSA completed Step 2 of SGMA compliance and is implementing Step 3



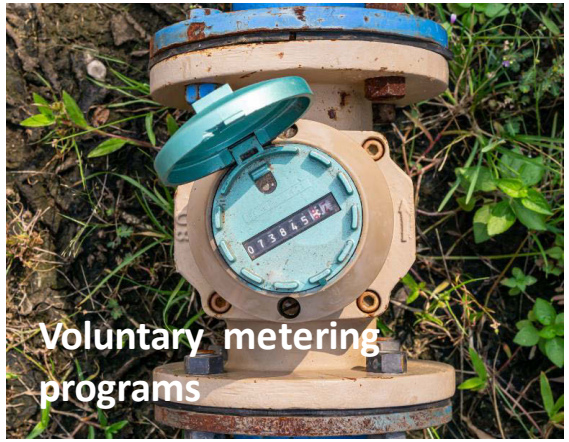
Petaluma Valley subbasin conditions

No evidence of concerns

Limited information

Potential concerns

Sustainability by 2042 through specific projects & actions


Voluntary metering programs

Aquifer storage and recovery projects

Water use efficiency and alternative water source projects

Stormwater capture and recharge

Recycled water expansion projects

Funding Groundwater Sustainability

Funding Sources

- Groundwater Sustainability Fees
- County Contribution
  - Equalizes fees across Sonoma County GSAs, secured until 2027
- Grants
  - Almost $9 million secured since 2017, including recent SGM Implementation grant

Fee Background

REVIEW OF THE FIRST TWO YEARS OF GROUNDWATER SUSTAINABILITY FEES IN PETALUMA VALLEY GSA

Petaluma Valley GSA Funding Background

- Prior to fee implementation, the GSA was funded through a combination of grant awards and member agency contributions
- To support efforts to implement the GSP and comply with SGMA, the GSA implemented a groundwater sustainability fee in July 2022
- The fee has been in place for almost two years and is approaching it's third fee cycle

Water Code § 10730 and Prop 26

- The GSA fee program is based on Water Code § 10730, which was codified by SGMA and provides the GSA the authority to charge fees to fund GSA program administration
- Proposition 26, manifested as Article XIII C of the California Constitution, provides the constitutional basis for these fees as:

"A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege to the payor."

Groundwater Extraction Fees

The Petaluma Valley GSA fee is based on groundwater extraction (both estimated and known). This is optimal for several reasons, including:

- **Proportional:** The fee is equitable in that properties that extract more groundwater (and have more at stake in ensuring a sustainable groundwater supply) would pay more while properties that extract less would pay less
- **Easy to Understand:** Proportionality based on estimated groundwater extraction is easy to understand
- **Legally Compliant:** This type of fee conforms with Water Code § 10730 as well as Proposition 26

***Note**: While the GSA is charging groundwater users per acre foot, it is not charging them for water use; rather, it is using groundwater extraction to apportion the costs of GSP implementation equitably across all users*

Rate Components

Two primary components determine the fee rate:

1. GSA revenue requirement (budget)
2. Groundwater extraction (both estimates and metered data)

$$\frac{\text{Revenue Requirement (\$\$\$)}}{\text{Acre Feet Extracted}} = \text{\$ Rate per Acre Foot}$$

Revenue Requirement

- **Key considerations that shaped the revenue requirement in 2022:**
  - Potential future grant funding was included in the budget (at 40% of revenue), lessening the revenue applied to fees and lowering rates
  - The revenue requirement was lowered, and a ‘bare bones’ budget was adopted
  - Sonoma County contributed funding to equalize the Petaluma Valley rate for most users with Santa Rosa Plain (at $40 per acre foot)

County Contribution and Fee Equalization

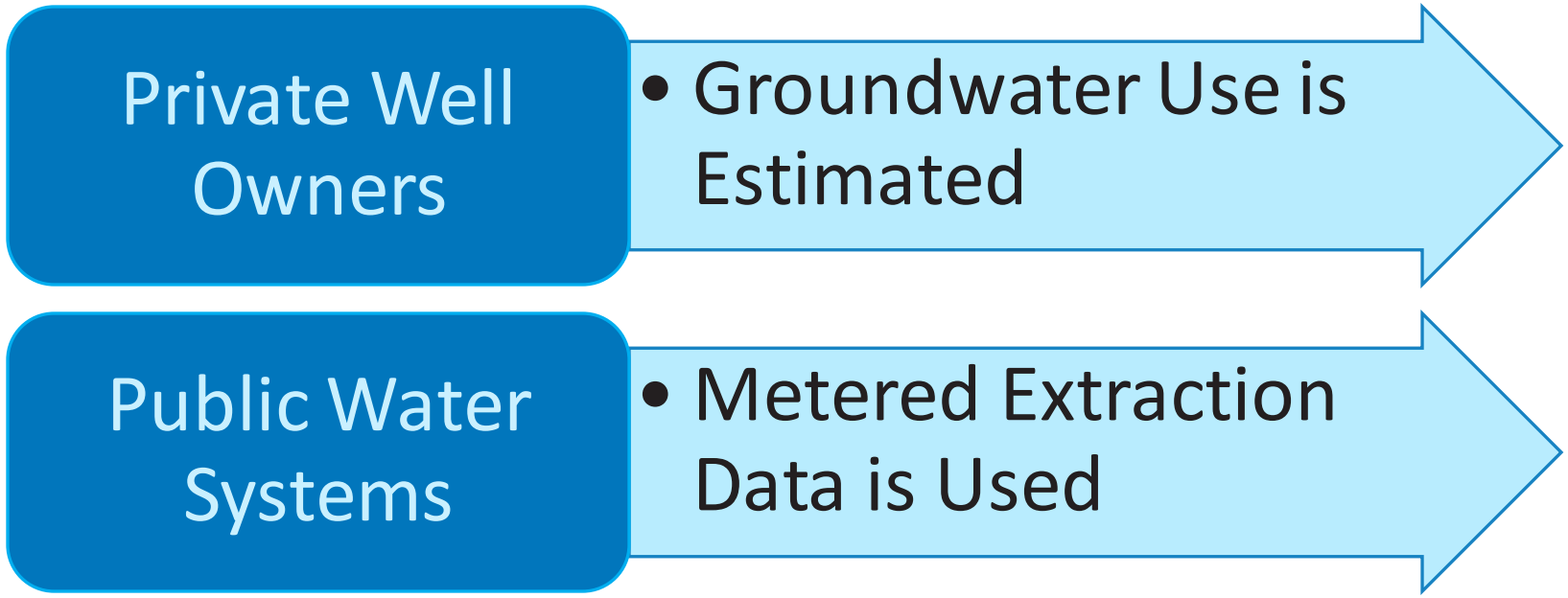
- To equalize the Petaluma Valley rate with Santa Rosa Plain's $40/AF, Sonoma County contributed over $700,000 to Petaluma Valley GSA in fiscal years 2022-23 and 2023-24

- The Sonoma County Board of Supervisors recently voted to extend this contribution for three more years, up to $1.1 million per year

- The contribution amount of up to $1.1 million is tied to the equalization of rates between Petaluma and Sonoma valley GSAs and the Santa Rosa Plain GSA

Groundwater Extraction Estimates

- Due to a lack of readily metered pumping data, groundwater use estimates are necessary in most cases to develop a fee based on groundwater extraction



Agricultural Groundwater Use Estimates

Estimation Process:

- DWR crop maps were used to determine crop type and amount per parcel
- Crop consumptive demands (water required per crop, per acre, per year) are multiplied by total crop acreage per parcel
- Surface water and recycled water deliveries are subtracted from the estimated groundwater use

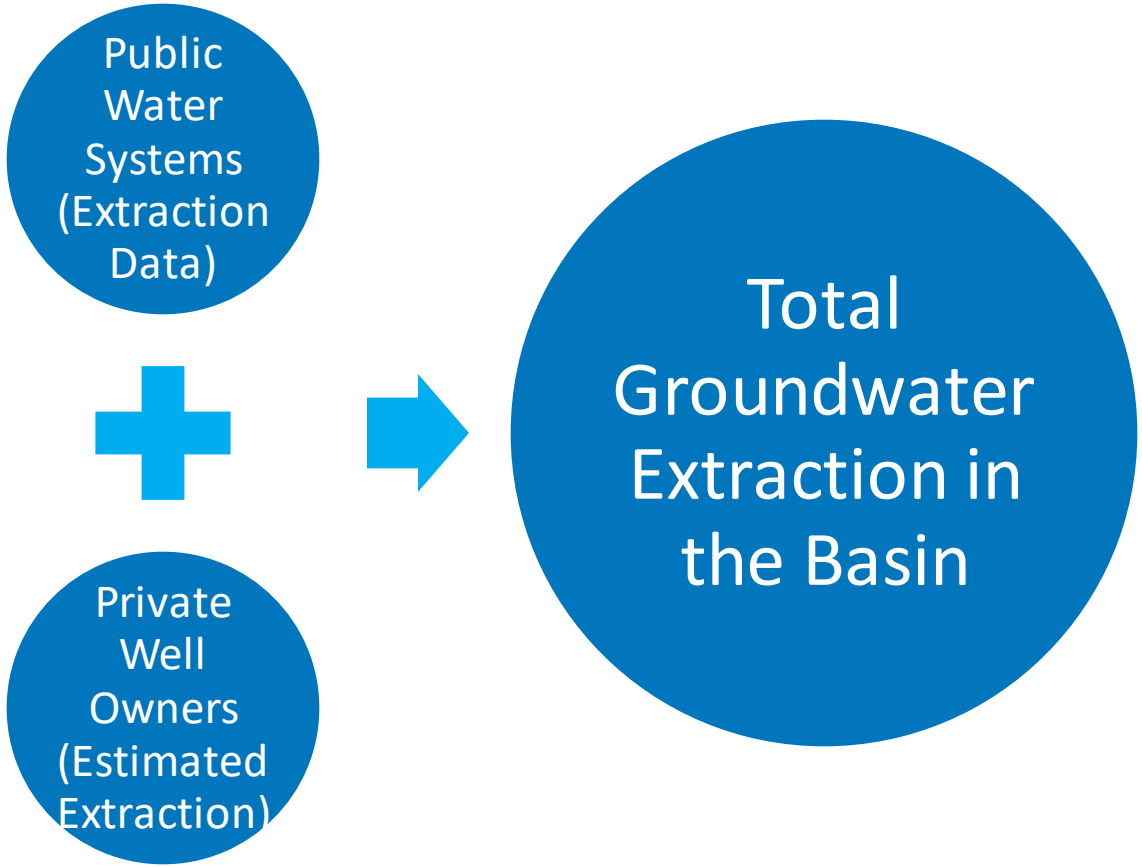
Crop Classifications	Sonoma County Average Applied Water (AF / Acre / Year)
Citrus & Subtropical	1.85
Deciduous Fruits & Nuts	1.83
Grain	0
Pasture	0.04
Truck Nursery and Berry Crops	1.78
Vineyard	0.60
Cannabis Outdoor	2.00
Cannabis Indoor	4.00

Residential and Commercial Groundwater Use Estimates

Estimation Process:

- Parcels served by public water systems were removed from the analysis
- Sonoma County Assessor Use Codes were analyzed to determine reasonable water use for each parcel type
- Previous studies, public system water use data, and Permit Sonoma data were used to refine these estimates
- For example, a residential parcel is assigned 0.5 AFY; a dairy parcel is assigned 5.0 AFY

Total Groundwater Extraction



- 2022 Rate and Fee Study estimated total groundwater use in Petaluma Valley Basin at **2,794.3 AFY**

Rate per Acre Foot: 2022-Present

$$\frac{\$\ 410{,}000}{2{,}794.3\ \ AF} = \$\,146.70 \quad per\ AF\ per\ Year$$

After applying the County contribution, the rate was lowered to $40 per acre foot.

Annual Rate Examples			@ $229/AF	@ $147/AF	@ $40/AF*
50-Acre Vineyard	30	AF =	$6,867	$4,401	$1,200
100-Acre Pasture	4	AF =	$916	$587	$160
100-Acre Grain	0	AF =	$0	$0	$0
5-Acre Food Crop (Truck)	8.9	AF =	$2,037	$1,306	$356
Rural Residential	0.5	AF =	$114	$73	$20

** $40 rate achieved through County Contribution / Fee Equalization*

Methodology of Fee Update

OVERVIEW OF CURRENT CONSIDERATIONS RELATED TO A FEE UPDATE FOR PETALUMA VALLEY GSA

Changes in Rate Components

Changes in the primary rate components have brought about consideration of an update to the 2022 Rate and Fee Study

1. GSA Revenue Requirements have changed
2. Groundwater extraction estimated have changed

Updated GSA Revenue Need (1)

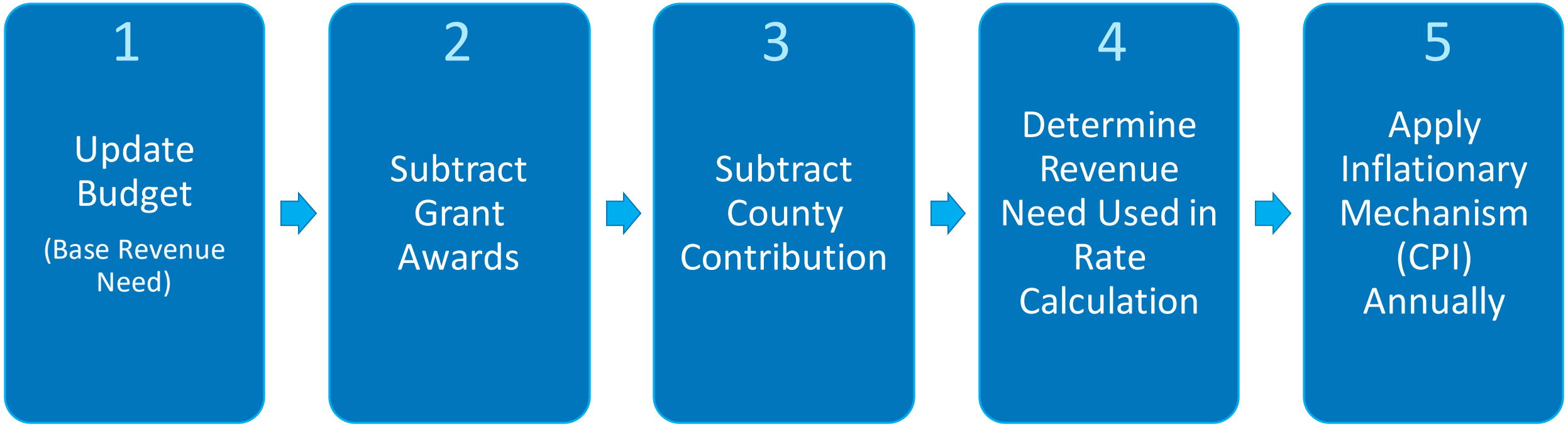
Petaluma Valley GSA's revenue need has changed over the course of the last two years for several reasons

1. The 'bare bones' budget used for the 2022 rate calculation was only intended to be used temporarily
2. GSP implementation costs have increased
3. The GSA was awarded a grant from the DWR for $6,739,409, the grant will help to offset costs passed on to groundwater users

Updated GSA Revenue Need (2)

- Sonoma County has agreed to continue the financial contribution that equalizes rates with Santa Rosa Plain GSA
- Similar to Petaluma Valley GSA, Santa Rosa Plain GSA is updating their budget forecast
- Considering the need to update the projected budget, the County contribution, and the grant award, Petaluma Valley GSA estimates a 10%-25% increase in costs and rate per AF
- GSA is considering implementing a small increase to account for inflation so that rates can be adjusted to keep up with increased costs

GSA Revenue Need Update Process



Updated Groundwater Use Estimates

Estimation of groundwater use in the Petaluma Valley Basin have changed over the last two years.

This is primarily due to two factors:

1. The estimation methodology was corrected in 2022 based on several factors
2. GUIDE surveys produced altered data for specific properties

Estimation Methodology Changes

1. Estimates to ‘Turf’ Irrigation

   - Feedback from property owners indicated that areas identified by DWR as turf were not irrigated (43 parcels were identified as non-irrigated and adjusted to zero water demand)

2. GUIDE User Submitted Corrections

   - Over 30 property owners submitted GUIDE surveys requesting changes to their groundwater use estimation, any required fee adjustments

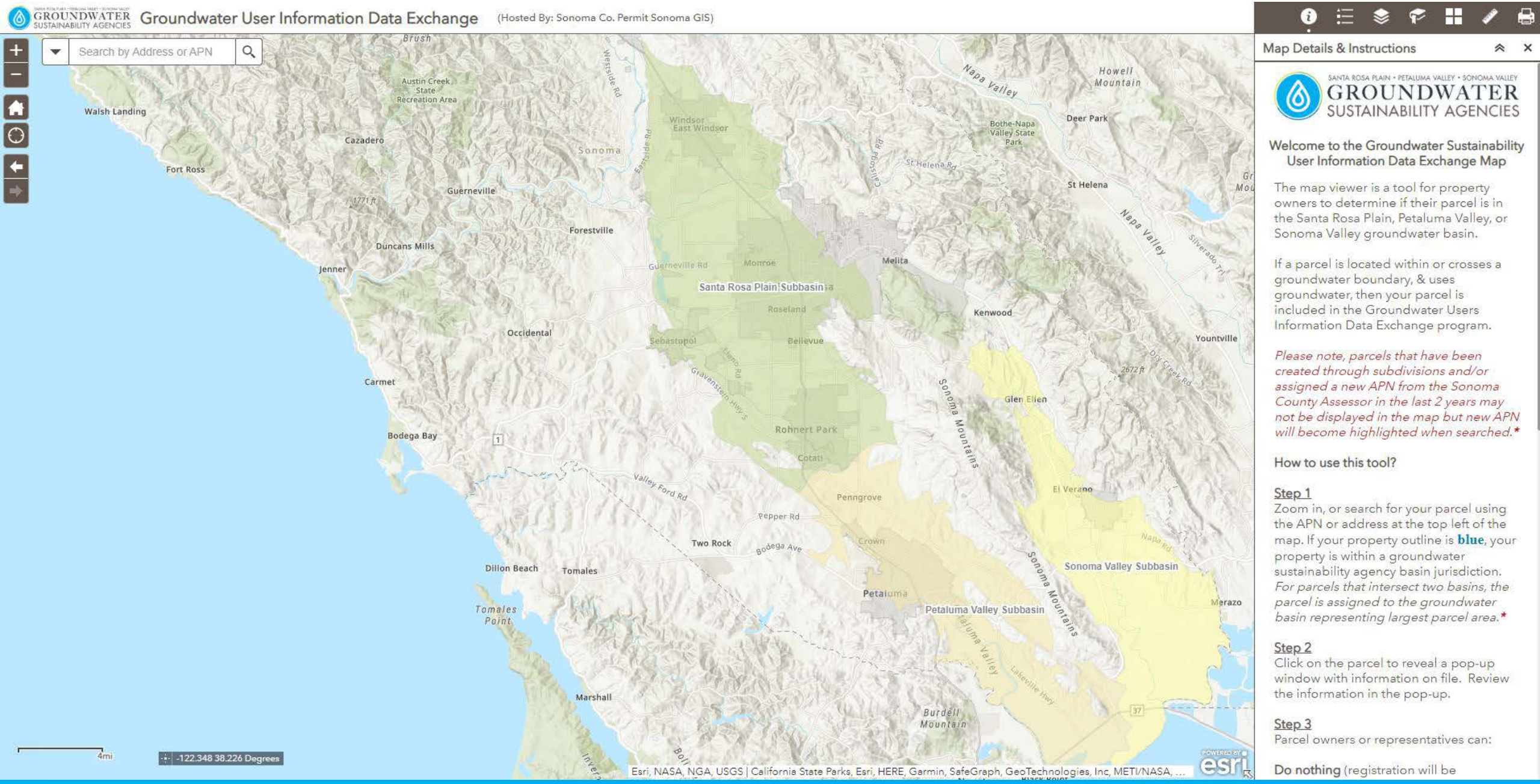
Summary

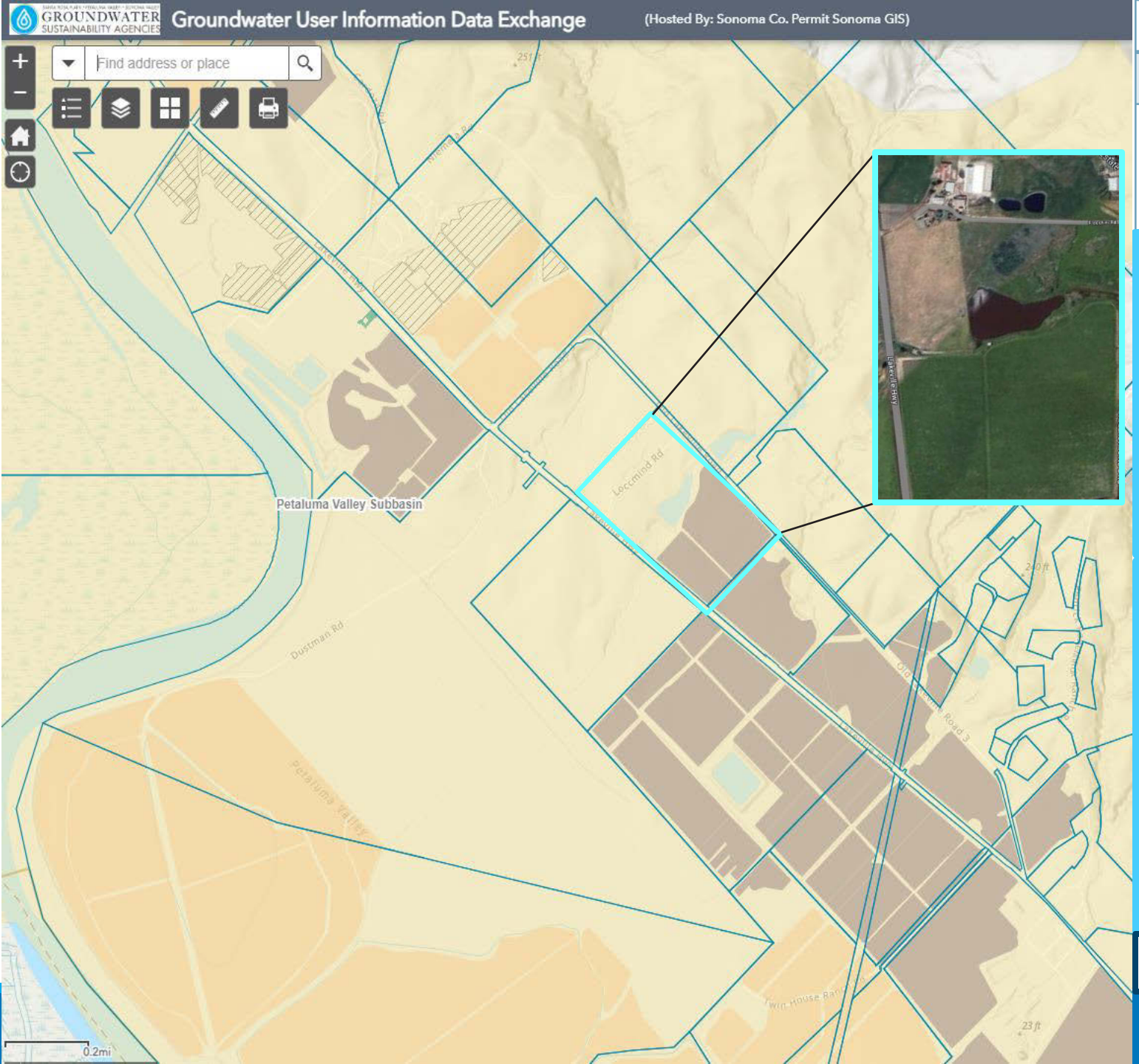
- Changes in revenue need and groundwater extraction estimates will determine the budget and rate
- The County contribution will equalize the rate with Santa Rosa Plain GSA
- This will likely result in a rate of $45-$50 per AF annually

GUIDE Demo

Groundwater User Information Data Exchange (GUIDE)

- Developed to provide the GSA better information about groundwater use in the valley and to give groundwater users an opportunity to view the available data about your parcel's assumed groundwater use.
- Through the GUIDE program, you can view, correct, or confirm the data the GSA has assumed for your property.


Groundwater User Information Data Exchange
(Hosted By: Sonoma Co. Permit Sonoma GIS)
Search by Address or APN
Map Details & Instructions
SANTA ROSA PLAIN • PETALUMA VALLEY • SONOMA VALLEY
GROUNDWATER SUSTAINABILITY AGENCIES
Welcome to the Groundwater Sustainability User Information Data Exchange Map
The map viewer is a tool for property owners to determine if their parcel is in the Santa Rosa Plain, Petaluma Valley, or Sonoma Valley groundwater basin.
If a parcel is located within or crosses a groundwater boundary, & uses groundwater, then your parcel is included in the Groundwater Users Information Data Exchange program.
Please note, parcels that have been created through subdivisions and/or assigned a new APN from the Sonoma County Assessor in the last 2 years may not be displayed in the map but new APN will become highlighted when searched.*
How to use this tool?
Step 1
Zoom in, or search for your parcel using the APN or address at the top left of the map. If your property outline is blue, your property is within a groundwater sustainability agency basin jurisdiction. For parcels that intersect two basins, the parcel is assigned to the groundwater basin representing largest parcel area.*
Step 2
Click on the parcel to reveal a pop-up window with information on file. Review the information in the pop-up.
Step 3
Parcel owners or representatives can:
Do nothing (registration will be
Santa Rosa Plain Subbasin
Petaluma Valley Subbasin
Sonoma Valley Subbasin
Sonoma Mountains
Petaluma
Sonoma
Windsor
Santa Rosa
Rohnert Park
Cotati
Penngrove
Two Rock
Petaluma Valley
Tomales
Dillon Beach
Bodega Bay
Marshall
Tomales Point
Occidental
Sebastopol
Bellevue
Roseland
Forestville
Guerneville
Monroe
Duncans Mills
Jenner
Fort Ross
Cazadero
Walsh Landing
Austin Creek State Recreation Area
Carmet
Glen Ellen
Kenwood
Melita
Deer Park
St Helena
Yountville
El Verano
Crown
Merazo
Burdell Mountain
Howell Mountain
Bothe-Napa Valley State Park
Napa Valley
Valley Ford Rd
Pepper Rd
Bodega Ave
Guerneville Rd
St Helena Rd
Graveenstein Hwy S
Lakeville Hwy
Petaluma Valley
Dry Creek Rd
Silverado Trl
Westside Rd
Eastside Rd
Calistoga Rd
Napa Rd
1771 ft
2672 ft
4mi
-122.348 38.226 Degrees
Esri, NASA, NGA, USGS | California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, ...
POWERED BY esri



APN	068-110-007
Land Size – Acres	63.83
Use Code Description	0423 [Irr Vineyd/Premium w/Residence]
Recycled Water Connection	No
Surface Water Connection	No
Water Source is Well on Parcel	Yes
Parcel within Public Water System Service Area	No
Water Use – Residential (AFY)	0.50
Water Use – Commercial (AFY)	0.00
Vines (acres)	25.88
Vines (AFY)	15.53
Water Use – Agriculture (AFY)	15.53
Parcel Groundwater Use (AFY)	16.03
Groundwater Sustainability Fee (at $40/AF)	$641.07

Complete Groundwater User Registration Survey

Next Steps

Tentative Timeline

February-March

Preparation / Initial Rate Considerations

March 28

Board Meeting – progress update and tentative rates

May

Updated Rate and Fee Study finalized; notice posted in local periodical and GSA websites

June 20

Board Meeting – Updated Rate and Fee Study considered for adoption

August

Direct charge roll submitted to Sonoma County Auditors Office

How to Get Involved

Upcoming Public Meetings:

- March 28 – GSA Board Meeting
- May 8 – Advisory Committee Meeting
- June 20 – GSA Board Meeting

Fee Study Information:

www.petalumavalleygroundwater.org/fee

Contact:

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administrator@petalumavalleygroundwater.org
707-243-8555

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GSA Subscribe

Questions?