

Public Workshop on Long-Term Funding Options

April 11, 2023

Welcome

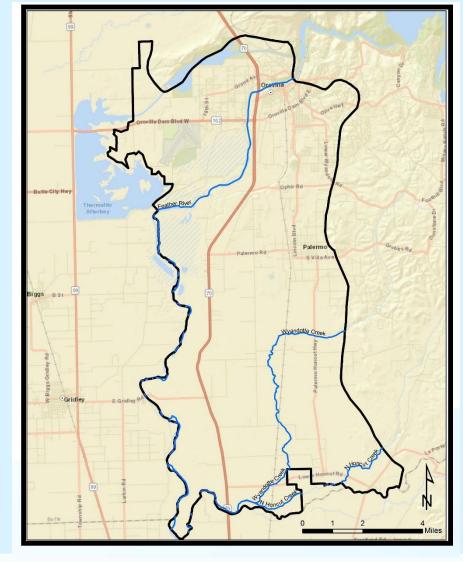
6:00	Background – Kamie and Christina, Butte County
6:15	Funding Option Overview – Eddy and Jacques, LSCE
6:35	Question and Answer Session — Staff
7:05	Next Steps, Wrap up – Kamie and Christina
7:10	Open Q&A
7:30	Pack Up



Introductions: People Behind the Process

GSA Board Members

- Butte County Supervisor Bill Connelly
 Alt: Supervisor Todd Kimmelshue
- Oroville Council Member Janet Goodson
 Alt: Art Hatley
- Thermalito Water & Sewer Board Bruce Wristen
 Alt: Scott Koch
- Agricultural User Stakeholder Kyle Daley
 Alt: Vacant
- Domestic Well User Stakeholder William Bynum Alt: Rick Wulbern





Introductions: People Behind the Process

Advisory Committee Members

Agricultural Groundwater Users

- Duke Sherwood
- Darin Williams
- Nicole Johansson

Other Entities Represented

- Loni Lind Cal Water Chico
- Kristen McKillop SFWPA

Business Association Representative

Vacant

Domestic Well Users

Vacant

Environmental Representative

Vacant



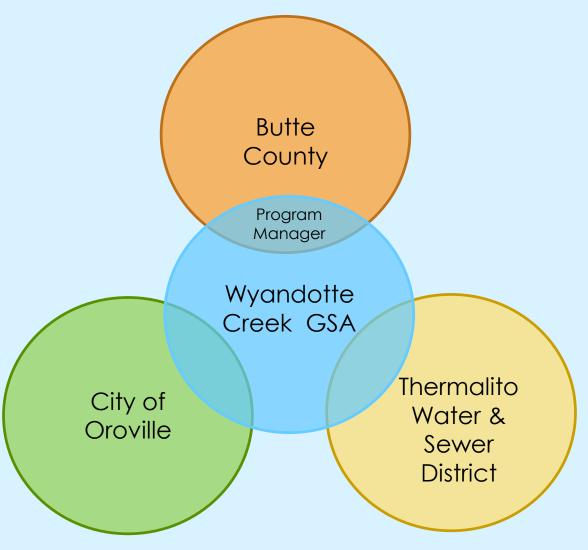
Introductions: People Behind the Process

Management Committee:

Kamie Loeser and Christina Buck, Butte County Matt Thompson, City of Oroville Chris Heindell, Thermalito Water & Sewer District

Funding Mechanism Consulting Team:

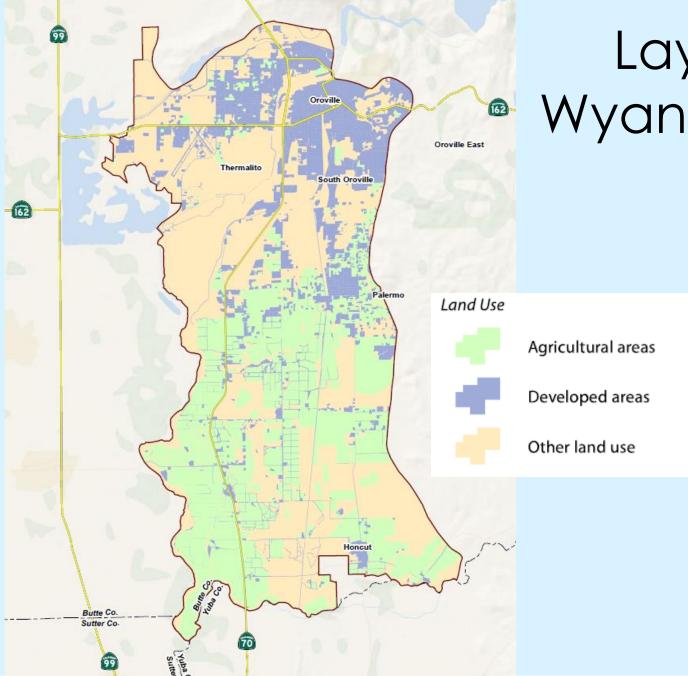
Jacques DeBra, Supervising Water Resources Planner Eddy Teasdale, Principal Hydrogeologist



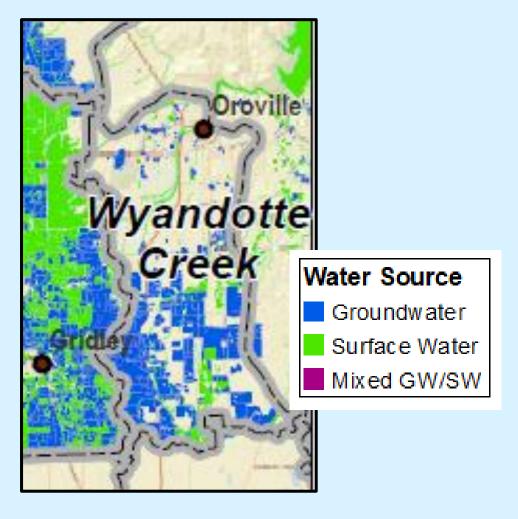








Lay of the Land in the Wyandotte Creek Subbasin





SGMA and Groundwater Management

SGMA= Sustainable Groundwater Management Act

- State law passed in 2014
- Local agencies given authority and responsibility to manage groundwater: Groundwater Sustainability Agencies
- 1. Develop and Adopt a Groundwater Sustainability Plan, by 2022
- 2. Implement Projects and Policy actions to achieve Sustainability
- 3. Monitoring and reporting every year
- 4. Achieve sustainability by 2042













Lowering Reduction Seawater Degraded Land Surface Water GW Levels of Storage Intrusion Quality Subsidence Depletion





Wyandotte Creek Subbasin WY 2022 Annual Report Update

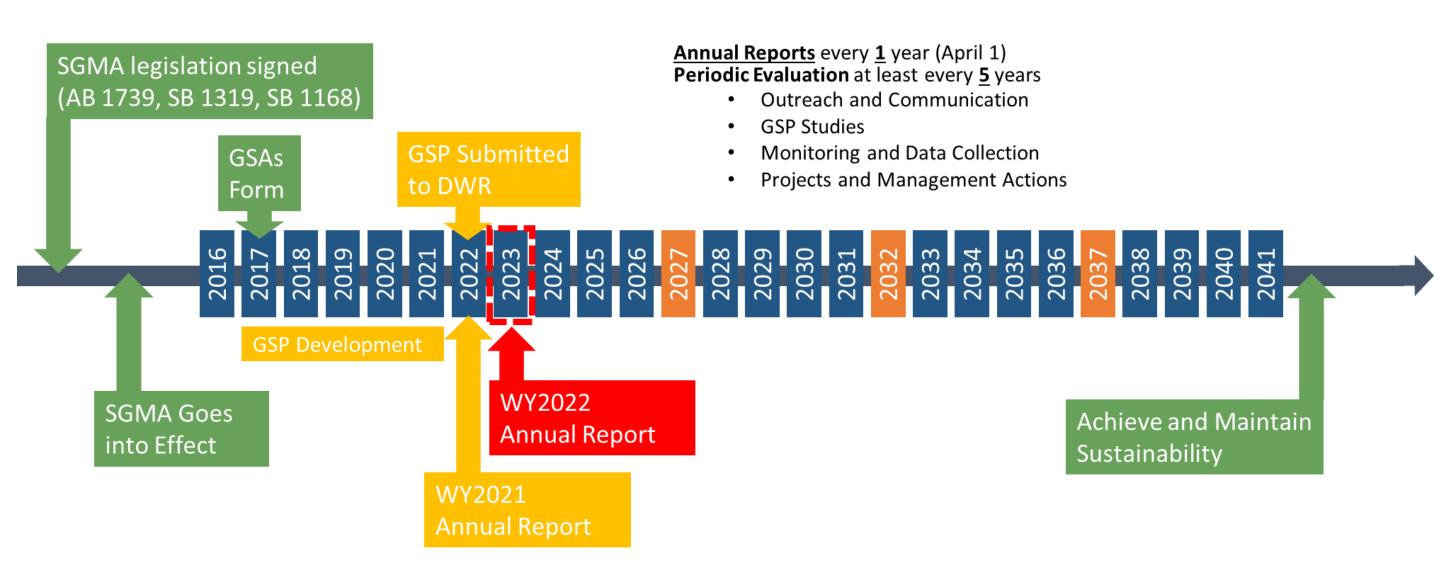


Eddy Teasdale, PG, CHG (LSCE)

April 11, 2023



SGMA Overview and Tasks Ahead





Annual Report Requirements

- Updates on Groundwater Conditions
 - Groundwater Elevation (Hydrographs, Contour Maps)
 - Change in Groundwater Storage
- Water Supply and Water Use
 - Groundwater Extraction
 - Surface Water Supplies
 - Total Water Use
- Progress Toward Plan Implementation
 (e.g., implementation of planned projects and management actions)

ANNUAL REPORT | APRIL 2023

WYANDOTTE CREEK SUBBASIN (5-021.69)
GROUNDWATER SUSTAINABILITY PLAN
ANNUAL REPORT – 2022

SUBMITTED B



WYANDOTTE CREEK GROUNDWATER SUSTAINABILITY AGENCY

REPARED UNDER CONTRACT WITH

BUTTE COUNTY DEPARTMENT OF WATER AND RESOURCE CONSERVATION

PREPARED BY





Prepared by Luhdorff and Scalmanini Consulting Engineers and Davids Engineering under contract with Butte County Department of Water and Resource Conservation on behalf of the Wyandotte Creek GSA.

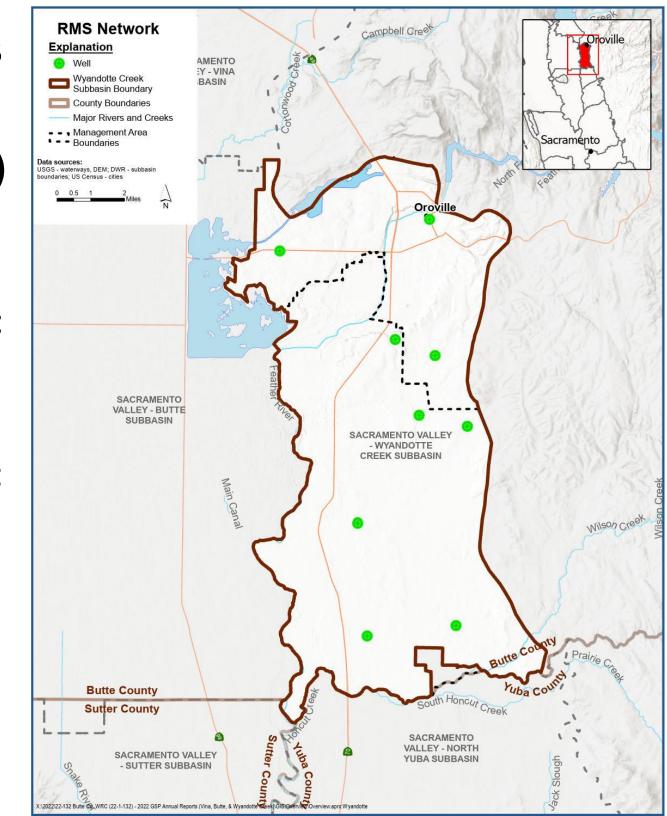


Groundwater Elevations

Groundwater Conditions – Groundwater Elevations

- Nine Representative Monitoring Sites (RMS) Wells
 - 3 RMS wells in the North Management Area,
 - 6 RMS wells in the South Management Area
- No wells had fall measurements below their Minimum Threshold





WYANDOTTE CREEK Subbasin - State Well Number (SWN): 19N04E31F001M

Groundwater
Conditions –
Groundwater
Elevations
*Example
Hydrograph

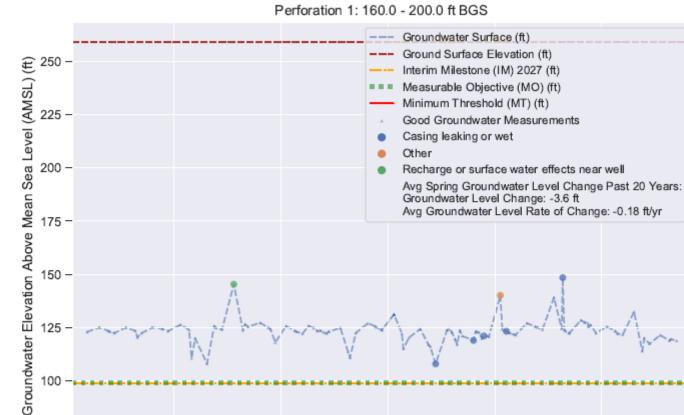


Sustainable Management Criteria:

IM (2027) = 99.0 ft AMSL MO = 99.0 ft AMSL MT = 76.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.





2008

2004



2012





2020

2016

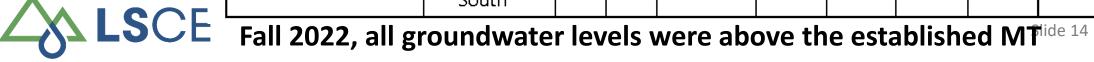
Ground Surface (BGS) (ft)

- -175

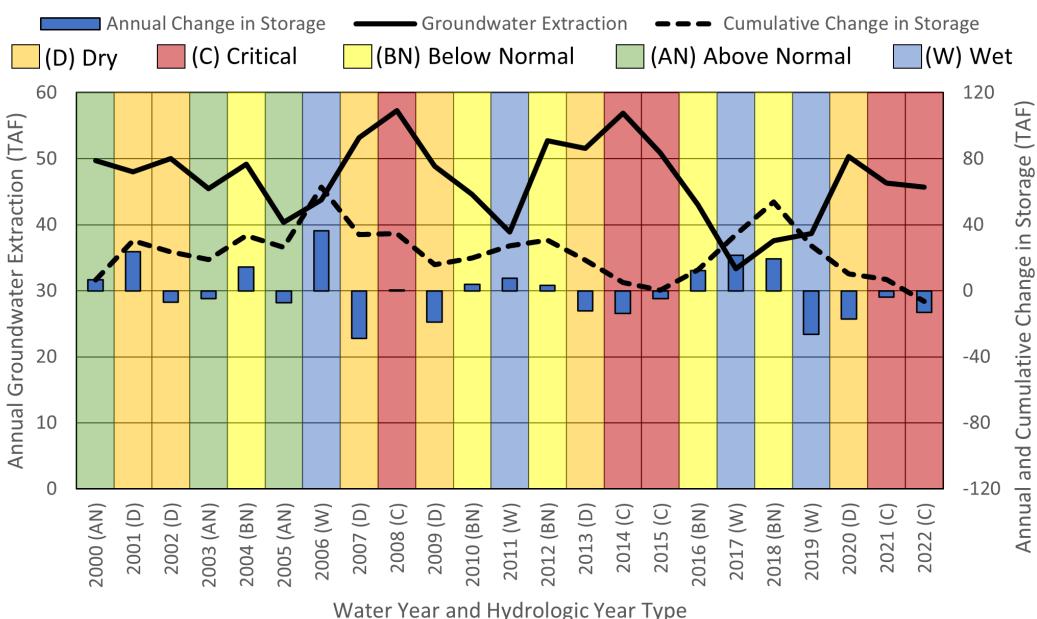
Groundwater
Conditions –
Groundwater
Elevation



		Groundwater Elevation (feet above mean sea level)								
State Well Number / Representative	Management			to to a silver	Seasonal High (Spring)		Spring)	Seasonal Low (Fall)		
Monitoring Site (RMS) ID ¹	Area	MO ²	MT ²	Interim MT ² Milestone 2027			rence from:	2022	Diffe (feet)	rence from:
<u> </u>						2021	MO ²		2021	MO ²
19N03E 16Q001M	Wyandotte North	133	85	134	139.3	1.0	6.3	138.2	-0.2	5.2
19N04E 32P001M	Wyandotte North	107	78	108	128.2	-2.3	21.2	122.5	-2.7	15.5
<u>CWS-03</u>	Wyandotte North	133	102	135	137.0	3.0	4.0	134.0	1.0	1.0
17N03E 13B002M	Wyandotte South	47	35	48	60.6	-1.5	13.6	51.6	-1.0	4.6
17N04E <u>09N002M</u>	Wyandotte South	49	35	51	65.4	-9.4	16.4	46.9	-0.3	-2.1
18N03E 25N001M	Wyandotte South	52	37	53	62.2	3.1	10.2	52.8	-3.5	0.8
18N04E <u>08M001M</u>	Wyandotte South	86	59	87	109.6	-1.5	23.6	105.5	-0.7	19.5
18N04E 16C001M	Wyandotte South	95	71	96	107.0	-4.5	12.0	95.9	-7.6	0.9
19N04E 31F001M	Wyandotte South	99	76	101	121.5	-11.0	22.5	118.9	1.5	19.9



Groundwater Conditions – Groundwater Storage

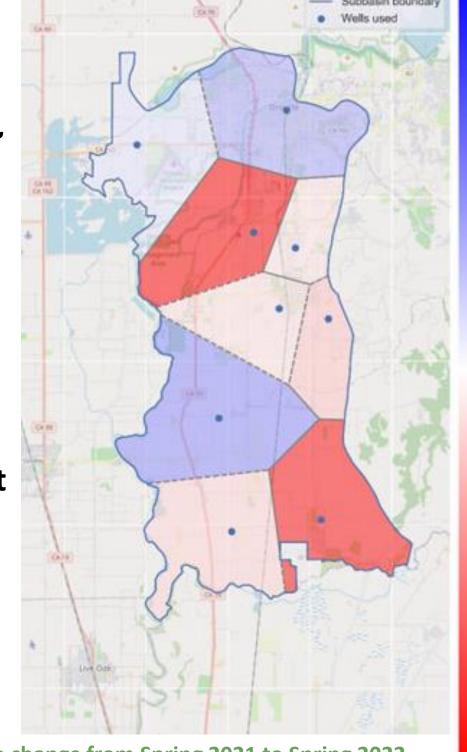






Groundwater
Conditions &
Change in
Storage
Summary

- Groundwater pumping from 2021 to 2022 ~ the same ~46 TAF, ~74% of supply
- Total groundwater pumping in 2022 ~
 same as long-term average ~47 TAF
- Annual Groundwater Storage
 Change: ~ -13 TAF
- Cumulative Groundwater Storage Change: ~ -7 TAF ~ 20% of avg. pumping per yr.
- Dry well reports in both management areas
- 2021 vs. 2022 GWL ~ 3' avg. annual drop between Spring measurements;
 Fall measurements saw ~2' drop





Water Supply and Water Use (Water Budget)

Table 3-3. Wyandotte Creek Subbasin Total Water Use by Water Use Sector							
Sactor		WY 2022 (AF)					
Sector	Groundwater	Surface Water	Total				
Agricultural	43,500	10,900	54,400				
Municipal	700	4,000	4,700				
Rural Residential	1,500	0	1,500				
Native Vegetation (Plant groundwater uptake)	36,300	1,300	37,600				
Total	82,000	16,200	98,200				
Total (excluding Environmental Groundwater¹)	45,700	16,200	61,900				

74% Groundwater Dependent in 2022



Project	Progress in WY 2021 Annual Report
Residential Water Conservation	7.8% reduction in urban pumping compared to 2021 (TWSD)
Agricultural Irrigation Efficiency	Recommendations report released June 2022, Grant application was submitted in December 2022 that would support project implementation
Flood MAR	Grant application was submitted in December 2022 that would support project implementation
Oroville Wildlife Area	SBFCA was awarded grant funding and work was initiated in November
Robinson's Riffle Project	2022 and is expected to be completed in summer 2024
Streamflow Augmentation	Grant application was submitted in December 2022 that would support conjunctive use efforts
Thermalito Water and Sewer	Ongoing work to design and implement the project
District Water Treatment Plant	Grant application was submitted in December 2022 that would support
Capacity Upgrade	project construction
Palermo Clean Water Consolidation	Ready to Commence Phase 1
Intra-basin Water Transfer	Grant application was submitted in December 2022 that would support project implementation
Agricultural Surface Water	Grant application was submitted in December 2022 that would support
Supplies	project implementation

Annual Report Summary

- 2022 Groundwater extraction is comparable to long-term average
- Groundwater levels are relatively stable and increased monitoring is needed to refine understanding of conditions
- Groundwater levels track well with wet/dry cycles and respond accordingly
- Maintaining access to surface water for irrigation is important to maintain stable groundwater levels
- Reports of dry or reduced capacity wells are present in the subbasin and are being addressed through County efforts i.e. Palermo







Wyandotte Creek GSA Public Workshop Long Term Funding Project Presentation



Eddy Teasdale and Jacques DeBra, LSCE

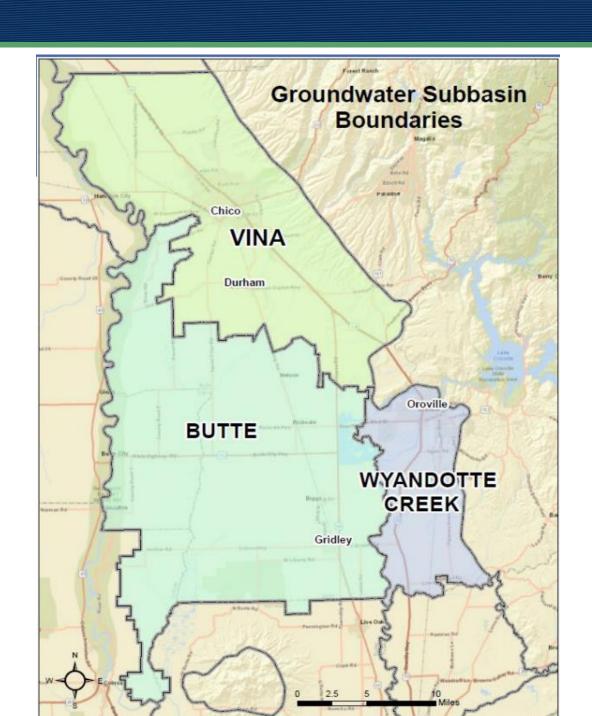
April 11, 2023



Overarching Goals for Long-Term Funding Strategy

- The Wyandotte Creek (WC) GSA and is working to keep costs as low as possible for landowners
- Long term funding will help the GSA maintain local control over our groundwater resources





This is all in response to SGMA Requirements

State of California 2014 Sustainable Groundwater Management Act

Required local formation of Groundwater Sustainability Agencies (GSAs) to:

- Sustain GSA over the SGMA regulation time frame
- Implement and update its Groundwater Sustainability Plan (GSP)
- Prepare / submit annual reports to DWR re: groundwater conditions
- Provide on-going GSA coordination
- Fill data gaps and address groundwater overdraft situations (e.g., subsidence)
- Plan / implement projects that achieve groundwater sustainability goals



SGMA Timeline and the Early Funding Strategy

SGMA Timeline



Form GSA

GSP Development



2042

Achieve Sustainability

Maintain sustainability for 30 years

GSP Implementation

GSAs adopt GSP and submit GSP to DWR

Jan. 2022

Up to January 2022, the GSA was funded by:

DWR grant: ~\$1.5M

Member In-Kind Contributions

Moving forward, the GSA needs a new sustainable funding source by 2024.



Long Term Funding Strategy

Funding
Mechanism
to cover costs
of SGMA
Compliance



Grant Funding to cover costs of Projects and Management Actions (PMAs)

Note: Some grants can fund both PMAs and costs associated with SGMA compliance, such as the Round 2 DWR SGM Implementation grant which the GSA applied for in December 2022.

That grant could cover up to \$7.4M in eligible projects and SGMA compliance activities. DWR is expected to announce grant awards in June 2023.



More on the next slide...

A Closer Look at the DWR SGMA Round 2 Application

			, \$
Task	Project	Cost Estimate	iı
1	GSP Implementation, Outreach and Interbasin Coordination Activities	\$1,175,000	•
2	Regional Conjunctive Use Project	\$400,000	
3	Monitoring Network Enhancements	\$1,444,800	•
4	Thermalito Water Treatment Plan Capacity Upgrade	\$2,318,500	•
5	Groundwater Recharge Feasibility Analysis, Design and Construction	1,840,000	C
Total		\$7,367,300	d
			• • /

\$7.4M application included:

- SGMA compliance activities
- Addressing data gaps
- Projects
- Programs

DWR grant award decision could reduce WC GSA charges over the next five years.



Process for Studying Fee Options and Developing a Resulting Charge

Establish Revenue Needs (based on Operational and Implementation Costs)

- Revenue needs GSA operations
- Revenue needs SGMA Compliance
- Five-year Revenue Projections planning horizon
- Adequate for GSA to comply with SGMA
- Meet GSA financial assurance/sustainability goal



Cost Allocation

- By type operations vs. implementation
- By entity agreed upon shared cost
- By groundwater use
- Proportional, relative to user costs and services or benefits received

Proposed Charges from Fee Study

- Public notification
- Outreach
- Public hearing or other measures required by the selected process



WDC GSA 2023 Long Term Funding Project - Primary Milestones

Project Tasks	Jan	Feb	Mar	[∧] Apr	May	June	July	August
M/DCCCA Due is at Outree ab								
WDCGSA Project Outreach	>>>>>>	>>>>>>	>>>>>>	>>>>>>	>>>>>>	>>>>>>	>>>>>>	>>>>>>
WDCGSA Board Meetings		В	В	В	В		В	
WDCGSA Comm. Meetings			СМ	СМ				
Project Development								
Update Revenue Projections	Develop	Draft	Final					
Evaluation Fee Options	Develop	Draft	Final					
Prepare Options TM								
Prepare/Approve Fee Report								
Approve Proposed Fees								
Tax Roll Data To Assessor								8/10/2023



Establishing Revenue Needs: Five-Year Projection

Wyandotte Creek GSA - Long Term Funding Strategy Five-Year GSA Operational Budget - GSP Implementation and SGMA Compliance Costs 5% 5% 5-Year GSP Implementation Inflation Adjustment 3% Year 1 Year 2 Year 3 Year 4 Year 5 Cost Category-GSA Admin. FY23-24 FY24-25 FY25-26 FY26-27 FY27-28 Professional Services - Admin. Auditor \$5,000 \$5,000 \$5,000 \$5,000 \$5,000 Financial Services \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$5,000 \$5,000 \$5,000 \$5,000 Legal Services \$10,000 Program Manager (w/County management) \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 Professional Services - Admin. Sub-total \$67,500 \$62,500 \$62,500 \$62,500 Office Expense Bank Fees \$250 \$250 \$250 \$250 **Administration** \$2,000 \$2,000 \$2,000 \$2,000 Insurance Outreach (education and outreach) \$2,500 \$2,500 \$2,500 \$1,500 Website \$1,500 \$1,500 \$1,500 Supplies \$1,000 \$500 \$500 \$500 Office Expense Sub-total \$7,250 \$6,750 \$6,750 \$6,750 Professional Services - GSP Implementation \$10,000 \$10,000 \$10,000 Legal Defense Reserve (build \$150,000/yr. balance) \$0 \$0 \$0 County Tax Roll Fee Support \$4,000 \$4,000 \$4,000 \$4,000 Contingency (10%) \$8,325 \$8,325 \$8,325 \$8,325 GSA Admin. Sub-total \$97,625 \$91,575 \$91,575 \$91,575 \$91,575 5-Year GSP Implementation Inflation Adjustment 3% 3% 5% 5% Cost Category-SGMA Compliance FY23-24 FY24-25 FY25-26 FY26-27 FY27-28 Annual Reporting (assumes DWR) \$30,000 \$30,000 \$30,000 \$30,000 \$30,000 Five Year GSP Update w/Modeling \$43,750 \$43,750 \$43,750 \$43,750 \$35,000 Surface-GW Interaction Modeling \$7,500 \$7,500 \$7,500 \$7,500 \$7,500 GSA Coordination & Outreach (w/in and between GSAs) \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 Compliance Data Management System Maintenance \$5,000 \$5,000 \$5,000 \$5,000 \$5,000 Long Term Financial Planning/Fees \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 Grant Procurement \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 Contingency (8%) \$9,300 \$9,300 \$9,300 \$9,300 \$8,600 SGMA Compliance Sub-Total \$125,550 \$125,550 \$125,550 \$125,550 \$116,100 TOTAL WDCGSA Administration (w/inflation adjustment) \$97,625 \$100,554 \$106,587 \$118,312 \$137,241 TOTAL WDCGSA SGMA Compliance (w/inflation adjustment) \$125,550 \$129,317 \$137,075 \$152,154 \$176,498 OTALWDCGSA Operational Budget \$223,175 \$229,870 \$243,662 \$270,465 \$313,740

Closer Look at the Projected GSA Administration Costs

Wyandotte Creek GSA - Long Term Funding Strategy Five-Year GSA Operational Budget - GSP Implementation and SGMA Compliance Costs					
·	ational Budget - GSP II	mplementation and S	3%	sts 5%	5%
5-Year GSP Implementation Inflation Adjustment					
Proposed	Year 1	Year 2	Year 3	Year 4	Year 5
Cost Category-GSA Admin.	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Professional Services - Admin.					
Auditor	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Financial Services	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Legal Services	\$10,000	\$5,000	\$5,000	\$5,000	\$5,000
Program Manager (w/County management)	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Professional Services - Admin. Sub-total	\$67,500	\$62,500	\$62,500	\$62,500	\$62,500
Office Expense					
Bank Fees	\$250	\$250	\$250	\$250	\$250
Insurance	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Outreach (education and outreach)	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Website	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Supplies	\$1,000	\$500	\$500	\$500	\$500
Office Expense Sub-total	\$7,250	\$6,750	\$6,750	\$6,750	\$6,750
Professional Services - GSP Implementation	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Legal Defense Reserve (build \$150,000/yr. balance)	\$0	\$0	\$0	\$0	\$0
County Tax Roll Fee Support	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Contingency (10%)	\$8,875	\$8,325	\$8,325	\$8,325	\$8,325
GSA Admin. Sub-total	\$97,625	\$91,575	\$91,575	\$91,575	\$91,575

A Closer Look at the Projected SGMA Compliance Costs

5-Year GSP Implementation Inflation Adjustment	0%	3%	3%	5%	5%
Cost Category-SGMA Compliance	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Annual Reporting (assumes DWR monitoring continues)	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Five Year GSP Update w/Modeling Calibrations	\$43,750	\$43,750	\$43,750	\$43,750	\$35,000
Surface-GW Interaction Modeling	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
GSA Coordination & Outreach (w/in and between GSAs)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Data Management System Maintenance	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Long Term Financial Planning/Fees	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Grant Procurement	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Contingency (8%)	\$9,300	\$9,300	\$9,300	\$9,300	\$8,600
SGMA Compliance Sub-Total	\$125,550	\$125,550	\$125,550	\$125,550	\$116,100
TOTAL WDCGSA Administration (w/inflation adjustment)	\$97,625	\$100,554	\$106,587	\$118,312	\$137,241
TOTAL WDCGSA SGMA Compliance (w/inflation adjustment)	\$125,550	\$129,317	\$137,075	\$152,154	\$176,498
TOTALWDCGSA Operational Budget	\$223,175	\$229,870	\$243,662	\$270,465	\$313,740

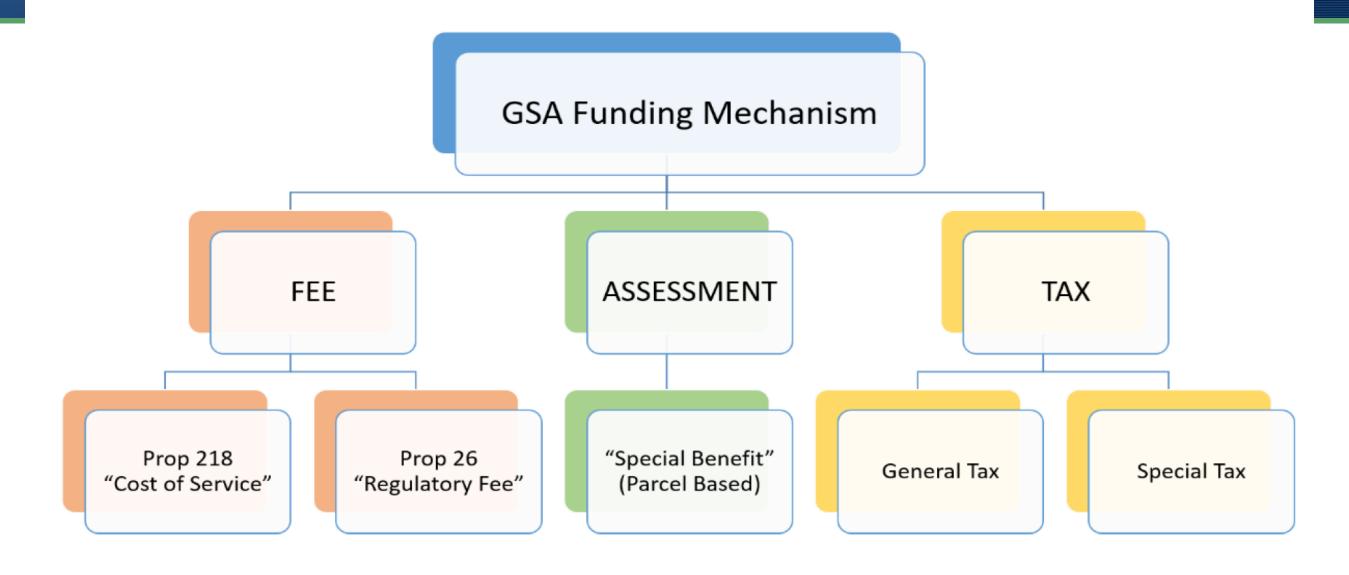


SGMA Compliance Beyond the Five-Year Projection

TASK	TIMELINE
GSA Administration & Operations	Annual
Community Outreach & Educations	Annual
GSP Monitoring & Data Management	Annual
GSP Reporting	Annual; GSP Update (Five Years)
Grant Writing	Annual



Available Options for Long Term Funding



Prop. 218 is most common GSA charge method to date. Includes customer notification and protest vote process.

Approach for Developing Charge

FOR REVENUE PROJECTIONS TO USE IN LONG TERM CHARGE STUDY

Reasonable

Contingency

Sufficient

Inflation

Reliable

Include adequate legal services

Scope (focus on GSA Admin. and SGMA Compliance)

Flexible – to address DWR requirements and compliance tasks



Common Evaluation Criteria for Charge Options

- Revenue Sufficiency to meet projected revenue targets
- Revenue Stability over the fee implementation period
- All Beneficiaries Pay important for SGMA compliance benefit
- Equity cost allocation
- Affordability economic impacts
- Simplicity easy to understand
- Administrative ease low implementation costs
- Enforceability potential costs for more complex fee structures
- Legality defensible, challenge risk, potential long term legal fees



Can impact revenue projections



What should be included in the scope of charges?

- Update Wyandotte Creek GSA Five Year Revenue Projections focused on GSP implementation and SGMA compliance.
- Discuss key charge assumptions to be sufficient yet reasonable.
- Include GSA cost sharing for SGMA compliance costs that benefit the Subbasin.
- Refine revenue projections to update GSA long term charge schedule.

A BALANCING ACT IN CONSIDERING SCOPE OF CHARGES

SGMA Compliance GSA Administration Higher revenue projections result in higher fees.

Project Implementation



Charge Options To Evaluate

Examples of Potential Options	Notes
Charge per Acre, for parcels subject to the charge within the GSA service area	Most common charge structure
Hybrid Land Use Approach	Would include both irrigated and non-irrigated lands
Other options? Offer your suggestions today!	
Charge per Acre-foot of groundwater extraction	Would require metering
State Water Resources Control Board Intervention Fees	GSA complying with SGMA

- Charge options will be evaluated to consider both GSA Admin & SGMA Compliance costs.
- Feasibility of options is based on available parcel level data for those subject to charges.
- A charge option summary will be available comparing options including impacts of future charges.

Example Charge Option

Highest Charge Option Implementation Costs

Lowest Charge Option Implementation Costs

Metered Use/Well Registration

Land Use Hybrid

\$/Acre

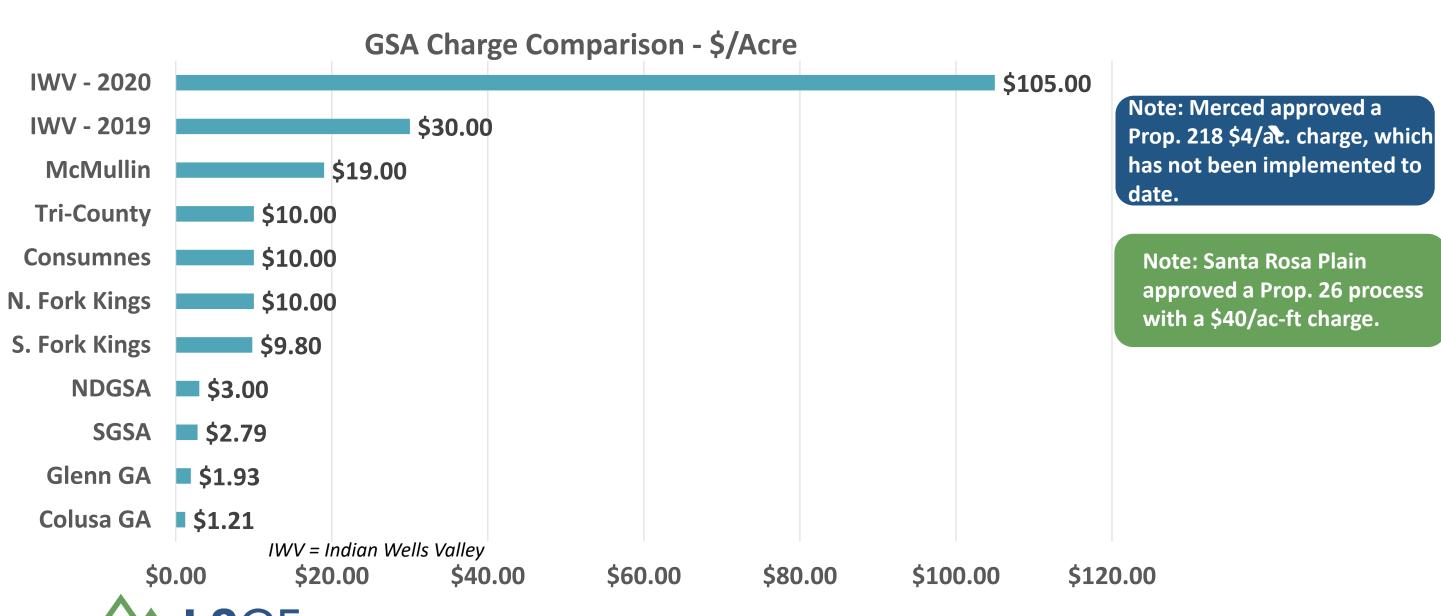


WC Example Charge Cost

Examples of Potential Options	Approach	Fee
Charge per Acre, for parcels subject to the charge within the GSA service area	\$223K (Total Operational Budget)/51,000 acres (Total Acres)	\$4.37/acre
Hybrid Land Use Approach (Irrigated Acreage)	\$233K (Total Operational Budget)/14,305 acres (Irrigated Acres)	\$16.28/acre
Hybrid Approach (Cost Share Admin & Irrigated pay Compliance)	\$98K (Total Admin)/51,000 acres (Total Acres) \$126K (Compliance)/14,305 (Irrigated Acreage)	\$1.92/acre \$8.81/acre



Comparing Approaches Across the State



Considerations for Approved Charges

The WC GSA will annually review its budget needs and determine appropriate GSA charges.

Approved Charges:

- Can only be used for tasks that are included in the WC GSA updated revenue projections.
- Will be limited to a maximum allowable amount.
- Will be assessed through the Butte County Assessor's Office tax roll for each landowner.
- Will be available on the GSA website, in addition to detailed budget information.

Local Charges For Local Groundwater Management and Decision-making!



WC GSA Wants Your Input!

Ways for you to provide us with your comments and ideas:

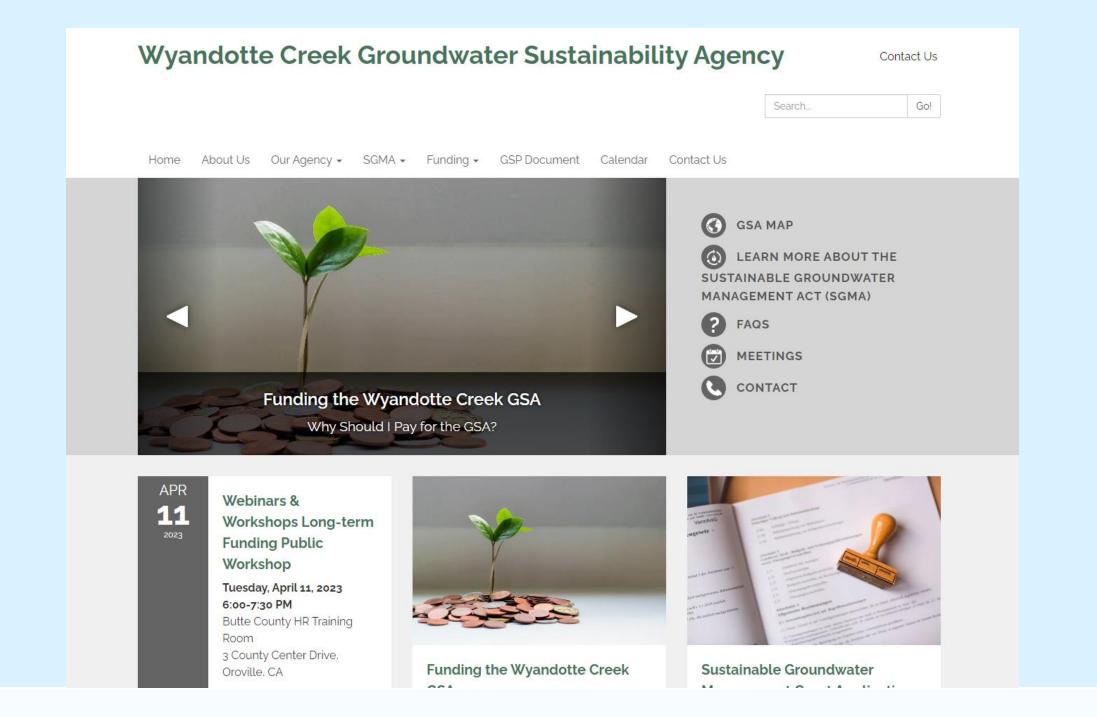
- Opt in to interested parties list on workshop sign-in sheet
- Question cards
- Common courtesy one speaker at a time
- We have time to answer some questions now
- If we don't get to your question, follow up with us during the poster session or we can follow up with you post-meeting if we have your contact info.
- A summary of this public workshop will be available on the website
- Thank you for attending!



Next Steps

2023 Milestone	Date	Action Items
Feb Board Meeting	Feb 23	Approve Revenue Projections
Mar Board Meeting	Mar 8	Meeting Actions – Proceed with Fee Options Evaluation TM
Public Workshop	Apr 11	Presentation and Public Comments
Apr Board Meeting	Apr 27	Board Meeting (Approve Fee Options TM)
WAC	May 4	Fee Study Update
May Board Meeting	May 25	Approve Fee Report
Public Notice	May 31	Send out Public Notice of Fee
Jun Board Meeting	Jun 22	Receive Project Update
Jul Board Meeting	Jul 27	Board Presentation – Public Hearing/Approve Proposed Fees
Tax Roll Deadline	Aug 10	Tax Roll To Assessor's Office





https://www.wyandottecreekgsa.com

We want your input!

Send comments to: wyandottecreekgsa@gmail.com

Frequently Asked Questions (printed and online)

https://www.wyandottecreekgsa.com/funding-frequently-asked-questions

Sign up for the interested parties list on the website:

https://www.wyandottecreekgsa.com/contact-us

