

# Cosumnes Groundwater Authority

## Draft Fee Structures



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## Presentation Goals

- Provide the Board with high-level estimates of potential rates
- Solicit feedback from the Board on a preference of methodology going forward
- Discuss any other relevant preferences the Board has pertaining to fee structure

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## Update on Progress

- SCI team is developing the database that will be used to inform the fee methodology
- CGA Staff has provided a draft budget through fiscal year 2026-27
  - Draft budget adapted from GSP based on recent Board discussions
- Today’s draft fee structures reflect this draft budget and the database as they stand today
  - Both will be honed and refined in the coming months

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## Cosumnes Groundwater Authority Draft Budget

Draft Long Term Cosumnes Groundwater Authority Expenses				
Activity	FY23-24	FY24-25	FY25-26	FY26-27 (GSP Year 5)
<b>Regulatory and Operational Expenses</b>				
Funding Exploration	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Monitoring	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Data Management System	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Public Outreach	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Legal	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Financial Audit	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Personnel	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000
Data Gaps	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Annual Report	\$ 48,000	\$ 48,000	\$ 48,000	\$ 48,000
5-Year Update	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Address State Comments	\$ 50,000	\$ -	\$ -	\$ -
Post-GSP Fee Establishment	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Misc.	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Contingency	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
<b>Regulatory and Operational Expenses Totals</b>	<b>\$ 528,000</b>	<b>\$ 478,000</b>	<b>\$ 478,000</b>	<b>\$ 478,000</b>
<b>Projects and Management Actions Expenses</b>				
Supply Augmentation	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Demand Management	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Other PMAs	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
<b>Projects and Management Actions Expenses Totals</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>
<b>Total Estimated Expenses</b>	<b>\$ 1,128,000</b>	<b>\$ 1,078,000</b>	<b>\$ 1,078,000</b>	<b>\$ 1,078,000</b>

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## Data

- Irrigated acreage is estimated using LandIQ’s 2019 dataset
- Estimated pumping is derived from the CoSANA Model
  - Model uncertainty is +/- 20%, we are working to refine this data
- Data will be applied at the parcel level in the coming months

Source Data
FY 23-24 Revenue Need: \$1,128,000
Total Irrigated Acreage Estimate: 50,525
Total Estimated Extraction Estimate: 110,625 AF
Total Parcels: 19,522

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## Draft Rate Structures



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## Irrigated Acreage

- Attributes a GW use based on irrigated acreage **per parcel**
- Same approach as current fee program

$$\frac{\text{Revenue Requirement (\$\$)}}{\text{Irrigated Acres}} = \text{Rate} \quad \textit{Parcels Charged Based on Irrigated Acres}$$

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## Irrigated Acreage

$$\frac{\$1,128,000}{50,525 \textit{ Irrigated Acres}} = \$22.33$$

Source Data
FY 23-24 Draft Revenue Need: \$1,128,000
Draft Irrigated Acreage: 50,525

Examples
<b>Parcel with no Irrigated acres</b> Acreage Fee: \$0*
<b>Parcel with 2 Irrigated acres</b> Acreage Fee: \$45
<b>Parcel with 10 Irrigated acres</b> Acreage Fee: \$223
<b>Parcel with 100 Irrigated acres</b> Acreage Fee: \$2,233

\*Note: Residential GW users could potentially be charged a minimal fee

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## Irrigated Acreage: Pros and Cons

### Advantages:

- Simpler:
  - Easier to convey to public
  - Easier to update
- Familiarity (fee structure already in place)

### Challenges:

- Potentially less equitable
- Different crop types charged the same
- Standard irrigated acreage methodology does not account for residential use\*

\*Note: Residential GW users not captured in current fee structure could be assigned a minimal fee in an updated irrigated acreage methodology

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## Estimated Extraction

- Attributes a GW use based on estimated AF extracted **per parcel**

$$\frac{\text{Revenue Requirement (\$\$)}}{\text{Acre Feet Pumped}} = \text{Rate} \quad \text{Parcels Charged Based on Allocated AF}$$

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## Estimated Extraction

$$\frac{\$1,128,000}{\$110,625 \text{ AF}} = \$10.20$$

Source Data
FY 23-24 Draft Revenue Need: \$1,128,000
Draft Estimated Extraction: 110,625 AF

Examples
Parcel using .5 AF Acreage Fee: \$5
Parcel using 4 AF Acreage Fee: \$41
Parcel Using 10 AF Acreage Fee: \$102
Parcel using 200 AF Acreage Fee: \$2,039

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## Estimated Extraction: Pros and Cons

### Advantages:

- Equitable
  - More pumping = Higher fee
  - Crop dependent
- Credit for surface / recycled water use

### Challenges:

- Requires multiple datasets; availability of updated data varies
  - Crop mapping/land use
  - Crop usage rates
  - Surface water use
  - Recycled water use
  - Public water system boundaries
  - Assessor use codes
  - Rural residential & urban well pumping
- More complex; more difficult to convey to public
- Incomplete well location data
- Limited extraction data available
  - Extraction must be modeled
- Appeals
  - More data = more challenges

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# Hybrid Model

- Blend of a broad parcel fee and either irrigated acreage fee *or* estimated extraction fee
- Charges placed on Direct GW users **and** all Subbasin parcels
- Utilize DWR Priority Point Allocation to assign portions of GSP implementation costs to two buckets:
  - Direct GW users
  - All parcels within Subbasin

Example Breakdown of Priority Point Allocation

Criteria	All Parcels	GW Users
1 Population	X	
2 Population Growth	X	
3 # Public Supply Wells	X	X
4 Total # Wells		X
5 Irrigated Acres		X
6 Reliance on GW	X	X
7 Basin Impacts	X	X
8 Habitat	X	

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# Hybrid Model

Example Priority Point Allocation Breakdown

Criteria	DWR Score	All Parcels	GW Users
1 Population	1	1	
2 Population Growth	2	2	
3 # Public Supply Wells	2	1.5	0.5
4 Total # Wells	3		3
5 Irrigated Acres	3		3
6 Reliance on GW	4.5	1	3.5
7 Basin Impacts	2	0.5	1.5
8 Habitat	2	2	
<b>TOTALS</b>	19.5	8	11.5
<b>Percentage</b>		<b>41.0%</b>	<b>59.0%</b>

Budget	All Parcels	GW Users
\$1,128,000	\$462,769.23	\$665,230.77

Note: Priority Point Allocation subject to Board Input

### Rate Scenarios

$$\frac{\$462,769.23}{19,522 \text{ Parcels}} = \$23.71 \text{ Parcel Fee}$$

**Plus**

$$\frac{\$665,231}{50,525 \text{ Irrigated Acres}} = \$13.17 \text{ Irrigated Acreage Fee}$$

**Or**

$$\frac{\$665,231}{110,625 \text{ AF}} = \$6.01 \text{ Estimated Extraction Fee}$$

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# Hybrid Model

### Examples: Parcel + Irrigated Acreage

#### Parcel with 10 Irrigated acres

Parcel Fee:	\$23.71
Acreage Fee:	\$131.66
<b>Total:</b>	<b>\$155.37</b>

#### Parcel with 100 Irrigated acres

Parcel Fee:	\$23.71
Acreage Fee:	\$1,316.64
<b>Total:</b>	<b>\$1,340.34</b>

#### Parcel with no Irrigated acres

Parcel Fee:	\$23.71
Acreage Fee:	\$0.00
<b>Total:</b>	<b>\$23.71</b>

### Examples: Parcel Fee + Estimated Extraction

#### Parcel using .5 AF

Parcel Fee:	\$23.71
Extraction Fee:	\$3.01
<b>Total:</b>	<b>\$26.71</b>

#### Parcel Using 4 AF

Parcel Fee:	\$23.71
Extraction Fee:	\$24.05
<b>Total:</b>	<b>\$47.76</b>

#### Parcel Using 100 AF

Parcel Fee:	\$23.71
Extraction Fee:	\$601.34
<b>Total:</b>	<b>\$625.04</b>

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# Hybrid: Pros and Cons

### Advantages:

- Spreads costs out to all parcels, lessening burden on larger GW users
  - All parcels may benefit from GW sustainability

### Challenges:

- Legally untested
  - SCGA implemented this, but did not charge parcels directly
- Parcel fee is flat, not proportional
  - Difficult for non-GW users to accept a fee
  - Parcels with smaller irrigated acreage would see a larger increase (\$23 parcel fee)

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# Cosumnes Groundwater Authority

Questions and  
Discussion



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## Considerations Moving Forward

**Budget:**

- Appeals
- Grant funding

**Outreach:**

- Coordination of outreach messaging and community meetings

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