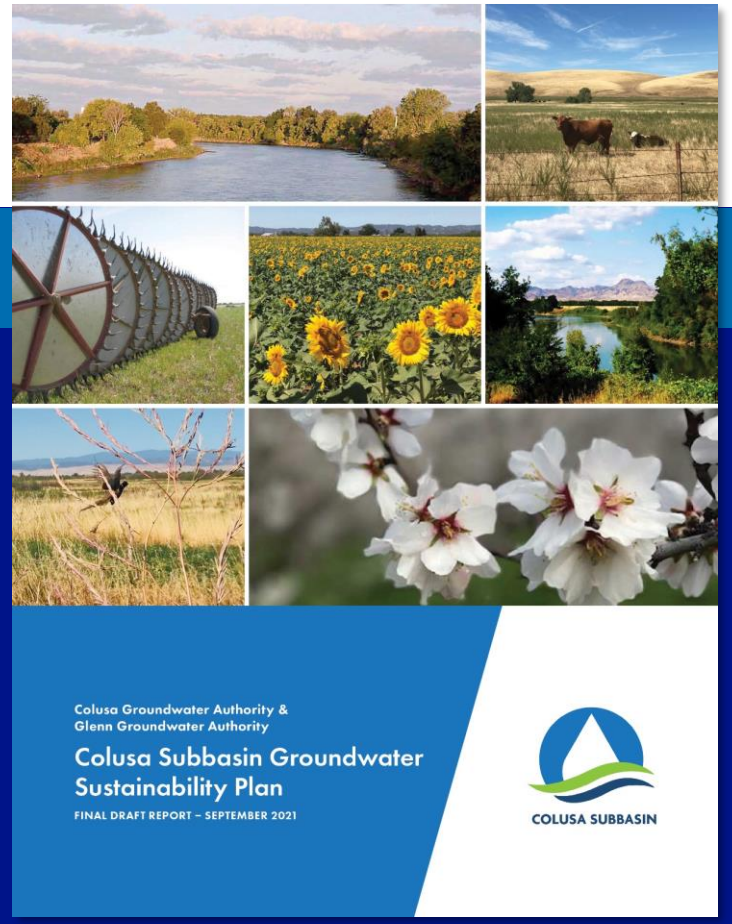
COLUSA SUBBASIN

Funding and Financing Planning for GSP Implementation

Joint GSA Board Meeting

March 10, 2022 1:00 – 3:30 pm



Overview

Purpose: Provide an overview of GSP costs, finance plan process, and options and examples for assigning costs

Desired Outcomes

- Review GSP cost categories and approximate GSP implementation costs (excluding PMAs)
- Provide an overview of the finance plan and fee study processes
- Present and receive feedback on options for assigning GSP implementation costs
- Define various action items needed for finance plan development

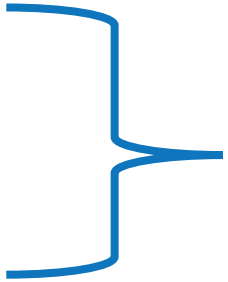
Topics

1. **Review GSP-related costs (Duncan MacEwan)**
   - Administration
   - Implementation (Data Gaps / Studies)
   - PMAs
2. **Finance Plan and Assigning costs (Steve Hatchett)**
3. **Examples from other subbasins (Duncan MacEwan)**
4. **Example options for the Colusa Subbasin (Duncan MacEwan)**
5. **Discussion**

GSP Implementation Costs

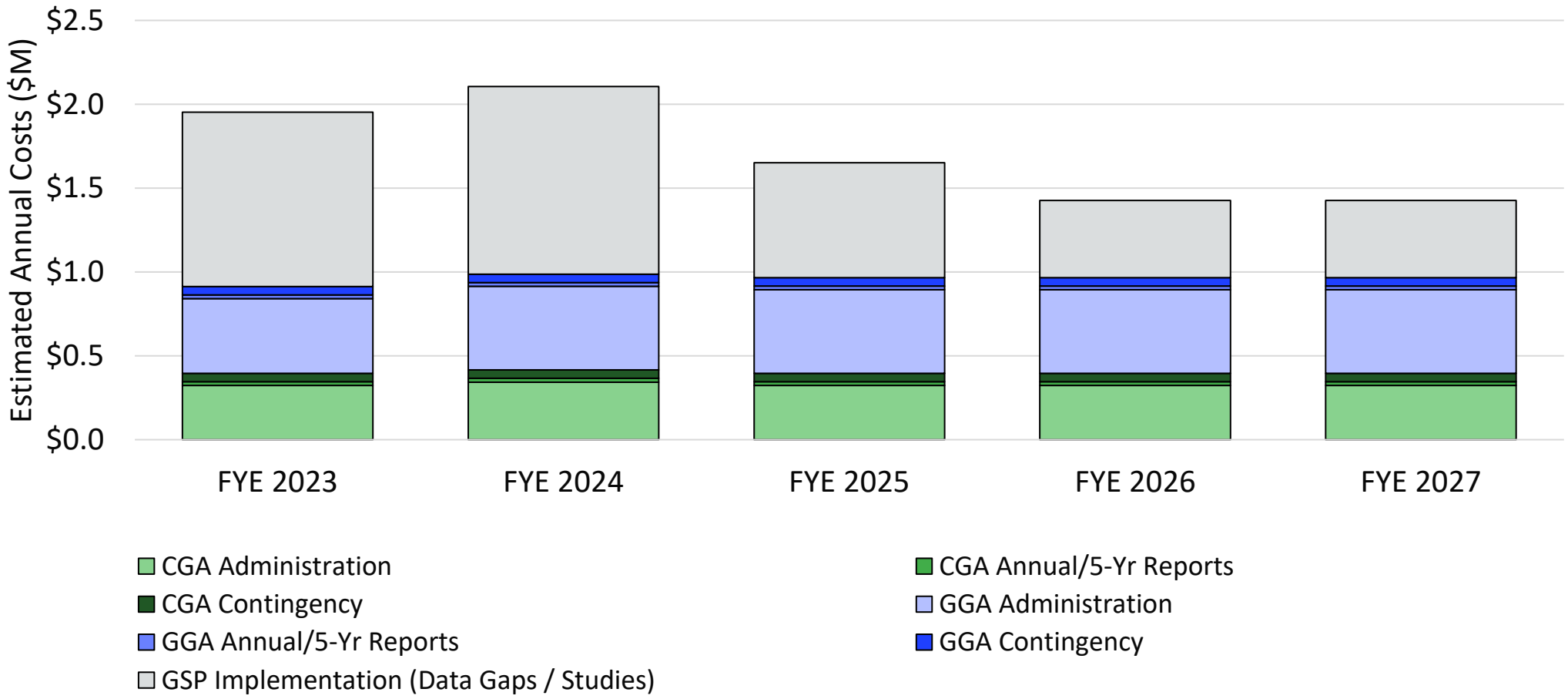
GSP Implementation Cost Summary

- Projects and Management Actions
  - Capital
  - Planning/design studies
  - Annual operations and maintenance
- Groundwater Sustainability Agencies
  - Administration (legal, staff time, coordination, monitoring, finance, etc.)
  - GSP technical studies to support GSP implementation and address data gaps
  - GSP Annual Reports (§356.2)
  - GSP 5-Year Assessments (§356.4)
  - Contingency



PMA Costs are not covered in this presentation, but remain critical for achieving SMC specified in GSP implementation

GSP Implementation Costs Summary



Note: Estimated costs are not indexed for inflation.

Revenue Needs Summary

- The next step in the financial plan would refine GSA revenue needs over the next 5 years and the full GSP implementation period
- This would include:
  - Refine GSP implementation costs
  - Refine GSA administrative budgets for GSP implementation
  - Consider PMAs that are critical for achieving SMCs and include in revenue needs
  - Assess potential grant funding opportunities
  - Apply an appropriate indexing for inflation for all cost line items

Finance Plan and Rate Study Process

Overview of Financial Plan and Rate Making Process

Revenue Needs ✓	Define Cost Categories	Cost Allocation	Revenue Recovery	Rate Making Process

• Specify revenue needs for GSP implementation
• GSP costs, administration, PMAs
• Appropriate accounting for cost inflation
	• Cost categories by GSAs or other entities, for example:
	  • Joint?
	  • Individual?
	  • Related to specific aspects of groundwater management?
		• Define entities/regions for assigning cost (e.g., GSA, parcel, district)
		• Develop cost- or benefit-based method for assigning costs
			• Options for recovering revenues include per acre, per acre-foot, and hybrid assessments
			• May vary across entities within a subbasin
				• Legal, noticing, other process requirements for calculating and implementing rates
				• Final rate design

GSP Finance Plan Process

Rate Making Process

Categorizing, Assigning Responsibility, and Recovering Costs

Policy Considerations for Assigning Costs

- Cost or benefit-based fair and equitable ways to assign GSP implementation costs
  - All lands that overlie usable groundwater benefit from sustainable management
  - Proportional contribution to groundwater extraction/recharge
  - Past investments in groundwater management
  - Access to useable groundwater
  - Rural residential and never-irrigated areas

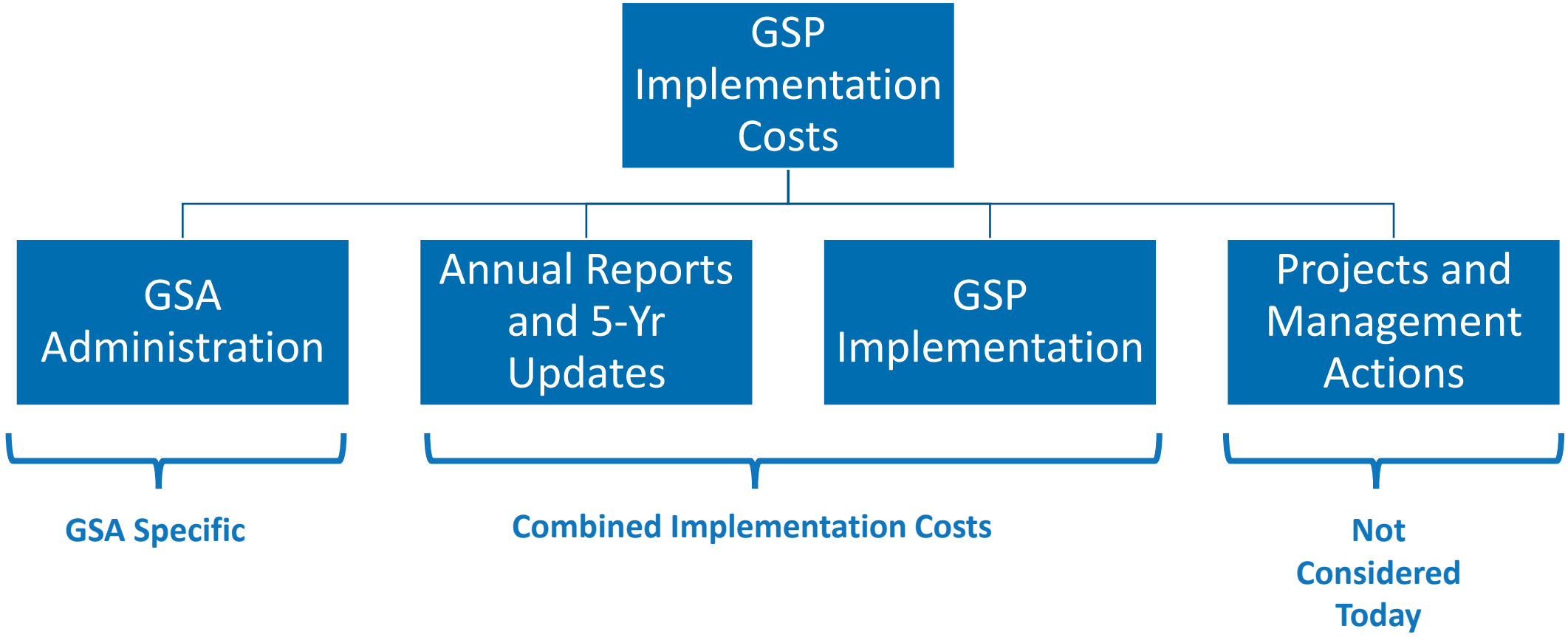
- Questions to frame these policy decisions
  - Who benefits from GSP implementation and groundwater management more broadly?
  - How are GSP Sustainable Management Criteria (SMCs) related to groundwater use and users across the subbasin?

How do we categorize implementation costs?

Cost Categories

Cost Allocation

Cost Recovery

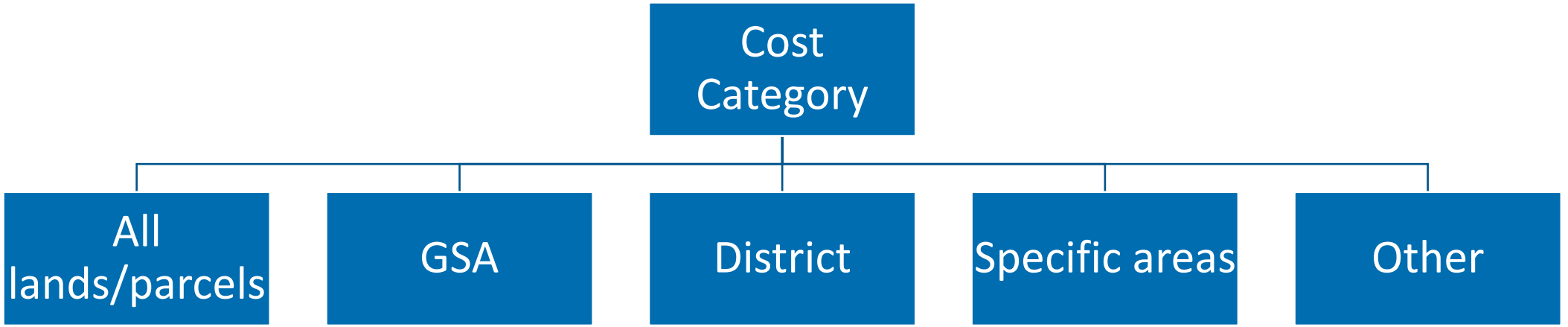


How do we assign costs in each cost category?

Cost Categories

Cost Allocation

Cost Recovery

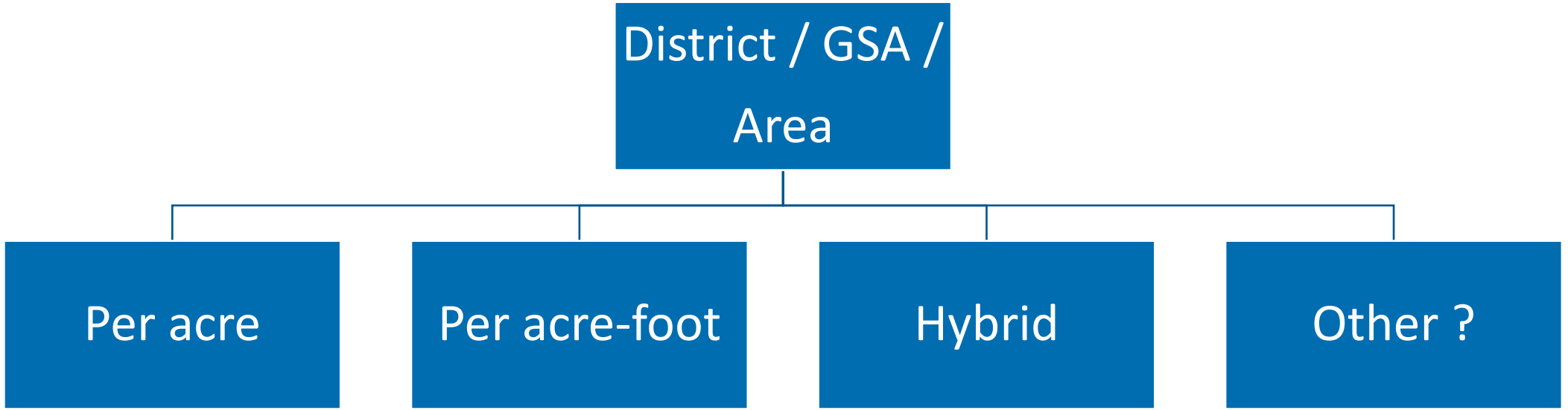


How do we recover costs?

Cost Categories

Cost Allocation

Cost Recovery



Examples from Other Subbasins

Cosumnes Subbasin

- Prop 26
- Costs
  - Administration
  - PMAs (fee study, MAR, fallowing, feasibility studies)
  - Total: $730,000 to $1 million per year
- Cost allocation
  - Irrigated acreage (year 1)
  - All parcels (subsequent years)
- Estimated fee
  - $10 per irrigated acre in year 1
  - Subsequent years TBD based on total assessable acreage

Madera County GSA

- Only non-district lands in the GSA
- Prop 218
- Costs
  - Administration
  - Legal
  - PMAs (recharge, Sites, land repurposing, well mitigation)
- Cost allocation
  - Enrolled acres (eligible to receive groundwater allocation)
  - Per acre; per acre-foot and hybrid approach being considered
- Estimated fee
  - $100 - $200 per enrolled acre
  - Substantial costs for PMAs (non-district lands with overdraft conditions)

Solano Subbasin

- Multiple GSAs covering district and non-district lands
- Prop 218 (in development stages)
- Costs
  - Administration and implementation
  - Legal
  - Total costs ~ $750,000 - $1 million annually
- Cost allocation
  - Legal costs, administration, implementation
- Estimated fee range (based on total cost and number of Subbasin acres)
  - $1 - $5 per acre

Other Examples

Maximum Prop 218 Land Assessments			
GSA	**Year**	**GSP Phase**	**Rate per Acre**
Merced Subbasin GSA	2019	Development	$4.00
East Turlock GSA	2021	Development	$4.95
McMullin Area GSA	2018	Development	$19.00
Madera County GSA	2021	Development	$23.30
Rosedale Rio-Bravo	2018	Development	$50.00
Eastern Tule GSA	2021	Development/Implementation	$9.44
North Fork Kings GSA	2018	Development/Implementation	$10.00
South Fork Kings GSA	2018	Development/Implementation	$10.00
Greater Kaweah GSA	2021	Development/Implementation	$10.00
Aliso Water District	2020	Implementation	$13.44
Madera County GSA	2022	Implementation	~$200.00
Rosedale Rio-Bravo	2020	Implementation	$205.00

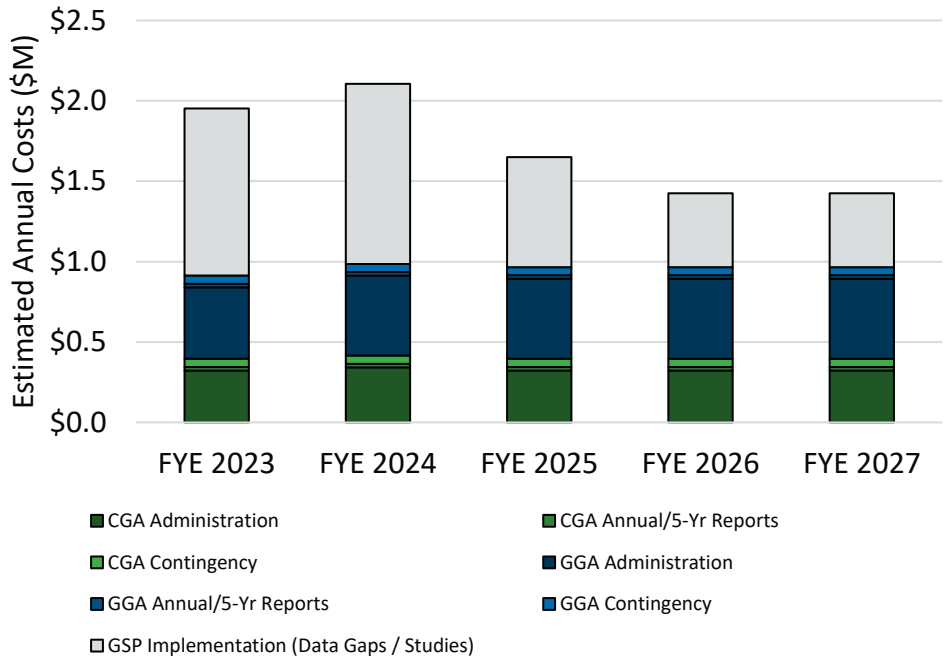
Note: Includes studies in progress (have not held 218 election yet)

Colusa Subbasin Examples

Colusa Subbasin Example: Cost Categories

- Aggregate cost categories
  - **Administration**
  - **Implementation**

- **GGA Administrative** Costs
  - Administration + contingency
- **CGA Administrative** Costs
  - Administration + contingency
- Joint **Implementation** Cost
  - GSP Implementation Data Gaps/Studies
  - GSP Annual Reports and 5-Yr Updates



Cost Allocation Examples

(1) Uniform	(2) Exclude Westside Area	(3) Total GSA Pumping	(4) Water Budget Area (WBA) Pumping	(5) WBA Pumping + Exclude Westside Area
Administration • Evenly allocate costs per acre	**Administration** • Evenly allocate costs per acre	**Administration** • Evenly allocate costs per acre	**Administration** • Evenly allocate costs per acre	**Administration** • Evenly allocate costs per acre
Implementation • Evenly allocate costs per acre	**Implementation** • Exclude westside area lands	**Implementation** • Allocate costs to each GSA in proportion to historical GSA GW pumping	**Implementation** • Allocate costs to each WBA in proportion to historical WBA GW pumping	**Implementation** • Allocate costs to each WBA in proportion to historical WBA GW pumping • Exclude westside area lands

Note: these examples are potential options for consideration and discussion purposes, and not an exhaustive list of options.

Example 1: Uniform Allocation

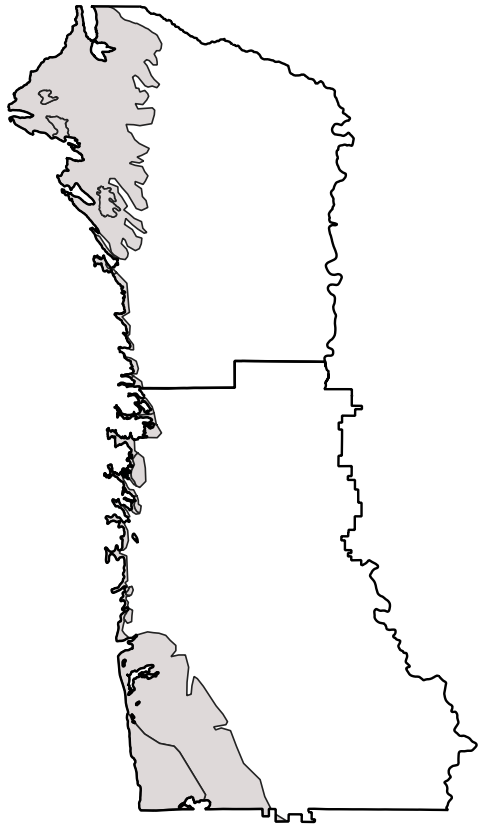
- Administration
  - Assigned to GGA and CGA and then allocated evenly per acre
- Implementation
  - Allocated evenly per acre
- Acreage in these examples includes all lands (irrigated and non-irrigated) less federal and tribal areas

	Colusa GA	Glenn GA
Gross Acres	*403,350*	*297,576*
Fees ($/acre)		
Administration	$0.92	$1.81
Implementation	$1.14	$1.14
Per Acre Fee	**$2.06**	**$2.95**

Draft preliminary for discussion purposes using aggregate GSP data. Values will be refined as part of financial plan and rate study.

Example 2: Exclude Westside Area from Implementation Costs

- Administration
  - Assigned to GGA and CGA and then allocated evenly per acre
- Implementation
  - Allocated evenly per acre, excluding westside areas



	Colusa GA	Glenn GA
Westside Area Acres	*57,155*	*67,087*
Other Areas Acres	*346,195*	*230,489*
Fees ($/acre)		
Westside Areas		
Administration	$0.92	$1.81
Implementation	-	-
Per Acre Fee	**$0.92**	**$1.81**
Other Areas		
Administration	$0.92	$1.81
Implementation	$1.37	$1.40
Per Acre Fee	**$2.29**	**$3.21**

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Example 3: Allocate Implementation Costs by GSA GW Pumping

- Administration
  - Assigned to GGA and CGA and then allocated evenly per acre
- Implementation
  - Allocated to GSAs by share of total GSP estimated groundwater pumping

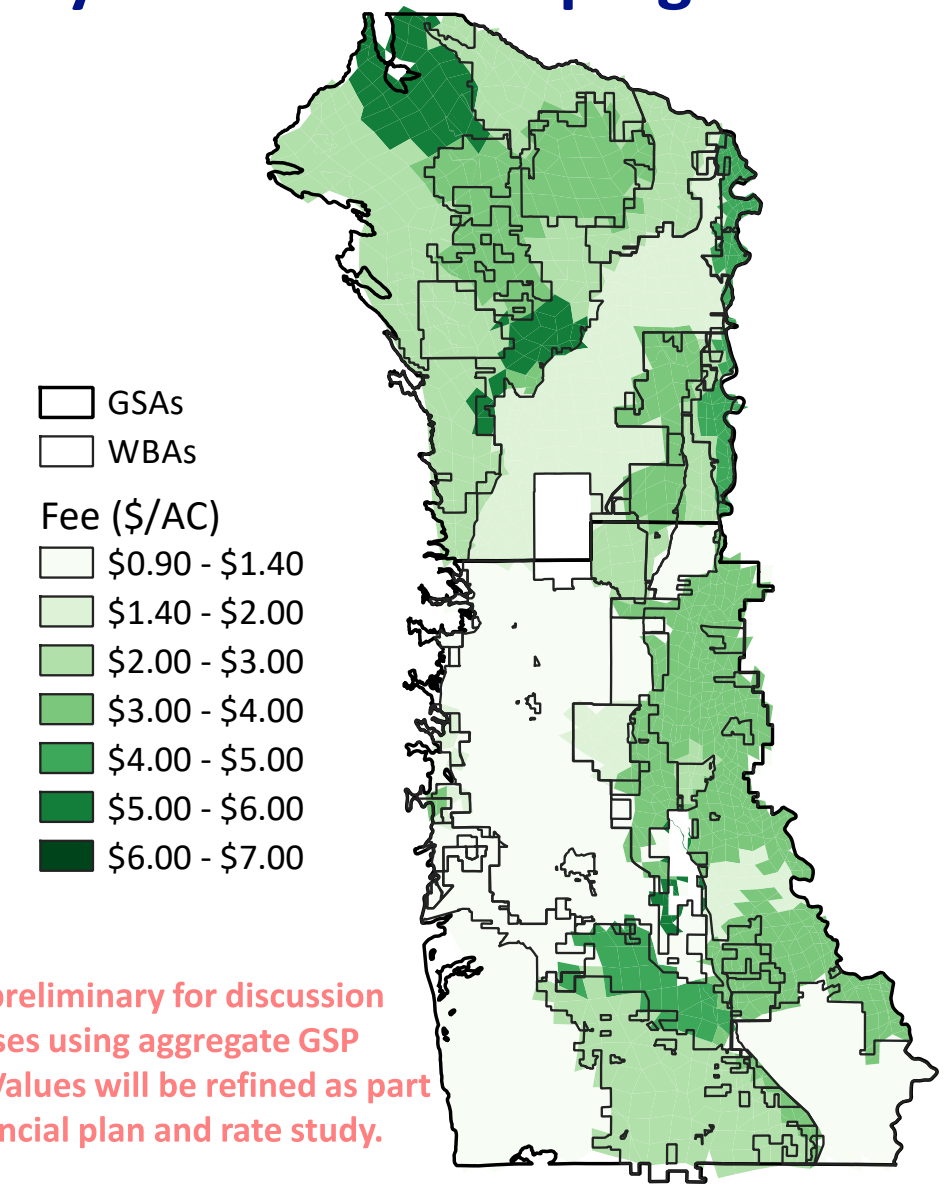
	Colusa GA	Glenn GA
Gross Acres	*403,350*	*297,576*
GW Pumping	*271,290*	*228,490*
	(54%)	*(46%)*
Fees ($/acre)		
Administration	$0.92	$1.81
Implementation	$1.07	$1.23
Per Acre Fee	**$2.00**	**$3.03**

Draft preliminary for discussion purposes using aggregate GSP data. Values will be refined as part of financial plan and rate study.

Example 4: Allocate Implementation Costs by WBA GW Pumping

- Administration
  - Assigned to GGA and CGA and then allocated evenly per acre
- Implementation
  - Allocated to WBAs by share of total GSP estimated groundwater pumping

	Colusa GA	Glenn GA
Fees ($/acre)		
Administration	$0.92	$1.81
Implementation	$0.11 - $4.42	$0.19 - $3.76
Per Acre Fee	**$1.04 - $5.34**	**$2.00 - $5.57**

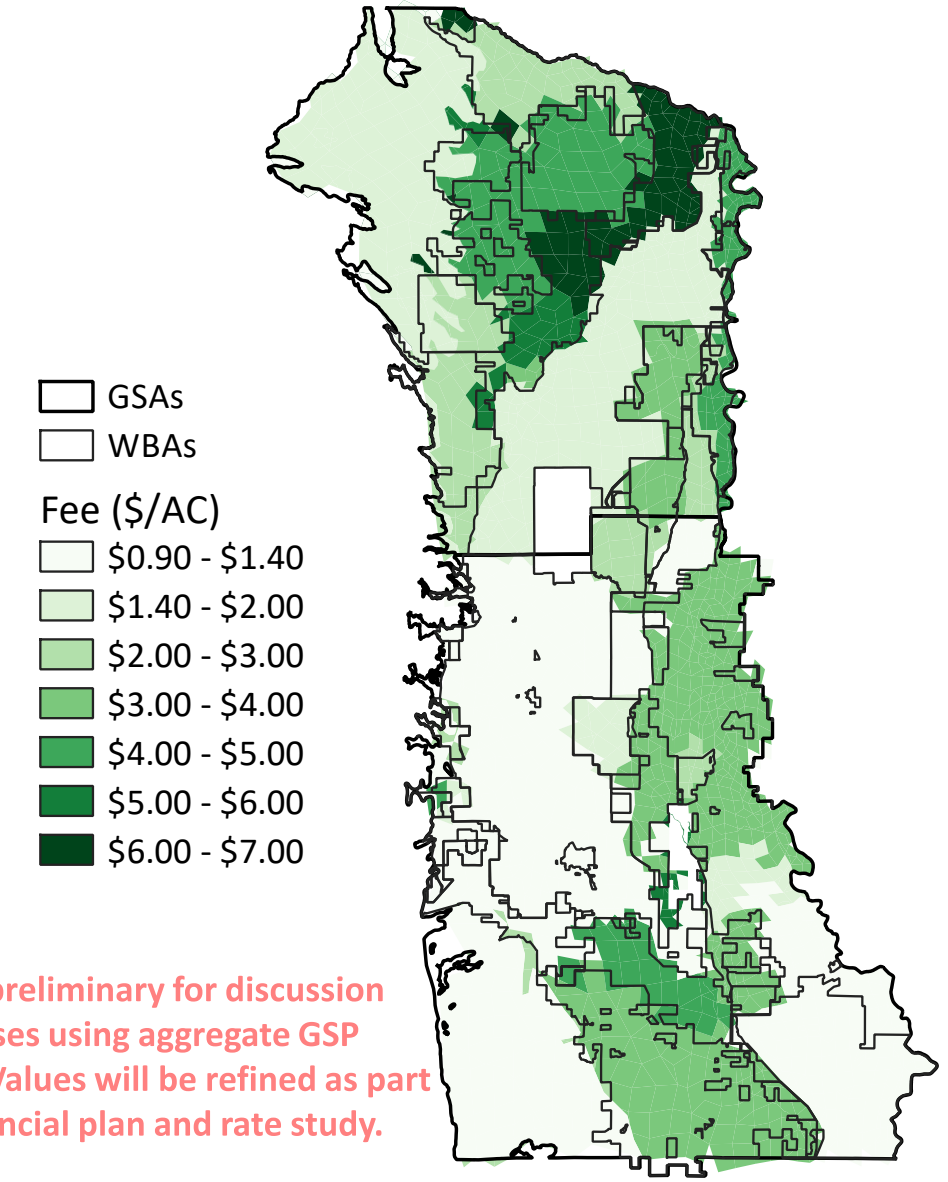


Draft preliminary for discussion purposes using aggregate GSP data. Values will be refined as part of financial plan and rate study.

Example 5: Allocate Implementation Costs by WBA GW Pumping; Exclude Westside Areas

- Administration
  - Assigned to GGA and CGA and then allocated evenly per acre
- Implementation
  - Allocated to WBAs by share of total GSP estimated groundwater pumping, excluding Westside areas

	Colusa GA	Glenn GA
Fees ($/acre)		
Westside Areas		
Administration	$0.92	$1.81
Implementation	-	-
Per Acre Fee	**$0.92**	**$1.81**
Other Areas		
Administration	$0.92	$1.81
Implementation	$0 - $4.42	$0.19 - $4.87
Per Acre Fee	**$0.92 - $5.34**	**$2.00 - $6.68**



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Summary

Summary Points

- Finance plan development
  - Categorizing costs
  - Allocating costs within each category
  - Recovering revenues
- Fairness and equitability considerations
  - Examples highlight a few alternative approaches based on gross groundwater pumping
- Other considerations
  - Costs associated with cost allocation and revenue recovery options (e.g., a volumetric groundwater charge requires a way to measure groundwater use)
  - Potential measures of net groundwater pumping

Discussion

Thank you