MONTGOMERY & ASSOCIATES

TECHNICAL MEMORANDUM

DATE: May 30, 2023 **PROJECT #:** 9100.4602

TO: Ms. Piret Harmon, Salinas Valley Basin GSA

CC: Mr. Roberto Moreno, Salinas Valley Basin GSA
Ms. Catherine Hansford, Hansford Economic Consulting

FROM: Derrik Williams

PROJECT: Salinas Valley Basin GSA Tiered Fee Calculation

SUBJECT: Justification of FY2023/2024 Tiered Budget Fees

BACKGROUND

The Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) is implementing the Sustainable Groundwater Management Act (SGMA) in all or part of 6 subbasins in the Salins Valley. The 6 subbasins include:

1. The 180/400-Foot Aquifer Subbasin (co-implementing with the Marina Coast Water District GSA [MCWD GSA] and Monterey County GSA)
2. The Eastside Aquifer Subbasin
3. The Forebay Aquifer Subbasin (co-implementing with the Arroyo Seco GSA)
4. The Langley Area Subbasin
5. The Monterey Subbasin (co-implementing with the MCWD GSA)
6. The Upper Valley Aquifer Subbasin

This memo supports the FY 2023/2024 SVBGSA regulatory fee budgeting process by providing justifications for how budgeted costs could be divided among subbasins.

The FY 2023/2024 budget includes an Operating Program Budget comprising Tier 1 costs covering general administrative and operating costs (including prudent reserves), and the Sustainable Groundwater Management Program Budget that includes both Tier 1 and Tier 2 costs. SVBGSA assigned each budget item to either Tier 1 or Tier 2 in accordance with the SVBGSA's adopted Tiered Regulatory Fee Policy which is included as Attachment 1. This memo addresses only items in the Sustainable Groundwater Management Program Budget.

TIER ASSIGNMENTS IN SUSTAINABLE GROUNDWATER MANAGEMENT PROGRAM BUDGET

All the costs in the Groundwater Management Program budget are regulatory in nature and are assigned to either Tier 1 or Tier 2 in accordance with the SVBGSA's adopted Tiered Regulatory Fee Policy. Attachment 2 summarizes the line items in the FY 2023/2024 Sustainable Groundwater Management Program Budget, including cost, assigned Tier, and net cost to be funded by fees once grant funds are accounted for.

Tier assignments for each budget activity shown in Attachment 2 reflect the SVBGSA's best assessment of the activity's area of impact. If it becomes clear that an activity originally assigned to Tier 1 should be assigned to Tier 2, an appropriate amount of the activity's cost could be charged to the subbasin(s) associated with the activity, at the Board's discretion. The Board also has the discretion to reassign costs originally assigned Tier 2 to Tier 1 if it becomes clear that the effort had roughly equivalent impact on all subbasins.

In the budget process for each fiscal year, staff shall assess, based upon new or different data, whether: a) a component of a Tier 1 Fee should have been characterized as a Tier 2 Fee for one or more Subbasins; b) a Tier 2 Fee should have been characterized as a Tier 1 Fee, should have been spread across additional Subbasins, or restricted to fewer Subbasins; or c) that the Tier 2 Fee distribution across Subbasins should have been substantially different than as adopted. Staff shall report the results of its assessment to the Board of Directors with recommendations, and the Board shall consider whether to make adjustments to the Fee amounts in the following fiscal year by approving appropriate credits or surcharges to account for adjustments.

JUSTIFICATION OF TIER 1 ACTIVITIES

Tier 1 activities are those for which the effort to implement the activity is roughly equivalent across all subbasins, or for which the activity's impact is roughly equivalent across all subbasins. All administrative and operating costs are Tier 1 activities.

Some activities in the Groundwater Management Program Budget, such as *Conduct Technical Reviews and Provide Technical Services,* are Tier 1 because this activity's area of impact is currently unknown. Therefore, the activity cannot be assigned to any individual subbasin(s). SVBGSA staff will assess the impact of these activities at the end of the year and recommend to the Board if feed adjustments are justified.

JUSTIFICATION OF TIER 2 ACTIVITIES

Budget Item – Assess Groundwater Benefits of Salinas River Stream Maintenance Programs

Activity Description: Assess groundwater benefits of potential Arundo removal and stream maintenance activities using hydraulic modeling with HEC-RAS to evaluate percolation from the river, its floodplain, and potential off-channel detention basins under a variety of flow regimes.

This activity occurs in the 4 subbasins along the main stem of the Salinas River: the Upper Valley, Forebay, Monterey, and 180/400-Foot Aquifer Subbasins. The stream maintenance program influences groundwater sustainability by promoting and maintaining surface water recharge; therefore, the cost apportionment is determined using each subbasins' historical recharge from Salinas River infiltration as estimated by the provisional Salinas Valley Integrated Hydrologic Model (SVIHM)[1].

Because this activity only focuses on the Salinas River, only seepage from the main stem of the Salinas River is included in the cost allocation. The SVIHM-estimated average annual Salinas River infiltration in each of the 4 subbasins is shown in Table 1. The cost of the Stream Maintenance Programs is divided among the 4 subbasins according to the percentages shown in Table 1.

Table 1. Cost Distribution for Salinas River Stream Maintenance Programs Activity

Subbasin	Average Annual Salinas River Infiltration (AF/yr)	Percentage of Total Infiltration	Net Cost for Fees
180/400	38,249	20.1%	$70,231
Monterey	921	0.5%	$1,691
Forebay	71,709	37.6%	$131,669
Upper Valley	79,736	41.8%	$146,408
Total	190,615	100.0%	$350,000

AF/yr: acre-feet per year

[1] These data (model and/or model results) are preliminary or provisional and are subject to revision. This model and model results are being provided to meet the need for timely best science. The model has not received final approval by the U.S. Geological Survey (USGS). No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the model and related material nor shall the fact of release constitute any such warranty. The model is provided on the condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the model.

Budget Item – Conduct Demand Management Dialogue Process

Activity Description: Conduct facilitated working group meetings with stakeholders and interested parties in all subbasins. This process will explore various demand management types, measures, options, and expected results. This work will be led by a facilitator with demand management expertise, and it expands on the recently completed basin-wide demand management stakeholder process.

The Demand Management Dialogue Process approved by the Board of Directors on March 9, 2023, comprises a 5-step process that includes a series of demand management workshops and information sessions in all subbasins managed by the SVBGSA. The FY 2023/2024 budget includes these efforts:

- Implement steps 1, 3, 4 and 5 of the Demand Management Dialogue Process for all subbasins. The estimated total cost is $159,000.
- Support the facilitated Demand Management Dialogue Process in all subbasins with outreach and communication activities as well as technical input. The estimated cost is $20,000.
- Implement a series of focused Demand Management workshops in the 180/400-Foot Aquifer Subbasin. The estimated cost is $21,000.

The costs for this year's Demand Management activities in the 180/400 Foot Aquifer Subbasin are funded with a grant from the Department of Water Resources. The net Tier 2 costs by subbasin are shown in Table 2.

Table 2. Demand Management Dialogue Process Cost Distribution

Subbasin	Basin Wide DM (Steps 1, 3, 4, and 5)	Basin-Wide Support	180/400 Focused Workshops	Total	Grant Funding	Net Cost for Fees
180/400	$ 26,500	$ 3,334	$ 21,000	$ 50,834	$50,834	$ 0
Eastside	$ 26,500	$ 3,334	$ 0	$ 29,834	$ 0	$ 29,834
Langley	$ 26,500	$ 3,333	$ 0	$ 29,833	$ 0	$ 29,833
Monterey	$ 26,500	$ 3,333	$ 0	$ 29,833	$ 0	$ 29,833
Forebay	$ 26,500	$ 3,333	$ 0	$ 29,833	$ 0	$ 29,833
Upper Valley	$ 26,500	$ 3,333	$ 0	$ 29,833	$ 0	$ 29,833
Total	**$ 159,000**	**$ 20,000**	**$ 21,000**	**$ 200,000**	**$ 50,834**	**$ 149,166**

Budget Item – Assess Seawater Intrusion Model, Phase 1: 180/400

Activity Description: Coordinate the assessment and further development and use of the seawater intrusion model with the MCWD GSA. The Seawater Intrusion Model will help both agencies determine if and how potential projects will stop Seawater Intrusion.

Seawater intrusion occurs in the Monterey and 180/400-Foot Aquifer Subbasins. MCWD GSA represents the Monterey Subbasin seawater intruded area in these collaborative meetings. The SVBGSA represents the 180/400-Foot Aquifer Subbasin seawater intruded area in these collaborative meetings. SVBGSA's effort will therefore be funded solely by the 180/400-Foot Aquifer Subbasin.

Budget Item – Refine Sustainability Strategy: Eastside

Activity Description: Conduct outreach and engage interested parties in the Eastside Subbasin to inform and develop their sustainability strategy. The sustainability strategy identifies interested parties' preferred combinations of projects and management actions to meet SGMA's goals and achieve sustainability. The sustainability strategy guides additional planning work and modeling necessary for the subbasin to proceed with projects and management actions.

This activity is specific to the Eastside Subbasin, and the costs are assigned solely to the Eastside Subbasin.

Budget Item – Refine Sustainability Strategy: Langley

Activity Description: Conduct outreach and engage interested parties in the Langley Subbasin to inform and develop their sustainability strategy. The sustainability strategy identifies the interested parties' preferred combinations of projects and management actions to meet SGMA's goals and achieve sustainability. The sustainability strategy guides additional planning work and modeling necessary for the subbasin to proceed with projects and management actions.

This activity is specific to the Langley Subbasin, and the costs are assigned solely to the Langley Subbasin.

Budget Item – Scope CSIP Expansion, Initial Phase (Blue Plan It)

Activity Description:

Contribute SVBGSA's cost-share for Monterey One Water to obtain the Blue Plan It tool for developing conceptual CSIP expansion maps in collaboration with the SVBGSA and Monterey County Water Resources Agency (MCWRA).

If implemented, CSIP expansion will likely occur only in the 180/400-Foot Aquifer Subbasin. The cost of this planning activity is therefore assigned to the 180/400-Foot Aquifer Subbasin.

Budget Item – Establish SMC Technical Advisory Committee: Forebay

Activity Description: Convene the Forebay Subbasin SMC Technical Advisory Committee. This Committee will develop guiding principles and triggers, which are groundwater conditions that trigger the need for management actions or projects according to the SMC defined in the GSP.

This activity is specific to the Forebay Subbasin, and the costs are assigned solely to the Forebay Subbasin.

Budget Item – Establish SMC Technical Advisory Committee: Upper Valley

Activity Description: Convene the Upper Valley Subbasin SMC Technical Advisory Committee. This Committee will develop guiding principles and triggers, which are groundwater conditions that trigger the need for management actions or projects according to the SMC defined in the GSP.

This activity is specific to the Upper Valley Subbasin, and the costs are assigned solely to the Upper Valley Subbasin.

Budget Item – Conduct Deep Aquifers Study - SVBGSA Share

Activity Description: Complete the ongoing Deep Aquifers Study. Activities include assessing existing data, collecting additional data, and developing guidance for management based on the best science. This budget line item allocates the share of this activity funded by SVBGSA.

SVBGSA's share of the Deep Aquifers Study is apportioned among the 5 subbasins overlying the Deep Aquifers: the 180/400-Foot Aquifer, Eastside, Langley, Corral de Tierra portion of the Monterey, and Forebay Subbasins. Costs are apportioned according to the percentage of the Deep Aquifers' areal extent under each subbasin. The extent of the Deep Aquifers is based on the recent definition and conceptual model produced by Montgomery & Associates (2022). The areas of the Deep Aquifers underlying the Seaside Subbasin and the Monterey-Ord portion of the Monterey Subbasin are not included in this calculation because SVBGSA has no authority to levy fees in these areas.

The calculated percentage of the Deep Aquifers' areal extent under each subbasin is shown in Table 3. The column titled *% of Deep Aquifers' Areal Extent Excluding Seaside and Marina/Ord* in Table 3 shows the percentages used to allocate costs among the subbasins. The costs apportioned to each subbasin for the SVBGSA share of the Deep Aquifers study are shown in the last column of Table 3.

Table 3. Cost Distribution for SVBGSA Share of Deep Aquifers Study

Subbasin	Deep Aquifers Area (ft^2)	% of Deep Aquifers' Areal Extent	% of Deep Aquifers' Areal Extent Excluding Seaside and Marina/Ord	Net Cost for SVBGSA Share
180/400	3,648,573,701	66.2%	75.7%	$67,556
Eastside	564,939,710	10.2%	11.7%	$10,460
Langley	63,083,737	1.2%	1.3%	$1,168
Monterey – Marina/Ord	583,822,515	10.6%	0.0%	$0
Monterey – Corral	38,601,811	0.7%	0.8%	$715
Seaside	109,758,846	2.0%	0.0%	$0
Forebay	505,019,345	9.2%	10.5%	$9,351
Total	**5,513,799,666**	**100.0%**	**100.0%**	**$89,250**
Total without Seaside and Marina/Ord	4,820,218,305			

Budget Item – Conduct Deep Aquifers Study - Agriculture Share

> **Activity Description:** Complete the ongoing Deep Aquifers Study. Activities include assessing existing data, collecting additional data, and developing guidance for management based on the best science. This budget line item allocates the share of this activity funded by the Salinas Valley's agriculture.

A Tier 2 fee will be used to collect the agricultural water users' share of the Deep Aquifers Study. Payments previously received from the Salinas Valley Water Coalition will be reimbursed to them to ensure equitable treatment of all agricultural water users.

Agriculture's share of the Deep Aquifers Study is apportioned among the 5 subbasins overlying the Deep Aquifers. The calculated percentage of the Deep Aquifers' areal extent under each subbasin is shown in Table 4. These are the same calculations shown in Table 3 for the SVBGSA share of the Deep Aquifers Study. The costs apportioned to each subbasin for the agricultural share of the Deep Aquifers Study are shown in the last column of Table 4.

Table 4. Cost Distribution for Agricultural Share of Deep Aquifers Study

Subbasin	Deep Aquifers Area (ft^2)	% of Deep Aquifers' Areal Extent	% of Deep Aquifers' Areal Extent Excluding Seaside and Marina/Ord	Agricultural Groundwater Users Share
180/400	3,648,573,701	66.2%	75.7%	$99,726
Eastside	564,939,710	10.2%	11.7%	$15,441
Langley	63,083,737	1.2%	1.3%	$1,724
Monterey – Marina/Ord	583,822,515	10.6%	0.0%	$0
Monterey – Corral	38,601,811	0.7%	0.8%	$1,055
Seaside	109,758,846	2.0%	0.0%	$0
Forebay	505,019,345	9.2%	10.5%	$13,804
Total	**5,513,799,666**	**100.0%**	**100.0%**	**$131,750**
Total without Seaside and Marina/Ord	4,820,218,305			

Budget Item – Prepare/Submit Annual Reports and Data Management

Activity Description: Prepare and submit annual reports for each of the 6 subbasins.

The effort to produce and submit annual reports is roughly equal across all subbasins. Data are stored and managed in a single, unified database for all 6 subbasins, and the effort to manage these data is roughly equal across all 6 subbasins. Because the effort for this item is roughly equal for all 6 subbasins, the cost of this item is divided equally among the subbasins.

The cost distribution among all subbasins for annual reports and data management is shown in Table 5. The cost of the annual report for FY 2023/2024 for the 180/400 Foot Subbasin is funded by a grant from the Department of Water Resources.

Table 5. Annual Reports and Data Management Cost Distribution

Subbasin	Reports and Data Management	Grant Funding	Net Cost for Fees
180/400	$43,000	$43,000	$0
Eastside	$42,900	$0	$42,900
Langley	$42,900	$0	$42,900
Monterey	$42,900	$0	$42,900
Forebay	$42,900	$0	$42,900
Upper Valley	$42,900	$0	$42,900
Total	**$257,500**	**$43,000**	**$214,500**

REFERENCES

California Department of Water Resources, 2021. California's Groundwater Update 2020 Highlights, Bulletin 118, Sacramento, California.

Montgomery & Associates, 2022. Conceptual Definition of The Deep Aquifers. Technical memorandum to the Salinas Valley Basin Groundwater Sustainability Agency, Salinas, California.

ATTACHMENT 1:
Tiered Regulatory Fee Policy
Adopted February 9, 2023
By the SVBGSA Board of Directors

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ATTACHMENT 2:
2023/2024 Sustainable Groundwater Management Program
Budget Items

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Work Plan Activities FY 2024	Budget Category	Budget Estimate	Round 1 Grant	Fee-Funded Costs
Tier 1 Activities				
Tier 1: Data Expansion & SGMA Compliance		***$355,000***	***$0***	***$355,000***
Expand Groundwater Extraction Monitoring	Data Expansion	$50,000		$50,000
Refine Hydraulic Conceptual Model (HCM)	Data Expansion	$100,000		$100,000
USGS Technical Services Agreement - SVBGSA Annual Fee	Data Expansion	$85,000		$85,000
USGS Cooperative Agreement Oversight	Data Expansion	$25,000		$25,000
Groundwater Model Maintenance	Data Expansion	$95,000		$95,000
Tier 1: Interested Parties Outreach		***$427,500***	***$0***	***$427,500***
Support SVBGSA Public Meetings and Workshops: Board of Directors, Executive Committee, Budget Finance Committee, Advisory Committee, Implementation Committees	Outreach	$95,000		$95,000
Support Coordination with Partner Agencies, Water Quality Coordination Group & Land Use Jurisdiction Coordination Program	Outreach	$80,000		$80,000
Coordinate Tech Support Meetings and Stakeholder Engagement	Outreach	$215,000		$215,000
Coordinate Groundwater Technical Advisory Committee	Outreach	$37,500		$37,500
Tier 1: Management Actions		***$222,000***	***$0***	***$222,000***
Develop and Support Website for Central Coast Ag Water BMPs	Management	$50,000		$50,000
Refine Sustainability Strategy and Project Assistance: All Basins	Management	$80,000		$80,000
Conduct Technical Reviews and Provide Technical Services	Management	$92,000		$92,000
Tier 1: Program Administration		***$120,000***	***$0***	***$120,000***
Administer Sustainable Groundwater Management Program	Contract Admin	$120,000		$120,000
Tier 2 Activities				
Tier 2: SGMA Compliance and Project & Management Actions (PMAs)		***$1,168,500***	***$93,834***	***$1,074,666***
Assess Groundwater Benefits of Salinas River Stream Maintenance Programs	Management	$350,000		$350,000
Conduct Demand Management Dialogue Process	Management	$200,000	$50,834	$149,166
Assess Seawater Intrusion Model, Phase 1: 180/400	Data Expansion	$50,000		$50,000
Refine Sustainability Strategy: Eastside	Management	$15,000		$15,000

Refine Sustainability Strategy: Langley	Management	$15,000		$15,000
Scope CSIP Expansion, Initial Phase (Blue Plan It)	Management	$10,000		$10,000
Establish SMC Technical Advisory Committee: Forebay	Management	$25,000		$25,000
Establish SMC Technical Advisory Committee: Upper Valley	Management	$25,000		$25,000
Conduct Deep Aquifers Study - SVBGSA Share	Management	$89,250		$89,250
Conduct Deep Aquifers Study - Agriculture Share	Management	$131,750		$131,750
Prepare/Submit Annual Reports and Data Management	Data Expansion	$257,500	$43,000	$214,500
Other Activities in the Sustainable Groundwater Management Program Budget				
Other: SGM Program Activities Funded by DWR Round 1 Grant		***$360,000***	***$360,000***	***$0***
Develop Deep Aquifers Management Actions: 180/400	Management	$40,000	$40,000	$0
Develop Well Registration Program: 180/400	Data Expansion	$210,000	$210,000	$0
Plan and Implement Groundwater Model Updates: 180/400	Data Expansion	$100,000	$100,000	$0
Plan and Carry out Outreach to Underrepresented Communities and Domestic Well Owners: 180/400	Outreach	$10,000	$10,000	$0
Totals				
Tier 1 SGM Program Costs		$1,124,500	$0	$1,124,500
Tier 2 SGM Program Costs		$1,168,500	$93,834	$1,074,666
Other SGM Program Costs		$360,000	$360,000	$0
Total FY 2024 Costs		**$2,653,000**	**$453,834**	**$2,199,166**