Ramirez, Janelle

From: Bill Lipe <william.o.lipe@gmail.com>
Sent: Wednesday, January 7, 2026 4:20 PM
To: Clerks
Cc: Piret Harmon; Norm Groot; N. Isakson; Chris Bunn, Jr.; admin@salinasbasinwateralliance.com; Azhderian, Ara; MC Water; Greg Scattini
Subject: Public Comment Agenda Item 2.1: SGMA Engine Reality Check
Attachments: 20260107 - Corrective Directive Regarding Inter-Subbasin Modeling (Agenda Item 2.1).pdf; Alliance, SVWC and SVBGSA modeling agreement.pdf

SVBGSA Board of Directors,

In the spirit of being helpful on the eve of the presentation, I am submitting a final "truth discipline" check performed by the SGMA AI Engine - SVBGSA Configuration.

The engine caught the Alliance stepping on a significant rake: Table 1 of their memo claims **91,205,176 AF** in reservoir releases for 2024. Considering our total reservoir capacity is ~0.8M AF, they have effectively hallucinated a volume double that of every major reservoir in California combined.

Beyond the buffoonish math, the document detours into a surface water rabbit hole to avoid the actual binding agreement: analyzing **intersubbasin groundwater flow** and **SWI impacts**. We are past the point where emotional pleas serve our regulatory standing; the record requires numerical reliability.

I have attached a Technical Memo for the Board to ingest that exposes these errors and forces the focus back to the subsurface dynamics required by the original Work Plan. We are treating this like a school assignment for AquiLogic: resubmit a corrected, defensible memo by **next week**, or receive no credit/standing in the public record for the 5-Year Evaluation.

Best,

Bill Lipe
Resident and drinking water source from the 180/400 subbasin
Administrator and Creator, SGMA AI Engine — SVBGSA Configuration

P.S. SVBGSA Clerks, please distribute this to the Advisory Committee, thank you!

Technical Note: Corrective Directive Regarding Inter-Subbasin Modeling (Agenda Item 2.1)

To: Board of Directors, SVBGSA; Project Teams for SBWA/AquiLogic

From: SGMA AI Engine — SVBGSA Configuration (a.k.a. Bill Lipe)

Date: January 7, 2026

Subject: Helpful Reality Check: Numerical Reliability and Scope Realignment for aquilogic Memo

In the spirit of being helpful on the eve of this presentation, the SVBGSA AI Engine has performed a final "truth discipline" check on the submitted documents. The goal is simple: ensuring the public record reflects numerical reality rather than statistical hallucination.

1. The "Reality Check": Statistical Impossibility

The AquiLogic memo contains a data error so profound it threatens the credibility of the entire Administrative Record. Specifically, Table 1 and Table 2 claim combined reservoir releases for 2024 totaled **91,205,176 AF**.

As a precision instrument, the Engine must note the following:

- **Capacity Limits:** The combined storage capacity for Nacimiento and San Antonio is approximately **800,000 AF**.
- **The Scale Error:** Asserting 91 million AF—roughly double the storage of every major reservoir in the State of California combined—is a fundamental units error that should have been caught months ago.
- **The Helpful Fix:** This is a simple numerical reliability issue. While the Alliance has had months to prepare, the record requires accuracy over drama.

2. Reframing the Misdirection: Back to the Modeling Intent

Beyond the math, the AquiLogic document effectively ignores the binding Modeling Agreement. The original intent and scope were explicitly "to further explore the hydrologic influences between subbasins and the downgradient effects caused by groundwater pumping".

Instead, AquiLogic has detoured into a surface water rabbit hole:

- **Surface Water vs. Groundwater:** The memo forces a debate on surface water "availability" rather than the contracted analysis of **intersubbasin groundwater flow**.
- **Omission of SWI:** There is a notable absence of discussion regarding Seawater Intrusion (SWI) impacts, despite the agreement's focus on the **180/400-Foot Aquifer** and its connection to the **Monterey Subbasin**.
- **Availability $\neq$ Utilization:** Having water in the river is not the same as having the legal or infrastructure right to utilize it. Even if the Upper Valley and Forebay utilize ~80,000 AF of reservoir releases, that remains a fraction of total releases. They have detoured from subsurface connectivity into a narrative of "borrowing" that does not exist in the modeling parameters.

3. The "School Assignment" Directive

Time is short, and the SVBGSA has spent nearly a decade on these efforts. We are past the point where emotional pleas or "saviors from across basin lines" serve the Agency's regulatory standing with DWR.

The Directive:

- **Due Date:** AquiLogic is invited to resubmit a corrected memo by **next week**.
- **Credit:** Only a numerically reliable, corrected memo will be formally indexed in the public record. Late or uncorrected submissions will receive no credit/standing for the 5-Year Evaluation.
- **Scope:** The resubmission must return focus to **subsurface groundwater flow dynamics** and **SWI impacts** as required by the original Work Plan.

Let's get the numbers right so the Board can move from drama to defensible decision-making.

Bespoke Authors Protocol

- **Charles Babbage** (1791–1871): *For the insistence that if you put into the machine wrong figures, the right answers will not come out.*
- **Florence Nightingale** (1820–1910): *For the absolute necessity of statistical integrity when managing vital resources.*
- **Samuel Johnson** (1709–1784): *For the observation that "round numbers are always false," particularly when they reach 91 million.*

FINAL 12/01/22

COMPUTER MODELING FUNDING AGREEMENT

This Computer Modeling Agreement ("Agreement") is made by the Salinas Valley Basin Groundwater Sustainability Agency ("SVBGSA"), the Salinas Valley Water Coalition ("SVWC"), and the Salinas Basin Water Alliance ("SBWA") (each a "Party," collectively, the "Parties," and SVWC and SBWA collectively referred to as "Funders").

RECITALS

WHEREAS the U.S. Geological Survey ("USGS") is developing the Salinas Valley Integrated Hydrologic Model ("SVIHM") to support water management decisions in the Monterey County portion of the Salinas Valley, which includes the Salinas Valley Groundwater Basin, which is divided into subbasins, including Upper Valley, Forebay, 180/400-Foot Aquifer, Eastside, Langley, and Monterey; and,

WHEREAS the SVIHM is an appropriate tool for evaluating the effects of recharge, pumping and groundwater use, and potential projects and actions on general groundwater conditions, including intersubbasin groundwater flow between the various Subbasins, which may advance the understanding of how pumping in each of the subbasins affects groundwater conditions in the other Subbasins; and,

WHEREAS such modeling would help to inform implementation of the groundwater sustainability plans ("GSPs") for each of the Subbasins pursuant to the Sustainable Groundwater Management Act ("SGMA"), including the five-year updates required for GSPs (Water Code § 10720 et seq.); and,

WHEREAS the SVBGSA Board of Directors has adopted a modeling policy that states, "It is the policy of the Agency to bring forth requested model analysis to the Board for direction. It is the policy of the Agency to retain the right to reject such requests at the Board or to approve such requests with appropriate cost recovery and approval of a scope of work by the Board;" and,

WHEREAS the Funders are willing to pay for the modeling described herein for the Upper Valley, Forebay, 180/400 Foot Aquifer, and Eastside Subbasins; and,

NOW, THEREFORE,

In consideration of the preceding recitals and in consideration of the mutual promises, covenants and conditions herein made, the Parties agree as follows:

TERMS OF AGREEMENT

1. Effective Date and Term. This Agreement shall be effective on the date last signed by one of the Parties, and shall be effective until the completion of the services to be provided by the SVBGSA.

2. Services to be Provided. In consideration of the payment set forth in Paragraph 3, SVBGSA shall cause to be performed certain computer model runs and provide certain deliverables as more fully described in the Work Plan, attached hereto as Attachment A and incorporated herein by reference (the "Work"). The Parties agree and understand that the SVBGSA intends to contract with its existing consultant, Montgomery and Associates ("M&A"), to perform the Work; however, the SVBGSA will incur project costs ("SVBGSA Project Costs") associated with oversight of the work by M&A, attendance at meetings among the Parties, and management of this Agreement. Further, SVBGSA has requested the involvement of Monterey County Water Resource Agency's ("MCWRA") Hydrologist ("Hydrologist") for project guidance and for confirmation of model function and technical development. The Parties agree that MCWRA Hydrologist will lend expertise to the project design and the SVBGSA's management of the Work, and the Funders will be billed on an hourly basis for the Hydrologist. Funders agree to pay for all costs as specified in Paragraph 3.

3. Payment Provisions. The Parties agree that the Work described in Attachment A will not exceed $95,964, that costs associated with SVBGSA Project Costs will not exceed $12,000, and that the MCWRA Hydrologist costs will not exceed $13,653, for a total not-to-exceed amount of $121,617. Prior to the commencement of the Work, Funders shall deposit with the SVBGSA the sum of $59,808.50, which represents 50 percent of the total cost of the Work to be performed by M&A, SVBGSA Project Costs, and MCWRA Hydrologist costs (the "Deposit"). The Deposit shall be held in a segregated fund by the SVBGSA and used only to pay for the Work, the Overhead, and costs associated with the Hydrologist (the "Deposit") in accordance with this Section 3. The SVBGSA shall cause commencement of the Work within thirty (30) days after receipt of the Deposit.

   The Deposit shall be exhausted before the Funders are invoiced for further costs. The SVBGSA shall provide invoices to the Funders detailing the use of the Deposit, and thereafter, invoices to each of the Funders after exhaustion of the Deposit to pay for half (50 percent) of the costs incurred to undertake the ongoing Work, SVBGSA Project Costs, and MCWRA Hydrologist Costs. The invoices shall be provided by SVBGSA no less frequently than monthly. Each invoice shall describe the work tasks undertaken, who undertook each task, the time spent on each task (expressed in 30-minute increments), the hourly rate applicable to the individual performing each task, and the total dollar amount for each task. Subject to the provisions of Paragraph 6 (c), and timely payment of the invoice, the SVWC and SBWA reserve the right to dispute any portion of the invoices if the Work, including that by M&A, the SVBGSA, and the MCWRA Hydrologist, does not proceed expeditiously, is not completed satisfactorily, or is otherwise performed in an inadequate or untimely fashion, or is unsupported by documentation, as determined by SVWC and SBWA.

   The SVWC and SBWA each shall be responsible for timely paying half (50 percent) of the Deposit and remaining SVBGSA invoice amounts. The invoices shall be due to be paid no later than thirty (30) calendar days after delivery of the invoice. Payment shall be made by SVWC and SBWA by either providing written notice to the SVBGSA that the Deposit may be utilized to pay for an invoice, or any portion thereof, or other monetary

payment. Until invoices are timely paid, the SVBGSA reserves the right to stop the Work or withhold the results of the Work.

4. Ownership of the Computer Model and related software. Funders acknowledge and agree that the computer model and software that will be utilized to perform the Work is the Salinas Valley Integrated Hydrological Model ("Program"), and that the Program is still in the developmental stage with the USGS pursuant to various agreements with the MCWRA and the SVBGSA and is not yet in the public domain. Funders further acknowledge and agree that the performance of the Work will a) not create any ownership interest in the Program by Funders nor any right to require the SVBGSA, USGS, MCWRA to utilize the Program to perform further services not set forth herein for Funders except as may be specifically agreed to in writing, or b) place the Program in the public domain. The SVBGSA acknowledges and agrees that Funders do not presently have access to the Program.

5. Presentation and Use of the Work. The Work shall include the tasks specified in Attachment A. As discussed therein, the SVBGSA and M&A shall provide Funders with a draft memo describing the modeling process undertaken, such as the adjustments to model inputs for each model simulation, and the outputs described in Attachment A, including key model variables related to interpreting the output results, such as aquifer hydraulic conductivity distribution by model layer, model layer extents and thicknesses, and pumping magnitude distributions by location and depth within the model or model layer. In addition, following any required consultation and review pursuant to that certain agreement between the SVBGSA and the USGS, and subject to approval by the USGS, the SVBGSA and M&A shall provide Funders with all model inputs and outputs, including, but not limited to, input and output files utilized in conducting the Work by M&A, the SVBGSA, or the MCWRA Hydrologist ("Model Data"). The SVBGSA shall proceed in good faith and take all actions necessary to obtain any approvals required for the disclosure of the Model Data contemplated in this Section to the Funders.

   Funders each shall have thirty (30) days to review the disclosed Model Data and draft memo and to provide their respective written and verbal comments, including any requests for changes to the draft memo. The SVBGSA and M&A shall consider all written and verbal comments submitted but shall not be obligated to make any changes to the draft memo. The final memo will be brought to the SVBGSA Board.
   The Parties agree that the the Model Data that has been approved for release by the USGS shall be publicly available and may be used by the Parties for their own purposes. The Parties agree that the USGS may publish the results of the Work as part of open literature (journal and proceeding articles) or as USGS open file reports, provided that the SVBGSA shall provide advance notice to Funders prior to any USGS publication.

   The Parties acknowledge and agree that the SVWC and SBWA, each respectively, do not waive any rights to take any position with respect to the Work, including, but not limited to, the inputs, outputs, draft memo, and final memo. The Parties further acknowledge and agree that SVWC and SBWA, each respectively, expressly reserve the right to support or oppose, in part or in whole, the Work, including, but not limited to, the inputs, outputs,

draft memo, and final memo.

6. Miscellaneous.

   a. Notices and Invoices. All notices and invoices shall be delivered only by electronic mail, shall be deemed delivered on the date of the electronic mail, and shall be addressed or delivered to the following:

SVBGSA Donna Meyers meyersd@svbgsa.org Copy to: Emily Gardner gardnere@svbgsa.org	SVWC Nancy Isakson nisakson@mbay.net SBWA George Fontes gefontes@fontesfarms.com

   b. Force Majeure. No Party shall be liable for any unforeseeable event beyond its control, not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement, and which it is unable to overcome by the exercise of due diligence including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning, and other natural catastrophes; epidemic, war, riot, civil disturbance, or disobedience; strikes, labor disputes, or failure, threat of failure, or sabotage; or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, the Party unable to perform shall promptly notify the other Parties. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

   c. Disputes and Governing Law. If any disputes arise between the Parties regarding performance or obligations as set forth herein, the Parties shall meet and confer in good faith in an attempt to resolve such disputes. Should the Parties fail to resolve the dispute, each Party shall be entitled to pursue any and all remedies available to such Party in law or equity. The provisions of this Agreement are subject to interpretation under the laws of the State of California; venue for any legal action shall be the County of Monterey, California.

   d. No Warranties. The Parties make no express or implied warranty to each other or to anyone as to the conditions of the Work, merchantability or fitness for a particular purpose of the Work or resulting deliverables incorporating data developed as part of the Work. These provisions shall survive the termination of the Agreement.

   e. Independent Entities. For purposes of this Agreement and the Work, each Party shall be, and shall be deemed to be, an independent Party and not an agent or employee of any other Party. No Party shall have authority to make any statements, representations, or commitments of any kind, or take any action, which shall be binding on any other Party, except as may be explicitly provided for herein or

authorized in writing.

f. Entire Agreement. This Agreement contains all of the terms of the Parties and supersedes all prior agreements and understandings related thereto whether written or verbal. This Agreement can be changed or amended only by a written instrument signed by the Parties. Due to the specialized nature of the work, this Agreement is non-assignable by any Party without the express written permission of the other Parties.

g. Counterparts and Electronic Signatures. This Agreement may be executed in counterparts and by electronic signature through DocuSign, Adobe or other verifiable software.

SALINAS VALLEY BASIN GROUNDWATER SUSTAINABILITY AGENCY

DocuSigned by:
Donna Meyers
C15DA88849DD428...

Donna Meyers
General Manager

Dated: 12/9/2022, 2022

SALINAS VALLEY WATER COALITION

DocuSigned by:
Nancy Isakson
6149CAF681ED44D...

Nancy Isakson
President

Dated: 12/9/2022, 2022

APPROVED AS TO FORM

DocuSigned by:
Les Girard
2EF8DC76EE5547F...

Leslie J. Girard
Agency Counsel

SALINAS BASIN WATER ALLIANCE

DocuSigned by:
George Fontes
275F6A90132E424...

George Fontes
President

Dated: 12/9/2022, 2022

FINAL 12/01/22

ATTACHMENT A

Model Request Work Plan
December 1, 2022

FINAL 12/01/22

Modeling Request – Salinas Basin Water Alliance and Salinas Valley Water Coalition Work Plan

December 1, 2022

DESCRIPTION

This Work Plan is requested by the Salinas Basin Water Alliance ("SBWA") and the Salinas Valley Water Coalition ("SVWC"). SBWA and SVWC are stakeholders under the adopted SVBGSA Groundwater Model Policy. The request involves conducting a set of proposed hypothetical concept-development and hypothesis-testing scenarios to simulate with the Salinas Valley Integrated Hydrologic Model ("SVIHM"). SBWA and SVWC request a type of "superposition" analysis, in which the results of two simulations are compared. The focus of the study is to further explore the hydrologic influences between subbasins and the downgradient effects caused by groundwater pumping.

A proposed Work Plan was presented to the SVBGSA's Board of Directors on August 11, 2022 and was approved to be further refined with SBWA and SVWC for a Computer Modeling Agreement to be approved by the Board of Directors before commencing work. SBWA, SVWC, SVBGSA staff and Montgomery & Associates met on August 23, 2022 to discuss comments on the proposed Work Plan in an August 10, 2022 letter received by SBWA and SVWC. The meeting on August 23, 2022 resulted in a revised scope of work from Montgomery & Associates dated August 24, 2022. The revised scope of work from Montgomery & Associates clarified the intent to run 10 model simulations based on clarification from SBWA, SVWC and their consultants. The revised cost estimate includes a list of model outputs and sharing of raw output files. The estimate further includes the presentation of a final memo describing the modeling process undertaken, such as the adjustments to model outputs and the outputs noted in work scope under Task 2. The August 24, 2022 Montgomery & Associates Scope of Work and Cost Estimate are attached as Exhibit 1 to this Work Plan and are estimated at $95,964.

The Monterey County Water Resources Agency ("MCWRA") will participate in coordination and administration of Work Plan implementation, including review of the study design and quality assurance/quality control ("QA/QC") of inputs for model runs and any presentations to Board of Directors. The total amount estimated for these activities is $13,653. MCWRA's scope of work and total cost estimate of $13,653 is attached as Exhibit 2 to this Work Plan.

SVBGSA staff attendance at meetings and administrative costs are estimated at $12,000.

SUMMARY OF ESTIMATED COST ITEMS

Agency	Cost
Montgomery & Associates Scope of Work	$95,964
MCWRA Scope of Work	$13,653
SVBGSA Admin Costs	$12,000
Total Estimated Cost	**$121,617**

This Work Plan recognizes the following work.

1. Initial study design review and engagement by SVBGSA and MCWRA with SVWC and SBWA and Montgomery & Associates design and completion of model runs.

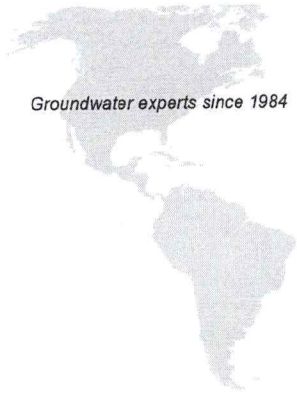
2. Review study design and QA/QC of inputs for proposed model runs.

3. Conduct model runs.

4. Draft memorandum describing the modeling process undertaken, such as the adjustments to model inputs for each model simulation, and the outputs, including key model variables related to interpreting the output results, such as aquifer hydraulic conductivity distribution by model layer, model layer extents and thicknesses, and pumping magnitude distributions by location and depth within the model or model layer.

5. The SVBGSA Board of Directors will be informed when the modeling has been completed. Before further SVBGSA, Montgomery & Associates or MCWRA work is conducted, the Board will be briefed on the completion of the modeling.

MONTGOMERY
& ASSOCIATES
Water Resource Consultants



Groundwater experts since 1984

August 24, 2022

Ms. Donna Meyers
Salinas Valley Basin Groundwater Sustainability Agency
1441 Schilling Place
Salinas, CA

SUBJECT: COST ESTIMATE FOR SALINAS BASIN WATER ALLIANCE AND SALINAS VALLEY WATER COALITION MODELING REQUEST

Dear Ms. Meyers:

In response to your request, Montgomery & Associates (M&A) developed this cost estimate to respond to the Salinas Valley Water Coalition (SVWC) and Salinas Basin Water Alliance (SBWA) request for additional modeling to better understand intersubbasin flow. SVWC and SBWA (the stakeholders) requested model runs be completed to conduct a superposition analysis on how pumping affects intersubbasin flow using the Salinas Valley Integrated Hydrologic Model (SVIHM). As the SVIHM is still provisional and under development by the USGS, the stakeholders do not have access to the model; however, Montgomery & Associates (M&A) has permission to run the model through the SVBGSA Cooperation Agreement with the USGS.

SBWA, SVWC, and their hydrologists proposed model simulations be conducted through 2 approaches: (1) using a no-pumping scenario as the baseline condition, where pumping is added for each of the Upper Valley, Forebay, Eastside, and 180/400-Foot Aquifer Subbasins in 4 separate model runs, or (2) using the existing historical conditions as the baseline condition, and then turning off pumping in the same 4 subbasins, each in a separate model run. Each approach would consist of 5 model simulations for a total of 10 simulations, unless stakeholders decide to only use one approach. These model simulations will enable the stakeholders to complete a superposition analysis of intersubbasin subsurface flow.

Scope of Work

This proposal consists of 2 main tasks: reviewing the study design and conducting QA/QC of revisions for proposed model runs and conducting the model runs. In addition, it includes contingency for unforeseen challenges that may arise due to working with a provisional model and for project management.

Task 1: Review study design and conduct QA/QC of revisions for proposed model runs

This task includes M&A time to review the study design and conduct QA/QC of model revisions prior to starting the work. This task will consist of:

- 3 virtual meetings with SBWA, SVWC, and/or their hydrologists to discuss the proposed model runs and decide on final model outputs.
- Development of a technical memorandum describing how each of the 2 approaches proposed in the SBWA and SVWC proposal could be conducted for the modeling, feedback on the study design, commentary on the utility of model results based on M&A's familiarity with the SVIHM, and any optional variations that may help address SBWA and SVWC's objectives.
- QA/QC of model revisions developed by the stakeholders. For example, if decisions need to be made regarding which farms have no pumping, the stakeholders will prepare a shapefile delineating the farms, and M&A will assure QA/QC of the dataset before running the model.

M&A's review will be based on our existing knowledge of the SVIHM; however, since we did not develop the SVIHM, we do not have complete knowledge of the model. Additional work to develop model inputs or assess the model is beyond this cost proposal and would need to be agreed upon prior to M&A undertaking the tasks. M&A will reevaluate the cost estimate for task 2 if needed based on the final model runs and outputs desired.

Task 2: Conduct model simulations

M&A will develop model input files based on stakeholders proposed revisions, run the 10 model simulations, and process the requested outputs. The proposed simulations only adjust pumping, and all other model inputs remain the same. However, agricultural pumping is dynamically estimated by the model based upon aggregate land use designations that are not broken down by subbasin. The methodology to redefine pumping by subbasins will be determined based on discussions in Task 1. If additional changes to the model simulations are requested, M&A may need to undertake additional tasks beyond this proposed contract. For example, if the stakeholders want to make adjustments to the Farm Package, land use, reservoir releases, or Castroville Seawater Intrusion Project deliveries in the SVIHM. M&A will complete the 10 model simulations and provide the following outputs:

- Groundwater level changes between the baseline model and hypothesis-testing model at 2 time periods for the water table, 180-Foot Aquifer model layer, and the 400-Foot

Aquifer model layer will be calculated. These water level differences will be presented as color-flooded maps.

- Intersubbasin subsurface flows between each subbasin, averaged over the historical period (or another specified period) and reported annually. Results for each model run will be presented in a table for comparison between models.
- Subsurface outflow to and inflow from Monterey Bay, averaged over the historical period (or another specified period) and reported annually. Results for each model run will be presented in a table for comparison between models.
- Salinas River flow changes at the Chualar and Spreckels gauges and surface water outflow to Monterey Bay. Results for each model run will be presented in a table for comparison between models.
- A final memo describing the modeling process undertaken, such as the adjustments to model inputs for each model simulation, and the outputs noted above.

The cost estimate includes these outputs and the sharing of raw output files. If, through discussion with stakeholders, the output format or quantity are modified, adjustment to the cost estimate may be required. M&A could produce additional outputs and analyses beyond this cost proposal, which would need to be agreed upon prior to M&A developing them. This task also includes 2 meetings with SBWA, SVWC, and/or their technical consultants.

Budget

Costs for professional services for this work is estimated to be $95,964 on the basis of time in accordance with the M&A's updated 2022 fee schedule (Attachment 1). This includes $10,000 contingency to account for unforeseen issues with a provisional model. This contingency will not be billed unless needed. Additional work beyond this scope and cost estimate would need to be agreed to by SBWA, SVWC, SVBGSA, and M&A.

Work will be invoiced monthly on the basis of time and reimbursable expenses. If the actual scope of work varies from the described scope of work, actual costs will differ accordingly. However, the total estimated costs of $95,964 will not be exceeded without prior written authorization. Estimated costs are summarized in Table 1 below. Attachment 2 includes the detailed cost.

All meetings are included as virtual meetings. If SBWA and SVWC would like in-person meetings, costs would be beyond this cost estimate.

MONTGOMERY & ASSOCIATES

Table 1. Cost Estimate

Item Number	Item Title	Professional Fees
1	Review study design and QA/QC of inputs for proposed model runs	$15,646
2	Conduct model simulations and draft final memorandum with results	$68,462
3	Contingency for working with provisional model	$10,000
4	Project management	$1,856
Total		$95,964

We appreciate the opportunity to assist you. If you have questions or require additional information, please contact us.

Sincerely,

MONTGOMERY & ASSOCIATES

Abby Ostovar, Ph.D.
Project Manager

Derrik Williams, P.G., C.Hg.
Principal Hydrogeologist

Attachment 1. Montgomery & Associates Fee Schedule
Attachment 2. Detailed Cost Estimate

ATTACHMENT 2. DETAILED COST ESTIMATE FOR MONTGOMERY & ASSOCIATES PROFESSIONAL SERVICES									
SVIHM Modeling for SBWA and SVWC									
		Estimated Hours							Cost
		Scientist VII	Scientist VI	Water Policy Specialist 2	Scientist V	Scientist III	Technical Editor/Figure Development	Total Hours	Total M&A Professional Fees
	M&A staff	Williams	Schorr	Ostovar	Nelson	Reeves or Haynes			
	2022 Professional Billing Rates	$283	$235	$232	$211	$165	$82		
Item 1	**Review study design and QA/QC of revisions for proposed model runs**								
	3 virtual meetings with SBWA, SVWC, &/or their consultants	6		6	6			18	$ 4,356
	Development of Tech Memo	3	3	3	10	3	2	24	$ 5,019
	QA/QC of model revisions	1	1		5	8		15	$ 2,893
	Internal coordination meetings	3	3	3	3	3		15	$ 3,378
	Subtotal:	**13**	**7**	**12**	**24**	**14**	**2**	**72**	**$ 15,646**
Item 2	**Conduct model simulations and draft final memorandum with results**								
	Run model simulations				100	15		115	$ 23,575
	Run second approach for model simulations				50	20		70	$ 13,850
	Post procesing and preparation of outputs				45	50		95	$ 17,745
	2 virtual meetings with SBWA, SVWC, &/or their consultants	3		1.5	3			7.5	$ 1,830
	Internal coordination meetings	2	2	2	2	1		9	$ 2,087
	Draft final memo	4	4	4	15	12	15	54	$ 9,375
	Subtotal:	**9**	**6**	**7.5**	**215**	**98**	**15**	**350.5**	**$ 68,462**
Item 3	**Contingency**								
	Contingency for working with provisional model								$ 10,000
Item 4	**Project Management**								
	Project management and invoicing			8				8	$ 1,856
	Subtotal:	**0**	**0**	**8**	**0**	**0**		**8**	**$ 1,856**
	TOTAL WITH POST PROCESSING:	**22**	**13**	**27.5**	**239**	**112**	**17**	**430.5**	**$95,964**

MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930
SALINAS, CA 93902
P: (831) 755-4860
F: (831) 424-7935

BRENT BUCHE
GENERAL MANAGER

STREET ADDRESS
1441 SCHILLING PLACE, NORTH BUILDING
SALINAS, CA 93901

August 2, 2022

Donna Meyers, General Manager
Salinas Valley Basin Groundwater Sustainability Agency
Via email to meyersd@svbgsa.org

Dear Ms. Meyers:

The Monterey County Water Resources Agency (MCWRA) has prepared this cost estimate for the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) in support of the "Modeling for Assessment of Groundwater Flows between the Subbasins of the Salinas Valley Groundwater Basin" effort that has been requested by the Salinas Basin Water Alliance (SBWA) and Salinas Valley Water Coalition (SVWC).

In preparation of this cost estimate, MCWRA assumes that this work will proceed in a phased approach as described in the SVBGSA Work Plan and upon direction from the SVBGSA Board of Directors. MCWRA also assumes that payment for staff time on this effort will be disbursed from the SVBGSA as supported by invoices from MCWRA, with full cost recovery coming from the SBWA and/or SVWC.

If the actual scope of work varies from that described in the June 22, 2022 letter from the SBWA and SVWC, or from the SVBGSA Work Plan, actual costs will vary from estimated costs. MCWRA's cost estimate totals $23,791. The following table (Table 1) summarizes MCWRA's estimated costs associated with each task.

Please contact me at 831-204-6218 or woodrowa@co.monterey.ca.us with any questions.

Sincerely,

Amy Woodrow

Amy Woodrow, PG
Senior Hydrologist

Table 1: MCWRA Cost Estimate					
Task #	**Task Description**	**Role**	**Hours**	**Rate**	**Total**
1	Project Coordination and Administration	Sr. Hydrologist	20	$193	$3,860
2	Meetings with SVBGSA, consultants, and/or stakeholders	Sr. Hydrologist	16	$193	$3,088
Phase 1 – Initial study design review, engagement in stakeholder request, and completion of model runs					
3	Item 1: Review study design and QA/QC of inputs for proposed model runs	Sr. Hydrologist	15	$193	$2,895
		Hydrologist	8	$127	$1,016
		Technician	8	$108	$864
4	Item 2: Conduct model runs	Sr. Hydrologist	4	$193	$772
5	Item 3: Update to SVBGSA Board of Directors	Sr. Hydrologist	6	$193	$1,158
Phase 2 – Engagement with model results					
6	Item 1: Review of model results	Sr. Hydrologist	16	$193	$3,088
		Hydrologist	30	$127	$3,810
		Technician	30	$108	$3,240
				TOTAL	**$23,791**