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SENT VIA: EMAIL

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SUBJECT: Proposal to Provide Professional Services to Implement the Upper Temescal Valley Salt and Nutrient Management Plan for the Elsinore Valley MWD and Eastern MWD

Dear Messrs. Kalaria and Javier:

Pursuant to your request, West Yost has prepared this letter proposal to provide the Elsinore Valley Municipal Water District (Elsinore Valley MWD) and the Eastern Municipal Water District (Eastern MWD) with a proposed scope of services, budget, and schedule for the implementation of the Upper Temescal Valley Salt and Nutrient Management Plan (UTV SNMP) for the calendar years (CYs) 2021 through 2023 monitoring and reporting periods.¹

From 2013 to 2017, Wildermuth Environmental, Inc. (who has been acquired by West Yost and hereafter is referred to as such)², in collaboration with Elsinore Valley MWD and Eastern MWD, performed the technical work to develop the UTV SNMP. The work to develop the SNMP is documented in the 2017 UTV SNMP³ final report which was approved by the Santa Ana Water Quality Control Board (Regional Board) for incorporation into the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) on December 4, 2020. The amended Basin Plan⁴ requires Elsinore Valley MWD and Eastern MWD to implement specific management actions defined in the UTV SNMP and includes a compliance schedule. In 2020, West Yost completed the first required update to the UTV SNMP per the 2017 implementation actions: the 2020 UTV SNMP.⁵ The 2020 UTV SNMP included refinements to the 2017 implementation actions that are necessary to fulfill the objectives of the UTV SNMP and Basin Plan requirements.

This proposal outlines (1) the implementation actions and compliance schedules required under the 2020 UTV SNMP and the recommended program planning budget for the CYs 2021 through 2023 reporting

¹ The monitoring and reporting period for the Regional Board is in calendar year.

² The West Yost staff assigned to work on the UTV SNMP are the same WEI staff that have previously managed and worked on the program development and implementation.

³ Wildermuth Environmental, Inc. (2017). Salt and Nutrient Management Plan for the Upper Temescal Valley. Prepared for the Elsinore Valley Municipal Water District and Eastern Municipal Water District, September 2017.

⁴ The amended Basin Plan refers to the incorporation of the UTV SNMP into the Basin Plan.

⁵ West Yost. (2020). Upper Temescal Valley Salt and Nutrient Management Plan – 2020 Update. Prepared for Prepared for the Elsinore Valley Municipal Water District and Eastern Municipal Water District, November 2020.

periods and (2) describes the scope of services, budget, and schedule proposed by West Yost to support the implementation of certain actions. Having supported the development and implementation of the UTV SNMP since 2013, West Yost staff is uniquely qualified to continue to support this work. We are grateful for the opportunity to continue to serve the Elsinore Valley MWD and Eastern MWD.

UTV SNMP IMPLEMENTATION PLAN ACTIONS AND RECOMMENDED PLANNING BUDGET

Pursuant to the 2020 UTV SNMP, the Elsinore Valley MWD and/or Eastern MWD are required to implement the following seven management actions:

1. Implement a surface water and groundwater monitoring program to collect the data required to support the objectives of the UTV SNMP. This is a joint management action for Elsinore Valley MWD and Eastern MWD.
2. Prepare triennial reporting of water supply and discharge water quality management. Each agency will prepare its own separate report of activities.
3. Participate in the regional efforts to periodically update the wasteload allocation (WLA) analysis for recycled water discharges to the Santa Ana River and its tributaries. This is a regional stakeholder effort external to the SNMP that each agency already contributes to financially and through participation in meetings and project implementation.
4. Develop a salt offset plan for recycled water discharges that periodically exceed discharge permit limits. This is a joint management action for Elsinore Valley MWD and Eastern MWD.
5. Periodic update of current and projected ambient water quality. This is a joint management action for Elsinore Valley MWD and Eastern MWD.
6. Periodic update of the SNMP action items pursuant to the ambient water quality findings. This is a joint management action for Elsinore Valley MWD and Eastern MWD.
7. Annual reporting of progress and activities related to implementation of the SNMP. This is a joint management action for Elsinore Valley MWD and Eastern MWD.

Table 1 summarizes the implementation actions that must be implemented in CYs 2021 through 2023. Table 1 shows the action item due date, the date the project should commence to meet the deadline⁶, the estimated cost to complete the scope of work to be performed in each CY, and the responsible agency for implementing the action item. The cost estimates are only provided for the implementation actions that are a joint effort between Elsinore Valley MWD and Eastern MWD (see cells highlighted in blue in Table 1). The estimated costs shown in Table 1 represent the best budget-level estimate that can be made on currently-available information, and the estimated costs for some actions are more precise than others. The notes included in Table 1 define which cost estimates should be interpreted as budget-level placeholders. The total recommended program budget for the implementation actions that are a joint

⁶ Note that the proposed schedule for the implementation actions described herein is the ideal scenario. However, based on consideration of possible external funding for some proposed tasks within the 2020 UTV SNMP, the proposed schedule may need to be revised to accommodate the acquisition of such funds. Additionally, the schedule may need adjustment to account for changed conditions in the evolving pandemic situation, including the impacts of budgetary constraints.

will need to include steps to improve the model. Such model improvements will use the information obtained from the monitoring programs and the hydrogeologic characterization that is being developed for the Groundwater Sustainability Plans (GSPs) for Bedford-Coldwater and Elsinore Valley Subbasins. The scope of services of the salt offset plan will include a plan and schedule for the update of the surface water model.

Table 5 is a detailed line-item work breakdown structure that shows the scope of services (the major tasks and subtasks) required to prepare the salt offset plan. For each task and subtask, Table 5 shows the labor hours, labor cost, and other direct costs to prepare the plan for CY 2021. The major tasks include:

- Task 1. Evaluate the TDS Impact of Elsinore Valley and Eastern Recycled Water Discharge Exceedances
- Task 2. Develop and Select Project Alternative to Address Impacts
- Task 3. Preliminary Evaluation of Project Alternatives
- Task 4. Prepare Salt Offset Plan Report
- Task 5. Meetings and Project Management

The cost to prepare the offset plan in CY 2021 is \$109,898. The precise cost of implementing the plan will not be known until it is developed. For budgeting purposes, the costs shown in Table 1 for CY 2022 and CY 2023 assumed that the annual cost to implement the salt offset plan will be \$50,000. The program budget for these future years will need to be revisited upon completion of the salt offset plan.

To complete the salt offset plan by the Basin Plan compliance deadline, this work should ideally begin by June 2021. The draft offset plan and the final offset plan will be submitted to the Regional Board by November 15, 2021 and by December 31, 2021, respectively.

Recalculation of Current and Projected Ambient Water Quality (Item 10)

The 2017 UTV SNMP recommended periodic recomputation of ambient water quality of the UTV GMZ. Current and projected ambient TDS and nitrate concentrations must be recomputed periodically to assess assimilative capacity and compliance with Basin Plan objectives. The frequency of this work has not been formalized by the Regional Board and has been deferred until an updated methodology for computing ambient water quality can be developed for the UTV SNMP. In the 2020 UTV SNMP, the Elsinore Valley MWD and Eastern MWD proposed to prepare a recommendation to the Regional Board to update the methodology for computing current and/or projected ambient water quality by December 31, 2022. This deadline is necessary to ensure that the next recomputation ambient water quality can be completed in 2023 – the same timeframe required for the rest of the Santa Ana Watershed in the Basin Plan.

The ambient water quality methodologies will be based on the analyses, hydrogeologic conceptual models, and numerical models that are currently being developed by the GSPs for Bedford-Coldwater and Elsinore Valley Subbasins, this work is due to be published by January 2022.

The cost to prepare the methodology workplan in CY 2022 is assumed to be \$25,000. The cost to perform the methodology is assumed to be \$35,000 in CY 2023.

Table 1
Summary of Cost Estimates of UTV SNMP Implementation Action Items for the CYs 2021 through 2023

Item	Upper Temescal Valley SNMP Implementation Action Item	Budget Start Date ¹	Due Date ²	CY 2021 Cost Estimate	CY 2022 Cost Estimate	CY 2023 Cost Estimate	3-Year Total Cost Estimate	CY 2021 Line-item Cost Estimate Table Attached	Responsible Party	Notes
1	UTV SNMP Monitoring and Reporting Program, Including 2020 and 2021 Annual Reports	January 12, 2021	Monitoring: Ongoing Reports: April 15, 2021 and April 15, 2022	\$108,526	\$112,324	\$116,255	\$337,105	Table 2	Elsinore Valley and Eastern Joint Effort	
2	First quarterly sampling of Regional WRF to test for all major anions and cations	n/a	March 31, 2021 and quarterly thereafter	n/a	n/a	n/a	n/a	n/a	Elsinore Valley Only	Assumed to be directly performed and funded by Elsinore Valley
3	Develop and implement a stormwater sampling program ³	July 1, 2021	September 30, 2021	\$25,493	\$25,000	\$18,000	\$68,493	Table 3	Elsinore Valley and Eastern Joint Effort	The stormwater sampling program will be developed in CY 2021. The deliverable will include recommendations for additional work in CY 2022 and 2023. The cost of implementing these recommendations is a budget-level placeholder.
4	Triennial report – Elsinore Valley ⁴	n/a	August 15, 2021	n/a	n/a	n/a	n/a	n/a	Elsinore Valley Only	Also satisfies requirements of the Elsinore GMZ Maximum Benefit Commitments
5	Triennial report – Eastern ⁴	n/a	August 15, 2021	n/a	n/a	n/a	n/a	n/a	Eastern Only	Also satisfies San Jacinto Upper Pressure Maximum Benefit Commitments.
6	Surface Water Discharge Monitoring Program ⁵	July 1, 2021	February 28, 2022	\$78,005	\$59,888	\$133,965	\$271,859	Table 4	Elsinore Valley and Eastern Joint Effort	The feasibility-level work plan for the installation of surface water discharge monitoring stations will be developed in CY 2021. The deliverable will include recommendations for additional work in CY 2022 and 2023. The cost of implementing these recommendations is a budget-level placeholder.
7	Salt offset plan	April 1, 2021	December 31, 2021	\$109,898	\$50,000	\$50,000	\$209,898	Table 5	Elsinore Valley and Eastern Joint Effort	The deliverable will include recommendations for additional work in CY 2022 and 2023. The cost of implementing these recommendations is a budget-level placeholder.
8	Complete construction of monitoring wells in Lee Lake and Warm Springs	n/a	December 31, 2021	n/a	n/a	n/a	n/a	n/a	Elsinore Valley Only	Assumed to be directly performed and funded through the Elsinore Valley GSP work
9	Engineering work and schedule for monitoring well in Bedford	n/a	December 31, 2021	n/a	n/a	n/a	n/a	n/a	Elsinore Valley Only	Assumed to be directly performed and funded through the Bedford-Coldwater GSP work
10	Recalculation of current and projected ambient water quality	July 1, 2022	December 31, 2022	n/a	\$25,000	\$35,000	\$60,000	n/a	Elsinore Valley and Eastern Joint Effort	The methodology for estimating current and projected ambient TDS and nitrate concentrations will be reviewed and updated in CY 2022. The recalculation of current ambient may be delayed until 2025 depending on negotiations with Regional Board. The cost is a budget-level placeholder for scope if performed in 2023, which would not need an SNMP plan update.
Total (Excludes Items 4 and 5)				\$321,922	\$272,212	\$353,220	\$947,355			

Notes:

Highlighted rows in blue are items that are covered under this UTV SNMP proposal letter.

1-- Represents the date that the budget would need to be available to start work based on the "ideal" schedule defined for the Regional Board with the exception of items 3 and 6 (see Notes [3] and [5] below).

2-- Represents "ideal" schedule defined for the Regional Board with the exception of items 3 and 6 (see Notes [3] and [5] below).

3-- The due date based on the ideal schedule defined for the Regional Board was June 30, 2021. Based on the existing budget, this work cannot reasonably start until July 1, 2021, thus the due date has been shifted to September 30, 2021.

4 -- Elsinore Valley MWD and Eastern MWD are required to submit separate triennial reports. These items are not joint management efforts and, therefore, are not included in this budget proposal.

5-- The due date based on the ideal schedule defined for the Regional Board was December 31, 2021. Based on the existing budget, this work cannot reasonably start until July 1, 2021, thus the due date has been shifted to February 28, 2022.

Table 2
Work Breakdown Structure and Fee Estimate for Professional Services:
to Support the Implementation of the Upper Temescal Valley SNMP Monitoring Program CY 2021 and CY 2022 (Item 1*)

Task and Subtask Descriptions	Notes	Labor and Cost Estimate									Reimbursable Expenses					Annual Project Costs			
		Principal II	Senior I/II	Staff II	Staff I	Field Technician	Tech Editor/Admin	Task Repetition	Person Hours	Labor Cost		Travel	Field Equipment Purchase	Field Equipment Rental	Total		Sub-Task	Task	
										Sub-Task	Task				Sub-Task	Task			
SNMP Monitoring Program																			
Task 1 - Field Groundwater Monitoring Program																		\$22,787	
1.1 Quarterly field groundwater-level and water quality monitoring at 8 wells	a,b		1.00		12.00		4.00	52.00	\$ 4,700.00			\$720		\$180	\$900			\$ 5,600.00	
1.2 Process, QA/QC, and load water level and water quality data to HydroDaVE			1.50	6.00	4.00		4.00	46.00	\$ 7,724.00					\$0				\$ 7,724.00	
1.3 As needed equipment maintenance, troubleshooting and/or replacement			4.00	2.00	9.00	1.00	15.00	\$ 1,734.00			\$180	\$5,000	\$88	\$5,268			\$7,002		
1.4 As needed field visits to canvass additional wells for monitoring, if new wells identified			2.00	3.00	9.00	1.00	14.00	\$ 1,669.00					\$64	\$64			\$1,733		
1.5 Contingency for field groundwater-level and water quality monitoring for additional wells	c		1.00		4.00	1.00	5.00	\$ 503.00			180		45	\$225			\$728		
Task 2 - Field Surface Water Quality Monitoring Program																	\$33,611		
2.1 Collect grab water quality samples at up to 7 surface water sites (biweekly in Jan, Feb, Mar, Apr, Nov, Dec; monthly from May through Oct)	b,d e		1.00		12.00		19	247	\$22,325			\$1,710		\$1,007	\$2,717			\$25,042	
2.2 Process, QA/QC, and load water quality data to HydroDaVE			0.25	1.00	1.50		19	52.25	\$8,569					\$0				\$8,569	
Task 3 - Cooperator Data Acquisition and Management																	\$15,117		
3.1 Coordinate with well owners who are monitoring production, water levels, water quality, and or discharge to collect data on a periodic basis. Download online data sources for surface water discharge and quality. Process, QA/QC, and load data to HydroDaVE.			0.50	12.50	10.25		4	93	\$15,117					\$0				\$15,117	
Task 4 - Reporting																	\$20,947		
4.1 Prepare draft annual report and review with Elsinore Valley and Eastern staff			5.00	20.00	40.00	20.00	8.00	1	93	\$16,347					\$0				\$16,347
4.2 Prepare final annual report and submit to the Regional Board			1.00	5.00	8.00	10.00	3.00	1	27	\$4,600					\$0				\$4,600
Task 5 - Meetings and Project Management																	\$16,064		
5.1 Participate in four project progress conference calls with Elsinore Valley and Eastern Staff			1.00	2.00			4	12	\$2,160					\$0				\$2,160	
5.2 As needed meeting and coordination with the Regional Board			7.50	15.00			1	22.5	\$4,508					\$0				\$4,508	
5.3 Project administration and management			0.25	0.50	2.50		16	52	\$9,396					\$0				\$9,396	
Project Total (CY 2021)		13.75	30.75	97.00	47.75	46.00	11.00	730.75	\$99,352					\$9,174			\$108,526		
Project Total (CY 2022) - assumes a 3.5% increase from CY 2021 budget	f																\$112,324		
Project Total (CY 2023) - assumes a 3.5% increase from CY 2022 budget	f																\$116,255		
3-Year Budget Total																	\$337,105		

Notes

- * In reference to Item 1 in Table 1.
- a The wells to sample are Gregory 1, Station 70, Barney Lee 1, Barney Lee 2, Barney Lee 3, Barney Lee 4, Alberhill 2, and Cemetery.
- b The cost estimate does not include costs for laboratory analysis of water quality samples. Assumes that this cost will be handled directly between Eastern and Elsinore Valley.
- c Contingency for monitoring of additional wells that can be added to the 8 existing wells in the field groundwater monitoring program. These wells include monitoring wells from the Bedford-Coldwater GSP and Elsinore GSP as well as other wells (i.e. private or production wells in the Upper Temescal valley GMZ).
- d It is anticipated that the majority of the surface water sites will be dried or not-discharging from May through October, so the field work and data processing costs will likely be cheaper as only time and materials are billed. And, equipment rental costs are not charged if all surface water sites are dry during a field sampling event.
- e Surface water sampling events require two field technicians due to health and safety issues of accessing remote sites along Temescal Wash.
- f Assumes the scope of work for CY 2022 and CY 2023 is the same as CY 2021.

Table 3
Work Breakdown Structure and Fee Estimate for Professional Services:
to prepare a Scope of Work for a Stormwater Sampling Program in the Upper Temescal Valley Watershed (Item 3*)

Task and Subtask Descriptions	Notes	Labor Hours and Cost							Other Direct Charges (Travel)	Annual Project Costs		
		Principal III	Principal II	Supervising I	Senior I	Staff II	Tech Editor/Admin	Task Multiplier		Person Hours	Labor Cost	Sub-task Totals
Task 1 - Research and Development of a Stormwater Monitoring Program												
1.1 Preliminary Research of Potential Field Methods	a						1	0	\$0		\$0	
1.2 Site Visit to Temescal Wash		6		6		6	1	18	\$4,230	\$90	\$4,320	
1.3 Follow-up Research of Potential Field Methods				1		2.5	1	3.5	\$671		\$671	
1.4 Research on forecasting methods		1			2	4	1	7	\$1,365		\$1,365	
Task 2 - Prepare Scope of Work for Stormwater Monitoring Program												
2.1 Prepare Draft Sampling and Analysis Plan (SAP)		4	4	16	6	16	6	1	52	\$10,998	\$10,998	
2.2 Review and Revise Draft and Prepare Final SOW and SAP		2	2	4	2	6	4	1	20	\$4,086	\$4,086	
Task 3 - Project Management												
3.1 Meetings with Elsinore Valley and Eastern (3 teleconference calls)				1.5	1.5	1.5		3	13.5	\$2,817	\$2,817	
3.2 Project Management					6			1	6	\$1,236	\$1,236	
Project Total (CY 2021)		13.0	6.0	27.0	10.0	34.5	10		101			\$25,493
Project Total (CY 2022) - assumes decrease in cost during implementation	b											\$25,000
Project Total (CY 2023) - assumes decrease in cost as implementation becomes more efficient	b											\$18,000
3-Year Budget Total												\$68,493

Notes:

- * In reference to Item 3 in Table 1.
- a This work is currently being performed by West Yost staff for a similar project.
- b The scope of work for CY 2022 and CY 2023 is the implementation of the work plan for the sampling program that will be developed in CY 2021. The precise cost of implementing the program will not be known until it is developed. The cost of implementing the work plan is a budget-level placeholder.

Table 4
Work Breakdown Structure and Fee Estimate for Professional Services:
Installation of Surface Water Discharge Monitoring Stations in the Upper Temescal Valley (Item 6*)

Tasks	Notes	Labor (person hours)							Other Direct Costs						Total Project Costs				
		Principal III	Principal II	Supervising I	Senior II	Staff I/II	Task repetition multiplier	Total labor hours	Cost		Survey / LIDAR	CEQA consultant	Construction contractor	Equipment	Other - see notes	Sub-task	Task	Sub-task	Task
									Sub-task	Task									
Task 1 Develop Preliminary Designs for the Monitoring Stations (CY 2021)										\$37,064							\$27,000	\$64,064	
1.1	Develop feasibility-level designs																		
1.1.1	Develop monitoring plan and preliminary design for Temescal Creek Pond and Lee Lake gauges	a, b		8.0	8.0	1	16	\$3,488										\$3,488	
1.1.2	Review Task 1.1.1 with property owners of Temescal Creek Pond and establish condition of access	c		8.0	4.0	1	12	\$2,664										\$2,664	
1.1.3	Obtain approval to access the Temescal Creek Pond property to develop information to develop monitoring plan and preliminary design	d		4.0		1	4	\$920					\$2,000	\$2,000				\$2,920	
1.1.4	Conduct ground surveys of the immediate Temescal Creek Pond area and Lee Lake dam and reservoir (establish ground control and permanent benchmarks; conduct LIDAR surveys)			8.0	24.0	1	32	\$6,784	\$25,000					\$25,000				\$31,784	
1.1.5	Develop monitoring station design alternatives, prepare cost estimates, document this work in a TM and submit to Elsinore and Eastern for review and comment			16.0	40.0	1	56	\$11,920										\$11,920	
1.1.6	Review TM with Elsinore Valley and Eastern staffs			4.0	4.0	1	8	\$1,744										\$1,744	
1.1.7	Revise TM and submit to the Regional Board staff for review and comment			4.0	8.0	1	12	\$2,568										\$2,568	
1.1.8	Review TM with Regional Board, Elsinore Valley and Eastern staffs			4.0	4.0	1	8	\$1,744										\$1,744	
1.1.9	Finalize TM and submit to Temescal Creek Pond owner for review and comment			4.0	4.0	1	8	\$1,744										\$1,744	
1.1.10	Review TM with Temescal Creek Pond owner, Elsinore Valley and Eastern staffs			4.0	4.0	1	8	\$1,744										\$1,744	
1.1.11	Finalize TM			4.0	4.0	1	8	\$1,744										\$1,744	
Task 2 Prepare Final Design and CEQA Documentation for the Monitoring Stations (CY 2022)										\$32,594							\$15,000	\$47,594	
2.1	Complete CEQA documentation																		
2.2.1	Prepare project description for CEQA consultant			2.0	4.0	1	6	\$1,334										\$1,334	
2.2.2	Select CEQA consultant					1	0	\$0										\$0	
2.2.3	As-needed assistance to CEQA consultant in preparation of CEQA documentation	e		2.0	8.0	1	10	\$2,190	\$10,000				\$10,000	\$10,000				\$12,190	
2.2	Finalize access agreements with the property owners of Temescal Creek Pond	d		4.0		1	4	\$956					\$5,000	\$5,000				\$5,956	
2.3	Design surface water discharge gauging station at Lee Lake																		
2.3.1	Specify controlled outlet meter, stage sensor and location, telemetry and access plan			8.0	16.0	1	24	\$5,336										\$5,336	
2.3.2	Develop technical plans and specification for construction			4.0	8.0	1	12	\$2,668										\$2,668	
2.4	Design surface water discharge gauging station at the Temescal Creek Pond																		
2.4.1	Specify stage sensor, location, telemetry and access plan			8.0	16.0	1	24	\$5,336										\$5,336	
2.4.2	Develop technical plans and specification for construction			4.0	8.0	1	12	\$2,668										\$2,668	
2.5	Prepare design report																		
2.5.1	Prepare draft report and submit to Elsinore Valley and Eastern for review and comment			16.0	24.0	1	40	\$8,960										\$8,960	
2.5.2	Review draft report with Elsinore Valley and Eastern staffs			4.0	4.0	1	8	\$1,812										\$1,812	
2.5.3	Finalize design report and technical plans and specifications			2.0	4.0	1	6	\$1,334										\$1,334	

Table 4
Work Breakdown Structure and Fee Estimate for Professional Services:
Installation of Surface Water Discharge Monitoring Stations in the Upper Temescal Valley (Item 6*)

Tasks	Notes	Labor (person hours)							Other Direct Costs						Total Project Costs				
		Principal III	Principal II	Supervising I	Senior II	Staff I/II	Task repetition multiplier	Total labor hours	Cost		Survey / LIDAR	CEQA consultant	Construction contractor	Equipment	Other - see notes	Sub-task	Task	Sub-task	Task
									Sub-task	Task									
Task 3 Construct monitoring stations (CY 2023)									\$11,200							\$85,000		\$96,200	
3.1 Prepare final plans and specification																			
3.1.1 Prepare complete set of construction plans and specifications and submit Elsinore and Eastern for review and comment				8.0		1	8	\$1,912										\$1,912	
3.1.2 Finalize plans and specifications				2.0		1	2	\$478										\$478	
3.2 Advertise project and select contractor																			
3.2.1 Advertise and obtain bids					8.0	1	8	\$1,712										\$1,712	
3.2.2 Select contractor				4.0		1	4	\$956										\$956	
3.2.3 Negotiate contract				4.0		1	4	\$956										\$956	
3.3 Construction Lee Lake gauge																			
3.3.1 Furnish and install meter with telemetry	b, f					1	0	\$0			\$30,000	\$30,000		\$60,000				\$60,000	
3.3.2 Furnish and install stage sensor with telemetry					8.0	1	8	\$1,712	\$2,500		\$5,000	\$4,000		\$11,500				\$13,212	
3.4 Construct Temescal Creek Pond gauge																			
3.5.1 Furnish and install stage sensor with telemetry	c				8.0	1	8	\$1,712	\$2,500		\$5,000	\$4,000		\$11,500				\$13,212	
3.5 Start up demonstration	g			2.0	6.0	1	8	\$1,762			\$2,000			\$2,000				\$3,762	
Task 4 Project management and meetings (CY 2021 to 2023)	h								\$20,550							\$0		\$20,550	
4.1 Project management and invoicing					1.5	18	27	\$5,778										\$5,778	
4.2 Coordination meetings					1.5	1.5	12	\$6,984										\$6,984	
4.3 Technical review		4.0	2.0	4.0		3	30	\$7,788										\$7,788	
Project Total (CY 2021 + 10 percent engineering contingency)								\$48,305							\$29,700			\$78,005	
Project Total (CY 2022 + 10 percent engineering contingency)								\$43,388							\$16,500			\$59,888	
Project Total (CY 2023 + 30 percent construction contingency)								\$23,465							\$110,500			\$133,965	
3-Year Budget Total		12	6	142	283	18		\$115,159	\$30,000	\$10,000	\$42,000	\$38,000	\$7,000					\$271,859	

Notes:

- * In reference to Item 6 in Table 1.
- a - Assumes new stage gauge with telemetry. Note that an existing sensor may be usable.
- b - Assumes new 16-inch meter with telemetry for the gated outlet and stage gauge with telemetry.
- c - Assumes stage gauge with telemetry.
- d - Attorney fees to negotiate agreements.
- e - Assumes project will qualify for a categorical exemption.
- f - Assumes Elsinore will provide CMS for the outlet meter installation.
- g - Contractor conducts field inspection and telemetry demonstration to demonstrate to engineer and owner that facilities were constructed pursuant to contract.
- h - The cost of Task 4 was distributed equally between the three years.

**Table 5
Work Breakdown Structure and Fee Estimate for Professional Services:
to prepare a Salt Offset Plan for Elsinore Valley and Eastern Municipal Water Districts (Item 7*)**

Task and Subtask Descriptions	Notes	Labor Hours and Cost							Annual Project Total	
		Principal III	Principal II	Senior I/II	Staff II	Tech Editor/Admin	Task Multiplier	Person Hours		Labor Cost
Task 1 - Evaluate the TDS Impact of Elsinore Valley and Eastern Recycled Discharge Exceedances Based on Data									\$17,422	
1.1 Collect and process surface water quality data downstream of Temescal Valley GMZ				2	8		1	10	\$1,748	
1.2 Analyze discharge, surface water, and groundwater quality trends to determine if the data suggest correlations in change in water quality resulting from exceedances			8	8	8		1	24	\$5,120	
1.3 Develop tables, charts and text to characterize potential correlations			2	2	6	4	1	14	\$2,504	
1.4 Identify data gaps and develop scope of work to collect data and improve surface water modeling tools to characterize TDS impacts of discharge violations	a	12	6	12		4	1	34	\$8,050	
Task 2 - Develop and select project alternatives to address impacts									\$18,038	
2.1 Characterize the potential for future violations, quantify the associated TDS load, and estimate expected impact based on analysis in Task 1		4	6	8	4		1	22	\$5,058	
2.2 Identify and describe universe of potential salt offset projects to resolve TDS impacts and review with Elsinore Valley and Eastern staff		8	16	24	6		1	54	\$12,498	
2.3 Review projects with Elsinore Valley and Eastern staff and select project alternatives to evaluate	b	0.5	0.5	1			1	2	\$482	
Task 3 - Preliminary Evaluation of Project Alternatives									\$29,199	
3.1 Develop criteria to evaluate project alternatives		8	4	20			1	32	\$7,468	
3.2 Screen projects based on criteria		2	4	10	2		1	18	\$4,032	
3.3 Develop cost opinion for each project		16	8	40	4		1	68	\$15,604	
3.4 Review projects with Elsinore Valley and Eastern staff and update, as needed	b	2	2	4	1		1	9	\$2,095	
Task 4 - Prepare Salt Offset Plan Report									\$28,099	
4.1 Prepare draft report		8	16	40	20	12	1	96	\$19,800	
4.2 Review draft report with Elsinore Valley and Eastern staff and update, as needed	b	1	4	8	4	4	1	21	\$4,225	
4.3 Review draft report with Regional Board staff and prepare final report	b		2	8	8	4	1	22	\$4,074	
Task 5 - Meetings and Project Management									\$17,140	
5.1 Meetings with Elsinore Valley and Eastern (6 teleconferences)			2	2	2		6	36	\$7,680	
5.2 Meetings with the Regional Board (2 teleconferences)			2	2	2		2	12	\$2,560	
5.3 Project Management				2		2	10	40	\$6,900	
Project Total (CY 2021)		62	95	223	87	48		514		\$109,898
Project Total (CY 2022)	c									\$50,000
Project Total (CY 2023)	c									\$50,000
3-Year Budget Total										\$209,898

Notes:

- * In reference to Item 7 in Table 1.
- a The scope of work will rely on the completion of the feasibility-level engineering investigations for the installation of surface discharge monitoring stations.
- b The meeting will occur as part of Task 5; labor in Task 2.3 is for finalizing work products based on the meeting
- c The scope of work for CY 2022 and CY 2023 is the implementation of the salt offset plan that will be developed in CY 2021. The precise cost of implementing the plan will not be known until it is developed. The cost of implementing the plan is a budget-level placeholder.

Table 6
CY 2021 Hourly Rate Sheet for Professional Services
Upper Temescal Valley Salt and Nutrient Management Plan Implementation

Professional Level	Key Personnel	Hourly Rate
Principal III Engineer/Scientist	Mark Wildermuth, PE	\$285
Principal II Engineer/Scientist	Samantha Adams, MESM	\$267
Principal I Engineer/Scientist		\$253
Supervising II Engineer/Scientist		\$236
Supervising I Engineer/Scientist	Veva Weamer, MS	\$230
Senior Engineer/Scientist	Carolina Sanchez, PE Garrett Rapp, PE	\$206
Staff II Engineer/Scientist	Sodavy Ou, MESM	\$167
Staff I Engineer/Scientist	Austin Poncelet, MS Lucy Hedley, MESM	\$155
Technical Editor		\$132
Field Technician	Terrinda Alonzo	\$84
Administrative Assistant		\$132
Expert Witness		a

Notes:

Hourly rates are subject to change in CY 2022 and CY 2023.

a - Appearance at depositions and expert witness testimony in court will be billed at twice the hourly rate listed above for a minimum of eight hours each day.

Table 7
CY 2021 Reimbursable Unit Costs for Other Direct Costs of Field Services

Other Direct Cost Type	Cost
Mileage	
Automobiles	Current IRS Rates
Field Vans	\$0.80 per Mile
Tolls	As incurred at prevailing rates
Field Equipment	
2" Purge Pump and Control Box	\$270 per day
Generator	\$45 per day
Low Flow Sampling Device	\$75 per day
Precision Water Level Meter	\$19 per day
Water Quality Meter	\$27 per day
Turbidity Meter	\$22 per day
Other as-needed rental equipment or supplies	Cost of materials

Note:

Reimbursable unit costs are subject to change in CY 2022 and CY 2023.