Santa Ana River Wasteload Allocation Model Update

BASIN MONITORING PROGRAM TASK FORCE

February 19, 2019





Budget Amendment in Response to Risk Sciences' 24-Jan-19 Letter Re: Rationale for Restoring Some Elements of Task 4 in the WLAM Scope of Work

Option 1 Scope

- Summarize stormwater diversions and associated TDS/TIN concentrations in tables.
- Explicitly state in text that these diversions are not included in the calculation of the volume-weighted average TIN and TDS concentrations in recharges to each GMZ.
- Lower cost option but would require additional work in the future to determine impact of stormwater capture on groundwater quality.

Option 1 Cost

Task	Description	Previous Budget	Additional Budget	Total Budget
4.0	Develop WLAM for Managed Recharge in Percolation Basins	\$3,696	-	-
4e.1	Option 1: Summarize Stormwater Diversion and Spreading	-	\$3,530	-
	Task 4 Subtotal	\$3,696	\$3,530	\$7,226
10.0	Monthly Project Meetings	\$52,860	-	-
	Option 1: Prepare For and Participate in up-to 2 Half-Day Monthly Meetings and 21-Jan-19 Meeting with IEUA, CBWM, and WEI	-	\$9,150	-
	Task 10 Subtotal	\$52,860	\$9,150	\$62,010
	PROJECT TOTAL (Tasks 1-11)	\$314,956	\$12,680	\$327,636

Option 1 Project Schedule

- Submit Draft Study Report in Mid- to Late-March 2019
- Submit Final Study Report in Mid- to Late-April 2019

Option 2 Scope

- Adjust the WLAM to recognize stormwater recharge as a separate nodal inputs.
- Calculate the volume-weighted average TIN and TDS concentrations of recharge to each GMZ with and without accounting for the off-channel recharges.
- Higher cost option that better assures that the WLAM evaluates the effect of stormwater recharge.
- WLAM would still not consider imported or artificial recharge in off-channel spreading basins.

Option 2 Cost

Task	Description	Previous Budget	Additional Budget	Total Budget
4.0	Develop WLAM for Managed Recharge in Percolation Basins	\$3,696	-	-
4e.1	Option 2: Create Nodal Inputs in the WLAM for Stormwater Diversion and Recharge	-	\$11,280	-
	Task 4 Subtotal	\$3,696	\$11,280	\$7,226
10.0	Monthly Project Meetings	\$52,860	-	-
	Option 2: Prepare For and Participate in up-to 3 Half-Day Monthly Meetings and 21-Jan-19 Meeting with IEUA, CBWM, and WEI	-	\$12,680	-
	Task 10 Subtotal	\$52,860	\$12,680	\$62,010
	PROJECT TOTAL (Tasks 1-11)	\$314,956	\$23,300	\$338,256

Option 2 Project Schedule

- Submit Draft Study Report in Mid- to Late-April 2019
- Submit Final Study Report in Mid- to Late-May 2019

Estimated Cost to Support WEI WLAM Review

GEOSCIENCE Costs: WEI WLAM Review

Task	Description	Additional Budget
12.0	WEI WLAM Review	-
12.1	Prepare model input and output files for model calibration run and each planning scenario run	\$1,065
12.2	Provide support and respond to questions throughout WEI review process	\$4,630
12.3	Project management and meetings	\$8,850
12.4	Respond to WEI recommendations following review	TBD
	Task 12 Subtotal	\$14,545