

Attachment 6. Budget

This attachment presents the estimated budget to perform the tasks described in the Work Plan presented in Attachment 5. The budget was developed based upon professional experience performing similar scopes of work and specific key subcontractor cost estimated, included with this attachment

Labor costs were developed based upon professional experience performing similar scopes of work and direct communication with subcontractor projected efforts. The labor categories included for the project include: project manager; project administrator; staff, principal, and chief geologist/hydrogeologist; lead and staff modeler; geographical information system (GIS) specialist, and word processing. These labor categories meet the required personnel necessary to complete the scope of services and assure that the appropriate level of quality assurance is met.

Direct costs are included to account for the direct purchase of necessary field equipment, health and safety equipment, environmental review reports, mapping and investigation reports, and drilling permits. The drilling permit costs are determined by the County of Sacramento County Department of Environmental Health. Permit costs are listed on the attached price sheet. The environmental Review Reports include the NEPA search and various environmental data, maps, and diagrams to aid in CEQA documentation preparation. This cost was estimated based upon professional experience. The sampling equipment includes the costs to purchase depth discrete grab sample devices for each groundwater sample and includes the necessary equipment for deployment and recovery. The health and safety and general field equipment is intended to cover the costs of standard health and safety equipment for drilling and sampling operations associated with the described scope of work. In addition these estimated costs cover the purchase of sample chip trays, collection bags, necessary sample collection equipment, and water quality meter rental and calibration solutions.

The subcontractor costs are based upon both verbal and direct budget estimates for the efforts described in Attachment 5. Direct budget estimates are provided in this attachment for the drilling subcontractor, geotechnical analysis, utility clearance, and the water quality laboratory.

The budget summary table provides a summary of local contributions by SSWD, requested grant funding, and a total project effort. The total for local SSWD contributions is \$52,049. The total amount requested in grant funding is \$247,925. The total estimated budget for the project is \$299,974. The following budget summary table and detail table provide breakdown of all described components and total summary.

Development of Tools for Monitoring, Assessment, and Management of Groundwater in the Arden-Arcade Region
 Sacramento Suburban Water District LGA Grant Application 2012

Budget Summary Table					
Budget Category			Non-State Share	Requested Grant Funding	Total
Task	SubTask	Title			
1		CEQA and Permitting			
	1	CEQA Exemption Documentation	\$ -	\$ 5,258	\$ 5,258
	2	Well Drilling Permit	\$ -	\$ 5,308	\$ 5,308
2		Well Installation			
	1	Drill 2 Monitoring Wells	\$ -	\$ 92,982	\$ 92,982
	2	Construct 2 Monitoring Wells	\$ -	\$ 43,367	\$ 43,367
	3	Develop 2 Monitoring Wells	\$ -	\$ 12,541	\$ 12,541
	4	TM	\$ -	\$ 5,997	\$ 5,997
3		Sampling			
	1	Monitoring Well Sampling	\$ -	\$ 7,964	\$ 7,964
	2	TM	\$ -	\$ 5,355	\$ 5,355
4		Aquifer Testing			
	1	Field Setup	\$ 19,164	\$ -	\$ 19,164
	2	Aquifer Testing	\$ 21,877	\$ -	\$ 21,877
	3	TM	\$ 11,008	\$ -	\$ 11,008
5		Modeling			
	1	Data Collect and Incorporate	\$ -	\$ 2,589	\$ 2,589
	2	Model Refine and Concept	\$ -	\$ 7,425	\$ 7,425
	3	Model Calibration	\$ -	\$ 7,862	\$ 7,862
	4	Predictive Model Runs	\$ -	\$ 5,085	\$ 5,085
	5	Particle Tracking	\$ -	\$ 4,068	\$ 4,068
	6	Fate and Transport Estimation	\$ -	\$ 5,085	\$ 5,085
	7	Model Documentation	\$ -	\$ 7,745	\$ 7,745
	8	Modeling Meetings	\$ -	\$ 7,440	\$ 7,440
6		Project Management			
	1	Quarterly Reporting	\$ -	\$ 12,337	\$ 12,337
	2	Final Report	\$ -	\$ 4,398	\$ 4,398
	3	QA/QC	\$ -	\$ 5,119	\$ 5,119
Total:			\$ 52,049	\$ 247,925	\$299,974

Detailed Budget

		Project Manager and Lead Hydrogeologist	Accountant	Senior Hydrogeologist	Field Geologist	GIS Specialist	Word Processing	Lead Modeler	Staff Modeler			Sacramento County EHD	Transducer Purchase	Equipment Purchase	Equipment	Drilling Contractor	Water Quality Laboratory	Surveyor	Geotechnical Laboratory	Utility Locating Contractor				
Phase	Phase Description	PM	PA							Total Labor Hours	Total Labor Effort					Cost	Cost	Cost	Cost	Cost	Total Sub Cost	Total Expense Effort	Total Effort	
001	CEQA and Permitting	\$135.10	\$91.26	\$208.86	\$80.29	\$107.71	\$79.94	\$162.30	\$115.39															
000	CEQA Exemption Documents	24	0	2	42	8	4	0	0	80	8,214	2,352	0	0	0	0	0	0	0	0	0	0	2,352	10,566
000	Well Drilling Permit	16	0	2	26	4	2	0	0	50	5,258	0	0	0	0	0	0	0	0	0	0	0	0	5,258
000		8	0	0	16	4	2	0	0	30	2,956	2,352	0	0	0	0	0	0	0	0	0	0	2,352	5,308
002	Well Installation	56	0	11	200	4	0	0	0	271	26,352	0	0	0	500	120,235	0	5,000	1,600	1,200	128,035	128,535	154,887	
000	Drill 2 Monitoring Wells	8	0	2	80	0	0	0	0	90	7,922	0	0	0	0	82,260	0	0	1,600	1,200	85,060	85,060	92,982	
000	Construct 2 Monitoring Wells	24	0	4	48	0	0	0	0	76	7,932	0	0	0	500	34,935	0	0	0	0	34,935	35,435	43,367	
000	Develop 2 Monitoring Wells	8	0	1	40	0	0	0	0	49	4,501	0	0	0	0	3,040	0	5,000	0	0	8,040	8,040	12,541	
000	TM	16	0	4	32	4	0	0	0	56	5,997	0	0	0	0	0	0	0	0	0	0	0	0	5,997
003	Sampling	28	0	6	64	4	0	0	0	102	10,605	0	0	0	500	0	2,214	0	0	0	2,214	2,714	13,319	
000	Monitoring Well Sampling	12	0	2	40	0	0	0	0	54	5,250	0	0	0	500	0	2,214	0	0	0	2,214	2,714	7,964	
000	TM	16	0	4	24	4	0	0	0	48	5,355	0	0	0	0	0	0	0	0	0	0	0	0	5,355
004	Aquifer Testing	104	0	42	148	16	4	0	0	314	36,749	0	15,000	300	0	0	0	0	0	0	0	0	15,300	52,049
000	Field Setup	16	0	2	16	0	0	0	0	34	3,864	0	15,000	300	0	0	0	0	0	0	0	0	15,300	19,164
000	Aquifer Testing	40	0	24	132	8	0	0	0	204	21,877	0	0	0	0	0	0	0	0	0	0	0	0	21,877
000	TM	48	0	16	0	8	4	0	0	76	11,008	0	0	0	0	0	0	0	0	0	0	0	0	11,008
005	Modeling	16	0	4	0	16	4	94	234	368	47,299	0	0	0	0	0	0	0	0	0	0	0	0	47,299
000	Data Collect and Incorporate	0	0	0	0	0	0	6	14	20	2,589	0	0	0	0	0	0	0	0	0	0	0	0	2,589
000	Model Refine and Concept	0	0	0	0	8	0	12	40	60	7,425	0	0	0	0	0	0	0	0	0	0	0	0	7,425
000	Model Calibration	0	0	0	0	0	0	20	40	60	7,862	0	0	0	0	0	0	0	0	0	0	0	0	7,862
000	Predictive Model Runs	0	0	0	0	0	0	10	30	40	5,085	0	0	0	0	0	0	0	0	0	0	0	0	5,085
000	Particle Tracking	0	0	0	0	0	0	8	24	32	4,068	0	0	0	0	0	0	0	0	0	0	0	0	4,068
000	Fate and Transport Estimation	0	0	0	0	0	0	10	30	40	5,085	0	0	0	0	0	0	0	0	0	0	0	0	5,085
000	Model Documentation	0	0	0	0	8	4	12	40	64	7,745	0	0	0	0	0	0	0	0	0	0	0	0	7,745
000	Modeling Meetings	16	0	4	0	0	0	16	16	52	7,440	0	0	0	0	0	0	0	0	0	0	0	0	7,440
006	Project Management	69	30	15	60	0	19	2	0	195	21,854	0	0	0	0	0	0	0	0	0	0	0	0	21,854
000	Quarterly Reporting	24	20	6	60	0	15	0	0	125	12,337	0	0	0	0	0	0	0	0	0	0	0	0	12,337
000	Final Report	24	0	4	0	0	4	0	0	32	4,398	0	0	0	0	0	0	0	0	0	0	0	0	4,398
000	QA/QC	21	10	5	0	0	0	2	0	38	5,119	0	0	0	0	0	0	0	0	0	0	0	0	5,119
GRAND TOTAL		297	30	80	514	48	31	96	234	1,330	151,072	2,352	15,000	300	1,000	120,235	2,214	5,000	1,600	1,200	130,249	148,901	299,974	

Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.