ATTACHMENT 6: BUDGET
Hydrogeologic Characterization of the Eastern Turlock Subbasin

This attachment provides the Project budget by tasks and subtasks, consistent with the Workplan (Attachment 5) and the Project Schedule (Attachment 7).

6.1 Project Budget and Basis of Estimate

The Project has been scoped to allow the TGBA to maximize the quantity and quality of data and improved tools for groundwater management that can be realized within the amount allowed by the grant program ($250,000). With no additional funding match available, the entire amount of the Project will be funded by the LGA grant. The following table presents the budget on a per task basis.

Budget Category		Non-State Share (Funding Match)	Requested Grant Funding	Total
Task 1:	Compile Hydrogeologic Data and Develop Project Databases/GIS	$ -	$ 29,310	$ 29,310
Task 2:	Document Current and Historical Land Use and Groundwater Use	$ -	$ 11,629	$ 11,629
Task 3:	Evaluate Aquifer Systems and Groundwater Conditions	$ -	$ 18,564	$ 18,564
Task 4:	Update Hydrogeologic Conceptual Model	$ -	$ 26,304	$ 26,304
Task 5:	Expand and Revise a Subbasin-wide Numerical Model	$ -	$ 87,750	$ 87,750
Task 6:	Evaluate Scenarios for Current and Future Land Use	$ -	$ 31,901	$ 31,901
Task 7:	Prepare Project Report	$ -	$ 32,528	$ 32,528
Task 8:	Manage Project	$ -	$ 12,014	$ 12,014
	TOTAL	$ -	$ 250,000	$ 250,000

This budget was based on a detailed estimate by a reputable hydrogeologic consulting firm that specializes in groundwater studies. That firm has knowledge of data sources in the Turlock Subbasin and access to the current TID model files and USGS steady-state model files. As such, the costs represent a realistic assessment of the level of effort needed to meet Project goals and objectives.

6.2 Detailed Budget

To substantiate and provide supporting documentation for the above budget summary, a more detailed budget is shown on the following Table 6-1 that includes labor categories, hourly rates, labor time estimates and other direct costs.

Proposal for: Hydrogeologic Characterization of the Eastern Turlock Subbasin
Stanislaus and Merced Counties, California

Labor Category / Hourly Rate TASKS	Technical Director QA/QC $210	Project Manager $200	Lead GW Modeler $195	Senior Modeler $175	Lead Hydro-geologist $170	Staff Eng/Geol Support $130	Technical Support $125	GIS / Graphics $97	Labor Hours	Estimated Labor Costs	2% Comm* Fee	Admin Assist. $82	Other Direct Costs	Total Costs
1 - Compile Hydrogeologic Data and Develop Project Databases/GIS														
1.1 Compile Physical, Geologic, and Hydrologic Data		4			8		12		24	$ 3,660	$ 73	$ -	$ 45	$ 3,779
1.2 Compile Hydrogeologic Data		4			12	24			40	$ 5,960	$ 119	$ -	$ 630	$ 6,709
1.3 Compile Land Use Data		1					8	4	13	$ 1,588	$ 24	$ -	$ -	$ 1,612
1.4 Create Project Databases and Project GIS		4			8		32	24	68	$ 8,488	$ 123	$ -	$ -	$ 8,611
1.5 Apply QA/QC Procedures	8	2				4			14	$ 2,600	$ 52	$ -	$ -	$ 2,652
1.6 Prepare Technical Memorandum (TM) No. 1	3	12			16				31	$ 5,750	$ 115	$ 82	$ -	$ 5,947
Task 1 Budget	**11**	**27**	**0**	**0**	**44**	**28**	**52**	**28**	**190**	**$ 28,046**	**$ 507**	**$ 82**	**$ 675**	**$ 29,310**
2- Document Current and Historical Land Use and Groundwater Use														
2.1 Analyze Land Use Data Sets		4			12			2	18	$ 3,034	$ 57	$ -	$ -	$ 3,091
2.2 Incorporate Groundwater Use Databases		6			16			2	24	$ 4,114	$ 78	$ -	$ -	$ 4,192
2.3 Prepare TM No. 2	4	8			8			4	24	$ 4,188	$ 76	$ 82	$ -	$ 4,346
Task 2 Budget	**4**	**18**	**0**	**0**	**36**	**0**	**0**	**8**	**66**	**$ 11,336**	**$ 211**	**$ 82**	**$ -**	**$ 11,629**
3 - Evaluate Aquifer Systems and Groundwater Conditions														
3.1 Evaluate Project Area Aquifers		12			16				28	$ 5,120	$ 102	$ -	$ -	$ 5,222
3.2 Evaluate Groundwater Conditions		8			32				40	$ 7,040	$ 141	$ -	$ -	$ 7,181
3.3 Prepare TM No. 3	4	12			16				32	$ 5,960	$ 119	$ 82	$ -	$ 6,161
Task 3 Budget	**4**	**32**	**0**	**0**	**64**	**0**	**0**	**0**	**100**	**$ 18,120**	**$ 362**	**$ 82**	**$ -**	**$ 18,564**
4 - Update Hydrogeologic Conceptual Model									0	$ -	$ -	$ -	$ -	$ -
4.1 Describe Hydrogeologic Framework		12			24				36	$ 6,480	$ 130	$ -	$ -	$ 6,610
4.2 Update Water Balance for the Project Area		8		32	24				64	$ 11,280	$ 226	$ -	$ -	$ 11,506
4.3 Prepare TM No. 4 and Conduct Workshop No. 1	8	16	8	4	4				40	$ 7,820	$ 156	$ 82	$ 130	$ 8,188
Task 4 Budget	**8**	**36**	**8**	**36**	**52**	**0**	**0**	**0**	**140**	**$ 25,580**	**$ 512**	**$ 82**	**$ 130**	**$ 26,304**
5 - Expand and Revise a Subbasin-wide Numerical Model														
5.1 Obtain USGS Model and Verify Model Results		4	24	16					44	$ 8,280	$ 166	$ -	$ -	$ 8,446
5.2 Expand Model and Modify Boundary Conditions		8	60	40	32				140	$ 25,740	$ 515	$ -	$ -	$ 26,255
5.3 Calibrate the Revised Project Model		8	80	60	32				180	$ 33,140	$ 663	$ -	$ -	$ 33,803
5.4 Prepare TM No. 5 and Conduct Workshop No. 2	8	16	40	16	12			12	104	$ 18,684	$ 350	$ 82	$ 130	$ 19,246
Task 5 Budget	**8**	**36**	**204**	**132**	**76**	**0**	**0**	**12**	**468**	**$ 85,844**	**$ 1,694**	**$ 82**	**$ 130**	**$ 87,750**
6 - Evaluate Scenarios for Current and Future Land Use														
6.1 Develop Future Land Use Scenarios for Analysis		2	12	12					26	$ 4,840	$ 97	$ -	$ -	$ 4,937
6.2 Analyze Future Land Use Scenarios		4	60	40					104	$ 19,500	$ 390	$ -	$ -	$ 19,890
6.3 Prepare TM No. 6	4	8	16	6				3	37	$ 6,901	$ 132	$ 41	$ -	$ 7,074
Task 6 Budget	**4**	**14**	**88**	**58**	**0**	**0**	**0**	**3**	**167**	**$ 31,241**	**$ 619**	**$ 41**	**$ -**	**$ 31,901**
7 - Prepare Project Report														
7.1 Prepare Draft Project Report	8	32	16	16	12			24	108	$ 18,368	$ 321	$ -	$ 20	$ 18,709
7.2 Present Report to PAC (Workshop No. 3)	1	8	4		4			12	29	$ 4,434	$ 65	$ -	$ 130	$ 4,629
7.3 Prepare Final Project Report	4	12	8					40	64	$ 8,680	$ 96	$ 164	$ 250	$ 9,190
Task 7 Budget	**13**	**52**	**28**	**16**	**16**	**0**	**0**	**76**	**201**	**$ 31,482**	**$ 482**	**$ 164**	**$ 400**	**$ 32,528**
8- Manage Project														
8.1 Manage Project Progress, Schedule, and Budget		12				24			36	$ 5,520	$ 110	$ -	$ 100	$ 5,730
8.2 Prepare Quarterly Progress Reports (8)		8				16			24	$ 3,680	$ 74	$ 82	$ -	$ 3,836
8.3 Provide Project Materials to the PAC		12							12	$ 2,400	$ 48	$ -	$ -	$ 2,448
Task 8 Budget	**0**	**32**	**0**	**0**	**0**	**40**	**0**	**0**	**72**	**$ 11,600**	**$ 232**	**$ 82**	**$ 100**	**$ 12,014**
Total Project Budget	**52**	**247**	**328**	**242**	**288**	**68**	**52**	**127**	**1404**	**$ 243,249**	**$ 4,619**	**$ 697**	**$ 1,435**	**$ 250,000**

Note: Hourly rates and labor hours from Hydrogeologic Consultant Estimate

*** Communications estimated at 2% of professional labor, based on consultant estimate**