

ATTACHMENT 6 - BUDGET

The budget for the proposed project is summarized in **Table 6.1** below:

Table 6.1 - Budget Summary

Task	Budget Category	Requested Grant Funding	Non-State Share (Funding Match)	Total
1	Public Outreach	\$4,090	\$0	\$4,090
2	Monitoring Well Design	\$17,200	\$0	\$17,200
3	Monitoring Well Construction	\$228,710	\$6,320	\$235,030
4	Post Construction Activities	\$0	\$9,760	\$9,760
5	Project Reporting	\$0	\$12,965	\$12,965
	Grant Total	\$250,000	\$29,045	\$279,045

Below is a list of supporting documents for the budget:

- Exhibit 6.1 – Detailed Project Cost Estimate
- Exhibit 6.2 – Construction Cost Estimate
- Exhibit 6.3 – Cost Estimate for Data Loggers
- Exhibit 6.4 – Laboratory Costs for Water Quality Testing

The budget items are consistent with the work plan and budget. Additional details on the cost estimate follow.

Monitoring Well Costs

Monitoring well construction costs were estimated based on bids received for a similar project in KCWD in 2011. Since 2011 construction and well drilling costs have not appeared to change much in the San Joaquin Valley. A detailed construction cost estimate is included as **Exhibit 6.2**. The estimate assumes that workers are paid Kings County prevailing wages.

It should be noted that costs for monitoring wells in the project area can vary significantly. Monitoring well costs vary with hydrologic conditions (generally higher during dry years), contractor availability, fuel costs and cost for materials. Therefore, it is possible that the monitoring well costs could vary considerably from the estimate provided. During project implementation, any significant change in costs will be



reported to the DWR as soon as the information is available so that discussions can be held on modifying the budget and scope of work. Adjustments may include reducing the depth of number of casings in some wells. However, it is believed that the cost estimate is the best and most reasonable value that can be provided more than one year in advance of the anticipated well construction.

Pressure Transducers (Data Loggers)

Exhibit 6.3 includes a cost estimate for data loggers. The unit prices are based on a quotation from a reputable manufacturer for another local project in 2012. These will be purchased directly by KCWD and will not have a markup.

Water Quality Sampling and Testing

Groundwater will be tested for irrigation suitability analysis in Subtask 4.2 – Water Quality Testing. A water-testing price sheet from a local laboratory is included as **Exhibit 6.4**. Irrigation suitability analyses cost \$100 per sample. Therefore, testing costs for the proposed project are summarized as follows:

(4 wells x 2 casings + 1 wells x 3 casings + 1 blank sample + 1 duplicate sample) x \$100/sample = \$1,300 x 15% markup = \$1,495 (rounded to \$1,500).

Legal Fees

The budget includes a nominal \$500 budget for legal fees. The legal fees are needed for the District’s legal counsel to review bidding documents and assist with permitting efforts, if needed. No substantial legal services are expected to be needed, so the nominal budget is considered adequate.

Labor Compliance

The cost estimate includes \$2,500 for a labor compliance consultant to prepare and implement a Labor Compliance Plan in accordance with California labor laws. The estimate is based on the anticipated length of construction.

Consultant Fees

Consultant fees were provided by KCWD’s consulting engineer, Provost & Pritchard Consulting Group, Inc., and are based on their standard fee schedule.

Subconsultant

Subconsultant fees include \$1,000 for Kenneth D. Schmidt & Associates, a hydrogeologic consultant who will provide independent third-party review. All subconsultant fees will include a standard 15% markup.

Permits

The well drilling permits cost \$220 for each parcel that wells are installed on. The encroachment permits cost \$500 for all of the wells. These costs are built into the well construction cost estimate (Item 1 – Mobilization/Demobilization) since the driller will be responsible for obtaining these permits.

Mileage

No mileage, per diem or lodging costs are included in the cost estimate as it has been understood from past Proposition 84 funded projects, that DWR does not allow travel charges to the project. Trips will be needed to verify well locations, conduct pre-bid and pre-construction meetings with contractors, monitor construction, collect water quality samples, and survey well elevations. Mileage for the project is based on trips between Fresno, Fresno County, the location of the proposed consultants, and the project site located in an unincorporated area of Kings County. Each trip from Fresno to Kings County is 80 miles round trip. It is assumed that 35 total round trip are made during the project, most to observe construction and log soils. KCWD is prepared to fund any travel costs not allowed by DWR.

Administrative Tasks

Administrative costs will be limited to Sub-task 5.1 – Progress Reports, which total \$3,545, which is about 1.5% of the requested grant amount.

Contingency

The cost estimate has a built in contingency of 5%. KCWD is prepared to pay for extra costs if they exceed the estimate.

Project Tracking and Billing

It is proposed to track and bill the project according to the five (5) tasks in budget. Budgets will not be tracked or billed by subtask. Tracking cost according to each sub-task would be cumbersome and would not add to understanding the project's cost.

District Contribution

The District is requesting a \$250,000 grant and will fund the remainder of the project. With a total cost of \$279,045, the District share will be \$29,045. **Exhibit 4.2** is a 2012 financial budget that shows \$40,000 for Groundwater Management, which could be used to pay for this cost share. The cost share is also a small expense, and represents less than 2% of the District's \$1.65 million annual budget.



The District will also make other contributions to project costs that are not included in the cost estimate. These include the following:

- 1) District staff time to administer and manage the project through meetings with the consulting engineer, Board meetings, meetings with other water agencies, Groundwater Monitoring Committee meetings, and review of project submittals.
- 2) Future groundwater monitoring efforts.

**KINGS COUNTY WATER DISTRICT
GROUNDWATER MONITORING WELL PROJECT**
Detailed Project Cost Estimate

STAFF HOURS	Labor Costs						Subcontractors							Direct Costs		Totals			
	Principal Engineer	Senior Engineer	Associate Engineer	Associate Geologist	Drafter	Clerical	Subconsultant (Kenneth Schmidt & Associates)	Surveying	Well Construction	Data Loggers	Labor Compliance Plan	Water Quality Testing	Legal Services	Mileage at \$0.555/mi.	Printing & Postage	Total Hours	Total Cost	DWR Funded	Applicant Cost Share
Rate / Hour	\$170	\$140	\$120	\$100	\$80	\$60													
Task 1 Stakeholder Involvement																Task 1 Total =	\$4,090	\$4,090	\$0
1.1 Groundwater Monitoring Committee Meetings (2)	4		4											\$25	8	\$1,185			
1.2 Property Owners Association Meetings (2)	4		4												8	\$1,160			
1.3 District Board of Directors Meetings (6)	8		2			2								\$25	12	\$1,745			
Task 2 Monitoring Well Design																Task 2 Total =	\$17,200	\$17,200	\$0
2.1 Conceptual Design Memorandum	2	4	8	4			\$500								18	\$2,760			
2.2 Prepare Environmental Documents/Permitting			2												2	\$240			
2.3 Well Construction Drawings and Specifications	4	20	20		20									\$50	64	\$7,530			
2.4 Prepare Bidding Documents/Assist with Bidding	4	20	20			4					\$500			\$50	48	\$6,670			
Task 3 Monitoring Well Construction																Task 3 Total =	\$235,030	\$228,710	\$6,320
3.1 Well Construction		20	60					\$198,000	\$10,200	\$2,500				\$50	80	\$220,750			
3.2 Geologic and Geophysical Logging			10	100											110	\$11,200			
3.3 Surveying			4				\$1,000								4	\$1,480			
3.4 Prepare Record Drawings			8		8										16	\$1,600			
Task 4 Post Construction Evaluation																Task 4 Total =	\$9,760	\$0	\$9,760
4.1 Hydrogeologic/Stratigraphic Evaluation		8		40	8		\$500								56	\$6,260			
4.2 Monitoring Well Sampling and Analytical Testing				20						\$1,500					20	\$3,500			
Task 5 Project Reporting																Task 5 Total =	\$12,965	\$0	\$12,965
5.1 Progress Reports		8	20											\$25	28	\$3,545			
5.2 Draft Project Report	4	20	20	10		4								\$50	58	\$7,170			
5.3 Final Project Report		8	8			2								\$50	18	\$2,250			
Total Hours:	30	108	190	174	36	12													
Total Cost:	\$5,100	\$15,120	\$22,800	\$17,400	\$2,880	\$720	\$1,000	\$1,000	\$198,000	\$10,200	\$2,500	\$1,500	\$500	\$0	\$325	550	\$279,045	\$250,000	\$29,045

TOTAL ESTIMATED PROJECT COST: **\$279,045**

KINGS COUNTY WATER DISTRICT
CONSTRUCTION COST ESTIMATE
Triple Completion Well

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization/Demobilization	1	LS	\$ 4,500.00	\$ 4,500.00
2	Miscellaneous Facilities, Operations, and Worker Protection, USA	1	LS	\$ 500.00	\$ 500.00
3	Drill Borehole	540	LF	\$ 35.00	\$ 18,900.00
4	Electric Logs	1	EA	\$ 1,800.00	\$ 1,800.00
5	Furnish and Install 2-inch (nominal) Diameter Blank Casing	830	LF	\$ 2.00	\$ 1,660.00
6	Furnish and Install 2-inch (nominal) Diameter Perforated Casing	90	LF	\$ 2.50	\$ 225.00
7	Furnish and Install Gravel Pack	125	LF	\$ 20.00	\$ 2,500.00
8	Furnish and Install Bentonite Seal	345	LF	\$ 20.00	\$ 6,900.00
9	Furnish and Install Cement-Grout Seal	75	LF	\$ 25.00	\$ 1,875.00
10	Preliminary Well Development	18	HR	\$ 75.00	\$ 1,350.00
11	Well Development by Pumping	18	HR	\$ 75.00	\$ 1,350.00
12	Construct Above Ground Wellhead Facilities	1	EA	\$ 750.00	\$ 750.00
Total for 1 Well					\$ 42,310.00

Note: Unit prices based on contractor bids for similar wells constructed in KCWD in 2011

KINGS COUNTY WATER DISTRICT
CONSTRUCTION COST ESTIMATE
Double Completion Well

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization/Demobilization	1	LS	\$ 4,500.00	\$ 4,500.00
2	Miscellaneous Facilities, Operations, and Worker Protection, USA	1	LS	\$ 500.00	\$ 500.00
3	Drill Borehole	540	LF	\$ 34.00	\$ 18,360.00
4	Electric Logs	1	EA	\$ 1,800.00	\$ 1,800.00
5	Furnish and Install 2-inch (nominal) Diameter Blank Casing	610	LF	\$ 2.00	\$ 1,220.00
6	Furnish and Install 2-inch (nominal) Diameter Perforated Casing	70	LF	\$ 2.50	\$ 175.00
7	Furnish and Install Gravel Pack	125	LF	\$ 15.00	\$ 1,875.00
8	Furnish and Install Bentonite Seal	345	LF	\$ 15.00	\$ 5,175.00
9	Furnish and Install Cement-Grout Seal	75	LF	\$ 25.00	\$ 1,875.00
10	Preliminary Well Development	18	HR	\$ 75.00	\$ 1,350.00
11	Well Development by Pumping	18	HR	\$ 75.00	\$ 1,350.00
12	Construct Above Ground Wellhead Facilities	1	EA	\$ 750.00	\$ 750.00
Total for 1 Well					\$ 38,930.00
Total for 4 Wells					\$ 155,720

Note: Unit prices based on contractor bids for similar wells constructed in KCWD in 2011

**KINGS COUNTY WATER DISTRICT
CONSTRUCTION COST ESTIMATE
*Data Loggers***

Item	Description	Quantity	Unit	Unit Price	Total
1	Diver Data Cable	3,595	LS	\$ 0.85	\$ 3,056
2	Diver Data PC Interface Cable	1	EA	\$ 325.00	\$ 325
3	Pressure Transducers	11	EA	\$ 525.00	\$ 5,775
4	Optical Reading Unit	1	EA	\$ 193.00	\$ 193
Subtotal					\$ 9,349
Sales Tax (8.175%)					\$ 764
Shipping					\$ 120
Total					\$ 10,233

- Note:**
- 1) Data loggers will be installed in 11 casings with depths of 120 feet (5 total), 245 feet (1 total) and 550 feet (5 total)
 - 2) Unit prices based on quotation from reputable supplier for similar project in 2012



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Irrigation Water Suitability

Please select an analysis below for sampling instructions and container information.

<u>CONSTITUENTS</u>	<u>METHOD</u>	<u>PRICE</u>
Irrigation Water Suitability Irrigation Water Suitability (Alkalinity, bicarbonate, boron, calcium, carbonate, chloride, copper, electrical conductivity, fluoride, gypsum requirement, hydroxide, iron, magnesium, manganese, nitrate, pH, potassium, sodium, SAR, sulfate, total dissolved solids, total hardness, zinc)	Various	\$100.00

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