



LOCAL GROUNDWATER ASSISTANCE PROGRAM

BUDGET

The funding provided by the LGA Program will be firstly, for the purchase of new meters needed for wells that have none, secondly for the purchase of new meters where replacement is necessary and thirdly for parts and straightening apparatus. All labor involved in the project and future maintenance, operations, repairs and replacement will be provided by Westlands Water District. Westlands is willing and able to provide approximately \$110,000 per year to the operation, maintenance and meter reading required for the groundwater meters.

Table B-1: Well Metering Project Budget

Well Metering Project		
Expenses		
Total Expenses	\$250,000.00	\$154,500.00
	Estimated State Funding	Cost Share - Non-State Funding
Meter Cost		
Meter Cost	\$1,567.00	\$0.00
Total Cost for 68 Meters	\$106,556.00	\$0.00
Refurbish Meter Parts Cost		
Parts	\$137,444.00	\$0.00
Flow Straightener (10 @ \$450 ea)	\$4,500.00	\$0.00
Straightening Vanes (30 @ \$50 ea)	\$1,500.00	\$0.00
Total Refurbish Parts Cost	\$143,444.00	\$0.00
Labor Costs		
Installation Labor Average Cost	\$0.00	\$24,000.00
Install Straightening Apparatus	\$0.00	\$9,500.00
Refurbish Labor	\$0.00	\$11,000.00
Total Labor Costs	\$0.00	\$44,500.00
Post Installation Costs (per year)		
Operation and Maintenance	\$0.00	\$35,000.00
Meter Reading Labor Costs	\$0.00	\$20,000.00
Replacement Costs	\$0.00	\$55,000.00
Total Post Installation Cost Per Year	\$0.00	\$110,000.00

In May and June of 2012 a survey of 86% of the wells located in the District was conducted. This was done to determine if wells had meters; if the meters found were in working condition; the size of the current meter; and finally if there is adequate straight run for the meters to function properly and accurately. This data was extrapolated over the entire District and found that approximately 68 new meters will be needed, 46 meters are in need of repair and 40 lack an adequate straight run.

Meter Cost

In order to approximate a budget for the cost of the new meters, the survey conducted also determined what meter sizes are currently used on the wells in the District. This showed that the majority of the existing meters are 10", with 12" coming in a close second. With that information, a conservative estimate was developed using 12" meters for all new meters to be installed. The District installs McCrometer Saddle Meters (Item #LP32) which is quoted to cost \$1,567.

Straightening Devices

McCrometer also provided a quick estimate of \$50 for every straightening vane and \$450 for each flow straightener. It is estimated based on the field survey conducted that 25% of the existing meters that lack an adequate straight run will require a flow straightener; which equates to approximately 10 flow straighteners and 30 straightening vanes. This amount could change once a more in-depth examination of each unit is done.

Repair Parts

The cost to repair meters will be determined on a case-by-case basis because the survey conducted only noted if a meter was not working properly, so the parts needed to repair the dysfunctional meters is unknown. Since the exact parts needed are unidentified, the amount allowed for repairs is the amount left over after new meters and straightening devices are purchased. This amount also accounts for the possibility that a meter may need to be replaced or straightening devices needed for new installations. All labor, operations, maintenance and future replacement costs will be provided by Westlands Water District.

Labor Costs

Installation labor is estimated at \$24,000. This was based on \$300 per meter installation with an additional \$3600 (less than 20%) for any unforeseeable actions needed.



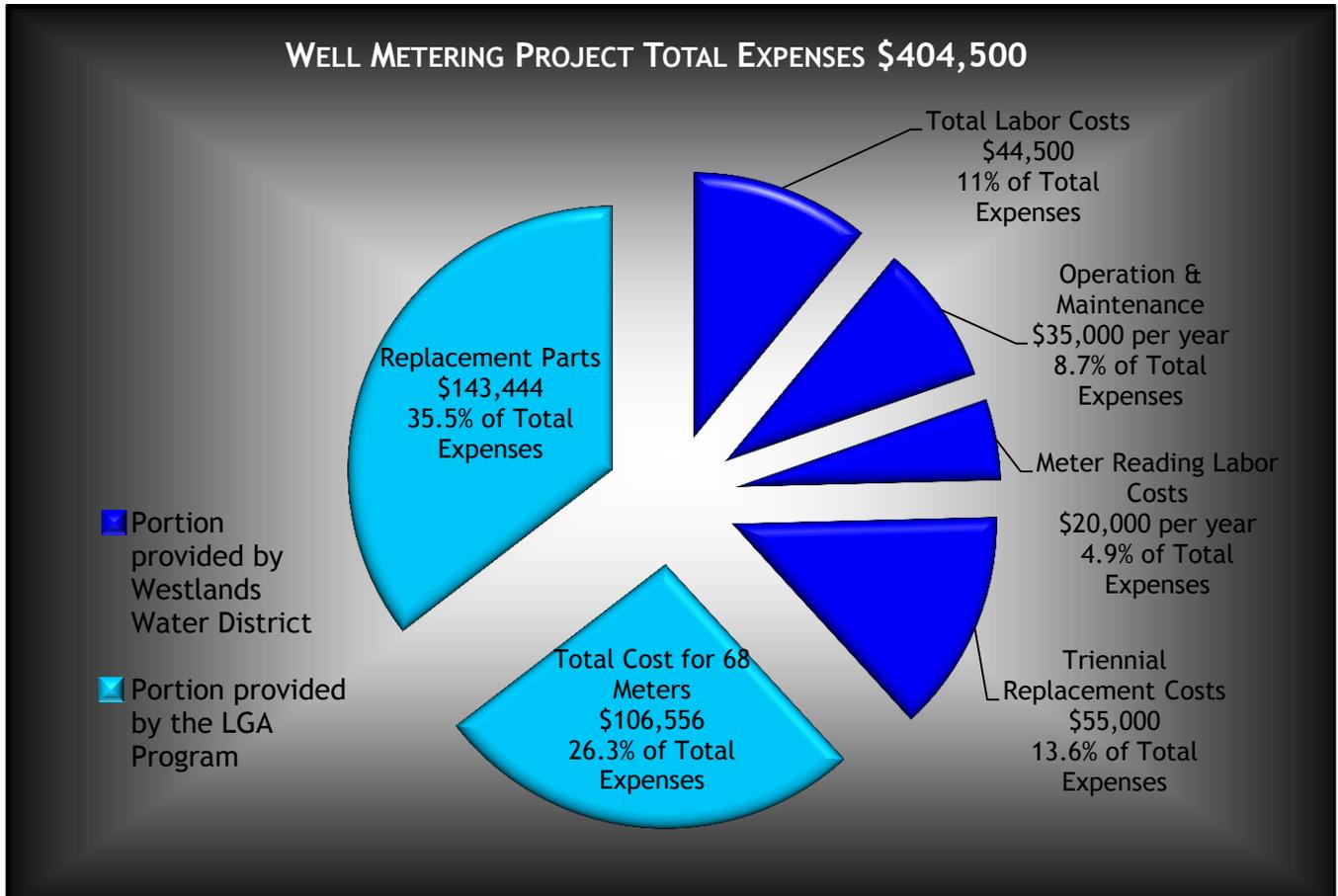
The estimation for the refurbish labor and straightening device installation was based on previous experiences that occurred in the field and the time it took the meter to be fully functional. But, again, there is no way to determine exactly what will be encountered in the field. It is estimated at \$170 for a “normal service” (See Appendix B for the “Meter Maintenance and Accuracy Report”), since the meters needing repair will require more than a “normal service” an estimate of \$200 per meter was used. For the estimated 46 meters needing repair it is \$9,200, adding \$1,800 (less than 20%) for unforeseeable labor needed brings the total to \$11,000. Approximately 40 straightening devices need installation within the District, with an estimated \$200 per installation, the total is \$8,000 and a less than 20% contingency cost brings the labor cost to \$9,500. The total labor cost for the entire Well Metering Project is \$44,500.

Again, all labor costs will be provided by Westlands Water District.

Post Installation Costs

The yearly cost for operations and maintenance is estimated at \$35,000 and is based on the current O&M program costs, where the District manages approximately 3,200 meters; this estimate also includes triennial inspection and service plus parts. Meter Reading labor costs are also based on the current program costs which is estimated at \$20,000 per year; this doesn't include added vehicle costs. The McCrometer saddle type meter has a 20 year life span, if it is maintained properly; this would be an annual capital cost to repair 5% of the meters a year, which equates to approximately \$55,000. All post installation costs will be provided by Westlands Water District.

Figure B-1: Total Expenses



In conclusion, the \$250,000 from the LGA program will be used exclusively for the purchase of new meters, refurbish parts and straightening devices. Westlands Water District will provide all of the labor required and annual costs involved with operation, maintenance, meter reading and replacements; a one-time labor cost of approximately \$44,500 and approximately \$110,000 annually.