

11 ATTACHMENT 4 - BUDGETS

11.1 Plum Basin Project

The budget for the Plum Basin Project can be found in **Appendix A of Attachment 4**. Supporting documentation for the costs included in the Plum Basin Project budget can be found in **Appendix B of Attachment 4** of the application.

Table 11-1: Plum Basin Project Summary Budget Table

Table 7 - Project Budget						
Proposal Title: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal</u> Project Title: <u>Plum Basin Project</u>						
Budget Category		(a)	(b)	(c)	(d)	(e)
		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$41,990	\$27,500	\$0	\$69,490	60%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$54,600	\$0	\$0	\$54,600	100%
(d)	Construction/Implementation	\$1,209,818	\$1,577,758	\$0	\$2,787,576	43%
(e)	Environmental Compliance/Mitigation/Enhancement	\$1,760	\$0	\$0	\$1,760	100%
(f)	Construction Administration	\$1,414	\$44,708	\$0	\$46,122	3%
(g)	Other Costs	\$33,449	\$0	\$0	\$33,449	100%
(h)	Construction/Implementation Contingency	\$106,526	\$159,036	\$0	\$265,562	40%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$1,449,557	\$1,809,002	\$0	\$3,258,559	44%
*List sources of funding: Use as much space as required.						

It should be noted that the Plum Basin project is a scalable project. The most significant funded effort is the excavation and construction of an earthen recharge basin. If reduced funding (funds less than what has been requested) were available to the

implementing agencies, this project could be reduced in the size of the constructed basins and still accomplish significant benefits.

11.1.1 Row (a) Direct Project Administration

Proposal reporting costs from Kaweah Delta WCD to DWR were included in this cost category. The person identified to do this reporting will be Mr. Larry Dotson, Kaweah Delta WCD's Senior Engineer, who will also be the Proposal Manager for Kaweah Delta WCD. An hourly cost of \$61.25 per hour was included to cover the District's effort through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Dotson's wages and benefits. Grant funds were requested for these costs.

Proposal reporting costs from Tulare ID to Kaweah Delta WCD were included in this cost category. The person identified to do this reporting will be Mr. Aaron Fukuda, Tulare ID's District Engineer, who will also be the Project Manager for Tulare ID. An hourly cost of \$70.72 per hour was included to cover the District's effort through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Fukuda's wages and benefits. Grant funds were requested for these costs.

There are also project administration costs from Provost and Pritchard Consulting Group (Tulare ID's consulting engineers) to Tulare ID that were included in this cost category. Several people were identified to be involved in this effort and each of their hours was tabulated to generate a total per line item for the project budget. The hourly cost of \$105.27 and \$105.13 per hour were the calculated averages of the individuals involved in completing the tasks and the hours used in the effort. The listed hourly costs include Provost and Pritchard wages and benefits. Grant funds were not requested for these costs.

Office supplies were included as a lump sum. This cost was estimated based on similar Tulare ID efforts to report on Bureau of Reclamation grants over the last several years. Given the amount of reporting and number of entities involved, Tulare ID's costs were proportioned to estimate what office supplies would be needed for this reporting effort. Grant funds were not requested for these costs.

11.1.2 Row (b) Land Purchase/Easement

Tulare ID and the City of Tulare purchased the Plum Basin property in 2007. No project costs were included in this cost category.

11.1.3 Row (c) Planning/Design/Engineering/Environmental Documentation

The design of the Plum Basin project has already been completed as has the vast majority of environmental documentation. CEQA compliance documentation was completed by Tulare ID in 2009. Also, NEPA compliance for the construction was pursued by the Bureau of Reclamation after Phase One of the project was awarded a federal grant in 2009. NEPA compliance for Phases Two and Three of the project are currently underway as a second federal grant from the Bureau of Reclamation was awarded in 2010.

The 100% (final) design and record survey listed in the project budget do not have associated costs because they were completed prior to September 30, 2008. The CEQA and NEPA documentation listed in the project budget has been developed from the previous efforts of the District's consultant to produce environmental documentation. The total hours from each effort was summed for each individual involved to generate an average hourly rate for the project. This was then applied to the hours involved in completing the project to account for the cost for the effort. Supplemental cost breakdowns for the previous efforts can be found in **Appendix E of the Plum Basin Project Appendices**.

11.1.4 Row (d) Construction/Implementation

11.1.4.1 Components of Constructed Effort

Labor, Equipment and Materials was called out in each of the phases of construction for the project. The following sections describe how different costs were estimated or quantified.

11.1.4.1.1 Labor

Tulare ID forces will be constructing the majority of the project. Individual hourly rates were determined for the employees involved in the construction effort and their wages and benefits were shown as hourly costs for the project. Salary or wages for a Tulare ID employee is approximately 61.04% of the listed hourly rates. Fringe benefits account for approximately 36.62% of the listed hourly rates. Fringe benefits that are available to each employee are FICA, Medicare, medical, dental and vision insurance; worker's compensation and limited disability, life insurance, vacation, holiday pay and safety compensation leave.

Tulare ID will consult an integration controller (Concepts in Controls) to assist with the completion of the Project. Labor for the integration controller will involve installation of all SCADA control equipment and is based on similar efforts by the consultant for Tulare ID.

11.1.4.1.2 Equipment

Tulare ID has rented all the heavy earthmoving equipment that will be used in this Project. All equipment costs are generated to include equipment usage. It is estimated that operation and maintenance per cubic yard of earth moving will cost \$1.397.

11.1.4.1.3 Materials

In accordance with the requirements of the Recovery Act, the District certifies that all iron, steel and manufactured goods purchased for this project will be produced in the United States. All supply and material costs are considered preliminary and are solely based on similar costs currently being constructed in the local area. SCADA control costs are based on the District's experience installing similar facilities with the District's Integration Control consultant. Office supply costs are for the preparation of any environmental, permitting or reporting documents that will be generated by the engineering consultant.

11.1.4.2 Phase One

Phase One of the project is currently under construction and is planned to be completed by February 2011. For this reason its costs are shown as local cost share and are not being requested for reimbursement. Phase One efforts involve the construction of the first of three earthen basin cells, two concrete turnout structures, and several piezometers. The earthen basin will be excavated using large earthmoving equipment (scrapers, excavators, bull dozers) rented by Tulare ID and material from the excavation will be compacted to create above ground embankments around the basin. The concrete turnout structures will be formed and cast in place. They will then be outfitted with trash racks, control gates, flow meters and SCADA controls to allow Tulare ID staff to monitor conditions at the site remotely. Labor, materials and equipment were all quantified for these construction efforts using unit prices.

11.1.4.3 Phase Two

Phase Two of the project is scheduled to begin after the anticipated award date of June 2011. For this reason its costs will be requested for grant reimbursement. Phase Two efforts involve the construction of the second of three earthen basin cells, one concrete

turnout structure, several piezometers and a monitoring well. The earthen basin will be excavated using large earthmoving equipment (scrapers, excavators, bull dozers) rented by Tulare ID and material from the excavation will be compacted to create above ground embankments around the basin. The concrete turnout structure will be formed and cast in place. It will then be outfitted with a trash rack, control gate, flow meter and SCADA controls to allow Tulare ID staff to monitor conditions at the site remotely. Labor, materials and equipment were all quantified for these construction efforts using unit prices.

Estimated costs for Phase Two construction were first generated in an Engineer's Estimate of Probable Construction Cost for through the full three-cell Plum Basin Project. However, as Cell one has proceeded under construction, the original Engineer's Estimate and the unit costs used have been refined according to the District's experience with the project.

11.1.4.4 Phase Three

Phase Three of the project is scheduled to begin in March of 2012. For this reason its costs will be requested for grant reimbursement. Phase Three efforts involve the construction of the third of three earthen basin cells, one concrete turnout structure, several piezometers and a monitoring well. The earthen basin will be excavated using large earthmoving equipment (scrapers, excavators, bull dozers) rented by Tulare ID and material from the excavation will be compacted to create above ground embankments around the basin. The concrete turnout structure will be formed and cast in place. It will then be outfitted with a trash rack, control gate, flow meter and SCADA controls to allow Tulare ID staff to monitor conditions at the site remotely. Labor, materials and equipment were all quantified for these construction efforts using unit prices.

Estimated costs for Phase Three construction were first generated in an Engineer's Estimate of Probable Construction Cost for through the full three-cell Plum Basin Project. However, as Cell one has proceeded under construction, the original Engineer's Estimate and the unit costs used have been refined according to the District's experience with the project.

11.1.5 Row (e) Environmental Compliance/Mitigation/Enhancement

The environmental compliance effort accounted for in the project budget involves a biological site survey prior to construction beginning for each phase of the project. This

site survey will be accomplished by a qualified individual from Provost and Pritchard Consulting Group, Tulare ID's environmental consultant before construction of Cell Two or Cell Three begins. Results from the site survey will be documented and recorded for the District. The District will be made immediately aware of any issues identified.

11.1.6 Row (f) Construction Administration

Construction inspection for the project will mostly be accomplished by the Tulare ID's District Engineer. Mr. Fukuda's time for each phase of the construction was included in the project budget.

The District plans on installing the piezometers (very shallow monitor wells) for the project. A small amount of time is included for this effort in the construction administration category to account for help from the District's engineering consultant during the construction of the first few piezometers.

Construction staking for the project will be accomplished by the Tulare ID's consulting engineers, Provost and Pritchard Consulting Group. Provost and Pritchard's time for the construction staking of each phase of the construction was included in the project budget.

11.1.7 Row (g) Other Costs

The costs for the removal of the pre-existing orchard prior to construction was included in this cost category. However, the work has already been accomplished; therefore the costs are shown as local cost share and are not being requested for reimbursement.

11.1.8 Row (h) Construction/Implementation Contingency

A ten percent (10%) contingency was used for this project because the project's final design is completed and the District has a history of costs on the project that have proven to be fairly consistent. Building material costs could fluctuate during the construction timeframe, but recently material costs have been fairly stable. This contingency mostly covers the unavoidable and unforeseen construction issues that often arise on these types of projects. Some of these issues may be weather related, and some of them could be related to what is found during excavation of the basin sites.

11.2 Water Reuse Pipeline Project

The budget for the Water Reuse Pipeline Project can be found in **Appendix C of Attachment 4**. Supporting documentation for the costs included in the Water Reuse

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Pipeline Project budget can be found in **Appendix D of Attachment 4** of the application.

Table 11-2: Water Reuse Pipeline Project Summary Budget Table

Table 7 - Project Budget						
Proposal Title: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal</u> Project Title: <u>Water Reuse Pipeline Project</u>						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$62,880	\$0	\$0	\$62,880	100%
(b)	Land Purchase/Easement	\$21,250	\$0	\$0	\$21,250	100%
(c)	Planning/Design/Engineering/Environmental Documentation	\$1,011,258	\$0	\$0	\$1,011,258	100%
(d)	Construction/Implementation	\$8,247,261	\$3,089,530	\$0	\$11,336,791	73%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$81,972	\$0	\$0	\$81,972	100%
(g)	Other Costs	\$5,000	\$0	\$0	\$5,000	100%
(h)	Construction/Implementation Contingency	\$1,234,014	\$463,430	\$0	\$1,697,444	73%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$10,663,635	\$3,552,960	\$0	\$14,216,595	75%
*List sources of funding: Use as much space as required.						

It should be noted that the Water Reuse Pipeline project is a scalable project. The most significant funded effort is the construction of a large diameter pipeline and its appurtenances. If reduced funding (funds less than what has been requested) were available to the implementing agencies, this project could be reduced in the diameter of the conveyance pipeline and still accomplish significant benefits.

11.2.1 Row (a) Direct Project Administration

Proposal reporting costs from Kaweah Delta WCD to DWR were included in this cost category. The person identified to do this reporting will be Mr. Larry Dotson, Kaweah Delta WCD's Senior Engineer, who will also be the Proposal Manager for Kaweah Delta WCD. An hourly cost of \$61.25 per hour was included to cover the District's effort through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Dotson's wages and benefits. Grant funds were not requested for these costs.

Proposal reporting costs from the City of Visalia to Kaweah Delta WCD were included in this cost category. The person identified to do this reporting will be Mr. Andrew Benelli, the City of Visalia's Public Works Director, who will also be the Project Manager for the City of Visalia. An hourly cost of \$70.72 per hour was included to cover the City of Visalia's effort through Mr. Benelli's time in project reporting. The listed hourly cost includes Mr. Benelli's wages and benefits. Grant funds were not requested for these costs.

There are also project administration costs from Provost and Pritchard Consulting Group (Tulare ID's consulting engineers) to Tulare ID that were included in this cost category. This effort is associated with the project reporting to the Bureau of Reclamation on a federal grant acquired by Tulare ID for partial funding of the Project. Several people were identified to be involved in this effort and each of their hours was tabulated to generate a total per line item for the project budget. The hourly cost of \$116.42 per hour was the calculated averages of the individuals involved in completing the tasks and the hours used in the effort. The listed hourly costs include Provost and Pritchard wages and benefits. Grant funds were not requested for these costs.

Office supplies were included as a lump sum. This cost was estimated based on similar City of Visalia efforts to report on other State grants over the last several years. Given the amount of reporting and number of entities involved, City of Visalia's costs were proportioned to estimate what office supplies would be needed for this reporting effort. Grant funds were not requested for these costs.

11.2.2 Row (b) Land Purchase/Easement

The majority of the project alignment will be constructed in existing County right-of-way. Discussions with Tulare County as to easements in their right-of-way for the proposed project are underway and currently it is understood that right-of-way acquisition associated with those areas will not be necessary. The City of Visalia will acquire approximately 4.25 acres of right-of-way from a private owner. This right-of-way

acquisition (a planned easement) will occur after the environmental documentation for the project is completed. It has been estimated that the property is currently worth approximately \$5,000 per acre given recent similar property acquisitions in the area.

11.2.3 Row (c) Planning/Design/Engineering/Environmental Documentation

The design of the Water Reuse Pipeline project will be completed prior to the anticipated grant award and given the existing schedule for the environmental documentation; it will likely be completed as well. The design of the Water Reuse Pipeline project is currently at a 60% level and the draft administrative EIR/EIS is now in preparation.

The City of Visalia is pursuing the design and environmental compliance efforts for the expansion and upgrade of their wastewater treatment plan and the water reuse pipelines through a team of consultants lead by Parsons Corporation through their water and infrastructure division. Parsons Corporation is the taking the lead on the design of the City of Visalia's upgrade and expansion of their wastewater treatment plant. As a partner on the consulting team Jones & Stokes ICF is preparing the environmental documentation (an anticipated Environmental Impact Report covering the wastewater treatment plant expansion and upgrade as well as the water reuse pipelines and all necessary property acquisitions) for the project. Provost & Pritchard Consulting Group is the third member of the consulting team and they have the responsibility of surveying for the water reuse system, which is the focus of the submitted project, designing the water reuse system and preparing the property acquisition easements for the new pipelines.

As a project partner on the Water Reuse Pipelines, Tulare ID applied for a federal grant from the Bureau of Reclamation for partial funding of the Tulare ID Water Reuse Pipeline in 2010 and was successfully awarded a \$700,000 for construction. Along with these federal funds comes the requirement that the Bureau of Reclamation process environmental documentation as lead agency in compliance with NEPA. Tulare ID is currently working with the Bureau of Reclamation in the preparation of this documentation, and it is anticipated to be completed approximately four (4) months after the projects CEQA documentation is completed (October 2011).

11.2.3.1 Technical Report

The Technical Report for this effort was a conceptual evaluation of the feasibility of potential project alternatives in an effort to select a preferred alternative and understand

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the basis of design for this facility. The Technical Report consisted of the following sections:

- Review of the City of Visalia's Water Conservation Plant Masterplan (wastewater treatment plant improvement and expansion planning document);
 - Estimation of the anticipated increase in wastewater flows over the foreseeable future;
 - Evaluation of the potential uses of the treated wastewater given the treatment level planned for the improved plant.
- Evaluate and Analyze area surrounding the existing wastewater treatment plant:
 - Land Use;
 - Cropping;
 - Identify potential issues for delivery of treated wastewater;
 - Estimate consumptive use and likely irrigated demand for existing cropping.
 - Construction Obstacles;
 - Existing water conveyance systems;
 - Existing City of Visalia parks in the area;
 - Identify potential issues for delivery of treated wastewater;
 - Estimate consumptive use and likely irrigated demand for existing cropping.
 - Valley Oaks Golf Course;
 - Identify potential for the irrigation of turf at the Golf Course and delivery to water features;
 - Estimate consumptive use and likely irrigated demand for existing turf;
 - Estimate potential groundwater recharge from water features.
 - City of Visalia Airport; and
 - Tulare ID service area.
- Conceptually design a water reuse delivery system:
 - Alternative to deliver water to only City of Visalia facilities;
 - Alternative to deliver water to existing growers in the wastewater treatment plant area;
 - Alternative to deliver water to Tulare ID service area;
 - Alternative to deliver water to local golf course, airport and City of Visalia green areas; and
 - Alternative to deliver water to recharge basins on east side of City of Visalia.
- Development of costs and benefits for each alternative water reuse delivery system design:
 - Construction Costs;
 - Operation and Maintenance Costs;
 - Necessary right-of-way acquisition;
 - Potential issues associated with existing utilities in the area; and
 - Necessary permits and agreements.

For a detailed description of the work items involved in this effort please refer to the Water Reuse Pipeline Project work plan.

The costs included in the project budget for the Technical Report on the City of Visalia's Water Reuse Pipelines were developed from the proposal for the work submitted to the City of Visalia. This proposal outlined the work items involved in the study, estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the Technical Report that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.2.3.2 Mill Creek Bypass Pipeline to Basin 4 Design

This work item will include furnishing and installing 6,510 feet of 60-inch RGRCP pipeline from the new regulation basins and pump station to the City's existing Basin 4. This pipeline will include several bends, a few road crossings, a concrete meter vault with a transducer style flowmeter, and several air vents. The controls for this pipeline will be outfitted with SCADA so that information on the system will be made available to be monitored by City of Visalia Staff back at the yard for the Public Works department as well as inside the Water Conservation Plant. For a detailed description of the work items involved in constructing this effort please refer to the Water Reuse Pipeline Project work plan.

The design costs included in the project budget for the Mill Creek Bypass Pipeline to Basin 4 were developed from the proposal for the work submitted to the City of Visalia. This proposal outlined the work items involved in the conceptual design, final design, estimates of probable construction cost, contract documents, project specifications and bid documents for the facility. The proposal estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the design of the Mill Creek Bypass Pipeline to Basin 4

that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.2.3.3 Regulation Basins and Tulare ID Water Reuse Pipeline Design

The Tulare ID Water Reuse Pipe involves furnishing and installing 10,300 feet of 60-inch RGRCP pipeline from a diversion from the Mill Creek Bypass Pipeline to Tulare ID's surface water delivery system. This pipeline will include several bends, a few road crossings, a concrete meter vault with a transducer style flowmeter, and several air vents. The construction of the crossing at Ave 272 is intended to be a jack-and-bore.

The new regulation basins involve constructing a new two cell 20 acre regulation basin that will require approximately 15,000 cubic-yards of excavation. The construction of the basins will include water control structures between the two cells that employ manual sluice gates. Concrete spillway structures will be constructed on both cells of the basin to provide protection against failure. This facility will also include a new concrete metering vault in the bank of the regulation basin that will employ a transducer styled flow meter. SCADA equipment will be installed at this location to monitor the water level in both cells, the measured flows leaving the basins and the metered flows coming into the basin. This information will be made available to be monitored by City of Visalia Staff back at the yard for the Public Works department as well as inside the Water Conservation Plant.

The design costs included in the project budget for the Regulation Basins and Tulare ID Water Reuse Pipeline were developed from the proposal for the work submitted to the City of Visalia. The Regulation Basins and Tulare ID Water Reuse Pipeline proposal was part of a proposal for the larger project that also included the Mill Creek Bypass Pipeline to Basin 4. The content of the work and the method used to budget costs as described in that previous section also apply to this section.

11.2.3.4 City of Visalia Water Reuse Pipeline Design

The construction of the eastern portion of the City of Visalia's Water Reuse Pipelines will involve furnishing and installing 3,400 feet of 18-inch C905 PVC pipeline from a diversion from the new regulation basins and pump station to a connection with the southern portion of the system. This pipeline will include several bends, a few road

crossings, a concrete meter vault with a transducer style flowmeter, and several air vents.

The construction of the southern portion of the City of Visalia's Water Reuse Pipelines will include furnishing and installing 17,350 feet of 18 to 36-inch C900 to C905 PVC pipeline from the diversion from the eastern portion of the system to the Visalia airport, the Golf Course, and adjacent farmed fields. This pipeline will include several bends, a few road crossings, a concrete meter vault with a transducer style flowmeter, and several air vents. The construction of the crossing at Highway 99 and the adjacent railroad is intended to be a jack-and-bore with a 51-inch steel carrier casing.

The construction of the new water reuse system pump station will include furnishing and installing a new pump station with one 60 HP constant speed pump, one 60 HP variable speed pump and one 125 HP constant speed pump with piping, valves, electrical and appurtenances. The new concrete pump station structure is anticipated to consist of approximately 188 cubic-yards of concrete. This work item will include all necessary work to extend electrical service to the site and to work with the utility to activate the service and make the connection to the new pump station functional.

The design costs included in the project budget for the City of Visalia's Water Reuse Pipeline and Pump Stations were developed from the proposal for the work submitted to the City of Visalia. The City of Visalia's Water Reuse Pipeline and Pump Stations proposal was part of a proposal for the larger project that also included the Mill Creek Bypass Pipeline to Basin 4. The content of the work and the method used to budget costs as described in that previous section also apply to this section.

11.2.3.5 Legal Descriptions Development for Right-of-way Easements

A land surveying or civil engineering consultant will work with the City of Visalia to generate new easement descriptions and schematics for recording with the County of Tulare overall project properties.

The design costs included in the project budget for the generation of new easements in support of project right-of-way acquisition were developed from the proposal for the work submitted to the City of Visalia. This proposal outlined the work items involved in the conceptual design, final design, estimates of probable construction cost, contract documents, project specifications and bid documents for the facility. The proposal estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the

approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of new easements in support of project right-of-way acquisition that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.2.4 Row (d) Construction/Implementation

11.2.4.1 Contractor Selection and Bid Award

The included in the project budget for the selection of the successful low-bidding contract and the bid award by the City of Visalia were developed from the efforts recently necessary to accomplish other similar efforts for construction projects by the City of Visalia. These previous efforts were evaluated for the time required and how applicable they were to the proposed project. Then reasonable adjustments were made for particular aspects of the project that differed or needed to be accounted for. This was the basis for a man-hour estimate for the effort to review submitted bids, select the successful low-bidding contract and award the contract from the City of Visalia.

This estimate quantified the anticipated costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal. The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of effort that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.2.4.2 Construction Costs

The construction costs estimated for the pipeline from the expanded and improved City of Visalia wastewater treatment plant to the new regulation basins were developed from

a unit take-off from the current project plans. This effort was undertaken to develop an opinion of probable construction costs for the current 60% design plans. The unit prices for portions of the constructed effort were compiled by the City of Visalia's consulting engineer from project bid summaries from within the last 24-months associated with similar construction project within the local area that the consultant was involved with. This process was followed for the following construction efforts broken out in the project budget:

- WWTP to Regulation Basin Pipeline;
- Regulation Basin and Misc. Piping;
- Mill Creek Bypass Pipeline to Basin 4;
- Tulare ID Water Reuse Pipeline;
- Pump Station;
- City of Visalia's Water Reuse Southern Pipeline; and
- City of Visalia's Water Reuse Eastern Pipeline.

11.2.5 Row (e) Environmental Compliance/Mitigation/Enhancement

The environmental compliance effort accounted for in the project budget involves a biological site survey prior to construction beginning for each portion of the project. This site survey will be accomplished by a qualified environmental consultant. Results from the site survey will be documented and recorded for the City of Visalia. The City of Visalia will be made immediately aware of any issues identified.

11.2.6 Row (f) Construction Administration

As the project's design has not yet been completed, the hours for construction inspection and administration were estimated by a consultant to the City of Visalia based on similar local efforts accomplished in the recent years. This estimate outlined the work items involved in the construction management for different portions of the construction for the facility. The proposal estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of new easements in support of project right-of-way acquisition that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be

necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.2.7 Row (g) Other Costs

The costs for the removal of the pre-existing orchard prior to construction were included in this cost category. This cost is based on a similar effort by Tulare ID for the Plum Basin project that was accomplished in 2008. The effort was reduced to a per-acre unit cost and then applied to the necessary area for this project.

11.2.8 Row (h) Construction/Implementation Contingency

A fifteen percent (15%) contingency was used for this project because the project's 60% conceptual design is completed. Building material costs could fluctuate during the construction timeframe, but recently material costs have been fairly stable. This contingency mostly covers the unavoidable and unforeseen construction issues that often arise on these types of projects. Some of these issues may be weather related, and some of them could be related to what is found during excavation of the basin sites.

11.3 Paregien Basin Project

Supporting documentation for the costs included in the Plum Basin Project budget can be found in **Appendix B of the Paregien Basin Project Appendices** of the application.

It should be noted that the Paregien Basin Project is a scalable project. The most significant funded effort is the construction of a new canal structure and two earthen levees. Both the irrigation structure and the earthen levees are scalable. If reduced funding (funds less than what has been requested) were available to the implementing agencies, the length of height of the earthen levees could be reduced or the irrigation structure made more basic in order to reduce project costs while still accomplishing significant benefits.

11.3.1 Row (a) Direct Project Administration

Proposal reporting costs from Kaweah Delta WCD to DWR were included in this cost category. The person identified to do this reporting will be Mr. Larry Dotson, Kaweah Delta WCD's Senior Engineer, who will also be the Proposal Manager for Kaweah Delta WCD. An hourly cost of \$61.25 per hour was included to cover the District's effort

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through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Dotson's wages and benefits. Grant funds were requested for these costs.

Table 11-3: Paregien Basin Project Summary Budget Table

Table 7 - Project Budget						
Proposal Title: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal</u>						
Project Title: <u>Paregien Basin Project</u>						
Budget Category		(a)	(b)	(c)	(d)	(e)
		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$30,210	\$0	\$0	\$30,210	100%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$276,480	\$33,600	\$0	\$310,080	89%
(d)	Construction/Implementation	\$104,020	\$1,008,900	\$0	\$1,112,920	9%
(e)	Environmental Compliance/Mitigation/Enhancement	\$31,800	\$0	\$0	\$31,800	100%
(f)	Construction Administration	\$12,250	\$0	\$0	\$12,250	100%
(g)	Other Costs	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$200,780	\$0	\$200,780	0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$454,760	\$1,243,280	\$0	\$1,698,040	27%
<p>*List sources of funding: <i>Use as much space as required.</i> Funding for KDWCD staff hours associated with project administration will come from KDWCD operations budget.</p>						

Office supplies were included as a lump sum. This cost was estimated based on similar Kaweah Delta WCD efforts to report on Bureau of Reclamation and Department of Water Resources grants over the last several years. Given the amount of reporting and number of entities involved, Kaweah Delta WCD's costs were proportioned to estimate what office supplies would be needed for this reporting effort. Grant funds were not requested for these costs.

11.3.2 Row (b) Land Purchase/Easement

Kaweah Delta WCD purchased the Paregien Basin property in 2002. No project costs were included in this cost category.

11.3.3 Row (c) Planning/Design/Engineering/Environmental Documentation

The design of the Paregien Basin project is currently at the 10% conceptual design stage and will require significant study and design before the project can be constructed by a contractor. The following efforts are described in the work plan and included in the project budget as Planning/Design/Engineering/Environmental Documentation efforts. These efforts were developed in coordination with Kaweah Delta WCD's water resource consultants as study effort necessary to better define the operations of and potential benefits from the proposed facility.

- Preliminary Biological Assessment;
- Paregien Basin Technical Study:
 - Deep Creek Flow Range Research and Analysis;
 - Recharge and Impoundment Analysis;
 - Geotechnical Investigation;
 - Conceptual (30%) design development;
 - Development of estimate of probable construction cost for facility.
- Paregien Basin Design
 - Construction drawing development;
 - Project specification development.
- CEQA Documentation
 - Development of Environmental Checklist;
 - Provide and update to the Preliminary biological assessment;
 - Development of Draft Mitigated Negative Declaration;
 - Generation of the Final Mitigated Negative Declaration.
- Project Permitting
 - California Department of Fish and Game streambed alteration permit (1602 Permit);
 - Army Corps of Engineers Clean Water Act permit (404 Permit);
 - Regional Water Quality Control Board Storm Water Pollution Prevention Plan (SWPPP);
 - Air Resources Board Dust Control Plan (DCP);
 - Consolidated-Peoples Ditch Company Water Diversion Agreement.

The costs included in the project budget for these efforts were developed from the man-hour estimates developed by Kaweah-Delta WCD's consultants. These man-hour estimates outlined the work items involved in the efforts, estimated the required costs per task, quantified the number hours for each person on the project team and the cost

per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal. The average hourly rate shown in individual lines of the project budget are developed from the more specific man-hour estimates for the portions of the work. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.3.4 Row (d) Construction/Implementation

11.3.4.1 Contractor Selection and Bid Award

The effort included in the project budget for the selection of the successful low-bidding contract and the bid award by Kaweah Delta WCD were developed from the efforts recently necessary to accomplish other similar efforts for construction projects by the Kaweah Delta WCD. These previous efforts were evaluated for the time required and how applicable they were to the proposed project. Then reasonable adjustments were made for particular aspects of the project that differed or needed to be accounted for. This was the basis for a man-hour estimate for the effort to review submitted bids, select the successful low-bidding contract and award the contract from Kaweah Delta WCD.

This estimate quantified the anticipated costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal. The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of effort that was generated by Kaweah Delta WCD's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.3.4.2 Construction Costs

The construction costs estimated for the Paregien Basin water retention facilities and monitor wells were developed from a unit take-off from the current project plans. This effort was undertaken to develop an opinion of probable construction costs for the

current 10% design plans. The unit prices for portions of the constructed effort were compiled by the Kaweah Delta WCD's consulting engineer from project bid summaries from within the last 24-months associated with similar construction project within the local area that the consultant was involved with. This process was followed for the following construction efforts broken out in the project budget:

- Construction of the Water Retention Facilities:
 - Mobilization and Site Preparation;
 - Demolition of existing temporary earthen facility;
 - Construct reinforced concrete weir control structure;
 - Construct metal catwalk;
 - Furnish and install water control radial gate;
 - Construct earthen berms;
 - Hydroseed earthen berms;
 - Furnish and install gravel for levee road.
- Construction of the Monitor Wells:
 - Monitor well drilling;
 - Furnish and install 4-inch schedule 40 PVC perforated casing;
 - Furnish and install continuous data logger with direct read cable

11.3.5 Row (e) Environmental Compliance/Mitigation/Enhancement

The environmental compliance effort accounted for in the project budget involves a biological site survey prior to construction beginning for each portion of the project. This site survey will be accomplished by a qualified environmental consultant. Results from the site survey will be documented and recorded for Kaweah Delta WCD. The Kaweah Delta WCD will be made immediately aware of any issues identified.

11.3.6 Row (f) Construction Administration

As the project's design has not yet been completed, the hours for construction inspection and administration were estimated by a consultant to Kaweah Delta WCD based on similar local efforts accomplished in the recent years. This estimate outlined the work items involved in the construction management for different portions of the construction for the facility. The proposal estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of new easements in support of project

right-of-way acquisition that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.3.7 Row (h) Construction/Implementation Contingency

A twenty percent (20%) contingency was used for this project because the project's development is only to the 10% conceptual design level. A significant amount of operation study and structural design remain before accurate construction quantities can be determined.

11.4 Oakes Basin Habitat Enhancement Project

The budget for the Oakes Basin Habitat Restoration Project can be found in **Appendix E of Attachment 4**. Supporting documentation for the costs included in the Oakes Basin Habitat Restoration Project budget can be found in **Appendix F of Attachment 4** of the application.

It should be noted that the Oakes Basin Habitat Restoration Project is a scalable project. The most significant funded effort is the construction of a small irrigation well and the planting of the restored habitat. The irrigation well is not a scalable item, but the restored habitat planting is. If reduced funding (funds less than what has been requested) were available to the implementing agencies, the planted area in this project could be reduced while still accomplishing significant benefits.

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Table 11-4: Oakes Basin Habitat Enhancement Project Summary Budget Table

Table 7 - Project Budget						
Proposal Title: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal</u>						
Project Title: <u>Oakes Basin Habitat Enhancement Project</u>						
Budget Category		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$29,894	\$0	\$0	\$29,894	100%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$14,981	\$12,095	\$0	\$27,076	55%
(d)	Construction/Implementation	\$0	\$91,200	\$0	\$91,200	0%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$6,391	\$0	\$6,391	0%
(f)	Construction Administration	\$0	\$2,450	\$0	\$2,450	0%
(g)	Other Costs	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$7,695	\$0	\$7,695	0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$44,875	\$119,831	\$0	\$164,706	27%
*List sources of funding: Use as much space as required.						

11.4.1 Row (a) Direct Project Administration

Proposal reporting costs from Kaweah Delta WCD to DWR were included in this cost category. The person identified to do this reporting will be Mr. Larry Dotson, Kaweah Delta WCD's Senior Engineer, who will also be the Proposal Manager for Kaweah Delta WCD. An hourly cost of \$61.25 per hour was included to cover the District's effort through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Dotson's wages and benefits. Grant funds were requested for these costs.

Office supplies were included as a lump sum. This cost was estimated based on similar Kaweah Delta WCD efforts to report on Bureau of Reclamation and Department of

Water Resources grants over the last several years. Given the amount of reporting and number of entities involved, Kaweah Delta WCD's costs were proportioned to estimate what office supplies would be needed for this reporting effort. Grant funds were not requested for these costs.

11.4.2 Row (b) Land Purchase/Easement

Kaweah Delta WCD has owned the Oakes Basin project site for several years. No project costs were included in this cost category.

11.4.3 Row (c) Planning/Design/Engineering/Environmental Documentation

A mitigated negative declaration was previously adopted by Kaweah Delta WCD for the construction and operation of this project back in 2005. To verify that no significant issues have changed since then, a field review of the construction area will be accomplished by a qualified biological consultant and recommendations made to Kaweah Delta WCD. Assuming that nothing is identified as having significantly changed over the last few years since construction, a categorical exemption will be filed on the project. The effort included in the budget under this category for this project is the effort by Kaweah Delta WCD's consultant to accomplish the biological review and make recommendations on how to proceed.

11.4.4 Row (d) Construction/Implementation

11.4.4.1 Contractor Selection and Bid Award

The effort included in the project budget for the selection of the successful low-bidding contract and the bid award by Kaweah Delta WCD were developed from the efforts recently necessary to accomplish other similar efforts for construction projects by the Kaweah Delta WCD. These previous efforts were evaluated for the time required and how applicable they were to the proposed project. Then reasonable adjustments were made for particular aspects of the project that differed or needed to be accounted for. This was the basis for a man-hour estimate for the effort to review submitted bids, select the successful low-bidding contract and award the contract from Kaweah Delta WCD.

This estimate quantified the anticipated costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal. The average hourly rate shown in the project budget is developed

from the more specific man-hour estimate for the generation of effort that was generated by Kaweah Delta WCD's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.4.4.2 Construction Costs

The construction costs estimated for the Oakes Basin Habitat Enhancement irrigation well, irrigation system and vegetation plantings were developed from a unit take-off from the current project plans. This effort was undertaken to develop an opinion of probable construction costs for the current 90% design plans. The unit prices for portions of the constructed effort were compiled by the Kaweah Delta WCD's consulting engineer from project bid summaries from within the last 24-months associated with similar construction project within the local area that the consultant was involved with. This process was followed for the following construction efforts broken out in the project budget:

- Construction of the New Irrigation Well:
 - Mobilization and Site Preparation;
 - Construct/Drill low volume irrigation well;
 - E-log of the boring;
 - Classification of the borehole cuttings;
 - Furnish and Install 10-inch diameter PVC perforated casing;
 - Preliminary and Pumping Well Development;
 - Furnish and Install the designed submersible pump;
 - Construct concrete pump pad, gravel shoot, and sounding tube;
 - Furnish and Install pump panels;
 - Extend electrical service to new well.
- Construction of the New Irrigation System:
 - Furnish and Install underground PVC header pipelines;
 - Furnish and Install air release valves, water control valves and flush valves;
 - Furnish and install above ground flexible tubing;
 - Furnish and install above irrigation bubblers.
- Plantings as per the Vegetation Plan:
 - Dig planting holes;
 - Plant trees Valley Oaks;

11.4.5 Row (e) Environmental Compliance/Mitigation/Enhancement

The environmental compliance effort accounted for in the project budget involves a biological site survey prior to construction beginning for each portion of the project. This site survey will be accomplished by a qualified environmental consultant. Results from the site survey will be documented and recorded for Kaweah Delta WCD. The Kaweah Delta WCD will be made immediately aware of any issues identified.

11.4.6 Row (f) Construction Administration

The construction administration effort for the Oakes Basin Habitat Enhancement project involves the construction inspection for a new irrigation well, new irrigation system and the planting of the vegetation plan for the facility. Construction inspection estimates were generated by Kaweah Delta WCD's engineering consultant that outlined the work items involved for constructing different portions of the facility. The proposal estimated the required costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal.

The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of new easements in support of project right-of-way acquisition that was generated by the City of Visalia's consultant. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.4.7 Row (h) Construction/Implementation Contingency

A ten percent (10%) contingency was used for this project because the project's development is to the 90% draft final design level. Building material costs could fluctuate during the construction timeframe, but recently material costs have been fairly stable. This contingency mostly covers the unavoidable and unforeseen construction issues that often arise on these types of projects. Some of these issues may be weather related, and some of them could be related to what is found during excavation of the basin sites.

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11.5 GW Quality Protection and Investigation

The budget for the Groundwater Quality Protection and Investigation Project can be found in **Appendix G of Attachment 4**. Supporting documentation for the costs included in the Groundwater Quality Protection and Investigation Project budget can be found in **Appendix H of Attachment 4** of the application.

Table 11-5: Groundwater Quality Protection and Investigation Project Summary Budget Table

Table 7 - Project Budget						
Proposal Title: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal</u>						
Project Title: <u>Groundwater Quality Protection & Investigation Project</u>						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$0	\$7,950	\$0	\$7,950	0%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$0	\$169,400	\$0	\$169,400	0%
(d)	Construction/Implementation	\$0	\$320,000	\$0	\$320,000	0%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$0	\$0	\$0	\$0	0%
(g)	Other Costs	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$64,000	\$0	\$64,000	0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$0	\$561,350	\$0	\$561,350	0%
*List sources of funding: Use as much space as required. Funding for KDWCD staff hours associated with project administration will come from KDWCD operations budget.						

It should be noted that the Groundwater Quality Protection and Investigation Project is a scalable project. The most significant funded effort is the destruction of 100 abandoned domestic wells in disadvantaged communities and the development of water quality solutions to identified issues through feasibility studies and preliminary engineer reports.

If reduced funding (funds less than what has been requested) were available to the implementing agencies, the number of destroyed wells or the number of feasibility studies / preliminary engineer reports in this project could be reduced while still accomplishing significant benefits.

11.5.1 Row (a) Direct Project Administration

Proposal reporting costs from Kaweah Delta WCD to DWR were included in this cost category. The person identified to do this reporting will be Mr. Larry Dotson, Kaweah Delta WCD's Senior Engineer, who will also be the Proposal Manager for Kaweah Delta WCD. An hourly cost of \$61.25 per hour was included to cover the District's effort through Mr. Dotson's time in proposal reporting. The listed hourly cost includes Mr. Dotson's wages and benefits. Grant funds were requested for these costs.

Proposal reporting costs from Tulare County to Kaweah Delta WCD were included in this cost category. The staff member identified to do this reporting will be water analyst in the County Administrative Office. This person will report directly to Debbie Vaughn who will be the Project Manager for Tulare County. An hourly cost of \$35 per hour was included to cover Tulare County's effort in proposal reporting. The listed hourly cost includes the staff members' wages and benefits. Grant funds were requested for these costs.

Office supplies were included as a lump sum. This cost was estimated based on similar Kaweah Delta WCD efforts to report on Bureau of Reclamation and Department of Water Resources grants over the last several years. Given the amount of reporting and number of entities involved, Kaweah Delta WCD's costs were proportioned to estimate what office supplies would be needed for this reporting effort. Grant funds were not requested for these costs.

11.5.2 Row (b) Land Purchase/Easement

No property will be acquired during the project; therefore no project costs were included in this cost category.

11.5.3 Row (c) Planning/Design/Engineering/Environmental Documentation

A small portion of project planning has been accomplished to date. Efforts to secure project funding have been the project's focus for the last few years and so some general planning and project development has been accomplished. As this is a project and an investigation, the current project design is the implementation of a County standard for

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well destructions, so it can be considered a final design. The study effort has been outlined and is sufficiently developed concept to provide detailed information regarding each of the significant portions of the effort. The following efforts are described in the work plan and included in the project budget as Planning/Design/Engineering/Environmental Documentation efforts. These efforts were developed in coordination with Tulare County's project partners (Self Help Enterprises and Community Water Center) as the study effort necessary to better define the operations of and potential benefits from the proposed facility.

- Task 4.1 - Identify Priority Areas
- Task 4.2 - Selection of Private Wells for Destruction
- Task 4.3 - Outreach and Technical Assistance for Private Well Owners
- Task 4.6 - Technical Assistance to Communities

Self Help Enterprises and Community Water Center are project partners with Tulare County in several water supply and water quality related efforts for disadvantaged communities. These two local organizations have proven their effectiveness in engaging local disadvantaged communities through door-to-door information gathering efforts, educational materials, workshops, and public meetings. Given their understanding of the necessary effort for Tasks 4.1-4.3 and 4.6, they developed man-hour estimates to establish the necessary budgets for these tasks.

- Task 4.5 - Feasibility Studies
- Task 4.7 - Preliminary Engineers Reports

Given that the issues to be studied and evaluated have not yet been identified, approximate budgets were developed for the efforts of Task 4.5 and 4.7 based on similar other efforts that Self Help Enterprises and Community Water Center have participated in. The intent of both the feasibility studies and the preliminary engineering reports is that up to three such efforts would be conducted if the available funds are sufficient. However, if the funds are not sufficient, then these efforts would be scaled back to two or one studies and reports depending on the necessary scope of work for the priority effort identified. A typical table of contents for a preliminary engineers report is expected to be very similar to what is required by the USDA, being:

- General
- Description of Project Planning Area
- Evaluation of Existing Facilities
- Need for Project
- Alternatives Considered
- Selection of an Alternative
- Proposed Project (Recommended Alternative)
- Conclusions and Recommendations

- Task 4.4 - Well Sampling
- Task 6 - Categorical Exclusion Processing
- Task 7 - County Well Destruction Permits

Task 7 and Task 4.4 are costs that Tulare County experiences for well sampling services or permit fees that the County recoups to cover administrative processing and County staff inspection of constructed facilities. These costs are based on a long record of experience working to protect the resources of the County. The effort to file the categorical exclusions associated with the well permits was estimated based on the number of wells anticipated to be destroyed, the hourly rate for the County specialist that would undertake the work, and the number of hours per permit that was viewed as necessary to accomplish the task.

11.5.4 Row (d) Construction/Implementation

11.5.4.1 Contractor Selection and Bid Award

The effort included in the project budget for the selection of the successful low-bidding contract and the bid award by Tulare County were developed from the efforts recently necessary to accomplish other similar efforts for construction projects by Tulare County. These previous efforts were evaluated for the time required and how applicable they were to the proposed project. Then reasonable adjustments were made for particular aspects of the project that differed or needed to be accounted for. This was the basis for a man-hour estimate for the effort to review submitted bids, select the successful low-bidding contract and award the contract from Tulare County.

This estimate quantified the anticipated costs per task, quantified the number hours for each person on the project team and the cost per hour for their involvement in the effort, estimated the approximate schedule for the major tasks involved in the effort, and described the potentially related efforts to the study that were not included in the submitted proposal. The average hourly rate shown in the project budget is developed from the more specific man-hour estimate for the generation of effort that was generated by Tulare County. The total cost for the effort was divided through by the total number of hours shown to be necessary to develop an average cost per hour for the project team involved. This average cost per hour was then applied to the total number of hours required for the effort to account for the cost associated with the effort in the overall project budget.

11.5.4.2 Construction Costs

The construction costs estimated for the Groundwater Quality Protection and Investigation project were developed from the County's general knowledge of well destruction costs and generic quotes for typical destructions that were solicited from local contractors (see **Appendix B of the Groundwater Quality Protection and Investigation Project Appendices**).

11.5.5 Row (e) Environmental Compliance/Mitigation/Enhancement

Categorical exclusions will be processed for the well destructions as part of the Tulare County permitting process (Task 7). There will be no environmental compliance/mitigation/enhancement effort associated with the Groundwater Quality Protection and Investigation project; therefore no costs were included for the funding category.

11.5.6 Row (f) Construction Administration

Limited construction administration will be accomplished by Tulare County as part of the normal well destruction permit process (see Task 7), but no specific construction administration costs were included in this budget category as they are already embedded in Tulare County's permit costs.

11.5.7 Row (h) Construction/Implementation Contingency

A twenty percent (20%) contingency was used for this project because the construction effort to properly destroy wells is well defined by existing Tulare County ordinance codes. However, this contingency percentage was used because the depth of each abandoned well is not known and will significantly influence the ultimate construction cost.

ATTACHMENT 4 – BUDGET

APPENDIX A

Plum Basin Project Budget

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Plum Basin Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a) Direct Project Administration Costs								
DWR Grant Administration	204	\$ 61.25	Staff Hrs.	\$ -	\$ 12,500	\$ -	\$ 12,500	0.0%
DWR Grant Reporting	212	\$ 70.72	Staff Hrs.	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
Phase I - USBR Grant Reporting by Consultant	184	\$ 105.27	Staff Hrs.	\$ 19,370	\$ -	\$ -	\$ 19,370	1.3%
Phase II & III - USBR Grant Reporting (TID)	68	\$ 70.72	Staff Hrs.	\$ 4,810	\$ -	\$ -	\$ 4,810	0.3%
Phase II & III - USBR Grant Reporting by Consultant	148	\$ 105.13	Staff Hrs.	\$ 15,560	\$ -	\$ -	\$ 15,560	1.1%
Office Supplies (Printing, etc.)	1	\$ 2,300.00	Lump Sum	\$ 2,250	\$ -	\$ -	\$ 2,250	0.2%
(b) Land Purchase/Easement¹								
	--		--	\$ -	\$ -	\$ -	\$ -	0.0%
(c) Planning/Design/Engineering/Environmental Documentation								
100% (Final) Design ¹	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
Record of Survey ¹	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
CEQA Documentation	140	\$ 98.04	Staff Hrs.	\$ 13,750	\$ -	\$ -	\$ 13,750	0.9%
NEPA Documentation - Phase I	192	\$ 98.04	Staff Hrs.	\$ 18,800	\$ -	\$ -	\$ 18,800	1.3%
NEPA Documentation - Phase II & III (TID)	40	\$ 70.72	Staff Hrs.	\$ 2,830	\$ -	\$ -	\$ 2,830	0.2%
NEPA Documentation - Phase II & III	178	\$ 107.98	Staff Hrs.	\$ 19,220	\$ -	\$ -	\$ 19,220	1.3%
(d) Construction/Implementation								
Phase I								
<i>Labor</i>								
TID - District O&M Superintendent	184	\$ 54.45	Staff Hrs.	\$ 10,019	\$ -	\$ -	\$ 10,019	0.7%
TID - Heavy Equipment Operator	2408	\$ 35.91	Staff Hrs.	\$ 86,471	\$ -	\$ -	\$ 86,471	6.0%
TID - Light Equipment Operator	1840	\$ 26.76	Staff Hrs.	\$ 49,238	\$ -	\$ -	\$ 49,238	3.4%
TID - District Maintenance Worker	1400	\$ 23.05	Staff Hrs.	\$ 32,270	\$ -	\$ -	\$ 32,270	2.2%
Consultant - SCADA Integration	2	\$ 4,000.00	Site	\$ 8,000	\$ -	\$ -	\$ 8,000	0.6%
<i>Equipment</i>								
Equipment Mobilization	1	\$ 5,000.00	Lump Sum	\$ 5,000	\$ -	\$ -	\$ 5,000	0.3%
Earth Moving Equipment - Scrapers (Rental)	266,610	\$ 1.62	CY	\$ 431,909	\$ -	\$ -	\$ 431,909	29.8%
Earth Moving Equipment - Excavator (District Owned)	10	\$ 460.00	Day	\$ 4,600	\$ -	\$ -	\$ 4,600	0.3%
Earth Moving Equipment - Dozer (District Owned)	15	\$ 536.00	Day	\$ 8,040	\$ -	\$ -	\$ 8,040	0.6%
Water Truck (District Owned)	230	\$ 277.33	Day	\$ 63,786	\$ -	\$ -	\$ 63,786	4.4%
<i>Materials</i>								
Fuel	55,050	\$ 2.00	Gallon	\$ 110,100	\$ -	\$ -	\$ 110,100	7.6%
Reinforced Concrete	10.1	\$ 1,200.00	CY	\$ 12,120	\$ -	\$ -	\$ 12,120	0.8%
24" C905 DR25 CL 165 PVC Pipe	230	\$ 43.00	LF	\$ 9,890	\$ -	\$ -	\$ 9,890	0.7%
24" C905 DR25 CL 165 GXG 45° PVC Pipe	3	\$ 1,425.00	EA	\$ 4,275	\$ -	\$ -	\$ 4,275	0.3%
24" Sluice Gate	2	\$ 3,000.00	EA	\$ 6,000	\$ -	\$ -	\$ 6,000	0.4%
24" OF12 Open Flowmeter	2	\$ 2,500.00	EA	\$ 5,000	\$ -	\$ -	\$ 5,000	0.3%
48" RCP Flowmeter Standpipe w/Cover	2	\$ 4,500.00	EA	\$ 9,000	\$ -	\$ -	\$ 9,000	0.6%
Inlet Box Structure Grate	1	\$ 500.00	EA	\$ 500	\$ -	\$ -	\$ 500	0.0%
Piezometers	6	\$ 600.00	EA	\$ 3,600	\$ -	\$ -	\$ 3,600	0.2%
Controls - SCADA	2	\$ 25,000.00	Site	\$ 50,000	\$ -	\$ -	\$ 50,000	3.4%
Phase II								
<i>Labor</i>								
TID - District O&M Superintendent	206	\$ 54.45	Staff Hrs.	\$ -	\$ 11,217	\$ -	\$ 11,217	0.0%
TID - Heavy Equipment Operator	4106	\$ 35.91	Staff Hrs.	\$ -	\$ 147,446	\$ -	\$ 147,446	0.0%
TID - Light Equipment Operator	1962	\$ 26.76	Staff Hrs.	\$ -	\$ 52,503	\$ -	\$ 52,503	0.0%
TID - District Maintenance Worker	1737	\$ 23.05	Staff Hrs.	\$ -	\$ 40,038	\$ -	\$ 40,038	0.0%
Consultant - SCADA Integration	2	\$ 4,000.00	Site	\$ -	\$ 8,000	\$ -	\$ 8,000	0.0%
Contractor - Monitor Well Drilling	240	\$ 112.50	Staff Hrs.	\$ -	\$ 27,000	\$ -	\$ 27,000	0.0%
<i>Equipment</i>								
Equipment Mobilization	1	\$ 2,500.00	Lump Sum	\$ -	\$ 2,500	\$ -	\$ 2,500	0.0%
Earth Moving Equipment - Scrapers (Rental)	446,468	\$ 1.27	CY	\$ 150,000	\$ 417,015	\$ -	\$ 567,015	10.3%
Earth Moving Equipment - Excavator (District Owned)	10	\$ 460.00	Day	\$ -	\$ 4,600	\$ -	\$ 4,600	0.0%
Earth Moving Equipment - Dozer (District Owned)	28	\$ 536.00	Day	\$ -	\$ 15,008	\$ -	\$ 15,008	0.0%
Water Truck (District Owned)	109	\$ 277.33	Day	\$ -	\$ 60,458	\$ -	\$ 60,458	0.0%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Plum Basin Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
Materials								
Fuel	84,560	\$ 2.00	Gallon	\$ -	\$ 169,120	\$ -	\$ 169,120	0.0%
Reinforced Concrete	10.1	\$ 1,200.00	CY	\$ -	\$ 12,120	\$ -	\$ 12,120	0.0%
24" C905 DR25 CL 165 PVC Pipe	230	\$ 43.00	LF	\$ -	\$ 9,890	\$ -	\$ 9,890	0.0%
24" C905 DR25 CL 165 GXG 45° PVC Pipe	3	\$ 1,425.00	EA	\$ -	\$ 4,275	\$ -	\$ 4,275	0.0%
24" Sluice Gate	2	\$ 3,000.00	EA	\$ -	\$ 6,000	\$ -	\$ 6,000	0.0%
24" OF12 Open Flowmeter	2	\$ 2,500.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
48" RCP Flowmeter Standpipe w/Cover	2	\$ 4,500.00	EA	\$ -	\$ 9,000	\$ -	\$ 9,000	0.0%
Inlet Box Structure Grate	1	\$ 500.00	EA	\$ -	\$ 500	\$ -	\$ 500	0.0%
4" SCH 40 PVC Perf Casing	150	\$ 20.00	LF	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
Continuous Datalogger w/DR Cable	1	\$ 700.00	EA	\$ -	\$ 700	\$ -	\$ 700	0.0%
Piezometers	3	\$ 600.00	EA	\$ -	\$ 1,800	\$ -	\$ 1,800	0.0%
Controls - SCADA	2	\$ 25,000.00	Site	\$ -	\$ 50,000	\$ -	\$ 50,000	0.0%
Phase III								
Labor								
TID - District O&M Superintendent	196	\$ 54.45	Staff Hrs.	\$ -	\$ 10,672	\$ -	\$ 10,672	0.0%
TID - Heavy Equipment Operator	1519	\$ 35.91	Staff Hrs.	\$ -	\$ 60,688	\$ -	\$ 60,688	0.0%
TID - Light Equipment Operator	81	\$ 26.76	Staff Hrs.	\$ -	\$ 47,205	\$ -	\$ 47,205	0.0%
TID - District Maintenance Worker	90	\$ 23.05	Staff Hrs.	\$ -	\$ 37,756	\$ -	\$ 37,756	0.0%
Consultant - SCADA Integration	2	\$ 4,000.00	Site	\$ -	\$ 8,000	\$ -	\$ 8,000	0.0%
Contractor - Monitor Well Drilling	240	\$ 112.50	Staff Hrs.	\$ -	\$ 27,000	\$ -	\$ 27,000	0.0%
Equipment								
Equipment Mobilization	1	\$ 2,500.00	Lump Sum	\$ -	\$ 2,500	\$ -	\$ 2,500	0.0%
Earth Moving Equipment - Scrapers (Rental)	163,083	\$ 1.27	CY	\$ 150,000	\$ 57,115	\$ -	\$ 207,115	10.3%
Earth Moving Equipment - Excavator (District Owned)	10	\$ 460.00	Day	\$ -	\$ 4,600	\$ -	\$ 4,600	0.0%
Earth Moving Equipment - Dozer (District Owned)	9	\$ 536.00	Day	\$ -	\$ 4,824	\$ -	\$ 4,824	0.0%
Water Truck (District Owned)	98	\$ 277.33	Day	\$ -	\$ 54,357	\$ -	\$ 54,357	0.0%
Materials								
Fuel	47,008	\$ 2.00	Gallon	\$ -	\$ 94,016	\$ -	\$ 94,016	0.0%
Reinforced Concrete	9.9	\$ 1,200.00	CY	\$ -	\$ 11,880	\$ -	\$ 11,880	0.0%
24" C905 DR25 CL 165 PVC Pipe	310	\$ 43.00	LF	\$ -	\$ 13,330	\$ -	\$ 13,330	0.0%
24" C905 DR25 CL 165 GXG 45° PVC Pipe	5	\$ 1,425.00	EA	\$ -	\$ 7,125	\$ -	\$ 7,125	0.0%
24" Sluice Gate	2	\$ 3,000.00	EA	\$ -	\$ 6,000	\$ -	\$ 6,000	0.0%
24" OF12 Open Flowmeter	2	\$ 2,500.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
48" RCP Flowmeter Standpipe w/Cover	2	\$ 45,000.00	EA	\$ -	\$ 9,000	\$ -	\$ 9,000	0.0%
48" RCP Standpipe	1	\$ 4,000.00	EA	\$ -	\$ 4,000	\$ -	\$ 4,000	0.0%
4" SCH 40 PVC Perf Casing	150	\$ 20.00	LF	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
Continuous Datalogger w/DR Cable	1	\$ 700.00	EA	\$ -	\$ 700	\$ -	\$ 700	0.0%
Piezometers	3	\$ 600.00	EA	\$ -	\$ 1,800	\$ -	\$ 1,800	0.0%
Controls - SCADA	2	\$ 25,000.00	Site	\$ -	\$ 50,000	\$ -	\$ 50,000	0.0%
Environmental								
(e) Compliance/Mitigation/Enhancement								
Biological Site Survey	16	\$ 110.00	Staff Hrs.	\$ 1,760	\$ -	\$ -	\$ 1,760	0.1%
(f) Construction Administration								
Phase I: TID - District Engineer	20	\$ 70.72	Staff Hrs.	\$ 1,414	\$ -	\$ -	\$ 1,414	0.1%
Phase II: TID - District Engineer	94	\$ 70.72	Staff Hrs.	\$ -	\$ 6,648	\$ -	\$ 6,648	0.0%
Phase III: TID - District Engineer	84	\$ 70.72	Staff Hrs.	\$ -	\$ 5,940	\$ -	\$ 5,940	0.0%
Installation of Piezometers	16	\$ 85.00	Staff Hrs.	\$ -	\$ 1,360	\$ -	\$ 1,360	0.0%
Phase II: Construction Management	71	\$ 89.44	Staff Hrs.	\$ -	\$ 6,350	\$ -	\$ 6,350	0.0%
Phase III: Construction Management	71	\$ 89.44	Staff Hrs.	\$ -	\$ 6,350	\$ -	\$ 6,350	0.0%
Phase II: Construction Staking	43	\$ 210.00	Staff Hrs.	\$ -	\$ 9,030	\$ -	\$ 9,030	0.0%
Phase III: Construction Staking	43	\$ 210.00	Staff Hrs.	\$ -	\$ 9,030	\$ -	\$ 9,030	0.0%
(g) Other Costs								
Phase II Orchard Removal	60.21	\$ 237.49	Acre	\$ 14,299	\$ -	\$ -	\$ 14,299	1.0%
Phase III Orchard Removal	45.06	\$ 425.00	Acre	\$ 19,150	\$ -	\$ -	\$ 19,150	1.3%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Plum Basin Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(h) Construction/Implementation Contingency								
Phase I								
TID Construction Labor	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
Equipment	1	\$ 51,333.00	Lump Sum	\$ 51,333	\$ -	\$ -	\$ 51,333	3.5%
Materials	1	\$ 21,048.00	Lump Sum	\$ 21,048	\$ -	\$ -	\$ 21,048	1.5%
SCADA Integration by Consultant	1	\$ 800.00	Lump Sum	\$ 800	\$ -	\$ -	\$ 800	0.1%
Phase II								
TID Construction Labor	1	\$ 25,120.00	Lump Sum	\$ -	\$ 25,120	\$ -	\$ 25,120	0.0%
Equipment	1	\$ 64,708.00	Lump Sum	\$ 15,000	\$ 49,959	\$ -	\$ 64,959	1.0%
Materials	1	\$ 27,141.00	Lump Sum	\$ -	\$ 27,141	\$ -	\$ 27,141	0.0%
Contractor - Monitor Well Drilling	1	\$ 2,700.00	Lump Sum	\$ -	\$ 2,700	\$ -	\$ 2,700	0.0%
SCADA Integration by Consultant	1	\$ 800.00	Lump Sum	\$ -	\$ 800	\$ -	\$ 800	0.0%
Phase II Orchard Removal	1	\$ 1,430.00	Lump Sum	\$ 1,430	\$ -	\$ -	\$ 1,430	0.1%
Phase III								
TID Construction Labor	1	\$ 15,632.00	Lump Sum	\$ -	\$ 15,632	\$ -	\$ 15,632	0.0%
Equipment	1	\$ 27,890.00	Lump Sum	\$ 15,000	\$ 12,340	\$ -	\$ 27,340	1.0%
Materials	1	\$ 20,585.00	Lump Sum	\$ -	\$ 20,585	\$ -	\$ 20,585	0.0%
Contractor - Monitor Well Drilling	1	\$ 2,700.00	Lump Sum	\$ -	\$ 2,700	\$ -	\$ 2,700	0.0%
SCADA Integration by Consultant	1	\$ 800.00	Lump Sum	\$ -	\$ 800	\$ -	\$ 800	0.0%
Phase III Orchard Removal	1	\$ 1,915.00	Lump Sum	\$ 1,915	\$ -	\$ -	\$ 1,915	0.1%
Construction Administration								
Phase I: TID - District Engineer	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
Phase II: TID - District Engineer	1	\$ 665.00	Lump Sum	\$ -	\$ 665	\$ -	\$ 665	0.0%
Phase III: TID - District Engineer	1	\$ 594.00	Lump Sum	\$ -	\$ 594	\$ -	\$ 594	0.0%
(i) Grand Total				\$ 1,449,557	\$ 1,809,002	\$ -	\$ 3,258,559	44.5%

¹Funds for these line items were incurred prior to September 30, 2008

*Non-State Share funding will be funded partially through two Federal Bureau of Reclamation Challenge Grants totaling \$600,000; and by Tulare Irrigation District through their District Financial Reserves

ATTACHMENT 4 – BUDGET

APPENDIX B

Water Reuse Pipeline Project Budget

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Water Reuse Pipeline Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a) Direct Project Administration Costs								
DWR Grant Reporting: City of Visalia	212	\$ 70.72	Staff Hrs.	\$ 15,000	\$ -	\$ -	\$ 15,000	0.1%
DWR Grant Administration: KDWCD	204	\$ 61.25	Staff Hrs.	\$ 12,500	\$ -	\$ -	\$ 12,500	0.1%
USBR Grant Reporting by Consultant	218	\$ 116.42	Staff Hrs.	\$ 25,380	\$ -	\$ -	\$ 25,380	0.2%
Office Supplies (Printing, etc.)	1	\$ 10,000.00	Lump Sum	\$ 10,000	\$ -	\$ -	\$ 10,000	0.1%
(b) Land Purchase/Easement	4.25	\$ 5,000.00	Acres	\$ 21,250	\$ -	\$ -	\$ 21,250	0.2%
(c) Planning/Design/Engineering/Environmental Documentation								
Technical Report								
Preliminary Topo Survey	28	\$ 218.43	Staff Hrs.	\$ 6,116	\$ -	\$ -	\$ 6,116	0.1%
Research Existing Maps, Improvement Plans, Permits, etc.	129	\$ 125.35	Staff Hrs.	\$ 16,170	\$ -	\$ -	\$ 16,170	0.2%
Prepare Project Basemap	59	\$ 110.75	Staff Hrs.	\$ 6,534	\$ -	\$ -	\$ 6,534	0.1%
Preparation & Submittal of Technical Report	161	\$ 127.22	Staff Hrs.	\$ 20,482	\$ -	\$ -	\$ 20,482	0.2%
Pipeline - WCP to Basin 4								
Topo Survey	62	\$ 196.94	Staff Hrs.	\$ 12,210	\$ -	\$ -	\$ 12,210	0.1%
Update Project Basemap	45	\$ 112.44	Staff Hrs.	\$ 5,060	\$ -	\$ -	\$ 5,060	0.0%
10% (Conceptual) Design	219	\$ 117.94	Staff Hrs.	\$ 25,828	\$ -	\$ -	\$ 25,828	0.2%
60% (Concept) Design	295	\$ 123.35	Staff Hrs.	\$ 36,388	\$ -	\$ -	\$ 36,388	0.3%
90% (Pre-Final) Design	240	\$ 117.38	Staff Hrs.	\$ 28,171	\$ -	\$ -	\$ 28,171	0.3%
100% (Final) Design	92	\$ 122.55	Staff Hrs.	\$ 11,275	\$ -	\$ -	\$ 11,275	0.1%
Regulating Basin & TID Pipeline								
Preliminary Topo Survey	31	\$ 186.65	Staff Hrs.	\$ 5,786	\$ -	\$ -	\$ 5,786	0.1%
10% (Conceptual) Design - Regulating Basin	30	\$ 118.07	Staff Hrs.	\$ 3,542	\$ -	\$ -	\$ 3,542	0.0%
10% (Conceptual) Design - TID Pipeline	133	\$ 121.74	Staff Hrs.	\$ 16,192	\$ -	\$ -	\$ 16,192	0.2%
Topo Survey	53	\$ 209.21	Staff Hrs.	\$ 11,088	\$ -	\$ -	\$ 11,088	0.1%
Update Project Basemap	44	\$ 111.00	Staff Hrs.	\$ 4,884	\$ -	\$ -	\$ 4,884	0.0%
60% (Concept) Design - Regulating Basin	180	\$ 107.43	Staff Hrs.	\$ 19,338	\$ -	\$ -	\$ 19,338	0.2%
60% (Concept) Design - TID Pipeline	329	\$ 115.52	Staff Hrs.	\$ 38,005	\$ -	\$ -	\$ 38,005	0.4%
90% (Pre-Final) Design - Regulating Basin	101	\$ 129.06	Staff Hrs.	\$ 13,035	\$ -	\$ -	\$ 13,035	0.1%
90% (Pre-Final) Design - TID Pipeline	101	\$ 129.06	Staff Hrs.	\$ 13,035	\$ -	\$ -	\$ 13,035	0.1%
100% (Final) Design - Regulating Basin	77	\$ 126.71	Staff Hrs.	\$ 9,757	\$ -	\$ -	\$ 9,757	0.1%
100% (Final) Design - TID Pipeline	77	\$ 126.71	Staff Hrs.	\$ 9,757	\$ -	\$ -	\$ 9,757	0.1%
Low-Head Irrigation Pipeline System								
Conceptual Design								
Preliminary Topo Survey	106	\$ 206.92	Staff Hrs.	\$ 21,934	\$ -	\$ -	\$ 21,934	0.2%
Research Existing Maps, Improvement Plans, Permits, etc.	126	\$ 126.06	Staff Hrs.	\$ 15,884	\$ -	\$ -	\$ 15,884	0.1%
Prepare Project Basemap	59	\$ 110.75	Staff Hrs.	\$ 6,534	\$ -	\$ -	\$ 6,534	0.1%
10% (Conceptual) Design	468	\$ 137.83	Staff Hrs.	\$ 64,504	\$ -	\$ -	\$ 64,504	0.6%
Pipeline - Low head East of Hwy 99								
60% (Concept) Design	1,015	\$ 122.66	Staff Hrs.	\$ 124,498	\$ -	\$ -	\$ 124,498	1.2%
90% (Pre-Final) Design	207	\$ 130.99	Staff Hrs.	\$ 27,115	\$ -	\$ -	\$ 27,115	0.3%
100% (Final) Design	181	\$ 125.50	Staff Hrs.	\$ 22,715	\$ -	\$ -	\$ 22,715	0.2%
Pipeline - Low head SR 198 & Hwy 99								
Topo Survey	28	\$ 187.00	Staff Hrs.	\$ 5,236	\$ -	\$ -	\$ 5,236	0.0%
60% (Concept) Design	417	\$ 116.20	Staff Hrs.	\$ 48,455	\$ -	\$ -	\$ 48,455	0.5%
90% (Pre-Final) Design	61	\$ 122.80	Staff Hrs.	\$ 7,491	\$ -	\$ -	\$ 7,491	0.1%
100% (Final) Design	34	\$ 129.41	Staff Hrs.	\$ 4,400	\$ -	\$ -	\$ 4,400	0.0%
Legal Descriptions for Easements								
Pipeline - WCP to Basin 4	61	\$ 121.00	Staff Hrs.	\$ 7,381	\$ -	\$ -	\$ 7,381	0.1%
Pipeline - TID Pipeline	63	\$ 119.78	Staff Hrs.	\$ 7,546	\$ -	\$ -	\$ 7,546	0.1%
Pipeline - Low Head East of Hwy 99	148	\$ 119.51	Staff Hrs.	\$ 17,688	\$ -	\$ -	\$ 17,688	0.2%
Pipeline - Low Head SR 198 & Hwy 99	147	\$ 119.13	Staff Hrs.	\$ 17,512	\$ -	\$ -	\$ 17,512	0.2%
Storm Water Pollution Prevention Plan (SWPPP)	50	\$ 110.00	Staff Hrs.	\$ 5,500	\$ -	\$ -	\$ 5,500	0.1%
Dust Control Plan (DCP)	50	\$ 110.00	Staff Hrs.	\$ 5,500	\$ -	\$ -	\$ 5,500	0.1%
FEMA Evaluation and Report	163	\$ 122.70	Staff Hrs.	\$ 20,000	\$ -	\$ -	\$ 20,000	0.2%
CEQA Documentation	1,571	\$ 133.23	Staff Hrs.	\$ 209,312	\$ -	\$ -	\$ 209,312	2.0%
NEPA Documentation - TID Pipeline	480	\$ 123.75	Staff Hrs.	\$ 59,400	\$ -	\$ -	\$ 59,400	0.6%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Water Reuse Pipeline Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(d) Construction/Implementation								
Selection of Qualified Contractor through a Competitive Bid Process	91	\$ 123.30	Staff Hrs.	\$ 11,220	\$ -	\$ -	\$ 11,220	0.1%
Bid Award & Executed Contract Documents	75	\$ 123.79	Staff Hrs.	\$ 9,284	\$ -	\$ -	\$ 9,284	0.1%
Pipeline - WCP to Regulating Basin								
Mobilization/Demobilization	1	\$ 66,504.00	Lump Sum	\$ 66,504	\$ -	\$ -	\$ 66,504	0.6%
F&I 72" RGRCP	2,850	\$ 288.00	LF	\$ 820,800	\$ -	\$ -	\$ 820,800	7.7%
F&I 72" 90° RGRCP Bend	1	\$ 3,500.00	EA	\$ 3,500	\$ -	\$ -	\$ 3,500	0.0%
F&I 72" 45° RGRCP Bend	2	\$ 3,500.00	EA	\$ 7,000	\$ -	\$ -	\$ 7,000	0.1%
Controls - SCADA	1	\$ 70,000.00	Site	\$ 70,000	\$ -	\$ -	\$ 70,000	0.7%
SCADA Integration by Consultant	100	\$ 133.33	Staff Hrs.	\$ 13,333	\$ -	\$ -	\$ 13,333	0.1%
Pipeline - Regulating Basin								
Mobilization/Demobilization	1	\$ 91,840.00	Lump Sum	\$ 91,840	\$ -	\$ -	\$ 91,840	0.9%
Construct Basin Inlet/Outlet Structures	137	\$ 1,200.00	CY	\$ 164,400	\$ -	\$ -	\$ 164,400	1.5%
F&I Slide Gates - Ponds 2 & 3 Structures	4	\$ 5,000.00	EA	\$ 20,000	\$ -	\$ -	\$ 20,000	0.2%
Construct Junction Gate Box	78	\$ 1,200.00	CY	\$ 93,600	\$ -	\$ -	\$ 93,600	0.9%
Construct Concrete Spillway Structure	103	\$ 1,200.00	CY	\$ 123,600	\$ -	\$ -	\$ 123,600	1.2%
F&I 60" RGRCP (Interconnecting Basin Pipe)	2,600	\$ 240.00	LF	\$ 624,000	\$ -	\$ -	\$ 624,000	5.9%
F&I 60" 90° RGRCP Bend	4	\$ 3,000.00	EA	\$ 12,000	\$ -	\$ -	\$ 12,000	0.1%
F&I 60" 45° RGRCP Bend	4	\$ 3,000.00	EA	\$ 12,000	\$ -	\$ -	\$ 12,000	0.1%
F&I 60" RGRCP Tee	2	\$ 3,000.00	EA	\$ 6,000	\$ -	\$ -	\$ 6,000	0.1%
F&I Metering Vault	1	\$ 5,000.00	EA	\$ 5,000	\$ -	\$ -	\$ 5,000	0.0%
F&I 60" Transducer Flow Meter	1	\$ 10,000.00	EA	\$ 10,000	\$ -	\$ -	\$ 10,000	0.1%
Excavate Regulation Basin	15,000	\$ 3.00	CY	\$ 45,000	\$ -	\$ -	\$ 45,000	0.4%
Compact Regulation Basin Liner	4,000	\$ 6.00	CY	\$ 24,000	\$ -	\$ -	\$ 24,000	0.2%
F&I Rip-Rap for Erosion Control	136,000	\$ 0.40	SF	\$ 55,000	\$ -	\$ -	\$ 55,000	0.5%
Controls - SCADA	1	\$ 70,000.00	Site	\$ 70,000	\$ -	\$ -	\$ 70,000	0.7%
SCADA Integration by Consultant	100	\$ 133.33	Staff Hrs.	\$ 13,333	\$ -	\$ -	\$ 13,333	0.1%
Pipeline - Regulating Basin to Basin 4								
Mobilization/Demobilization	1	\$ 135,512.00	Lump Sum	\$ 135,512	\$ -	\$ -	\$ 135,512	1.3%
Traffic Control System	1	\$ 25,000.00	Lump Sum	\$ 25,000	\$ -	\$ -	\$ 25,000	0.2%
F&I 60" RGRCP	6,510	\$ 240.00	LF	\$ 1,562,400	\$ -	\$ -	\$ 1,562,400	14.7%
F&I 60" 90° RGRCP Bend	3	\$ 3,500.00	EA	\$ 10,500	\$ -	\$ -	\$ 10,500	0.1%
F&I 60" 45° RGRCP Bend	2	\$ 3,500.00	EA	\$ 7,000	\$ -	\$ -	\$ 7,000	0.1%
F&I Metering Vault	1	\$ 5,000.00	EA	\$ 5,000	\$ -	\$ -	\$ 5,000	0.0%
F&I 60" Transducer Flow Meter	1	\$ 10,000.00	EA	\$ 10,000	\$ -	\$ -	\$ 10,000	0.1%
F&I Junction Box	50	\$ 1,200.00	CY	\$ 60,000	\$ -	\$ -	\$ 60,000	0.6%
F&I Junction Box Control Gate	1	\$ 5,000.00	EA	\$ 5,000	\$ -	\$ -	\$ 5,000	0.0%
F&I O&M Access Structure w/ Air Vent	3	\$ 8,000.00	EA	\$ 24,000	\$ -	\$ -	\$ 24,000	0.2%
Construct Basin Outlet Structure	25	\$ 1,200.00	CY	\$ 30,000	\$ -	\$ -	\$ 30,000	0.3%
Construct Basin Weir Structure	61	\$ 1,200.00	CY	\$ 73,200	\$ -	\$ -	\$ 73,200	0.7%
Controls - SCADA	1	\$ 70,000.00	Site	\$ 70,000	\$ -	\$ -	\$ 70,000	0.7%
SCADA Integration by Consultant	100	\$ 133.33	Staff Hrs.	\$ 13,333	\$ -	\$ -	\$ 13,333	0.1%
Pipeline - TID								
Mobilization/Demobilization	1	\$ 278,000.00	Lump Sum	\$ -	\$ 278,000	\$ -	\$ 278,000	0.0%
Traffic Control System	1	\$ 25,000.00	Lump Sum	\$ -	\$ 25,000	\$ -	\$ 25,000	0.0%
F&I 60" RGRCP	10,300	\$ 240.00	LF	\$ 556,800	\$ 1,915,200	\$ -	\$ 2,472,000	5.2%
F&I 60" 90° RGRCP Bend	2	\$ 3,500.00	EA	\$ -	\$ 7,000	\$ -	\$ 7,000	0.0%
F&I 60" 45° RGRCP Bend	2	\$ 3,500.00	EA	\$ -	\$ 7,000	\$ -	\$ 7,000	0.0%
F&I 12" CMP Culvert Pipe at Caldwell Ave	170	\$ 29.41	LF	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I 36" RCP Culvert Pipe at Caldwell Ave	60	\$ 166.67	LF	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
F&I O&M Access Structure w/ Air Vent	10	\$ 8,000.00	EA	\$ -	\$ 80,000	\$ -	\$ 80,000	0.0%
Excavate the Receiving and Jacking Pits	333	\$ 10.00	CY	\$ -	\$ 3,330	\$ -	\$ 3,330	0.0%
F&I Temporary Construction Barriers, Flags and Tape, Temporary By-Pass Road around Receiving and Jacking Pits as per Tulare County Standards	1	\$ 109,000.00	Lump Sum	\$ -	\$ 109,000	\$ -	\$ 109,000	0.0%
F&I 60" RGRCP Intended for Microtunneling (Jack & Bore) at Ave 272	150	\$ 667.00	LF	\$ -	\$ 100,000	\$ -	\$ 100,000	0.0%
F&I 60" CMP Culvert Pipe at Ave 268	60	\$ 166.67	LF	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
Repave Trenched Section of Ave 268	85,000	\$ 5.00	SF	\$ -	\$ 425,000	\$ -	\$ 425,000	0.0%
Construct Turnout Structure to Basin 4	50	\$ 1,200.00	CY	\$ -	\$ 60,000	\$ -	\$ 60,000	0.0%
F&I Turnout Structure Control Gates	2	\$ 5,000.00	EA	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
F&I Metering Vault	1	\$ 5,000.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I 60" Transducer Flow Meter	1	\$ 10,000.00	EA	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
Construct Pipeline Outlet Structure	25	\$ 1,200.00	CY	\$ -	\$ 30,000	\$ -	\$ 30,000	0.0%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Water Reuse Pipeline Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
Pump Station								
Mobilization/Demobilization	1	\$ 32,022.00	Lump Sum	\$ 32,022	\$ -	\$ -	\$ 32,022	0.3%
F&I 9.5 CFS Pump (60 Hp) and Appurtenances	1	\$ 40,000.00	EA	\$ 40,000	\$ -	\$ -	\$ 40,000	0.4%
F&I 9.5 CFS VFD Pump (60 Hp) and Appurtenances	1	\$ 50,000.00	EA	\$ 50,000	\$ -	\$ -	\$ 50,000	0.5%
F&I 9.5 CFS Pump (125 Hp) and Appurtenances	1	\$ 45,000.00	EA	\$ 45,000	\$ -	\$ -	\$ 45,000	0.4%
Construct Pump Station Concrete Structure	188	\$ 1,200.00	CY	\$ 225,600	\$ -	\$ -	\$ 225,600	2.1%
F&I 60" RGRCP (between pump station and Junction box)	22	\$ 240.00	LF	\$ 5,280	\$ -	\$ -	\$ 5,280	0.0%
F&I Electrical System for Pump Station ²	1	\$ 100,000.00	Lump Sum	\$ 100,000	\$ -	\$ -	\$ 100,000	0.9%
Low-Head Irrigation Pipeline South								
Mobilization/Demobilization	1	\$ 14,480.00	Lump Sum	\$ 14,480	\$ -	\$ -	\$ 14,480	0.1%
F&I 18" C900 PVC Pipe (from pump station to existing irrigation line)	3,400	\$ 50.00	LF	\$ 170,000	\$ -	\$ -	\$ 170,000	1.6%
F&I 18" C900 PVC Pipe 90° Bend	4	\$ 500.00	EA	\$ 2,000	\$ -	\$ -	\$ 2,000	0.0%
F&I 18" C900 PVC Pipe Tee	1	\$ 500.00	EA	\$ 500	\$ -	\$ -	\$ 500	0.0%
F&I 18" Flow Meter	1	\$ 1,500.00	EA	\$ 1,500	\$ -	\$ -	\$ 1,500	0.0%
F&I 18" Control Valves	2	\$ 3,000.00	EA	\$ 6,000	\$ -	\$ -	\$ 6,000	0.1%
F&I Air/Vacuum Pressure Relief Valves	2	\$ 500.00	EA	\$ 1,000	\$ -	\$ -	\$ 1,000	0.0%
Low-Head Irrigation Pipeline East								
Mobilization/Demobilization	1	\$ 191,720.00	Lump Sum	\$ 191,720	\$ -	\$ -	\$ 191,720	1.8%
F&I 36" C905 PVC Pipe	17,350	\$ 100.00	LF	\$ 1,735,000	\$ -	\$ -	\$ 1,735,000	16.3%
F&I 36" Flow Meter	1	\$ 4,000.00	EA	\$ 4,000	\$ -	\$ -	\$ 4,000	0.0%
F&I 36" Control Valves	5	\$ 2,500.00	EA	\$ 12,500	\$ -	\$ -	\$ 12,500	0.1%
F&I 36" Miscellaneous Pipe fittings	1	\$ 71,000.00	Lump Sum	\$ 71,000	\$ -	\$ -	\$ 71,000	0.7%
F&I 51" Steel Casing Intended for Microtunneling (Jack & Bore) under Railroad & Hwy 99	450	\$ 425.00	LF	\$ 191,250	\$ -	\$ -	\$ 191,250	1.8%
F&I 18" Flow Meter	2	\$ 1,500.00	EA	\$ 3,000	\$ -	\$ -	\$ 3,000	0.0%
F&I 18" Butterfly Valves	2	\$ 1,000.00	EA	\$ 2,000	\$ -	\$ -	\$ 2,000	0.0%
F&I 18" C900 PVC Pipe	1,750	\$ 50.00	LF	\$ 87,500	\$ -	\$ -	\$ 87,500	0.8%
F&I 18" Control Valves	2	\$ 3,000.00	EA	\$ 6,000	\$ -	\$ -	\$ 6,000	0.1%
Construct Outlet Structure to Golf Course	1	\$ 4,500.00	EA	\$ 4,500	\$ -	\$ -	\$ 4,500	0.0%
F&I 10" Butterfly Valve for Local Farmer	3	\$ 3,000.00	EA	\$ 9,000	\$ -	\$ -	\$ 9,000	0.1%
F&I 18" Flow Meter for Local Farmer	3	\$ 3,000.00	EA	\$ 9,000	\$ -	\$ -	\$ 9,000	0.1%
F&I 18" Miscellaneous Pipe fittings	1	\$ 3,000.00	Lump Sum	\$ 3,000	\$ -	\$ -	\$ 3,000	0.0%
F&I 30" C905 PVC Pipe	1,680	\$ 70.00	LF	\$ 117,600	\$ -	\$ -	\$ 117,600	1.1%
F&I 30" Miscellaneous Pipe Fittings	1	\$ 9,250.00	Lump Sum	\$ 9,250	\$ -	\$ -	\$ 9,250	0.1%
F&I 12" C900 PVC Pipe	80	\$ 40.00	LF	\$ 3,200	\$ -	\$ -	\$ 3,200	0.0%
F&I 12" Miscellaneous Pipe Fittings	1	\$ 1,000.00	Lump Sum	\$ 1,000	\$ -	\$ -	\$ 1,000	0.0%
F&I Air/Vacuum Pressure Relief Valves	12	\$ 1,000.00	EA	\$ 12,000	\$ -	\$ -	\$ 12,000	0.1%
F&I 12" Flow Meter	1	\$ 1,000.00	EA	\$ 1,000	\$ -	\$ -	\$ 1,000	0.0%
F&I 12" Control Valve	1	\$ 700.00	EA	\$ 700	\$ -	\$ -	\$ 700	0.0%
F&I 6" Butterfly Valve	1	\$ 1,000.00	EA	\$ 1,000	\$ -	\$ -	\$ 1,000	0.0%
Construct Outlet Structure to Plaza Park Pond	1	\$ 4,500.00	EA	\$ 4,500	\$ -	\$ -	\$ 4,500	0.0%
Repave Trenched Section of Walnut Ave	20,000	\$ 5.00	SF	\$ 100,000	\$ -	\$ -	\$ 100,000	0.9%
Repave Trenched Section of Plaza Drive	250	\$ 5.00	SF	\$ 1,250	\$ -	\$ -	\$ 1,250	0.0%
Repave Trenched Section of Plaza Drive	250	\$ 5.00	SF	\$ 1,250	\$ -	\$ -	\$ 1,250	0.0%
Miscellaneous Ditch Crossing Costs	5	\$ 2,500.00	Lump Sum	\$ 12,500	\$ -	\$ -	\$ 12,500	0.1%
(e) Environmental Compliance/Mitigation/Enhancement²	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
(f) Construction Administration								
Construction Management - WCP to Basin 4	209	\$ 117.16	Staff Hrs.	\$ 24,486	\$ -	\$ -	\$ 24,486	0.2%
Construction Management - Regulating Basin & TID Pipeline	209	\$ 117.16	Staff Hrs.	\$ 24,486	\$ -	\$ -	\$ 24,486	0.2%
Construction Management - Low Head Pipeline East of Hwy 99	141	\$ 117.26	Staff Hrs.	\$ 16,533	\$ -	\$ -	\$ 16,533	0.2%
Construction Management - Low Head Pipeline SR 198 & Hwy 99	140	\$ 117.62	Staff Hrs.	\$ 16,467	\$ -	\$ -	\$ 16,467	0.2%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Water Reuse Pipeline Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(g) Other Costs								
Walnut Orchard Removal	5	\$ 1,000.00	Acres	\$ 5,000	\$ -	\$ -	\$ 5,000	0.0%
(h) Construction/Implementation Contingency								
Pipeline - WCP to Regulating Basin								
Mobilization/Demobilization	1	\$ 9,976.00	Lump Sum	\$ 9,976	\$ -	\$ -	\$ 9,976	0.1%
F&I 72" RGRCP	1	\$ 123,120.00	Lump Sum	\$ 123,120	\$ -	\$ -	\$ 123,120	1.2%
F&I 72" 90° RGRCP Bend	1	\$ 525.00	Lump Sum	\$ 525	\$ -	\$ -	\$ 525	0.0%
F&I 72" 45° RGRCP Bend	1	\$ 1,050.00	Lump Sum	\$ 1,050	\$ -	\$ -	\$ 1,050	0.0%
Controls - SCADA	1	\$ 10,500.00	Lump Sum	\$ 10,500	\$ -	\$ -	\$ 10,500	0.1%
SCADA Integration by Consultant	1	\$ 2,000.00	Lump Sum	\$ 2,000	\$ -	\$ -	\$ 2,000	0.0%
Pipeline - Regulating Basin								
Mobilization/Demobilization	1	\$ 13,776.00	Lump Sum	\$ 13,776	\$ -	\$ -	\$ 13,776	0.1%
Construct Basin Inlet/Outlet Structures	1	\$ 24,660.00	Lump Sum	\$ 24,660	\$ -	\$ -	\$ 24,660	0.2%
F&I Slide Gates - Ponds 2 & 3 Structures	1	\$ 3,000.00	Lump Sum	\$ 3,000	\$ -	\$ -	\$ 3,000	0.0%
Construct Junction Gate Box	1	\$ 14,040.00	Lump Sum	\$ 14,040	\$ -	\$ -	\$ 14,040	0.1%
Construct Concrete Spillway Structure	1	\$ 18,540.00	Lump Sum	\$ 18,540	\$ -	\$ -	\$ 18,540	0.2%
F&I 60" RGRCP (Interconnecting Basin Pipe)	1	\$ 93,600.00	Lump Sum	\$ 93,600	\$ -	\$ -	\$ 93,600	0.9%
F&I 60" 90° RGRCP Bend	1	\$ 1,800.00	Lump Sum	\$ 1,800	\$ -	\$ -	\$ 1,800	0.0%
F&I 60" 45° RGRCP Bend	1	\$ 1,800.00	Lump Sum	\$ 1,800	\$ -	\$ -	\$ 1,800	0.0%
F&I 60" RGRCP Tee	1	\$ 900.00	Lump Sum	\$ 900	\$ -	\$ -	\$ 900	0.0%
F&I Metering Vault	1	\$ 750.00	Lump Sum	\$ 750	\$ -	\$ -	\$ 750	0.0%
F&I 60" Transducer Flow Meter	2	\$ 1,500.00	Lump Sum	\$ 1,500	\$ -	\$ -	\$ 1,500	0.0%
Excavate Regulation Basin	1	\$ 6,750.00	Lump Sum	\$ 6,750	\$ -	\$ -	\$ 6,750	0.1%
Compact Regulation Basin Liner	1	\$ 3,600.00	Lump Sum	\$ 3,600	\$ -	\$ -	\$ 3,600	0.0%
F&I Rip-Rap for Erosion Control	1	\$ 8,250.00	Lump Sum	\$ 8,250	\$ -	\$ -	\$ 8,250	0.1%
Controls - SCADA	1	\$ 10,500.00	Lump Sum	\$ 10,500	\$ -	\$ -	\$ 10,500	0.1%
SCADA Integration by Consultant	1	\$ 2,000.00	Lump Sum	\$ 2,000	\$ -	\$ -	\$ 2,000	0.0%
Pipeline - Regulating Basin to Basin 4								
Mobilization/Demobilization	1	\$ 20,327.00	Lump Sum	\$ 20,327	\$ -	\$ -	\$ 20,327	0.2%
Traffic Control System	1	\$ 3,750.00	Lump Sum	\$ 3,750	\$ -	\$ -	\$ 3,750	0.0%
F&I 60" RGRCP	1	\$ 234,360.00	Lump Sum	\$ 234,360	\$ -	\$ -	\$ 234,360	2.2%
F&I 60" 90° RGRCP Bend	1	\$ 1,575.00	Lump Sum	\$ 1,575	\$ -	\$ -	\$ 1,575	0.0%
F&I 60" 45° RGRCP Bend	1	\$ 1,050.00	Lump Sum	\$ 1,050	\$ -	\$ -	\$ 1,050	0.0%
F&I Metering Vault	1	\$ 750.00	Lump Sum	\$ 750	\$ -	\$ -	\$ 750	0.0%
F&I 60" Transducer Flow Meter	2	\$ 1,500.00	Lump Sum	\$ 1,500	\$ -	\$ -	\$ 1,500	0.0%
F&I Junction Box	1	\$ 9,000.00	Lump Sum	\$ 9,000	\$ -	\$ -	\$ 9,000	0.1%
F&I Junction Box Control Gate	1	\$ 750.00	Lump Sum	\$ 750	\$ -	\$ -	\$ 750	0.0%
F&I O&M Access Structure w/ Air Vent	1	\$ 3,600.00	Lump Sum	\$ 3,600	\$ -	\$ -	\$ 3,600	0.0%
Construct Basin Outlet Structure	1	\$ 4,500.00	Lump Sum	\$ 4,500	\$ -	\$ -	\$ 4,500	0.0%
Construct Basin Weir Structure	1	\$ 10,980.00	Lump Sum	\$ 10,980	\$ -	\$ -	\$ 10,980	0.1%
Controls - SCADA	1	\$ 10,500.00	Lump Sum	\$ 10,500	\$ -	\$ -	\$ 10,500	0.1%
SCADA Integration by Consultant	1	\$ 2,000.00	Lump Sum	\$ 2,000	\$ -	\$ -	\$ 2,000	0.0%
Pipeline - TID								
Mobilization/Demobilization	1	\$ 41,700.00	Lump Sum	\$ -	\$ 41,700	\$ -	\$ 41,700	0.0%
Traffic Control System	1	\$ 3,750.00	Lump Sum	\$ -	\$ 3,750	\$ -	\$ 3,750	0.0%
F&I 60" RGRCP	1	\$ 370,800.00	Lump Sum	\$ 83,520	\$ 287,280	\$ -	\$ 370,800	0.8%
F&I 60" 90° RGRCP Bend	1	\$ 1,050.00	Lump Sum	\$ -	\$ 1,050	\$ -	\$ 1,050	0.0%
F&I 60" 45° RGRCP Bend	1	\$ 1,050.00	Lump Sum	\$ -	\$ 1,050	\$ -	\$ 1,050	0.0%
F&I 12" CMP Culvert Pipe at Caldwell Ave	1	\$ 750.00	Lump Sum	\$ -	\$ 750	\$ -	\$ 750	0.0%
F&I 36" RCP Culvert Pipe at Caldwell Ave	1	\$ 1,500.00	Lump Sum	\$ -	\$ 1,500	\$ -	\$ 1,500	0.0%
F&I O&M Access Structure w/ Air Vent	1	\$ 12,000.00	Lump Sum	\$ -	\$ 12,000	\$ -	\$ 12,000	0.0%
Excavate the Receiving and Jacking Pits	1	\$ 500.00	Lump Sum	\$ -	\$ 500	\$ -	\$ 500	0.0%
F&I Temporary Construction Barriers, Flags and Tape around Receiving and Jacking Pits as per Tulare County Standards	1	\$ 16,350.00	Lump Sum	\$ -	\$ 16,350	\$ -	\$ 16,350	0.0%
F&I 60" RGRCP Intended for Microtunneling (Jack & Bore) at Ave 272	1	\$ 15,000.00	Lump Sum	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
F&I 60" CMP Culvert Pipe at Ave 268	1	\$ 1,500.00	Lump Sum	\$ -	\$ 1,500	\$ -	\$ 1,500	0.0%
Repave Trenched Section of Ave 268	1	\$ 63,750.00	Lump Sum	\$ -	\$ 63,750	\$ -	\$ 63,750	0.0%
Construct Turnout Structure to Basin 4	1	\$ 9,000.00	Lump Sum	\$ -	\$ 9,000	\$ -	\$ 9,000	0.0%
F&I Turnout Structure Control Gates	1	\$ 1,500.00	Lump Sum	\$ -	\$ 1,500	\$ -	\$ 1,500	0.0%
F&I Metering Vault	1	\$ 750.00	Lump Sum	\$ -	\$ 750	\$ -	\$ 750	0.0%
F&I 60" Transducer Flow Meter	2	\$ 1,500.00	Lump Sum	\$ -	\$ 1,500	\$ -	\$ 1,500	0.0%
Construct Pipeline Outlet Structure	1	\$ 4,500.00	Lump Sum	\$ -	\$ 4,500	\$ -	\$ 4,500	0.0%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Water Reuse Pipeline Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
Pump Station								
Mobilization/Demobilization	1	\$ 4,803.00	Lump Sum	\$ 4,803	\$ -	\$ -	\$ 4,803	0.0%
F&I 9.5 CFS Pump (60 Hp) and Appurtenances	1	\$ 6,000.00	Lump Sum	\$ 6,000	\$ -	\$ -	\$ 6,000	0.1%
F&I 9.5 CFS VFD Pump (60 Hp) and Appurtenances	1	\$ 7,500.00	Lump Sum	\$ 7,500	\$ -	\$ -	\$ 7,500	0.1%
F&I 9.5 CFS Pump (125 Hp) and Appurtenances	1	\$ 6,750.00	Lump Sum	\$ 6,750	\$ -	\$ -	\$ 6,750	0.1%
Construct Pump Station Concrete Structure	1	\$ 33,840.00	Lump Sum	\$ 33,840	\$ -	\$ -	\$ 33,840	0.3%
F&I 60" RGRCP (between pump station and Junction box)	1	\$ 792.00	Lump Sum	\$ 792	\$ -	\$ -	\$ 792	0.0%
F&I Electrical System for Pump Station	1	\$ 15,000.00	Lump Sum	\$ 15,000	\$ -	\$ -	\$ 15,000	0.1%
Low-Head Irrigation Pipeline South								
Mobilization/Demobilization	1	\$ 2,172.00	Lump Sum	\$ 2,172	\$ -	\$ -	\$ 2,172	0.0%
F&I 18" C900 PVC Pipe (from pump station to existing irrigation line)	1	\$ 25,500.00	Lump Sum	\$ 25,500	\$ -	\$ -	\$ 25,500	0.2%
F&I 18" C900 PVC Pipe 90° Bend	1	\$ 300.00	Lump Sum	\$ 300	\$ -	\$ -	\$ 300	0.0%
F&I 18" C900 PVC Pipe Tee	1	\$ 75.00	Lump Sum	\$ 75	\$ -	\$ -	\$ 75	0.0%
F&I 18" Flow Meter	1	\$ 225.00	Lump Sum	\$ 225	\$ -	\$ -	\$ 225	0.0%
F&I 18" Control Valves	1	\$ 900.00	Lump Sum	\$ 900	\$ -	\$ -	\$ 900	0.0%
F&I Air/Vacuum Pressure Relief Valves	1	\$ 150.00	Lump Sum	\$ 150	\$ -	\$ -	\$ 150	0.0%
Low-Head Irrigation Pipeline East								
Mobilization/Demobilization	1	\$ 28,758.00	Lump Sum	\$ 28,758	\$ -	\$ -	\$ 28,758	0.3%
F&I 36" C905 PVC Pipe	1	\$ 260,250.00	Lump Sum	\$ 260,250	\$ -	\$ -	\$ 260,250	2.4%
F&I 36" Flow Meter	1	\$ 600.00	Lump Sum	\$ 600	\$ -	\$ -	\$ 600	0.0%
F&I 36" Control Valves	1	\$ 1,875.00	Lump Sum	\$ 1,875	\$ -	\$ -	\$ 1,875	0.0%
F&I 36" Miscellaneous Pipe fittings	2	\$ 10,650.00	Lump Sum	\$ 10,650	\$ -	\$ -	\$ 10,650	0.1%
F&I 51" Steel Casing Intended for Microtunneling (Jack & Bore) under Railroad & Hwy 99	1	\$ 28,688.00	Lump Sum	\$ 28,688	\$ -	\$ -	\$ 28,688	0.3%
F&I 18" Flow Meter	1	\$ 450.00	Lump Sum	\$ 450	\$ -	\$ -	\$ 450	0.0%
F&I 18" Butterfly Valves	1	\$ 300.00	Lump Sum	\$ 300	\$ -	\$ -	\$ 300	0.0%
F&I 18" C900 PVC Pipe	1	\$ 13,125.00	Lump Sum	\$ 13,125	\$ -	\$ -	\$ 13,125	0.1%
F&I 18" Control Valves	1	\$ 900.00	Lump Sum	\$ 900	\$ -	\$ -	\$ 900	0.0%
Construct Outlet Structure to Golf Course	1	\$ 675.00	Lump Sum	\$ 675	\$ -	\$ -	\$ 675	0.0%
F&I 18" Butterfly Valve for Local Farmer	1	\$ 1,350.00	Lump Sum	\$ 1,350	\$ -	\$ -	\$ 1,350	0.0%
F&I 18" Flow Meter for Local Farmer	1	\$ 1,350.00	Lump Sum	\$ 1,350	\$ -	\$ -	\$ 1,350	0.0%
F&I 18" Miscellaneous Pipe fittings	1	\$ 450.00	Lump Sum	\$ 450	\$ -	\$ -	\$ 450	0.0%
F&I 30" C905 PVC Pipe	1	\$ 17,640.00	Lump Sum	\$ 17,640	\$ -	\$ -	\$ 17,640	0.2%
F&I 30" Miscellaneous Pipe Fittings	1	\$ 1,388.00	Lump Sum	\$ 1,388	\$ -	\$ -	\$ 1,388	0.0%
F&I 12" C900 PVC Pipe	1	\$ 480.00	Lump Sum	\$ 480	\$ -	\$ -	\$ 480	0.0%
F&I 12" Miscellaneous Pipe Fittings	1	\$ 150.00	Lump Sum	\$ 150	\$ -	\$ -	\$ 150	0.0%
F&I Air/Vacuum Pressure Relief Valves	1	\$ 1,800.00	Lump Sum	\$ 1,800	\$ -	\$ -	\$ 1,800	0.0%
F&I 12" Flow Meter	1	\$ 150.00	Lump Sum	\$ 150	\$ -	\$ -	\$ 150	0.0%
F&I 12" Control Valve	1	\$ 105.00	Lump Sum	\$ 105	\$ -	\$ -	\$ 105	0.0%
F&I 6" Butterfly Valve	1	\$ 150.00	Lump Sum	\$ 150	\$ -	\$ -	\$ 150	0.0%
Construct Outlet Structure to Plaza Park Pond	1	\$ 675.00	Lump Sum	\$ 675	\$ -	\$ -	\$ 675	0.0%
Repave Trenched Section of Walnut Ave	1	\$ 15,000.00	Lump Sum	\$ 15,000	\$ -	\$ -	\$ 15,000	0.1%
Repave Trenched Section of Plaza Drive	1	\$ 188.00	Lump Sum	\$ 188	\$ -	\$ -	\$ 188	0.0%
Repave Trenched Section of Plaza Drive	1	\$ 188.00	Lump Sum	\$ 188	\$ -	\$ -	\$ 188	0.0%
Miscellaneous Ditch Crossing Costs	1	\$ 1,875.00	Lump Sum	\$ 1,875	\$ -	\$ -	\$ 1,875	0.0%
(i) Grand Total				\$ 10,663,635	\$ 3,552,960	\$ -	\$ 14,216,594	75.0%

¹Funds for these line items were incurred prior to September 30, 2008

²Costs generated are based on similar jobs performed in the area, within the last couple of years. Estimates for this job have yet to be finalized.

*All Non-State Share funding will be funded partially through a Federal Bureau of Reclamation Challenge Grant totaling \$696,000; and by the City of Visalia through low-interest loans through the State Revolving Fund

ATTACHMENT 4 – BUDGET

APPENDIX C

Paregien Basin Project Budget

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Paregien Basin Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a)	(b)	(c)	(d)	(e)
				Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a) Direct Project Administration Costs								
DWR Grant Administration: KDWCD	204	\$ 61.25	Staff Hrs.	\$ 12,500	\$ -	\$ -	\$ 12,500	2.7%
DWR Grant Reporting: KDWCD	245	\$ 61.25	Staff Hrs.	\$ 15,000	\$ -	\$ -	\$ 15,000	3.3%
Office Supplies (Printing, etc.)	1	\$ 2,500.00	Lump Sum	\$ 2,710	\$ -	\$ -	\$ 2,710	0.6%
(b) Land Purchase/Easement¹	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
(c) Planning/Design/Engineering/Environmental Assessment and Evaluation								
(c) Documentation								
Assessment and Evaluation								
Water Right Investigation	104	\$ 96.15	Staff Hrs.	\$ 10,000	\$ -	\$ -	\$ 10,000	2.2%
Preliminary Biological Assessment	42	\$ 120.00	Staff Hrs.	\$ 5,040	\$ -	\$ -	\$ 5,040	1.1%
Paregien Basin Technical Study								
Deep Creek Flow Range Research & Analysis	96	\$ 102.50	Staff Hrs.	\$ 9,840	\$ -	\$ -	\$ 9,840	2.2%
Recharge and Impoundment Analysis	140	\$ 94.29	Staff Hrs.	\$ 13,200	\$ -	\$ -	\$ 13,200	2.9%
Geotechnical Investigation	250	\$ 100.00	Staff Hrs.	\$ 25,000	\$ -	\$ -	\$ 25,000	5.5%
Recommendation on Facility Design (60% Design)	160	\$ 100.00	Staff Hrs.	\$ 16,000	\$ -	\$ -	\$ 16,000	3.5%
Estimate of Facility Cost (60% Design)	48	\$ 108.33	Staff Hrs.	\$ 5,200	\$ -	\$ -	\$ 5,200	1.1%
Final Design								
90% (Pre-Final) Design								
Project Design Drawings								
Water Retention Facilities	420	\$ 98.38	Staff Hrs.	\$ 41,320	\$ -	\$ -	\$ 41,320	9.1%
Monitor Wells	180	\$ 99.56	Staff Hrs.	\$ 17,920	\$ -	\$ -	\$ 17,920	3.9%
100% Final Design								
Project Design Specifications								
Water Retention Facilities	340	\$ 98.82	Staff Hrs.	\$ 33,600	\$ 33,600	\$ -	\$ 67,200	7.4%
Monitor Wells	160	\$ 109.00	Staff Hrs.	\$ 17,440	\$ -	\$ -	\$ 17,440	3.8%
Environmental Documentation								
Development of an Environmental Checklist	56	\$ 120.00	Staff Hrs.	\$ 6,720	\$ -	\$ -	\$ 6,720	1.5%
Provide an Update to the Preliminary Biological Assessment	24	\$ 120.00	Staff Hrs.	\$ 2,880	\$ -	\$ -	\$ 2,880	0.6%
Development of the Draft Mitigated Negative Declaration	200	\$ 120.00	Staff Hrs.	\$ 24,000	\$ -	\$ -	\$ 24,000	5.3%
Generation of the Final Mitigated Negative Declaration	120	\$ 120.00	Staff Hrs.	\$ 14,400	\$ -	\$ -	\$ 14,400	3.2%
Permitting								
CA Department of Fish & Game: 1602 Permit	88	\$ 103.64	Staff Hrs.	\$ 9,120	\$ -	\$ -	\$ 9,120	2.0%
Army Corps of Engineers: 404 Permit	88	\$ 103.64	Staff Hrs.	\$ 9,120	\$ -	\$ -	\$ 9,120	2.0%
Regional Water Quality Control Board: SWPPP	68	\$ 95.88	Staff Hrs.	\$ 6,520	\$ -	\$ -	\$ 6,520	1.4%
Air Resources Control Board: DCP	36	\$ 98.89	Staff Hrs.	\$ 3,560	\$ -	\$ -	\$ 3,560	0.8%
CPDCo: Water Diversion Agreement	40	\$ 140.00	Staff Hrs.	\$ 5,600	\$ -	\$ -	\$ 5,600	1.2%
(d) Construction/Implementation								
Construction Contracting and Deliverables								
Notice to Bidders	52	\$ 100.77	Staff Hrs.	\$ 5,240	\$ -	\$ -	\$ 5,240	1.2%
Pre-Bid Meeting and Addendum No. 1	52	\$ 100.77	Staff Hrs.	\$ 5,240	\$ -	\$ -	\$ 5,240	1.2%
Bid Opening and Bid Evaluation	48	\$ 97.50	Staff Hrs.	\$ 9,360	\$ -	\$ -	\$ 9,360	2.1%
Bid Award	48	\$ 97.50	Staff Hrs.	\$ 4,680	\$ -	\$ -	\$ 4,680	1.0%
Construction Staking	60	\$ 210.00	Staff Hrs.	\$ 12,600	\$ -	\$ -	\$ 12,600	2.8%
Miscellaneous Engineering Services	147	\$ 97.96	Staff Hrs.	\$ 14,400	\$ -	\$ -	\$ 14,400	3.2%
Construction of Water Retention Facilities								
Paregien Basin								
Mobilization and Site Preparation	1	\$15,000.00	Lump Sum	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
Demolition of Existing Earthen Facility	5,000	\$ 3.00	CY	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
Construct Reinforced Concrete Weir Control Structure	400	\$ 1,200.00	CY	\$ -	\$ 480,000	\$ -	\$ 480,000	0.0%
Construct Metal Catwalk	1	\$15,000.00	EA	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
Furnish & Install Water Control Radial Gate	1	\$50,000.00	EA	\$ -	\$ 50,000	\$ -	\$ 50,000	0.0%
Construct Earthen Berms	17,000	\$ 10.00	CY	\$ -	\$ 170,000	\$ -	\$ 170,000	0.0%
Hydroseed Constructed Earthen Berms	90,000	\$ 1.00	SF	\$ -	\$ 90,000	\$ -	\$ 90,000	0.0%
Furnish & Install Gravel for Levee Road	18,000	\$ 1.00	SF	\$ -	\$ 18,000	\$ -	\$ 18,000	0.0%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Paregien Basin Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
SE Pasture Enhancement Basin								
Excavate SE Pasture Recharge Basin	20,000	\$ 3.00	CY	\$ -	\$ 60,000	\$ -	\$ 60,000	0.0%
F&I Precast Concrete Turnout Structure	1	\$ 5,000.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I 15" Sluice Gate	1	\$ 2,500.00	EA	\$ -	\$ 2,500	\$ -	\$ 2,500	0.0%
F&I 15" C900 PVC DR25 CL 165 PVC Pipe	100	\$ 50.00	LF	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I Barb-Wire Fencing along Property Boundary	100	\$ 10.00	LF	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I Yearling Oak Trees	100	\$ 50.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I Tree Shelters & T-Posts for Tree Support	100	\$ 10.00	EA	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
Construction of Monitor Wells								
Monitor Well Drilling	551	\$ 112.50	Staff Hrs.	\$ -	\$ 62,000	\$ -	\$ 62,000	0.0%
Furnish & Install 4" SCH 40 PVC Perf Casing	400	\$ 20.00	LF	\$ -	\$ 8,000	\$ -	\$ 8,000	0.0%
Furnish & Install Continuous Datalogger w/DR Cable	2	\$ 700.00	EA	\$ -	\$ 1,400	\$ -	\$ 1,400	0.0%
Construction Management/Inspection	464	\$ 86.21	Staff Hrs.	\$ 40,000	\$ -	\$ -	\$ 40,000	8.8%
Performance Testing and Demobilization								
Concrete Test Cylinders	75	\$ 100.00	Staff Hrs.	\$ 7,500	\$ -	\$ -	\$ 7,500	1.6%
Compaction Tests and Compaction Curves	50	\$ 100.00	Staff Hrs.	\$ 5,000	\$ -	\$ -	\$ 5,000	1.1%
Demobilization	1	\$ 5,000.00	Lump Sum	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
(e) Environmental Compliance/Mitigation/Enhancement								
Biological Site Survey	40	\$ 120.00	Staff Hrs.	\$ 4,800	\$ -	\$ -	\$ 4,800	1.1%
Mitigate Identified Mitigation Areas	408	\$ 61.25	Staff Hrs.	\$ 25,000	\$ -	\$ -	\$ 25,000	5.5%
Implementation of the SWPPP	16	\$ 61.25	Staff Hrs.	\$ 1,000	\$ -	\$ -	\$ 1,000	0.2%
Implementation of the DCP	16	\$ 61.25	Staff Hrs.	\$ 1,000	\$ -	\$ -	\$ 1,000	0.2%
(f) Construction Administration								
Water Retention Facilities: District Engineer	100	\$ 61.25	Staff Hrs.	\$ 6,125	\$ -	\$ -	\$ 6,125	1.3%
Monitor Wells: District Engineer	100	\$ 61.25	Staff Hrs.	\$ 6,125	\$ -	\$ -	\$ 6,125	1.3%
(g) Other Costs								
	--	--		\$ -	\$ -	\$ -	\$ -	0.0%
(h) Construction/Implementation Contingency								
Construction of Water Retention Facilities								
Paregien Basin								
Mobilization and Site Preparation	1	\$ 3,000.00	Lump Sum	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
Demolition of Existing Earthen Facility	1	\$ 3,000.00	Lump Sum	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
Construct Reinforced Concrete Weir Control Structure	1	\$96,000.00	Lump Sum	\$ -	\$ 96,000	\$ -	\$ 96,000	0.0%
Construct Metal Catwalk	1	\$ 3,000.00	Lump Sum	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
Furnish & Install Water Control Radial Gate	1	\$10,000.00	Lump Sum	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
Construct Earthen Berms	1	\$34,000.00	Lump Sum	\$ -	\$ 34,000	\$ -	\$ 34,000	0.0%
Hydroseed Constructed Earthen Berms	1	\$18,000.00	Lump Sum	\$ -	\$ 18,000	\$ -	\$ 18,000	0.0%
Furnish & Install Gravel for Levee Road	1	\$ 3,600.00	Lump Sum	\$ -	\$ 3,600	\$ -	\$ 3,600	0.0%
SE Pasture Enhancement Basin								
Excavate SE Pasture Recharge Basin	1	\$12,000.00	Lump Sum	\$ -	\$ 12,000	\$ -	\$ 12,000	0.0%
F&I Precast Concrete Turnout Structure	1	\$ 1,000.00	Lump Sum	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I 15" Sluice Gate	1	\$ 500.00	Lump Sum	\$ -	\$ 500	\$ -	\$ 500	0.0%
F&I 15" C900 PVC DR25 CL 165 PVC Pipe	1	\$ 1,000.00	Lump Sum	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I Barb-Wire Fencing along Property Boundary	1	\$ 200.00	Lump Sum	\$ -	\$ 200	\$ -	\$ 200	0.0%
F&I Yearling Oak Trees	1	\$ 1,000.00	Lump Sum	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I Tree Shelters & T-Posts for Tree Support	1	\$ 200.00	Lump Sum	\$ -	\$ 200	\$ -	\$ 200	0.0%
Construction of Monitor Wells								
Monitor Well Drilling	1	\$12,400.00	Lump Sum	\$ -	\$ 12,400	\$ -	\$ 12,400	0.0%
Furnish & Install 4" SCH 40 PVC Perf Casing	1	\$ 1,600.00	Lump Sum	\$ -	\$ 1,600	\$ -	\$ 1,600	0.0%
Furnish & Install Continuous Datalogger w/DR Cable	1	\$ 280.00	Lump Sum	\$ -	\$ 280	\$ -	\$ 280	0.0%
(i) Grand Total				\$ 454,760	\$ 1,243,280	\$ -	\$ 1,698,040	26.8%

¹Funds for these line items were incurred prior to September 30, 2008

*All Non-State Share funding will be funded by Kaweah Delta Water Conservation District through their District Financial Reserves

ATTACHMENT 4 – BUDGET

APPENDIX D

Oakes Basin Habitat Enhancement Project Budget

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Oakes Basin Habitat Enhancement Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a)	(b)	(c)	(d)	(e)
				Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a) Direct Project Administration Costs								
DWR Grant Administration: KDWCD	204	\$ 61.25	Staff Hours	\$ 12,500	\$ -	\$ -	\$ 12,500	27.9%
DWR Grant Reporting: KDWCD	245	\$ 61.25	Staff Hours	\$ 15,000	\$ -	\$ -	\$ 15,000	33.4%
Office Supplies (Printing, etc.)	1	\$ 2,394.00	Lump Sum	\$ 2,394	\$ -	\$ -	\$ 2,394	5.3%
(b) Land Purchase/Easement¹								
Planning/Design/Engineering/Environmental	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
(c) Documentation								
Assessment and Evaluation								
Habitat Vegetation Plan ¹	--	--	--	\$ -	\$ -	\$ -	\$ -	0.0%
Biological Review	16	\$ 110.00	Staff Hours	\$ 1,760	\$ -	\$ -	\$ 1,760	3.9%
60% (Concept) Design								
Irrigation Well Capacity Estimate	40	\$ 105.00	Staff Hours	\$ 4,200	\$ -	\$ -	\$ 4,200	9.4%
Final Design								
90% (Pre-Final) Design								
Irrigation Well Construction Drawings	52	\$ 88.62	Staff Hours	\$ -	\$ 4,608	\$ -	\$ 4,608	0.0%
Irrigation System Construction Drawings	52	\$ 88.62	Staff Hours	\$ -	\$ 4,608	\$ -	\$ 4,608	0.0%
100% (Final) Design	52	\$ 100.77	Staff Hours	\$ 2,361	\$ 2,879	\$ -	\$ 5,240	5.3%
Environmental Documentation								
Biological Assessment	8	\$ 110.00	Staff Hours	\$ 880	\$ -	\$ -	\$ 880	2.0%
CEQA Compliance - Category Exclusion	8	\$ 110.00	Staff Hours	\$ 880	\$ -	\$ -	\$ 880	2.0%
Permitting								
Storm Water Pollution Prevention Plan (SWPPP)	80	\$ 61.25	Staff Hours	\$ 4,900	\$ -	\$ -	\$ 4,900	10.9%
(d) Construction/Implementation								
Construction Contracting and Deliverables								
Notice to Bidders	26	\$ 100.77	Staff Hours	\$ -	\$ 2,620	\$ -	\$ 2,620	0.0%
Pre-Bid Meeting and Addendum No. 1	26	\$ 100.77	Staff Hours	\$ -	\$ 2,620	\$ -	\$ 2,620	0.0%
Bid Opening and Bid Evaluation	18	\$ 94.67	Staff Hours	\$ -	\$ 1,704	\$ -	\$ 1,704	0.0%
Bid Award	18	\$ 94.67	Staff Hours	\$ -	\$ 1,704	\$ -	\$ 1,704	0.0%
Construction Staking	16	\$ 210.00	Staff Hours	\$ -	\$ 3,360	\$ -	\$ 3,360	0.0%
Miscellaneous Engineering Services	16	\$ 140.00	Staff Hours	\$ -	\$ 2,240	\$ -	\$ 2,240	0.0%
Vegetation Plan Plant Installation								
F&I Custom Collected Plants	230	\$ 8.25	EA	\$ -	\$ 1,898	\$ -	\$ 1,898	0.0%
F&I Tree Shelters & T-posts for Tree Support	152	\$ 8.25	EA	\$ -	\$ 1,254	\$ -	\$ 1,254	0.0%
Construct Individual Irrigation Basins	230	\$ 2.75	EA	\$ -	\$ 633	\$ -	\$ 633	0.0%
F&I Wood Chip Mulch within Individual Irrigation Basins	15	\$ 33.12	CY	\$ -	\$ 497	\$ -	\$ 497	0.0%
Vegetation Plan Plant Irrigation System								
Construct/Drill Low Volume Irrigation Well	150	\$ 200.00	Staff Hours	\$ -	\$ 30,000	\$ -	\$ 30,000	0.0%
F&I 10" SCH 40 PVC Perf Casing	300	\$ 50.00	LF	\$ -	\$ 15,000	\$ -	\$ 15,000	0.0%
F&I Designed Sumpersible Pump	1	\$10,000.00	EA	\$ -	\$ 10,000	\$ -	\$ 10,000	0.0%
F&I Pump Pad with Pressure Tank	1	\$ 5,000.00	EA	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I Electrical Service to Well	1	\$ 5,000.00	Lump Sum	\$ -	\$ 5,000	\$ -	\$ 5,000	0.0%
F&I 3" SCH 40 PVC Irrigation Distribution System	100	\$ 10.00	LF	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I Above Ground Bubbler Irrigation System	230	\$ 29.00	Plant	\$ -	\$ 6,670	\$ -	\$ 6,670	0.0%

Attachment 4 - Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Oakes Basin Habitat Enhancement Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(e) Environmental Compliance/Mitigation/Enhancement								
O&M Weed Control within Individual Irrigation Basins (Semi-Annual)	6	\$ 186.67	Visit	\$ -	\$ 1,120	\$ -	\$ 1,120	0.0%
O&M Weed Control within Planting Area (Semi-Annual)	6	\$ 315.83	Visit	\$ -	\$ 1,895	\$ -	\$ 1,895	0.0%
F&I Plant Replacement (15% of original planted)	39	\$ 10.56	Plant	\$ -	\$ 412	\$ -	\$ 412	0.0%
O&M Above Ground Bubbler Irrigation System	230	\$ 11.38	Plant	\$ -	\$ 2,617	\$ -	\$ 2,617	0.0%
O&M Individual Irrigation Basins	230	\$ 1.51	EA	\$ -	\$ 347	\$ -	\$ 347	0.0%
(f) Construction Administration								
Construction Management: District Engineer	40	\$ 61.25	Staff Hours	\$ -	\$ 2,450	\$ -	\$ 2,450	0.0%
(g) Other Costs								
--	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0.0%
(h) Construction/Implementation Contingency								
Vegetation Plan Plant Installation								
F&I Custom Collected Plants	1	\$ 189.80	Lump Sum	\$ -	\$ 190	\$ -	\$ 190	0.0%
F&I Tree Shelters & T-posts for Tree Support	1	\$ 125.00	Lump Sum	\$ -	\$ 125	\$ -	\$ 125	0.0%
Construct Individual Irrigation Basins	1	\$ 71.00	Lump Sum	\$ -	\$ 63	\$ -	\$ 63	0.0%
F&I Wood Chip Mulch within Individual Irrigation Basins	1	\$ 56.00	Lump Sum	\$ -	\$ 50	\$ -	\$ 50	0.0%
Vegetation Plan Plant Irrigation System								
Construct/Drill Low Volume Irrigation Well	1	\$ 3,000.00	Lump Sum	\$ -	\$ 3,000	\$ -	\$ 3,000	0.0%
F&I 10" SCH 40 PVC Perf Casing	1	\$ 1,500.00	Lump Sum	\$ -	\$ 1,500	\$ -	\$ 1,500	0.0%
F&I Designed Submersible Pump	1	\$ 1,000.00	Lump Sum	\$ -	\$ 1,000	\$ -	\$ 1,000	0.0%
F&I Pump Pad with Pressure Tank	1	\$ 500.00	Lump Sum	\$ -	\$ 500	\$ -	\$ 500	0.0%
F&I Electrical Service to Well	1	\$ 500.00	Lump Sum	\$ -	\$ 500	\$ -	\$ 500	0.0%
F&I 3" SCH 40 PVC Irrigation Distribution System	1	\$ 100.00	Lump Sum	\$ -	\$ 100	\$ -	\$ 100	0.0%
F&I Above Ground Bubbler Irrigation System	1	\$ 751.00	Lump Sum	\$ -	\$ 667	\$ -	\$ 667	0.0%
(i) Grand Total				\$ 44,875	\$ 119,831	\$ -	\$ 164,706	27.2%

¹Funds for these line items were incurred prior to September 30, 2008

*All Non-State Share funding will be funded by Kaweah Delta Water Conservation District through their District Financial Reserves

ATTACHMENT 4 – BUDGET

APPENDIX E

**Groundwater Quality Protection and Investigation
Project Budget**

Attachment 4 - Detailed Project Budget

Proposal Title: 2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration and Water Quality Protection Projects Proposal

Project Title: Groundwater Quality Protection and Investigation Project

Budget Category	No. of Units	Per Unit Cost	Unit	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a) Direct Project Administration Costs								
Implementation of MOU concerning grant funding with KDWCD	15	\$ 130.00	Staff Hrs.	\$ -	\$ 1,950	\$ -	\$ 1,950	0%
Tulare County Project Administration	86	\$ 35.00	Staff Hrs.	\$ -	\$ 3,010	\$ -	\$ 3,010	0%
Labor Compliance Program (during construction)	9	\$ 115.00	Staff Hrs.	\$ -	\$ 1,035	\$ -	\$ 1,035	0%
Reporting	17	\$ 115.00	Staff Hrs.	\$ -	\$ 1,955	\$ -	\$ 1,955	0%
(b) Land Purchase/Easement								
	--	--	--	\$ -	\$ -	\$ -	\$ -	0%
(c) Planning/Design/Engineering/Environmental Documentation								
Identify Priority Areas	20	\$ 115.00	Staff Hrs.	\$ -	\$ 2,300	\$ -	\$ 2,300	0%
Selection of Private Wells for Destruction	100	\$ 100.00	Staff Hrs.	\$ -	\$ 10,000	\$ -	\$ 10,000	0%
Produce Outreach Materials	1	\$ 2,000.00	Lump Sum	\$ -	\$ 2,000	\$ -	\$ 2,000	0%
Outreach and Technical Assistance to Private Well Owners	150	\$ 100.00	Staff Hrs.	\$ -	\$ 15,000	\$ -	\$ 15,000	0%
Well Sampling	50	\$ 250.00	Per Site	\$ -	\$ 12,500	\$ -	\$ 12,500	0%
Well Sounder	1	\$ 1,000.00	EA	\$ -	\$ 1,000	\$ -	\$ 1,000	0%
Feasibility Studies	3	\$ 15,000.00	Per Study	\$ -	\$ 45,000	\$ -	\$ 45,000	0%
Preliminary Engineering Reports	3	\$ 20,000.00	Per Report	\$ -	\$ 60,000	\$ -	\$ 60,000	0%
Technical Assistance to Communities	100	\$ 100.00	Staff Hrs.	\$ -	\$ 10,000	\$ -	\$ 10,000	0%
Final Design	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0%
Environmental Documentation	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0%
County Well Abandonement Permits	100	\$ 116.00	Permits	\$ -	\$ 11,600	\$ -	\$ 11,600	0%
(d) Construction/Implementation								
				\$ -				
Mobilization	100	\$ 256.00	Per Site	\$ -	\$ 25,600	\$ -	\$ 25,600	0%
Project Construction - 100 Well Destructions	100	\$ 2,848.00	Per Site	\$ -	\$ 284,800	\$ -	\$ 284,800	0%
Performance Testing and Demobilization	100	\$ 96.00	Per Site	\$ -	\$ 9,600	\$ -	\$ 9,600	0%
(e) Environmental Compliance/ Mitigation/Enhancement								
	--	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%
(f) Construction Administration								
Construction Administration	--	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%
(g) Other								
Legal Services	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0%
On-going Monitoring	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0%
On-going Operation and Maintenance	--	\$ -	--	\$ -	\$ -	\$ -	\$ -	0%
(h) Construction/Implementation Contingency								
Mobilization	1	\$ 5,120.00	Lump Sum	\$ -	\$ 5,120	\$ -	\$ 5,120	0%
Project Construction - 100 Well Destructions	1	\$ 56,960.00	Lump Sum	\$ -	\$ 56,960	\$ -	\$ 56,960	0%
Performance Testing and Demobilization	1	\$ 1,920.00	Lump Sum	\$ -	\$ 1,920	\$ -	\$ 1,920	0%
(i) Grand Total				\$ -	\$ 561,350	\$ -	\$ 561,350	DAC Waiver Requested

*DWR does not require a non-state share for DAC Projects