

# **Attachment 4**

## **Budget**

**Santa Ana One Water One Watershed IRWM Prop 84, Round 2  
Implementation Proposal**



**Table 8 – Summary Budget**  
**Proposal Title: \_Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal \_**

		(a)	(b)	(c)	(d)	(e)
Individual Project Title		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost	% Funding Match (col. b/col. d)
<b>(A)</b>	Perris Desalination Program - Brackish Water Wells 94, 95 and 96	\$1,041,690	\$9,238,280	\$0	\$10,279,970	<b>90%</b>
<b>(B)</b>	Quail Valley Subarea 9 Phase 1 Sewer System Project	\$2,010,460	\$3,670,000	\$0	\$5,680,460	<b>65%</b>
<b>(C)</b>	Forest First - Increase Stormwater Capture and Decrease Sediment Loading through Forest Ecological Restoration	\$1,041,690	\$4,231,040	\$0	\$5,272,730	<b>80%</b>
<b>(D)</b>	Wineville Regional Recycled Water Pipeline and Groundwater Recharge System Upgrades	\$1,041,690	\$21,000,000	\$0	\$22,041,690	<b>95%</b>
<b>(E)</b>	Plunge Creek Water Recharge and Habitat Improvement	\$520,840	\$210,500	\$0	\$731,340	<b>29%</b>
<b>(F)</b>	Prado Basin Sediment Management Demonstration Project	\$781,270	\$7,115,000	\$0	\$7,896,270	<b>90%</b>
<b>(G)</b>	San Sevaine Ground Water Recharge Basin	\$781,270	\$1,750,000	\$0	\$2,531,270	<b>69%</b>
<b>(H)</b>	Corona/Home Gardens Well Rehabilitation and Multi-Jurisdictional Water Transmission Line Project	\$1,354,180	\$4,720,400	\$0	\$6,074,580	<b>78%</b>
<b>(I)</b>	Enhanced Stormwater Capture and Recharge along the Santa Ana River	\$1,041,690	\$30,300,000	\$0	\$31,341,690	<b>97%</b>
<b>(J)</b>	Regional Residential Landscape Retrofit Program	\$520,840	\$500,000	\$0	\$1,020,840	<b>49%</b>
<b>(K)</b>	Canyon Lake Hybrid Treatment Process	\$520,840	\$385,500	\$0	\$906,340	<b>43%</b>
<b>(L)</b>	14th Street Groundwater Recharge and Storm Water Quality Treatment Integration Facility	\$520,840	\$5,219,187	\$0	\$5,740,027	<b>91%</b>
<b>(M)</b>	Customer Handbook to Using Water Efficiently in the Landscape	\$125,000	\$42,000	\$0	\$167,000	<b>25%</b>
<b>(N)</b>	Vulcan Pit Flood Control and Aquifer Recharge Project	\$1,041,690	\$12,703,000	\$9,950,000	\$23,694,690	<b>54%</b>
<b>(O)</b>	Francis Street Storm Drain and Ely Basin Flood Control and Aquifer Recharge Project	\$781,270	\$8,070,000	\$7,820,000	\$16,671,270	<b>48%</b>
<b>(P)</b>	Commercial/Industrial/Institutional Performance-Based Water Use Efficiency Program	\$520,840	\$1,927,512	\$0	\$2,448,352	<b>79%</b>
<b>(Q)</b>	Peters Canyon Channel Water Capture and Reuse Pipeline	\$1,041,690	\$7,691,112	\$0	\$8,732,802	<b>88%</b>

<b>(R)</b>	Soboba Band of Luiseño Indians Wastewater Project	\$156,250	\$53,000	\$0	\$209,250	<b>25%</b>
<b>(S)</b>	Recycled Water Project Phase I (Arlington-Central Avenue Pipeline)	\$1,041,690	\$28,869,800	\$0	\$29,911,490	<b>97%</b>
<b>(T)</b>	Wilson III Basins Project and Wilson Basins/Spreading Grounds	\$781,270	\$12,292,721	\$0	\$13,073,991	<b>94%</b>
	Proposal Total (Sum rows (a) through (t) for each column)	\$16,667,000	\$159,989,052	\$17,770,000	\$194,426,052	<b>82%</b>
	DAC Funding Match Waiver Total (Sum column (d) only for projects seeking DAC funding match waiver in rows (a) through (t))	\$0	\$0	\$0	\$0	
	Grand Total (Subtract row (j) from row (i) and recalculate column (e) - Funding Match %)	\$16,667,000	\$159,989,052	\$17,770,000	\$194,426,052	<b>82%</b>

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (A) Perris Desalination Program - Brackish Water Wells 94, 95 and 96\_(EMWD)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 41,690	\$ 1,000	\$ -	\$ 42,690
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 129,000	\$ -	\$ 129,000
<b>(d)</b>	Construction/Implementation	\$ 1,000,000	\$ 8,698,930	\$ -	\$ 9,698,930
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ 400,000	\$ -	\$ 400,000
<b>(g)</b>	Other Costs	\$ -	\$ 9,350	\$ -	\$ 9,350
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 9,238,280	\$ -	\$ 10,279,970

**\*List sources of funding:** EMWD revenues through various sources including capital improvement funds and rates.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

EMWD Administration: A total of \$1,000 is included as a place holder under Task 3, Reporting. This category amount may be modified to reflect actual if construction costs are less than estimated.

**B. Row (B) Land Purchase/Easement**

Sites for Wells 94, 95, and 96 have been purchased by EMWD for the Project: Riverside County Assessor's Parcel Nos. for the sites are; 309-380-006 (1.21 acres), 307-210-010 (1.05 acres), and 307-210-017 (1.20 acres).

### **C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The EMWD Capital Improvement Program utilizes a standard work breakdown structure which detail 7 phases from project planning to administrative closeout. The phases are described as such: Facility Planning, Preliminary Design, Final Design, Bid Package Preparation, Bid / Award, Construction, Admin Closeout. The Project will be constructed under three distinct projects: 1) Well Drilling, 2) Well Equipping, and 3) Pipeline Construction. The Project Estimates are summarized in the attachments Drilling Summary Estimates, Equipping Summary Estimates, and Pipeline Summary Estimates. Since all subprojects have completed the Facility Planning and Preliminary Design efforts, the summary estimates reflect actual costs. All remaining phases (Final Design through Admin Closeout) are scoped out in the Resource Allocation worksheets attached as Drilling Res Alloc, Equipping Res Alloc, and Pipeline Res Alloc. The Resource Allocation worksheets utilize the most recent hourly billing rates for the disciplines needed to design and construct the project. The estimated hours are based on recently completed projects with a similar scope of work. Contract services are also based on recently completed projects with a similar scope of work or recently acquired proposals from qualified consultants. EMWD has completed environmental compliance as component of the overall Perris II Desalination Program. Costs associated with environmental documentation (\$38,800) are for site-specific studies are reflected in the Project Budget. Permitting (Task 8) is estimated at \$3,000 per well with a small allowance for pipelines.

### **D. Row (D) Construction / Implementation**

Construction contracting is estimated at \$5,000. The construction estimates reflect the total construction contract value of \$9,693,930. Well Drilling is expected to cost approximately \$2,351,000; Well Equipping is estimated at \$5,493,000; and Pipeline Construction at \$1,849,000. Detailed construction estimates are attached as Perris II Wells 94-96 Construction Estimate. The estimates reflect Unit Quantities and Unit Prices for each major item required with 12-inch PVC piping installed at \$140 per linear foot and 24-inch PVC at \$230 per linear foot. Construction contingencies are reflected on Row (h) and are not included in this category. It should be noted that the construction estimates assume a well depth of 350 feet which is subject to change due to field conditions.

### **E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Environmental compliance/Mitigation/Enhancement costs associated with direct construction are included in the Construction/Implementation Category (Row (d)). Site-specific studies are ongoing however associated mitigation measures are expected to be consistent with similar projects recently completed—primarily construction BMPs. This Project is one component of a multiphase program and is covered under an umbrella CEQA. General compliances associated with the Perris II Desalination Program are being administered by EMWD outside the scope of this Project, are wholly the responsibility of EMWD, and therefore not included in the Project Budget.

### **F. Row (F) Construction Administration**

Construction Administration includes all costs related to construction management such as onsite consultants, EMWD Inspection / Contract Management labor, and system integration by EMWD Operations staff. The EMWD labor estimates reflected in the Resource Allocation Worksheets are based on recently completed similar projects. Consultant estimates are based on recently acquired proposals or estimated based on actual costs of recently completed similar projects.

### **G. Row (G) Other Costs**

The \$9,350 reflected on Row (g) accounts for miscellaneous costs and may be modified based on actual costs and the level of effort required to collect and analyze data for inclusion in the final and post completion reports as specified in the Grant agreement.

**H. Row (H) Construction / Implementation Contingency**

Construction costs are based on preliminary designs and therefore a contingency factor of 10% or \$969,000 is included in the Project Budget. The more typical range of 20% is reduced based on the high level of confidence acquired through the recent construction of additional extraction wells in the area coupled with years of extensive groundwater monitoring activities.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

Row (i) contains the \$1,000,000 grant request and the \$9,238,280 cost share reflecting the total cost of \$10,238,280.



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (B) Quail Valley Subarea 9 Phase 1 Sewer System Project (EMWD)

Project serves a need of a DAC?: Yes

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 80,460	\$ 9,000	\$ -	\$ 89,460
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ 200,000		\$ 200,000
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 960,000	\$ -	\$ 960,000
<b>(d)</b>	Construction/Implementation	\$ 1,608,000	\$ 1,806,000	\$ -	\$ 3,414,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 20,000	\$ -	\$ 20,000
<b>(f)</b>	Construction Administration	\$ -	\$ 300,000	\$ -	\$ 300,000
<b>(g)</b>	Other Costs	\$ -	\$ 20,000	\$ -	\$ 20,000
<b>(h)</b>	Construction/Implementation Contingency	\$ 322,000	\$ 355,000	\$ -	\$ 677,000
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 2,010,460	\$ 3,670,000	\$ -	\$ 5,680,460

**\*List sources of funding:** EMWD revenues through various sources including: capital improvement funds, rates, rate surcharges, and possible improvement fees. EMWD and others are actively pursuing additional grant funding from the State and other sources to reduce the economic burden on residents of this disadvantaged community.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

A total of \$9,000 is included as a place holder for Labor Compliance and Reporting. These category amounts may be modified to reflect actual. Other administrative costs will be contributed however are not reflected in the Project Budget.

## **B. Row (B) Land Purchase/Easement**

Eastern Municipal Water District will either purchase land for a lift station to convey flows to their Perris Valley Regional Wastewater Reclamation Facility, or purchase land required to connect to Elsinore Valley Municipal Water District's sewer collection system. \$200,000 has been allocated for this purchase.

## **C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The EMWD Capital Improvement Program utilizes a standard work breakdown structure which detail 7 phases from project planning to administrative closeout. The phases are described as such: Facility Planning, Preliminary Design, Final Design, Bid Package Preparation, Bid / Award, Construction, Admin Closeout. Quail Valley Phase I will be constructed as a single distinct project – Sewer Construction. The Project Estimates are summarized in the attachment Sewer Construction Summary Estimates. Since Facility Planning and Preliminary Design efforts are complete, the summary estimates reflect actual costs. All remaining phases (Final Design through Admin Closeout) are scoped in the Resource Allocation worksheets attached as Sewer Construction Res Alloc. The Resource Allocation worksheets utilize the most recent hourly billing rates for the disciplines needed to design and construct the project. The estimated hours are based on recently completed projects with a similar scope of work. Contract services are also based on recently completed projects with a similar scope of work or recently acquired proposals from qualified consultants. EMWD has initiated environmental compliance and the Project Budget reflects a \$100,000 allowance for completion. Permitting (Task 8) is estimated at \$10,000 based on similar sewer construction projects undertaken by EMWD in the general area.

## **D. Row (D) Construction / Implementation**

Construction estimates reflect the total construction contract value of \$3,384,000 with \$640,000 in material costs. Mobilization and site improvements are estimated at \$860,000; the sewer system \$1,384,000; overhead, insurances, taxes, etc. \$500,000. The detailed construction estimates are attached as Quail Valley Phase I Sewer Construction Estimate. The estimates reflect Unit Quantities and Unit Prices for each major item required. Construction contingencies are reflected on Row (h) and are not included in this category.

## **E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Environmental compliance/Mitigation/Enhancement costs associated with direct construction are included in the Construction/Implementation Category (Row (d)). Additional mitigation/enhancement activities may be required outside of standard BMP's for construction. In the event that such activities are required EMWD will pay all related and approved costs. There is no indication that such expenditures will be necessary.

## **F. Row (F) Construction Administration**

Construction Administration budget of \$300,000 includes all costs related to construction management such as onsite consultants, EMWD Inspection / Contract Management labor, and system integration by EMWD Operations staff. The EMWD labor estimates reflected in the Resource Allocation Worksheets are based on recently completed similar projects. The consultant estimates are based on recently acquired proposals or actual costs of recently completed similar projects.

## **G. Row (G) Other Costs**

The \$20,000 reflected on Row (g) accounts for miscellaneous costs and may be modified based on actual costs and the level of effort required to collect and analyze data for inclusion in the final and post completion reports as specified in the Grant agreement. The amount also supports ongoing public outreach. Services provided will include neighborhood notifications and meetings prior to and during construction.

**H. Row (H) Construction / Implementation Contingency**

The Construction/Implementation contingency is 20% or \$677,000 based on a direct construction cost estimate of \$3,384,000. The percentage is high due to the facts that final designs are not complete and the project site provides interesting challenges. The terrain is undulating and depth to bedrock varies from zero to approximately 30 feet. Added complexities arise from the fact that construction will take place in a developed community within limited rights-of-way utilized by existing underground utilities.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

Row (i) contains the \$1,930,000 grant request and the \$3,670,000 cost share reflecting the total cost of \$5,600,000.



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal  
 Project Title: Project (C) Forest First - Increase Stormwater Capture and Decrease Sediment Loading through Forest Ecological Restoration (U.S. Forest Service)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 53,190	\$ 5,000	\$ -	\$ 58,190
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 40,000	\$ 763,000	\$ -	\$ 803,000
<b>(d)</b>	Construction/Implementation	\$ 855,000	\$ 2,700,000	\$ -	\$ 3,555,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ 10,000	\$ 263,040	\$ -	\$ 273,040
<b>(f)</b>	Construction Administration	\$ 40,000	\$ 500,000	\$ -	\$ 540,000
<b>(g)</b>	Other Costs	\$ 3,500	\$ -	\$ -	\$ 3,500
<b>(h)</b>	Construction/Implementation Contingency	\$ 40,000	\$ -	\$ -	\$ 40,000
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 4,231,040	\$ -	\$ 5,272,730

**\*List sources of funding:** Column C cost share are Federally appropriated dollars that will be allocated over the course of the grant. It is anticipated that the Bluff area fuels will have a single contract with annual options and will combine Federal and grant dollars. For the Santa Ana fuels work, it is anticipated that 2 contracts will be used, one for plantations and one for mastication. Road work contracts will use ongoing contract mechanisms. Column E is in-kind services provided by partner water agencies and flood control for monitoring streamflow and sediment removal.

Most of the tasks involved with fuels management and roads management projects are a combination of office and field work. The time needed to complete a task is highly dependent on the site location, current weather and ground conditions, personnel and machinery. The Forest Service appropriated budget is tied to on-the-ground targets (e.g. acres, road miles) and not to personnel hours or wages. The nature of Forest Service work and the workforce makes it more efficient and accurate to track and estimate on a per-acre basis for fuels management field work. Therefore many of the task estimates are derived on a per-acre basis from the experience of personnel in that discipline. Wherever possible, the government Grade Scale (GS) level of the employees normally involved in tasks is given but tasks could be performed by employees of different GS levels in the absence of the responsible employee. Listed rates include salary, benefits, and personnel administration.

## **A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

USFS Administration:

Task 1 – Invoice preparation is expected to be done on a quarterly basis (for 20 quarters). Preparing invoices is estimated to take 5 hours each by a GS-12 employee (\$60/hr).

Task 2 – Labor compliance documentation is expected to take 8 hours, including discussion to verify federal compliance versus state compliance. This work would be done by a GS-12 employee (\$60/hr).

Task 3 – Annual reports are expected to take 16 hours each for a GS-12 employee (\$60/hr) with 4 hours review by a GS-13 employee (\$70/hr). Final reports on the three primary subtasks are expected to take 80 hours total by a GS-12 employee (\$60/hr) with 16 hours review by a GS-13 employee (\$70/hr).

## **B. Row (B) Land Purchase/Easement**

Not relevant to the project.

## **C. Row (C) Planning / Design/Engineering / Environmental Documentation**

Initial and final design of fuels management and roads management projects on the San Bernardino National Forest are done through the NEPA planning process. This is done by an interdisciplinary team of specialists during the development of the Purpose and Need, Proposed Action, and Scoping documents. This requires a combination of office and field work, including data analysis, meetings, field investigations, and report writing of existing conditions and effects of actions as they relate to silviculture, fuels, fire, wildlife, hydrology, soils, engineering, archaeology/heritage, and botany.

The NEPA phase of the Bluff fuels area and the Santa Ana fuels Unit 3 area have already been completed at an estimated cost of \$763,000 for consultant fees and contract review. These Federally appropriated dollars were expended since FFY09 as per cost share requirements. For the purposes of the PSP, having NEPA-ready project decisions is equivalent to a 90% (pre-final) design.

The NEPA phase for the perennial crossings along Forest Service Road (FSR) 1N09 is estimated to cost \$40,000, taking the various specialists of GS-9 through GS-13 about 90 days of work, averaging \$55/hour. This NEPA task is expected to take one year (FFY14 Q2 – FFY15 Q1). For the purposes of the PSP, this portion of the project is in the 10% (conceptual) design phase because the sites have been chosen and some background information is available from the Santa Ana fuels Unit 3 NEPA document.

## **D. Row (D) Construction / Implementation**

The Bluff project area consists of about 1500 acres of land and will have fuels reduction of 30-70% removal implemented over the course of three years using a single contract with annual options combining grant funds and Federally appropriated funds. The project also includes 4 miles of road improvement and stabilization through addition of base material. Past road improvement projects on the same district averaged \$50,000/mile.

The Santa Ana Unit 3 area consists of about 142 acres of land consisting of mastication with 50% removal of vegetation on about 100 acres and thinning of about 42 acres of plantations. The NEPA document included the provision to conduct maintenance along FSR 1N09 to support fuels equipment.

Contract preparation tasks for fuels projects include unit preparation, layout, writing prospectus, writing contract, field visit, and bid panel work. Costs of \$300/acre are estimated based on other past and on-going fuels management projects on the San Bernardino National Forest and include time for forestry personnel with GIS support for unit maps.

Contract pricing depends on the type of work being bid and market forces. Based on past projects, contract prices have ranged from \$1000/acre to \$2000/acre.

Implementation costs for stream crossing reconstruction vary based on the structures used. The conceptual design includes the use of culverts allowing for aquatic passage, raising the road grade and additional road drainage structures to hydrologically disconnect the road from the crossing. Based on past projects, \$250,000 has been allocated for the 2 crossings, which will possibly be similar. Preliminary engineering is estimated at 10% of the estimated contract costs, or \$25,000. Preliminary engineering includes: site survey, design, and contract preparation. Construction contract administration is usually estimated at 10% of the estimated contract costs, or \$25,000. This would include personnel time and costs incurred to administer the contract and provide contract quality assurance to the government.

#### **E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Forest Service BMPEP monitoring is done to ensure that BMPs are implemented and effective. BMPs are used to make sure that sediment generated during the implementation of fuels and roads work does not deliver to water channels in significant quantities. Implementation monitoring is done during and just after project activities, as well as before the winter season. Effectiveness monitoring is used to determine if the BMPs that were implemented were effective. Problems found are corrected and noted for adaptive management purposes. After each winter season and spring snowmelt, the treated areas are monitored to check for BMP compliance.

On an annual basis, the GS-9 (\$45/hr) staff person will conduct monthly BMP monitoring inspections for the 6 wettest months and be scheduled to inspect following summer thunderstorms in the area during the dry season. Senior watershed staff (GS-12; \$60/hr) will provide supervision and recommendations for fixes, as needed. The number of hours of work varies annually based on the phased nature of the implementation schedule and the travel distance to each of the locations.

FFY14: GS-9 for 48 hours; GS-12 for 24 hours = \$3600

FFY15: GS-9 for 112 hours; GS-12 for 48 hours = \$7920

FFY16: GS-9 for 112 hours; GS-12 for 48 hours = \$7920

FFY17: GS-9 for 48 hours; GS-12 for 24 hours = \$3600

Basal area reduction of vegetation (to correlate with reduced evapotranspiration) is measured through compliance with the contract specifications of the fuels treatment and is contained within Row (f) for construction administration.

Project partners, San Bernardino Valley Municipal Water District and Western Municipal Water District, have pledged to use internal resources (in-kind services) to continue to fund USGS stream gage data collection program which will be used to analyze water flows from project areas in an effort to quantify changes in flow which may be attributable to fuels reduction. In addition, San Bernardino County Flood Control District monitors their debris basins on an annual basis and will provide documentation of sediment removal.

## **F. Row (F) Construction Administration**

Project and program management is performed by various USFS personnel, both in the office and in the field. The work leaders are typically the Forest Fuels officer, the District Fuels officer, and the crews consist of Assistant Fuels officers, Fuels technicians, Contracting Officer Representatives (CORs), Inspectors, and resource specialists for wildlife, botany, and heritage. Depending on the complexity of the task and availability of personnel, any of these employees could be responsible for parts of the work. Costs of \$235/acre to \$315/acre are estimated based on past and on-going fuels management projects on the San Bernardino National Forest and are based on per acre estimates.

Construction is usually contracted with a private general contractor. All construction and construction management will be contracted to a general contractor with sufficient satisfactory past experience performing projects similar to the proposed road project. USFS engineering personnel perform contract administration during the construction phase. Contracting Officer Representatives (COR) and inspectors certified through the Forest Service National Construction Certification Program will administer the project in accordance with current Federal and Forest Service Acquisition Regulations. Road construction contract administration is usually estimated at 10% of the estimated contract costs. This would include government personnel time and costs incurred to administer the contract and provide contract quality assurance during the construction period

## **G. Row (G) Other Costs**

As stated in the scheduling attachment, the only permits anticipated are Clean Water Act section 401/404 permits for the perennial road crossing projects. Based on time required to acquire permits for a similar project in FFY12, costs are estimated for a GS-12 engineer (48 hours at \$54/hr) supported by a GS-12 hydrologist (15 hours at \$60/hr). Grant funds of \$3,500 shown in Table 7.

## **H. Row (H) Construction / Implementation Contingency**

Contingencies are usually a necessity in construction contracts, since some uncertainties or unforeseen circumstances exist that may require contract modifications during construction or contract bid prices coming in higher than estimated. A standard contingency of 10% of the contract costs would be recommended.

## **I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (D) Wineville Regional Water Pipeline and Groundwater Recharge System Upgrades\_ (IEUA)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 133,690	\$ 450,016	\$ -	\$ 583,706
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ 49,993	\$ -	\$ 49,993
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 1,645,000	\$ -	\$ 1,645,000
<b>(d)</b>	Construction/Implementation	\$ 583,000	\$ 15,699,991	\$ -	\$ 16,282,991
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement		\$ 130,000	\$ -	\$ 130,000
<b>(f)</b>	Construction Administration	\$ 325,000	\$ 1,025,000	\$ -	\$ 1,350,000
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 21,000,000	\$ -	\$ 22,041,690

*\*List sources of funding: IEUA is also exploring the option of a \$21,000,000 SRF loan agreement with the State Water Resources Control Board to fund the Wineville Recycled Water Pipeline and Groundwater Recharge System Upgrades Project.*

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

The Inland Empire Utilities Agency (IEUA) has extensive experience with administering construction projects funded by various grants. The Direct Project Administrative costs are estimates based upon previous experience with similar type of work. Fringe benefits are calculated at 75% of the salaries based upon an estimate established by the Financial Planning Department using actual past cost with possible future cost increases in consideration. Also included are indirect costs based upon IEUA's negotiated federal rate of 23.05% of all salary costs. The total estimated Direct Project Administrative cost is \$542,016 in pertinent areas of project management. IEUA will fund 83%, or \$450,016, of these costs. The Prop 84 grant will be responsible for 17%, or \$92,000.

Tasks	Description	Rate	Quantity	Direct Admin
Pre-Design	Senior Engineer	53.26	100	\$ 5,326
	Manager of Engineering	67.98	100	\$ 6,798
	Deputy Manager of Engineering	58.72	100	\$ 5,872
	Associate Engineer	43.82	100	\$ 4,382
	Sr. Associate Engineer	48.95	100	\$ 4,895
	Administrative Secretary	22.08	100	\$ 2,208
	Construction Project Manager	48.37	80	\$ 3,870
	Subtotal			\$ 33,351
30% Design	Senior Engineer	53.26	100	\$ 5,326
	Manager of Engineering	67.98	60	\$ 4,079
	Associate Engineer	43.82	100	\$ 4,382
	Administrative Secretary	22.08	80	\$ 1,766
	Deputy Manager of Engineering	58.72	100	\$ 5,872
	Sr Associate Engineer	48.95	100	\$ 4,895
	Subtotal			\$ 26,320
50% Design	Senior Engineer	53.26	100	\$ 5,326
	Manager of Engineering	67.98	50	\$ 3,399
	Associate Engineer	43.82	80	\$ 3,506
	Administrative Secretary	22.08	100	\$ 2,208
	Deputy Manager of Engineering	58.72	80	\$ 4,698
	Sr. Associate Engineer	48.95	100	\$ 4,895
	Application Systems Analyst	41.73	80	\$ 3,338
	Construction Project Manager	50.67	50	\$ 2,534
	Subtotal			\$ 29,903
85% Design	Senior Engineer	53.26	100	\$ 5,326
	Manager of Engineering	67.98	50	\$ 3,399
	Associate Engineer	43.82	50	\$ 2,191
	Sr. Associate Engineer	48.95	50	\$ 2,448
	Administrative Secretary	22.08	100	\$ 2,208
	Deputy Manager of Engineering	58.72	80	\$ 4,698
	Application Systems Analyst	41.73	100	\$ 4,173
	Groundwater Recharge Coordinator	50.00	80	\$ 4,000
	Construction Project Manager	50.67	100	\$ 5,067
	Subtotal			\$ 33,509
	Final Design Package	Senior Engineer	53.26	100
Manager of Engineering		67.98	100	\$ 6,798

## B. Row (B) Land Purchase/Easement

Costs under Land Purchase/Easement are the legal and administrative cost in obtaining easements. This budgeted item will not be used for land purchases. IEUA will be funding 100% of the Land Purchase/Easement cost.

Land Acquisition	Senior Engineer	53.26	120	\$	6,391
	Sr. Associate Engineer	48.95	103	\$	5,042
	Administrative Secretary	22.08	130	\$	2,870
	Deputy Manager of Engineering	58.72	100	\$	5,872
	Construction Project Manager	50.67	100	\$	5,067
	Subtotal			\$	25,242
Total Salary				\$	25,242
Fringe Benefit	75.00%			\$	18,932
Overhead	23.05%			\$	5,818
	<b>Land Purchase/Easement</b>			\$	49,993

### C. Row (C) Planning / Design/Engineering / Environmental Documentation

The Planning, Design, Engineering and Environmental tasks of this project will be mainly performed by hired Engineering Consulting Firms and Environmental Compliance Specialist. IEUA's roles are in general administrative such as preparing plan and specifications, bidding and awarding the consulting contracts and managing various phases of the activities.

The total estimated cost for the Planning, Design, Engineering and Environmental tasks is \$1,645,000. IEUA will be responsible for 100% of the Planning, Design, Engineering and Environmental costs. The costs were estimated based on previous experience in managing consulting services.

### D. Row (D) Construction / Implementation

Construction consists of installation of approximately six miles of recycled water and ground water distribution system pipelines, installation of a SCADA system to connect 19 ground water recharge sites and 7 recycled water facilities, and the installation and retrofitting of various public sites such as schools, parks and street caps. The breakdown of the total \$16,282,992 estimated construction cost is below:

1. \$13,352, 053, or 82%, will be used for the construction of the recycled water and groundwater distribution system pipelines. IEUA will be paying for 100% of this cost.
2. \$1,465,469 or 2% of the total construction cost will be for the construction of the SCADA System Upgrades. Of this item, IEUA will claim \$583,000 from Prop 84 grant. The balance will be the responsibility of IEUA.
3. \$1,465,469, or 2%, will be used of the installation and retrofits of the public sites. IEUA will fund 100% of the retrofitting cost.

### E. Row (E) Environmental Compliance / Mitigation / Enhancement

Based on IEUA's experience with similar types of projects, \$130,000 is budgeted for the use of any Environmental Compliance and Mitigation Enhancement. IEUA will be responsible for 100% of this estimated cost.

### F. Row (F) Construction Administration

Construction Management at IEUA is performed by the Agency's Engineering and Construction Management Staff. IEUA has extensive experience with managing various types of construction projects. The costs are estimated at \$1,350,000 based upon previous projects that were similar. IEUA will fund 100% of these costs.

Construction Management	Groundwater Recharge Coordinator	50.00	200	\$	10,000
	Construction Project Manager	50.67	2800	\$	141,876
	Deputy Manager of Engineering	58.72	800	\$	46,976
	Manager of Engineering	67.98	400	\$	27,192
	Associate Engineer	43.82	350	\$	15,337
	Construction Project Coordinator	48.31	2800	\$	135,268
	Senior Engineer	53.26	440	\$	23,434
	Application Systems Analyst	41.73	500	\$	20,865
	Sr. Associate Engineer	48.95	500	\$	24,475
	Administrative Assistant	22.13	400	\$	8,852
	Intern	12.00	300	\$	3,600
	Manager of Construction Management	61.66	1950	\$	120,237
	Construction Project Analyst	34.33	1000	\$	34,330
	Subtotal			\$	612,442
Start up	Deputy Manager of Engineering	58.72	80	\$	4,698
	Construction Project Manager	50.67	100	\$	5,067
	Construction Project Coordinator	48.31	100	\$	4,831
	Manager of Engineering	67.98	50	\$	3,399
	Associate Engineer	43.82	50	\$	2,191
	Senior Engineer	53.26	50	\$	2,663
	Sr. Associate Engineer	48.95	100	\$	4,895
	Manager of Construction Management	61.66	100	\$	6,166
	Administrative Assistant	22.13	100	\$	2,213
	Construction Project Analyst	34.33	50	\$	1,717
	Subtotal			\$	37,839
Project Acceptance	Groundwater Recharge Coordinator	50.00	50	\$	2,500
	Construction Project Manager	50.67	100	\$	5,067
	Construction Project Coordinator	48.31	100	\$	4,831
	Manager of Engineering	67.98	50	\$	3,399
	Associate Engineer	43.82	48	\$	2,103
	Senior Engineer	53.26	50	\$	2,663
	Sr. Associate Engineer	48.95	100	\$	4,895
	Administrative Assistant	22.13	50	\$	1,107
	Manager of Construction Management	61.66	50	\$	3,083
	Construction Project Analyst	34.33	50	\$	1,717

**G. Row (G) Other Costs**

The estimated cost for obtaining permits and licenses is \$17,540 of IEUA's staff time. Since these tasks are the routine responsibilities of IEUA Engineering and Construction Management staff, the staff time has been included in the Direct Project Administrative Cost section of the budget.

**H. Row (H) Construction / Implementation Contingency**

About 10% of all contract costs is included herein as contingencies to handle unknown conditions encountered during implementation/construction. It is also a standard practice for IEUA to assign this percentage on construction project over two million dollars. IEUA will fund 100% of this contingency cost.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

Total Project Cost is estimated to be \$22,000,000.



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (E) Plunge Creek Water Recharge and Habitat Improvement (SBVWCD)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 20,840	\$ 34,468	\$ -	\$ 55,308
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 140,000	\$ 29,010	\$ -	\$ 169,010
<b>(d)</b>	Construction/Implementation	\$ 360,000	\$ 1,000	\$ -	\$ 361,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 42,000	\$ -	\$ 42,000
<b>(f)</b>	Construction Administration	\$ -	\$ 36,022	\$ -	\$ 36,022
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 68,000	\$ -	\$ 68,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 520,840	\$ 210,500	\$ -	\$ 731,340

\*List sources of funding: SBVWCD Groundwater charge funding and Land Resource funding

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

SBVWCD Costs Budgeted per Cost Description, Administrative Services Specialist II and General Manager for duration of project at 2013 Burdened District Rates.

Description	Unit	Months	\$/unit	Total
<b>(a) Direct Project Administration</b>				
Administrative Services Specialist II	3	48	\$79.80 per hr	\$11,491
General Manager	2	48	\$239.35 per hr	\$22,978
<b>Total</b>				<b>\$34,468</b>

## B. Row (B) Land Purchase/Easement

No Costs Budgeted, District is providing fee title land and easement land to the project at no cost.

## C. Row (C) Planning / Design/Engineering / Environmental Documentation

Planning, Design, Engineering and Permitting are included in this category. Conceptual Design is completed and provided by the District and not included in project costs. Costs budgeted for approximately 12 months of efforts as detailed in Cost Description below.

### (c) Planning Design Engineering and Permits

Preliminary Soils Investigation	1	Lump Sum Contract	\$6,210
Site Approval/Project Plan	1	Lump Sum Contract	\$8,700
Environmental Initial Study	1	Lump Sum Contract	\$12,500
Boundary Survey	1	Lump Sum Contract	\$5,200
Topography/Aerial Survey	1	Lump Sum Contract	\$5,800
Hydrology and Hydraulic Study/Model	1	Lump Sum Contract	\$48,000
QA/QC	1	Lump Sum Contract	\$2,400
Regional Board SWPP	1	Lump Sum Contract	\$3,500
Construction Staking	1	Lump Sum Contract	\$7,900
Incidental Take USFWS	1	Lump Sum Contract	\$25,000
Planning Review Permit	1	Lump Sum Contract	\$6,200
Engineering Plan Check	1	Lump Sum Contract	\$4,200
Cal Fish and Wildlife	1	Lump Sum Contract	\$10,000
Meetings & Travel	1	Lump Sum Contract	\$2,200
Improvements Permits	1	Lump Sum Contract	\$1,200
Wetlands Permits	1	Lump Sum Contract	\$20,000
<b>Total</b>			<b>\$169,010</b>

## D. Row (D) Construction / Implementation

Construction/Implementation category includes all preparation and implementation of project in three annual efforts building on the work of the prior year. Costs budgeted as shown below

### (d) Construction/Implementation

Mobilization	1		LS	\$10,000
Jobsite Prep	1		LS*	\$10,000
Low Impact Clearing	110	Acres	\$900 per acre	\$99,000
Low Impact Excavation	110	Acres	\$1,100 per acre	\$121,000
Diversion and Outlet	1		LS	\$45,000
Sugar Dikes	1		LS*	\$24,000
Berm Protection	1		LS*	\$52,000
MWD Crossing	0		LS	(h) below
<b>Total</b>				<b>\$361,000</b>

\* Cost depending on depth and design

\*\*Based on Bonadiman Costs estimated as of 2/1/2013

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Initial baseline survey for SBKR prior to construction and annually just prior to year 2 and year 3 construction. Subcontract Field Biologists surveys of the 110 acres for the initial year budgeted for field days plus final reporting of all project monitoring and recommendations. Total of all costs is \$42,000.

**(e) Environmental Monitoring and Survey** 4 year monitoring **\$42,000**

**F. Row (F) Construction Administration**

Construction administration will be by District Staff Project Manager and Sr Field Staff as detailed in Cost Description Table 1.

**(f) Construction Administration**

Project Manager	8	48	\$82.45 per hour	\$31,662
Sr. Field Staff	8	12	\$45.42 per hour	\$4,360
Total				<b>\$36,022</b>

**G. Row (G) Other Costs**

None.

**H. Row (H) Construction / Implementation Contingency**

Contingency costs related to Construction are related to a single item, the crossing of an MWD Pipeline, should the casement be adequate to accommodate the flows of the Creek when pushed to the East, then the cost will not be incurred, if the casement is inadequate, additional casement will be required and increase the cost by and estimated \$68,000.

**(h) Construction/Imp. Contingency** 1 MWD Crossing **\$68,000**

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (F) Prado Basin Sediment Management Demonstration Project (OCWD)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 31,270	\$ 100,000	\$ -	\$ 131,270
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 1,200,000	\$ -	\$ 1,200,000
<b>(d)</b>	Construction/Implementation	\$ 750,000	\$ 4,950,000	\$ -	\$ 5,700,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 300,000	\$ -	\$ 300,000
<b>(f)</b>	Construction Administration	\$ -	\$ 250,000	\$ -	\$ 250,000
<b>(g)</b>	Other Costs	\$ -	\$ 30,000	\$ -	\$ 30,000
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 285,000	\$ -	\$ 285,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 781,270	\$ 7,115,000	\$ -	\$ 7,896,270

**\*List sources of funding:** The Prado Basin Sediment Management Demonstration Project is a debt-funded capital improvement project and will be funded by OCWD capital improvement project budget. OCWD is also exploring the option of a Clean Water State Revolving Fund (CWSRF) loan with the Division of Financial Assistance at the State Water Resources Control. OCWD shall inform SAWPA and DWR on the status of its CWSRF loan application.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

OCWD has extensive experience with various type of construction projects ranging from treatment plants to recharge basins. OCWD has recently completed several capital improvement construction projects. The budget of direct administration cost of \$100,000 is based on OCWD's experience with several capital improvement construction projects recently completed by OCWD. OCWD will pay for this cost with its own funds and will not seek a reimbursement from Proposition 84 IRWM Implementation Grant.

**B. Row (B) Land Purchase/Easement**

Not applicable

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The pre-design of this project is 60% complete. A budget of \$1,200,000 is included in this category and covers pre-design, design and the services of the design firm during construction. OCWD will fund 100% of these costs.

**D. Row (D) Construction / Implementation**

The estimated construction cost is \$5,700,000 as of November 29, 2012. The breakdown of construction/implementation cost of \$5,700,000 includes: clearing & grubbing (\$650,000), sediment removal (\$4,100,000), sediment re-entrainment (\$750,000), and sediment tracking (\$200,000). OCWD is requesting a Proposition 84 Grant funding in the amount of \$750,000 to cover this construction/implementation cost.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

OCWD has budgeted \$300,000 for the environmental mitigation measures (\$200,000) and the habitat monitoring program (\$100,000) associated with this project. OCWD will fund 100% of these costs.

**F. Row (F) Construction Administration**

The construction administration cost of \$250,000 is a conservative estimate and based solely on OCWD's prior experiences with capital construction projects. OCWD will fund 100% of this cost and will not seek reimbursement from Proposition 84 IRWM Implementation Grant.

**G. Row (G) Other Costs**

Other costs to support this project include any legal services (\$10,000) and public outreach (\$20,000). OCWD will fund 100% of these costs and will not seek reimbursement from Proposition 84 IRWM Implementation Grant.

**H. Row (H) Construction / Implementation Contingency**

A five percent of construction/implementation cost is included herein as contingencies to handle unknown conditions encountered during construction. This percentage is based on OCWD's extensive construction experiences with prior projects. It is also a standard practice for OCWD to assign this percentage for any construction project. OCWD will fund 100% of this contingency cost.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (G) San Sevaine Ground Water Recharge Basin\_(IEUA)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 31,270	\$ 124,351	\$ -	\$ 155,621
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ 15,873	\$ -	\$ 15,873
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 274,080	\$ -	\$ 274,080
<b>(d)</b>	Construction/Implementation	\$ 750,000	\$ 771,703	\$ -	\$ 1,521,703
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ 376,777	\$ -	\$ 376,777
<b>(g)</b>	Other Costs	\$ -	\$ 33,185	\$ -	\$ 33,185
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 154,031	\$ -	\$ 154,031
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 781,270	\$ 1,750,000	\$ -	\$ 2,531,270

**\*List sources of funding:** Match share is funded by an IEUA Capital Project, IEUA Board has approved this budget.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Inland Empire Utilities Agency (IEUA) has extensive experience with administering various types of construction projects partially funded by grants. This task includes budget for grant reporting and grant compliance. These costs are estimates based upon previous experience in administering grants with similar time periods and work. Fringe benefits are calculated at 75% of the salaries based upon an estimate established by the Financial Planning Department using actual past cost and an estimate regarding future increases for these costs. Also included are indirect costs based upon IEUA's negotiated federal rate of 23.05% of all salary costs. IEUA will fund 100% of these costs.

Classification	Rate	Total Hrs	Total
Grant Officer	50.72	100	5,072.00
Grant Administrator	39.74	75	2,980.50
Compliance Accountant	29.64	180	5,335.20
Sr. Accountant	36.05	40	1,442.00
Construction Project Manager	48.37	14	677.18
Senior Associate Engineer	48.95	40	1,958.00
Fringe Benefits Direct Project Administration 75%			13,098.64
Overhead for entire project @ 23.05%			93,787.59
Total Direct Project Administration Costs			124,351.11

**B. Row (B) Land Purchase/Easement**

This cost is for the purchase of right of way or easements from the San Bernardino County Flood Control District.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The Design is 0% complete. The project is currently in the pre-design stage. This includes the cost for in house staff to design the project, a design consultant to assist in the evaluation, prepare plans and specification, and the bid and award process. IEUA will be hiring an environmental consultant to prepare the CEQA and historic preservation search and documentation. Grants Administrative staff will review all bid documents for compliance to grant requirements and attend pre-bid conference to inform prospective bidders of the grant requirements. IEUA is estimating the cost based on prior experience regarding planning other similar projects. IEUA will fund 100% of these costs.

	Description	Rate	Qty	QTY X Rate	Fringe	Total
Pre-Design	Senior Engineer	53.26	221	11,770.46		
	Administrative Secretary	22.08	64	1,413.12		
	Groundwater Recharge Coordinator	50.00	32	1,600.00		
	Construction Project Manager	48.37	64	3,095.68		
	Sr Associate Engineer	48.95	480	23,496.00		
	Deputy Manager of Engineering	58.72	128	7,516.16		
	Subtotal			48,891.42	36,668.57	85,559.99
30% Design	Senior Engineer	53.26	160	8,521.60		
	Administrative Secretary	22.08	32	706.56		
	Deputy Manager of Engineering	58.72	64	3,758.08		
	Sr Associate Engineer	48.95	240	11,748.00		
	Groundwater Recharge Coordinator	50.00	16	800.00		
	Construction Project Manager	48.37	32	1,547.84		
	Subtotal			27,082.08	20,311.56	47,393.64
50% Design	Senior Engineer	53.26	160	8,521.60		
	Administrative Secretary	22.08	32	706.56		
	Deputy Manager of Engineering	58.72	64	3,758.08		
	Sr Associate Engineer	48.95	240	11,748.00		
	Application Systems Analyst	41.73	4	166.92		
	Groundwater Recharge Coordinator	50.00	16	800.00		
	Construction Project Manager	50.67	32	1,621.44		
	Subtotal			27,322.60	20,491.95	47,814.55
85% Design	Senior Engineer	53.26	80	4,260.80		
	Sr Associate Engineer	48.95	120	5,874.00		
	Administrative Secretary	22.08	32	706.56		
	Deputy Manager of Engineering	58.72	32	1,879.04		
	Application Systems Analyst	41.73	10	417.30		
	Groundwater Recharge Coordinator	50.00	8	400.00		

#### **D. Row (D) Construction / Implementation**

The breakdown of the construction/ implementation Costs of \$1,521,703.26 include:

Construction of approximately 5000 feet of pipeline to deliver water (recycled and stormwater) to the upper basins, which have higher infiltration rates. The project includes: (1) small pump station that could pump either recycled water or stormwater to the upper basins; (2) 2,000-foot pipeline from basin 5 to basin 3; (3) geophysical investigation to determine if poor infiltration rates in basin 5 can be improved; (4) flow control and internal berms to route water between basin 1 and basin 2 and keep a minimum amount of water depth throughout the summer to help with vector control; (5) internal berms in basin 5 to deepen water and alternate wet and drying cycles to control insect issues.

The amount is estimated to be \$1,452,761.31 for the construction contractor, \$68,941.95 for the contractor for start-up. IEUA is requesting \$750,000 in grant funding from the Department of Water Resources for the construction implementation. The remaining costs of \$771,703.26 will be funded by IEUA through a Board approved Capital Project Budget.

#### **E. Row (E) Environmental Compliance / Mitigation / Enhancement**

At this time IEUA is not aware of any necessary mitigation. Depending upon the results of the pre-design evaluations, IEUA will determine if mitigation measures will be necessary for this project.

#### **F. Row (F) Construction Administration**

Construction Management at IEUA is performed in-house by staff, contract consultants functioning as in-house staff and supported by the design staff. IEUA has extensive experience with managing various types of construction projects. In addition, the Groundwater Recharge Coordinator will have input throughout the construction. The costs are estimates based upon previous projects that were similar. IEUA will fund 100% of these costs.

Task	Description	Rate	Qty	Rate X Qty Subtotal	Fringe Benefit	Total Cost
Construction Management	Groundwater Recharge Coordinator	50.00	88	4,400.00		
	Construction Project Manager	50.67	520	26,348.40		
	Construction Project Coordinator	48.31	1320	63,769.20		
	Senior Engineer	53.26	440	23,434.40		
	Application Systems Analyst	41.73	12	500.76		
	Sr Associate Engineer	48.95	880	43,076.00		
	Administrative Assistant	22.13	100	2,213.00		
	Intern	12.00	20	240.00		
	Manager of Construction Management	61.66	88	5,426.08		
	Construction Project Analyst	34.33	500	17,165.00		
	Subtotal Construction Management			186,572.84	139749.63	326,322.47
Start up	Groundwater Recharge Coordinator	50.00	24	1,200.00		
	Construction Project Manager	50.67	100	5,067.00		
	Construction Project Coordinator	48.31	200	9,662.00		
	Senior Engineer	53.26	24	1,278.24		
	Sr Associate Engineer	48.95	8	391.60		
	Manager of Construction Management	61.66	8	493.28		
	Administrative Assistant	22.13	60	1,327.80		
	Construction Project Analyst	34.33	50	1,716.50		
	Subtotal			21,136.42	15,852.32	36,988.74
Project Acceptance	Groundwater Recharge Coordinator	50.00	8	400.00		
	Construction Project Manager	50.67	8	405.36		
	Construction Project Coordinator	48.31	8	386.48		
	Senior Engineer	53.26	8	426.08		
	Sr Associate Engineer	48.95	8	391.60		
	Manager of Construction Management	61.66	8	493.28		
	Construction Project Analyst	34.33	8	274.64		
	Subtotal			2,777.44	2,083.08	4,860.52
	Labor Compliance Consultant	8,605.00	1.00	8,605.00	0.00	8,605.00
Total Construction Administration				\$219,091.70	\$157,685.03	\$376,776.73

**G. Row (G) Other Costs**

Task	Description	Rate	Qty	Rate X Qty Subtotal
Permitting	Senior Engineer	53.26	96	5,112.96
	Sr Associate Engineer	48.95	192	9,398.40
	Administrative Secretary	22.08	13	287.04
	Deputy Manager of Engineering	58.72	13	763.36
	Groundwater Recharge Coordinator	50	13	650
	Construction Project Manager	50.67	13	658.71
	CIP Coordinator	41.85	50	2,092.50
	Subtotal			18,962.97

The following permits are expected to be needed:

San Bernardino County Flood Control District Permit to Construct

**H. Row (H) Construction / Implementation Contingency**

Ten percent of all contract costs are included herein as contingencies to handle unknown conditions encountered during implementation/construction. It is also a standard practice for IEUA to assign this percentage for construction projects over two million dollars. IEUA will fund 100% of this contingency cost.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

Total Project Cost is estimated to be \$2,500,000.00.

\$750,000 grant funding request.

\$1,750,000 to be funded by IEUA Board approved Capital Project budget.

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (H) Corona/Home Gardens Well Rehabilitation and Multi-Jurisdictional Water Transmission Line Project (City of Corona)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$54,180	\$ 71,200	\$ -	\$ 125,380
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 380,600	\$ -	\$ 380,600
<b>(d)</b>	Construction/Implementation	\$ 1,000,000	\$ 3,600,000	\$ -	\$ 4,600,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 35,600	\$ -	\$ 35,600
<b>(f)</b>	Construction Administration	\$ -	\$ 460,000	\$ -	\$ 460,000
<b>(g)</b>	Other Costs	\$300,000	\$ 173,000	\$ -	\$ 473,000
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 1,354,180	\$ 4,720,400	\$ -	\$ 6,074,580

**\*List sources of funding:** The City of Corona is also applying for Proposition 50 Funds for the well replacement costs. Those fund have not yet been secured.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Corona DWP has extensive experience with administrating various types of construction projects ranging from treatment plants to pipelines. The budget of \$71,200 is based upon DWP prior experience with similar projects. DWP will pay for these costs with its own funds and will not seek reimbursement from the IRWM implementation grant.

**B. Row (B) Land Purchase/Easement**

DWP will obtain an easement from Home Gardens in order to replace the non-functioning wells which are located in Home Gardens Water District. The easement will be provided to DWP at no cost and therefore is not IRWM grant.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

Planning, engineering and design costs (all phases including final) are estimated to total \$300,000. The bulk of these costs are associated with Planning and Engineering: 1600 hours @ \$125 hourly rate = \$200,000. Design costs are estimated at 800 hours @ \$125 hourly rate = \$100,000. Costs to complete the environmental documentation are estimated at \$80,600. All of these costs will be provided by Corona DWP.

**D. Row (D) Construction / Implementation**

Total Construction/Implementation Costs estimated to be: \$4,660,000 of which \$1,000,000 will be provided for by the grant. The costs are broken down as follows:

Well Replacement: \$2,000,000 (to be provided by Prop. 50 funds or City of Corona DWP.)

Civil Site Work\*: (11,770 linear feet 12" pipeline): \$2,600,000 (\$1,000,000 IRWM grant).

Total Construction/Implementation: \$4,600,000.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Dust reduction mediation and water quality assurances are expected mitigation measures in the CEQA document.

Costs are estimated to be \$35,600.

**F. Row (F) Construction Administration**

Construction administration costs are estimated to be 10% of total construction costs or \$460,000.

**G. Row (G) Other Costs**

Other costs include contracted construction services such as inspections. These costs will be provided by the City of Corona DWP. They are estimated to cost \$173,000. Other costs also include \$300,000 to be credited from the Grant to Home Gardens Water District as designated by SAWPA as part of a water purchase agreement.

**H. Row (H) Construction / Implementation Contingency**

Corona DWP will provide any additional funds that are necessary to complete the project in the event of unforeseen cost overruns beyond the contingency that was planned for in the construction budget.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (I) Enhanced Stormwater Capture and Recharge along the Santa Ana River (SBVMWD)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 41,690	\$ -	\$ -	\$ 41,690
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
<b>(d)</b>	Construction/Implementation	\$ 1,000,000	\$ 24,000,000	\$ -	\$ 25,000,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ 2,500,000	\$ -	\$ 2,500,000
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 3,800,000	\$ -	\$ 3,800,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 30,300,000	\$ -	\$ 31,341,690

**\*List sources of funding:** San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

**B. Row (B) Land Purchase/Easement**

N/A - Grant funds are not requested for any Land Purchase/Easement costs related to this project.

Most of the property needed for this project is owned by one of the partners in this project, the San Bernardino Valley Water Conservation District. Approximately 12 pieces of vacant land will need to be procured. Plats and legals have been prepared. Property appraisals are currently underway.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

N/A - Grant funds are not requested for Planning/Design/Engineering or Environmental Documentation costs related to this project.

Basis of Design Report - completed, August 2011

60% Design Submittal – completed September 2012

Property Appraisals – to be completed February 2013

Final Design Submittal – First quarter 2013

**D. Row (D) Construction / Implementation**

See attached 60% engineer's cost estimate

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

N/A Not requesting funds for these costs

**F. Row (F) Construction Administration**

N/A Not requesting funds for these costs

**G. Row (G) Other Costs**

N/A no other costs included for reimbursement

**H. Row (H) Construction / Implementation Contingency**

The percentage used for the Construction/Implementation Contingency is currently at 15% as provided for in the 60% design submittal. It is expected that this percentage will be reduced to 10% in the Final Design submittal

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**TOTAL COST REPORT**  
**DETAILED OPINION OF PROBABLE CONSTRUCTION COST**  
 60% SUBMITTAL

B &amp; V WATER

**SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT**  
**ENHANCED RECHARGE IN THE SANTA ANA RIVER SPREADING BASINS PROJECT**

**Estimate Totals**

Description	Amount	Totals	Hours	Rate	Percent of Total	
Labor	10,392,269		88,803.144 hrs		34.88%	
Material	7,315,665				24.55%	
Subcontract						
Equipment	3,740,902		46,146.859 hrs		12.56%	
Other						
<b>Total Direct Costs</b>	<b>21,448,836</b>	<b>21,448,836 USD</b>			<b>71.99</b>	<b>71.99%</b>
Mobilization	287,414			1.340 %	0.96%	
Supervision	800,042			3.730 %	2.69%	
Temporary Facilities	257,386			1.200 %	0.86%	
Temporary Utilities	171,591			0.800 %	0.58%	
Equipment Rental & Misc.	85,795			0.400 %	0.29%	
<b>General Requirements</b>	<b>1,602,228</b>	<b>23,051,064 USD</b>			<b>5.38</b>	<b>77.37%</b>
Sales Tax	856,884			7.750 %	2.88%	
<b>Subtotal</b>	<b>856,884</b>	<b>23,907,948 USD</b>			<b>2.88</b>	<b>80.25%</b>
Gen. Con.Overhead&Profit Labor	519,613			5.000 %	1.74%	
Gen. Con.Overhead&Profit Matl.	365,783			5.000 %	1.23%	
Gen. Con.Overhead&Profit Equip	187,045			5.000 %	0.63%	
Gen. Con. Fee on Sub Con.	13,901			5.000 %	0.05%	
<b>General Contractor Indirects</b>	<b>1,086,342</b>	<b>24,994,290 USD</b>			<b>3.65</b>	<b>83.89%</b>
Sub Con. Profit Labor	1,852			10.000 %	0.01%	
Sub Con. Overhead Labor	1,852			10.000 %	0.01%	
Sub Con. Profit Matl. & Equip.	25,949			10.000 %	0.09%	
<b>Electrical/I&amp;C Indirects</b>	<b>29,653</b>	<b>25,023,943 USD</b>			<b>0.10</b>	<b>83.99%</b>
Bonds and Insurance	375,359			1.500 %	1.26%	
<b>Subtotal</b>	<b>375,359</b>	<b>25,399,302 USD</b>			<b>1.26</b>	<b>85.25%</b>
Contingency	3,809,895			15.000 %	12.79%	
<b>Subtotal</b>	<b>3,809,895</b>	<b>29,209,197 USD</b>			<b>12.79</b>	<b>98.04%</b>
Midpoint of Construction	584,184			2.000 %	1.96%	
<b>Subtotal</b>	<b>584,184</b>	<b>29,793,381 USD</b>			<b>1.96</b>	<b>100.00%</b>
<b>Total</b>		<b>29,793,381 USD</b>				



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (J) \_Regional Residential Landscape Retrofit Program\_(IEUA)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 20,840	\$ 46,160	\$ -	\$ 67,000
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
<b>(d)</b>	Construction/Implementation	\$ 500,000	\$ 453,840	\$ -	\$ 953,840
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ -	\$ -	\$ -
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 520,840	\$ 500,000	\$ -	\$ 1,020,840

**\*List sources of funding:** Match share is IEUA proposed budget for FY 13/14 , through FY15/16 from the water conservation fund in the amount of \$50,159, Metropolitan Water District Rebates which are 50% of the installed project costs starting in FY 2011 through FY15/16, and is estimated at \$250,841 and a USBR grant for \$199,000 for installations.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

These costs include time to manage the project. The Project Manager will work with IEUA’s Member Agencies regarding data needed for choosing the sites and regarding the best way to educate the public and market the program. In addition, the Project Manager will oversee the work of the consultant. Time is also included for analyzing the data and involvement in reporting. In addition, budget is included for staff to prepare



**B. Row (B) Land Purchase/Easement**

The Project does not require the purchase of any land or easements to begin implementation.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The Project is a water conservation implementation project only and doesn't contain any design or engineering phases. Due to the fact that the project is retrofitting existing water devices at large residential sites, no environmental compliance is required. Since this project is based on a pilot project, planning has already taken place.

**D. Row (D) Construction / Implementation**

Below is a table provided by the consultant that breaks down the costs the consultant will be charging by type of work that may be performed on a site. The owner of the site will work with the consultant to determine which work is best for their site so the amount per site will vary. In addition, this task includes a budget for just under\$4,000 for the purchase and distribution of public education, outreach, and marketing materials.

IEUA Master Pricing '12-13											2012-2013		
Toro-Interior											Rev.12/30/12		
Code	Model	Controllor Price	Module Price	Climate Logic Weather Station	Total Materials	Labor 1-Unit	Total 1-Unit	Labor 2-Units	Total 2-Units	Total-units with CL-M-1	Labor 3-Unit	Total 3-Units	Total_units with CL-M-1
1	Toro TMC 212-4 station controller	\$ 61.35		\$ 107.54	\$ 168.89	\$ 120.00	\$ 288.89	\$ 110.00	\$ 278.89	\$ 248.89	\$ 100.00	\$ 268.89	\$ 238.89
2	Toro TMC 212-6 station controller	\$ 61.35	\$ 13.45	\$ 107.54	\$ 182.34	\$ 135.00	\$ 317.34	\$ 125.00	\$ 307.34	\$ 277.34	\$ 115.00	\$ 297.34	\$ 267.34
3	Toro TMC 212-8 station controller	\$ 61.35	\$ 26.90	\$ 107.54	\$ 195.79	\$ 150.00	\$ 345.79	\$ 140.00	\$ 335.79	\$ 305.79	\$ 130.00	\$ 325.79	\$ 295.79
4	Toro TMC 212-10 station controller	\$ 61.35	\$ 40.35	\$ 107.54	\$ 209.24	\$ 165.00	\$ 374.24	\$ 155.00	\$ 364.24	\$ 334.24	\$ 145.00	\$ 354.24	\$ 324.24
5	Toro TMC-212-12 station controller	\$ 61.35	\$ 53.80	\$ 107.54	\$ 222.69	\$ 165.00	\$ 387.69	\$ 155.00	\$ 377.69	\$ 347.69	\$ 145.00	\$ 367.69	\$ 337.69
Toro-Exterior													
Code	Model	Controllor Price	Module Price	Climate Logic Weather Station	Total Materials	Labor 1-Unit	Total 1-Unit	Labor 2-Units	Total 2-Units	Total-units with CL-M-1	Labor 3-Unit	Total 3-Units	Total_units with CL-M-1
6	Toro TMC 212-4 station controller	\$ 93.00		\$ 107.54	\$ 200.54	\$ 120.00	\$ 320.54	\$ 110.00	\$ 310.54	\$ 280.54	\$ 100.00	\$ 300.54	\$ 270.54
7	Toro TMC 212-6 station controller	\$ 93.00	\$ 13.45	\$ 107.54	\$ 213.99	\$ 135.00	\$ 348.99	\$ 125.00	\$ 338.99	\$ 308.99	\$ 115.00	\$ 328.99	\$ 298.99
8	Toro TMC 212-8 station controller	\$ 93.00	\$ 26.90	\$ 107.54	\$ 227.44	\$ 150.00	\$ 377.44	\$ 140.00	\$ 367.44	\$ 337.44	\$ 130.00	\$ 357.44	\$ 327.44
9	Toro TMC 212-10 station controller	\$ 93.00	\$ 40.35	\$ 107.54	\$ 240.89	\$ 165.00	\$ 405.89	\$ 155.00	\$ 395.89	\$ 365.89	\$ 145.00	\$ 385.89	\$ 355.89
10	Toro TMC-212-12 station controller	\$ 93.00	\$ 53.80	\$ 107.54	\$ 254.34	\$ 165.00	\$ 419.34	\$ 155.00	\$ 409.34	\$ 373.34	\$ 145.00	\$ 399.34	\$ 369.34
Toro-Exterior/ Interior													
Code	Model	Controllor Price	Module Price	Climate Logic Weather Station	Total Materials	Labor 1-Unit	Total 1-Unit	Labor 2-Units	Total 2-Units	Total-units with CL-M-1	Labor 3-Unit	Total 3-Units	Total_units with CL-M-1
11	Toro TMC 424-4 station controller	\$ 147.75		\$ 107.54	\$ 255.29	\$ 120.00	\$ 375.29	\$ 110.00	\$ 365.29	\$ 335.29	\$ 100.00	\$ 355.29	\$ 325.29
12	Toro TMC 424-8 station controller	\$ 147.75	\$ 32.60	\$ 107.54	\$ 287.89	\$ 135.00	\$ 422.89	\$ 125.00	\$ 412.89	\$ 382.89	\$ 115.00	\$ 402.89	\$ 372.89
13	Toro TMC 424-12 station controller	\$ 147.75	\$ 65.07	\$ 107.54	\$ 320.36	\$ 135.00	\$ 455.36	\$ 125.00	\$ 445.36	\$ 415.36	\$ 115.00	\$ 435.36	\$ 405.36
14	Toro TMC 424-16 station controller	\$ 147.75	\$ 93.90	\$ 107.54	\$ 349.19	\$ 150.00	\$ 499.19	\$ 140.00	\$ 489.19	\$ 459.19	\$ 130.00	\$ 479.19	\$ 449.19
15	Toro TMC 424-20 station controller	\$ 147.75	\$ 124.50	\$ 107.54	\$ 379.79	\$ 150.00	\$ 529.79	\$ 140.00	\$ 519.79	\$ 489.79	\$ 130.00	\$ 509.79	\$ 479.79
16	Toro TMC 424-24 station controller	\$ 147.75	\$ 156.15	\$ 107.54	\$ 411.41	\$ 165.00	\$ 576.41	\$ 155.00	\$ 566.41	\$ 536.41	\$ 145.00	\$ 556.41	\$ 526.41
17	Irritrol TC-36-EX-R	\$ 803.83		\$ 107.54	\$ 911.37	\$ 165.00	\$ 1,076.37						
18	Irritrol TC-48-EX-R	\$ 1,002.46		\$ 107.54	\$ 1,110.00	\$ 165.00	\$ 1,275.00						
Code	Model	Total Tax Incl.	Labor	Total							Labor	Total	
19	Climate Logic	\$ 107.54	\$ 75.00										
20	Receiver CL-M1	\$ 77.54	\$ 75.00									\$ 77.54	
21	Toro Precision Nozzles	\$ 2.05	\$ 2.05	\$ 4.10								\$ 4.10	
22	Audit (less than a acre)											\$ 225.00	
23	Audit (more than a acre)											\$ 275.00	

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

The Project does not require any compliance, mitigation or enhancement measures for implementation.

**F. Row (F) Construction Administration**

The Project is an implementation program and does not include any activities associated with construction.

**G. Row (G) Other Costs**

The Project does not require any legal services to implement and there are no licenses or permits required for scope of work activities or tasks.

**H. Row (H) Construction / Implementation Contingency**

Implementation contingencies are not required for this Project.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

The total project is budgeted for \$1,000,000.00

Requested Grant share is \$500,000.00

Local match is \$500,000.00

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (K) Canyon Lake Hybrid Treatment Process (LESJWA)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 20,840	\$ 25,000	\$ -	\$ 45,840
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 125,500	\$ -	\$ 125,500
<b>(d)</b>	Construction/Implementation	\$ 470,000	\$ 220,000	\$ -	\$ 690,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ 10,000	\$ 10,000	\$ -	\$ 20,000
<b>(f)</b>	Construction Administration	\$ 20,000	\$ 5,000	\$ -	\$ 25,000
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 520,840	\$ 385,500	\$ -	\$ 906,340

**\*List sources of funding:** Other sources of funding include project partners through the lake Elsinore and Canyon Lake TMDL Task Force.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

The Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 5% of the allotted grant funding. This estimate based on LESJWA's extensive experience in administering Propositions 13 and 40 grant programs.

**B. Row (B) Land Purchase/Easement**

No land purchase or easement is necessary as 100% of the Land Purchase/Easement is provided by the City of Canyon Lake

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The Planning, Design, Engineering and Environmental tasks of this project will be mainly performed by hired engineering consulting firms and environmental compliance specialists. CEQA analysis has been completed by Tom Dodson and Associates in 2013 showing the Project complies with CEQA regulations. Two key studies were used to support this determination; jar tests (Noblet et. al., 2012) and laboratory aluminum toxicity tests (GEI Consultants 2013). During the implementation phase of the 5 alum doses, LESJWA requires 3 reports to be submitted documenting current lake conditions and progress made. These reports are to be submitted by November 30th of each year ending with the 2015 report. The total cost of the planning, design, engineering and environmental documentation is \$125,500

**D. Row (D) Construction / Implementation**

Construction/Implementation consists of the cost of the consultant treating Canyon Lake including the 1380 kg of dry alum and reports to be submitted throughout the project duration.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

LESJWA has budgeted \$20,000 for Environmental compliance/Mitigation/Enhancement. CEQA documentation is currently under preparation to support a mitigated negative declaration for the proposed Project. The Project does not disturb any land; however one concern with the use of alum in lakes is the possible effects on aquatic life. There is potential for acute or chronic aluminum toxicity to aquatic life in surface waters (e.g. zooplankton) that receive the initial dose of alum. Studies of aluminum toxicity from similar source waters show that this is not a likely condition, especially considering the low dose proposed for Canyon Lake. Jar tests performed at each of the Canyon Lake compliance monitoring stations provided an approximation of the dissolved aluminum that may be present in the water column immediately following the alum application. With dissolved aluminum concentration ranging from 200-600 ug/L, acute or chronic toxicity is not expected.

**F. Row (F) Construction Administration**

The \$25,000 budgeted for construction administration is based off of LESJWA's past experiences with water quality treatment projects. In June 2013, implementation of the Project will be advertised for bidding by LESJWA. LESJWA will hold a pre-bid meeting and respond to questions from contractors, open and review bids for completeness, and award the Project. Depending on the status of grant funds and acceptance of CEQA documents by DWR, a notice to proceed for alum application could be issued by August 2013, so that the proposed application in September of 2013 could be performed as scheduled.

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

**G. Row (G) Other Costs**

Not applicable.

**H. Row (H) Construction / Implementation Contingency**

Not applicable.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (L) 14th Street Groundwater Recharge and Storm Water Quality Treatment Integration Facility (City of Upland)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 20,840	\$ 130,000	\$ -	\$ 150,840
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 205,000	\$ -	\$ 205,000
<b>(d)</b>	Construction/Implementation	\$ 500,000	\$ 4,249,766	\$ -	\$ 4,749,766
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 85,000	\$ -	\$ 85,000
<b>(f)</b>	Construction Administration	\$ -	\$ 80,000	\$ -	\$ 80,000
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 469,421	\$ -	\$ 469,421
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 520,840	\$ 5,219,187	\$ -	\$ 5,740,027

**\*List sources of funding:** The 14th Street Groundwater Recharge and Storm Water Quality Treatment Integration project is a capital improvement project and will be funded by Upland's Water Department capital improvement project budget. In addition Upland is also applying for a Department of Water Resources "Stormwater Flood Management Grant" from Proposition 1E Round 2.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

**B. Row (B) Land Purchase/Easement**

No cost for the land purchase or easement the parcels are owned by the City of Upland.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

All Planning, Design, Engineering and Environmental Documents have been completed and no additional costs are anticipated.

**D. Row (D) Construction / Implementation**

The project is currently in the construction/implementation phase. The budget for completing the project has been updated from the original 2010 cost estimate to reflect current construction market conditions. A detailed breakdown of construction implementation costs is included with Table 7. The total construction cost is \$4,749,766.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

This item is complete total cost for the environmental documents was \$85,000.

**F. Row (F) Construction Administration**

City of Upland project administration costs for the grant are estimated based on the amount of time required to complete at 80,000 which is 1.70% of the construction costs.

**G. Row (G) Other Costs**

No additional costs are anticipated for this project.

**H. Row (H) Construction / Implementation Contingency**

A contingency equal to 10 percent of the construction/implementation budget, totaling \$469,421 is included in the total project budget to offset potential cost increases due to unknown conditions encountered during construction.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

Project: 14th Street Groundwater Recharge and Storm Water Quality Treatment Integration Facility

Cost Estimate: (Soft cost)

Upland Staff Time, approximately:

\$130,000.00

Consultant Cost:

\$205,000.00

**Construction Cost Estimate:**

No.	ITEM DESCRIPTION	QUANTITY	UNIT	\$/UNIT	TOTAL (\$)
1	MOBILIZATION, DEMOBILIZATION, BONDS, INSURANCE, PERMITS AND MISCELLANEOUS	1	LS	\$30,000.00	30,000.00
2	TRAFFIC CONTROL AND SAFETY	1	LS	\$15,000.00	15,000.00
3	UTILITY VERIFICATION (POTHOLING)	1	LS	\$8,000.00	8,000.00
	Survey	1	LS	\$30,000.00	30,000.00
4	SWPPP AND BMPs	1	LS	\$5,000.00	5,000.00
5	CLEARING, GRUBBING, REMOVALS, RELOCATIONS, RESTORATIONS AND EARTHWORK	1	LS	\$400,000.00	400,000.00
6	STRUCTURE EXCAVATION AND OVER EXCAVATION	1	LS	\$250,000.00	250,000.00
7	STRUCTURE BACKFILL AND GRADING	2,903	LF	\$100.00	290,300.00
8	RIPRAP	6,690	SF	\$25.00	167,250.00
10	CONSTRUCT 24" RCP	80	LF	\$120.00	9,600.00
11	CONSTRUCT 30" RCP	14	LF	\$170.00	2,380.00
12	CONSTRUCT 36" RCP	601	LF	\$175.00	105,175.00
13	CONSTRUCT 42" RCP	1,784	LF	\$225.00	401,400.00
14	CONSTRUCT 66" RCP	97	LF	\$700.00	67,900.00
15	CONSTRUCT 84" RCP	2,236	LF	\$780.00	1,744,080.00
16	CONSTRUCT REINFORCED CONCRETE PLUG	1	EA	\$2,000.00	2,000.00
17	CONSTRUCT CURB OPENING CATCH BASIN PER SPPWC 300-3	22	EA	\$13,000.00	286,000.00
18	CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN PER SPPWC 313-3	22	EA	\$2,000.00	44,000.00
19	CONSTRUCT MANHOLE PER SPPWC 320-2	4	EA	\$9,000.00	36,000.00
20	CONSTRUCT MANHOLE PER SPPWC 322-2	7	EA	\$9,000.00	63,000.00
21	CONSTRCT MANHOLE SHAFT SAFTEY LEDGE PER SPPWC 330-2	11	EA	\$10,000.00	110,000.00
22	CONSTRUCT JUNCTION STRUCTURE PER SPPWC 331-3	13	EA	\$6,000.00	78,000.00
23	CONSTRUCT JUNCTION STRUCTURE PER SPPWC 332-2	2	EA	\$8,000.00	16,000.00
24	CONSTRUCT CONCRETE COLLAR PER SPPWC 380-4	17	EA	\$2,000.00	34,000.00
25	CONSTRUCT JUNCTION STRUCTURE PER SPPWC 340-2	2	EA	\$8,500.00	17,000.00
26	ABANDON EXIST. 4" WATER LINE	1	LS	\$15,000.00	15,000.00
27	CONSTRUCT 18'X9' CONC. OUTLET	1	EA	\$25,000.00	25,000.00
28	REMOVE EXISTING 16" WATERLINE	1	LS	\$15,000.00	15,000.00
29	CONSTRUCT ENERGY DISSIPATOR	1	EA	\$20,000.00	20,000.00
30	CONSTRUCT 1 FT. WIDE CONCRETE LINED SWALE	1	LS	\$6,000.00	12,000.00
31	CONSTRUCT NEW CURB AND GUTTER	25	LF	\$25.00	625.00
33	CONCRETE VAULTS AND MISCELLANEOUS CONCRETE	7	EA	\$3,500.00	24,500.00
37	PAVING	1	LS	\$25,000.00	25,000.00
39	DEMOBILIZATION, PROJECT CLOSEOUT, AND RECORD DRAWINGS	1	LS	\$10,000.00	10,000.00
				TOTAL COST =	4,359,210.00

Sub-total Project Costs:

\$4,694,210.00

10% contingency

\$469,421.00

**Total Construction Project Costs:**

**\$5,163,631.00**

Total Cost of Project:

**\$5,498,631.00**



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (M) Customer Handbook to Using Water Efficiently in the Landscape (WMWD)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 5,000	\$ -	\$ -	\$ 5,000
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 120,000	\$ 33,000	\$ -	\$ 153,000
<b>(d)</b>	Construction/Implementation	\$ -	\$ -	\$ -	\$ -
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ -	\$ -	\$ -
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 9,000	\$ -	\$ 9,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 125,000	\$ 42,000	\$ -	\$ 167,000

\*List sources of funding: Western Municipal Water District Operating Funds

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

**B. Row (B) Land Purchase/Easement**

Not applicable.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

This project is for the design and production of an engaging, credible, useful, easy to understand and practical guide to water efficient landscaping in the SAWPA watershed. The design for the project is broken down as follows:

Task	Cost
UCCE writing fees	\$50,000
UCCE writing fees for video content	\$15,000
Graphic Artist	\$18,000
Stock Art	\$2,000
Photographer	\$6,000
Video Production	\$10,000
Handbook Copies (5,000 @ \$1 each)	\$5,000
Promotional Flyer Printing (500,000 @ \$0.05 each)	\$25,000
Bill Insert Printing (1,000,000 @ \$0.02 each)	\$20,000

**D. Row (D) Construction / Implementation**

Not applicable.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Not applicable.

**F. Row (F) Construction Administration**

Not applicable.

**G. Row (G) Other Costs**

Not applicable.

**H. Row (H) Construction / Implementation Contingency**

Western has included 6% contingency in the amount of \$9,000 to cover any unforeseen circumstances with the implementation of the project.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (N) \_Vulcan Pit Flood Control and Aquifer Recharge Project\_(City of Fontana)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 56,090	\$ 126,200	\$ 154,000	\$ 336,290
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ 4,500,000	\$ -	\$ 4,500,000
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 69,300	\$ 567,900	\$ 689,000	\$ 1,326,200
<b>(d)</b>	Construction/Implementation	\$ 770,000	\$ 6,310,000	\$ 7,651,000	\$ 14,731,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ 15,400	\$ 126,200	\$ 154,000	\$ 295,600
<b>(f)</b>	Construction Administration	\$ 53,900	\$ 441,700	\$ 536,000	\$ 1,031,600
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ 77,000	\$ 631,000	\$ 766,000	\$ 1,474,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 12,703,000	\$ 9,950,000	\$ 23,694,690

**\*List sources of funding:** The City of Fontana will use a combination of local funds for match amounts (City, Inland Empire Utilities Agency, and County of San Bernardino). The City of Fontana is also pursuing a Proposition 1E SWFM grant for \$9,950,000.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Direct administration costs by the City of Fontana are estimated at 2% of Total Construction Cost.

**B. Row (B) Land Purchase/Easement**

Based on Vulcan Property Value Calculation, October 2005, included in Attachment 4.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

Estimated at 9% of Total Construction Cost.

**D. Row (D) Construction / Implementation**

See Attachment 4-1 for detailed Construction Costs.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Estimated at 2% of Total Construction Cost.

**F. Row (F) Construction Administration**

Estimated at 7% of Total Construction Cost.

**G. Row (G) Other Costs**

Not Applicable.

**H. Row (H) Construction / Implementation Contingency**

Estimated at 10% of Total Construction Cost.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

### Attachment 4 Budget

The City of Fontana is pursuing multiple state funding sources that include this program, Proposition 84 IRWM, and Proposition 1E SWFM. The budget is presented consistent with matching requirements for each program as follows:

1. Proposition 84, IRWM-the budget includes greater local matching funds than the required 25%
2. Proposition 1E, SWFM-the budget includes 50% local matching funds

A breakdown of the match amounts are presented below:

Category	SWFM Grant	50% SWFM Match	IRWM Grant	25% IRWM Match	Total Match
Admin	\$ 154,000	\$ 88,000	\$ 15,385	\$ 38,215	\$ 126,215
Land Acquisition	\$ -	\$4,500,000	\$ -	\$ -	\$ 4,500,000
Engineering	\$ 689,000	\$ 378,000	\$ 69,231	\$ 189,969	\$ 567,969
Construction	\$ 7,651,000	\$ 4,145,000	\$ 769,231	\$ 2,165,769	\$ 6,310,769
Env. Compl. Mit, and Enh.	\$ 154,000	\$ 88,000	\$ 15,385	\$ 38,215	\$ 126,215
Construction Admin	\$ 536,000	\$ 295,000	\$ 53,846	\$ 146,754	\$ 441,754
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Contingencies	\$ 766,000	\$ 456,000	\$ 76,923	\$ 175,077	\$ 631,077
<b>Total:</b>	\$9,950,000	\$9,950,000	\$1,000,000	\$2,754,000	

The blended match requirements result in an overall match of 54% as shown on Table 5.

The City was selected for grant funding through DWR's Proposition 1E Stormwater Flood Management Round 1 grant program. The City is currently in the process of executing the grant agreement with DWR. Those amounts are included in the budget plan shown on Table 5 within column c.



**Attachment 4-1  
Preliminary Construction Estimate**

**Project: Vulcan Pit Flood Control and Aquifer Recharge Project**

No.	Description	Quantity	Unit	Unit Cost	Amount
<b>Recycled Waterline</b>					
1	Mobilization	1	LS	\$ 15,000	\$ 15,000
2	SWPPP	1	LS	\$ 10,000	\$ 10,000
3	24" Pipeline	7,100	LF	\$ 75	\$ 532,500
4	24" Valves	4	EA	\$ 2,000	\$ 7,100
5	Air Valves	4	EA	\$ 2,000	\$ 7,100
6	Blow Offs	4	EA	\$ 1,500	\$ 5,325
7	Connections	1	EA	\$ 3,000	\$ 3,000
8	Aggregate Base	1,650	CY	\$ 55	\$ 90,750
9	Pavement	3,220	TONS	\$ 65	\$ 209,300
10	Traffic Control	1	LS	\$ 25,000	\$ 25,000

**Recycled Water Construction Subtotal: \$ 905,075**

<b>Arrow Storm Drain Infrastructure</b>					
1	Mobilization	1	LS	\$ 15,000	\$ 15,000
2	SWPPP	1	LS	\$ 10,000	\$ 10,000
3	48" RCP	1,318	LF	\$ 125	\$ 164,750
4	84" RCP	1,319	LF	\$ 275	\$ 362,725
5	120" RCP	3,570	LF	\$ 425	\$ 1,517,250
6	132" RCP	1,237	LF	\$ 525	\$ 649,425
7	Manhole	25	EA	\$ 10,000	\$ 248,133
8	Catch Basin Inlets	12	EA	\$ 8,000	\$ 96,000
9	Aggregate Base	1,730	CY	\$ 55	\$ 95,150
10	Pavement	3,380	TONS	\$ 65	\$ 219,700
11	Traffic Control	1	LS	\$ 15,000	\$ 15,000

**Arrow Storm Drain Construction Subtotal: \$ 3,378,133**

<b>Sultana/Valencia Storm Drain Infrastructure</b>					
1	Mobilization	1	LS	\$ 15,000	\$ 15,000
2	SWPPP	1	LS	\$ 10,000	\$ 10,000
3	48" RCP	1,178	LF	\$ 125	\$ 147,250
4	72" RCP	3,085	LF	\$ 225	\$ 694,125
5	84" RCP	686	LF	\$ 275	\$ 188,650
6	96" RCP	1,531	LF	\$ 325	\$ 497,575
7	108" RCP	5,150	LF	\$ 375	\$ 1,931,250
8	120" RCP	784	LF	\$ 425	\$ 333,200
9	132" RCP	1,320	LF	\$ 525	\$ 693,000
10	144" RCP	660	LF	\$ 625	\$ 412,500
11	Manhole	48	EA	\$ 10,000	\$ 479,800
12	Catch Basin Inlets	20	EA	\$ 8,000	\$ 160,000
13	Aggregate Base	3,340	CY	\$ 55	\$ 183,700
14	Pavement	6,530	TONS	\$ 65	\$ 424,450
15	Traffic Control	1	LS	\$ 15,000	\$ 15,000

**Sultana/Valencia Storm Drain Construction Subtotal: \$ 6,185,500**

<b>Basin Earthwork</b>					
1	Mobilization	1	LS	\$ 25,000	\$ 25,000
2	SWPPP	1	LS	\$ 10,000	\$ 10,000
3	Clearing and Grubbing	1	LS	\$ 75,000	\$ 75,000
4	Earthwork	980,000	CY	\$ 3.50	\$ 3,430,000
5	Construct Inlet Structures	2	EA	\$ 46,000	\$ 92,000
6	Construct Outlet Structure	1	EA	\$ 20,000	\$ 20,000
7	Construct Spillway Structure	1	EA	\$ 400,000	\$ 400,000
8	72" RCP Low Flow Outlet	400	LF	\$ 250	\$ 100,000
9	Landscaping and Irrigation	1	LS	\$ 100,000	\$ 100,000
10	Traffic Control	1	LS	\$ 10,000	\$ 10,000

**Basin Construction Subtotal: \$ 4,262,000**

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**Rounded Total: \$ 14,731,000**

**Notes:**

1.) Based on Vulcan Property Value Calculation, October 2005

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (O) Francis Street Storm Drain and Ely Basin Flood Control and Aquifer Recharge Project (City of Ontario)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 42,808	\$ 124,154	\$ 120,308	\$ 287,270
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 51,923	\$ 558,692	\$ 541,385	\$ 1,152,000
<b>(d)</b>	Construction/Implementation	\$ 576,923	\$ 6,207,693	\$ 6,015,385	\$ 12,800,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ 11,538	\$ 124,154	\$ 120,308	\$ 256,000
<b>(f)</b>	Construction Administration	\$ 40,385	\$ 434,538	\$ 421,077	\$ 896,000
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ 57,692	\$ 620,769	\$ 601,538	\$ 1,280,000
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 781,270	\$ 8,070,000	\$ 7,820,000	\$ 16,671,270

**\*List sources of funding:** The City of Ontario will use development impact fees (DIF) to pay for design and construction, which will be paid back by the County of San Bernardino after 2025. The City of Ontario is also pursuing a Proposition 1E SWFM grant for \$7,820,000.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Direct administration costs by the City of Ontario are estimated at 2% of Total Construction Cost.

**B. Row (B) Land Purchase/Easement**

Not Applicable.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

Estimated at 9% of Total Construction Cost.

**D. Row (D) Construction / Implementation**

See Attachment 4-1 for detailed Construction Costs.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Estimated at 2% of Total Construction Cost.

**F. Row (F) Construction Administration**

Estimated at 7% of Total Construction Cost.

**G. Row (G) Other Costs**

Not Applicable.

**H. Row (H) Construction / Implementation Contingency**

Estimated at 10% of Total Construction Cost.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

## Attachment 4 Budget

The City is pursuing multiple state funding sources that include this program Proposition 84 IRWM funding, and Proposition 1E SWFM funding. The budget is presented consistent with matching requirements for each program as follows:

1. Proposition 1E, SWFM-the budget includes 50% local matching funds
2. Proposition 84, IRWM-the budget includes 25% local matching funds

A breakdown of the match amounts are presented below:

Category	SWFM Grant	50% SWFM Match	IRWM Grant	25% IRWM Match	Total Match
Admin	\$ 120,308	\$ 120,308	\$ 11,538	\$ 3,846	\$ 124,154
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering	\$ 541,385	\$ 541,385	\$ 51,923	\$ 17,308	\$ 558,692
Construction	\$ 6,015,385	\$ 6,015,385	\$ 576,923	\$ 192,308	\$ 6,207,692
Env. Compl. Mit, and Enh.	\$ 120,308	\$ 120,308	\$ 11,538	\$ 3,846	\$ 124,154
Construction Admin	\$ 421,077	\$ 421,077	\$ 40,385	\$ 13,462	\$ 434,538
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Contingencies	\$ 601,538	\$ 601,538	\$ 57,692	\$ 19,231	\$ 620,769
<b>Total:</b>	<b>\$ 7,820,000</b>	<b>\$ 7,820,000</b>	<b>\$ 750,000</b>	<b>\$ 250,000</b>	

The blended match requirements result in an overall match of 48% as shown on Table 5.

The City has submitted an application for grant funding through DWR's Proposition 1E Stormwater Flood Management Round 2 grant program. Those amounts are included in the budget plan shown on Table 5 within column c. If the City is not successful in acquiring those funds, local funds through the City's development impact fees will replace those budget amounts overall increasing the City's match funding percentage to 95% of the amount requested for the IRWM program.

**Attachment 4-1  
Preliminary Construction Estimate**

**Project: Francis Street Storm Drain and**

No.	Description	Quantity	Unit	Unit Cost	Amount
<b>Storm Drain Infrastructure</b>					
1	Mobilization, Demobilization, Bonds, Insurance, And Miscellaneous	1	LS	\$ 150,000	\$ 150,000
2	SWPPP	1	LS	\$ 20,000	\$ 20,000
3	Traffic Control And Safety	1	LS	\$ 100,000	\$ 100,000
4	Utility Verification (Potholing)	1	LS	\$ 20,000	\$ 20,000
5	Trench Protection (Sheeting, Shoring, And Bracing)	1	LS	\$ 200,000	\$ 200,000
6	Earthwork	1	LS	\$ 300,000	\$ 300,000
7	Install 6' Chain Link Fence	90	LF	\$ 15	\$ 1,350
8	Plug And Abandon Storm Drain	13	EA	\$ 1,000	\$ 13,000
9	Install Brick & Mortar Plug (>66")	3	EA	\$ 1,000	\$ 3,000
10	Construct 18" RCP	125	LF	\$ 70	\$ 8,750
11	Construct 24" RCP	540	LF	\$ 110	\$ 59,400
12	Construct 30" RCP	120	LF	\$ 135	\$ 16,200
13	Construct 36" RCP	86	LF	\$ 160	\$ 13,760
14	Construct 48" RCP	192	LF	\$ 210	\$ 40,320
15	Construct 63" RCP	154	LF	\$ 260	\$ 40,040
16	Construct 66" RCP	61	LF	\$ 285	\$ 17,385
17	Construct 72" RCP	96	LF	\$ 310	\$ 29,760
18	Construct 84" RCP	1,540	LF	\$ 410	\$ 631,400
19	Construct 108" RCP	1,274	LF	\$ 610	\$ 777,140
20	Construct 120" RCP	2,560	LF	\$ 710	\$ 1,817,600
21	Construct 132" RCP	1,789	LF	\$ 810	\$ 1,449,090
22	Construct 12'x8' RCB (CALTRANS D80)	20	LF	\$ 1,200	\$ 24,000
23	Construct 6'x4' RCB (CALTRANS D81)	21	LF	\$ 1,000	\$ 21,000
24	Construct 36"x36" Catch Basin	1	EA	\$ 1,500	\$ 1,500
25	Construct Catch Basin (W=3.5', V=5')	3	EA	\$ 3,500	\$ 10,500
26	Construct Catch Basin (W=4', V=3.5'-5')	2	EA	\$ 4,500	\$ 9,000
27	Construct Catch Basin (W=7', V=5')	2	EA	\$ 5,500	\$ 11,000
28	Construct Catch Basin (W=10', V=5'-6')	2	EA	\$ 6,000	\$ 12,000
29	Construct Catch Basin (W=14', V=5'-6')	7	EA	\$ 6,500	\$ 45,500
30	Construct Catch Basin (W=21', V=5'-5.5')	3	EA	\$ 8,500	\$ 25,500
31	Construct Catch Basin (W=28', V=7'-8')	7	EA	\$ 10,500	\$ 73,500
32	Construct Manhole (APWA 320-1, D=63", L=6')	1	EA	\$ 5,500	\$ 5,500
33	Construct Manhole (APWA 320-1, D=84", L=6')	3	EA	\$ 6,500	\$ 19,500
34	Construct Manhole (APWA 320-1, D=108", L=6')	2	EA	\$ 8,500	\$ 17,000

35	Construct Manhole (APWA 320-1, D=120", L=6')	5	EA	\$ 10,500	\$ 52,500
36	Construct Manhole (APWA 320-1, D=132", L=6')	2	EA	\$ 12,500	\$ 25,000
37	Construct Manhole (APWA 322-1, D=72", L=10')	1	EA	\$ 10,500	\$ 10,500
38	Construct Manhole (APWA 322-1, D=84", L=6')	1	EA	\$ 6,500	\$ 6,500
39	Construct Manhole (APWA 322-1, D=72"-84", L=8')	1	EA	\$ 8,500	\$ 8,500
40	Construct Manhole (APWA 322-1, D=84"-108", L=15')	1	EA	\$ 15,500	\$ 15,500
41	Construct Manhole (APWA 322-1, D=108"-120", L=15')	1	EA	\$ 20,500	\$ 20,500
42	Construct Manhole (APWA 322-1, D=120"-132", L=15')	1	EA	\$ 22,500	\$ 22,500
43	Construct Manhole (APWA 322-1, D=132", L=20')	1	EA	\$ 24,500	\$ 24,500
44	Construct Junction Structure (APWA 331-2)	1	EA	\$ 4,500	\$ 4,500
45	Construct Junction Structure (APWA 332-1, Case 1 Or 2, 1-Lateral)	3	EA	\$ 2,500	\$ 7,500
46	Construct Junction Structure (APWA 332-1, Case 1, 2-Laterals)	4	EA	\$ 4,500	\$ 18,000
47	Construct Junction Structure (SBCFCD Std. Sp. 220)	1	EA	\$ 5,000	\$ 5,000
48	Construct Concrete Collar (APWA 380-2, >60")	3	EA	\$ 2,500	\$ 7,500
49	Construct Concrete Collar (APWA 380-2, <48")	11	EA	\$ 2,000	\$ 22,000
50	Construct Transition Structure (APWA 342-1, 132"-12'x8', L=30')	2	EA	\$ 50,000	\$ 100,000
51	Construct Transition Structure (APWA 342-1, 132"-12'x10', L=30')	1	EA	\$ 60,000	\$ 60,000
52	Construct Transition Structure (APWA 342-1, 66"-6'x4', L=10')	1	EA	\$ 15,000	\$ 15,000
53	Channel Connection	1	LS	\$ 100,000	\$ 100,000

**Storm Drain Construction Total: \$ 6,509,195**

Basin Excavation					
1	Mobilization	1	LS	\$ 100,000	\$ 100,000
2	SWPPP	1	LS	\$ 10,000	\$ 10,000
3	Clearing and Grubbing	1	LS	\$ 25,000	\$ 25,000
4	Earthwork	500,000	CY	\$ 12	\$ 6,000,000
5	Water Level Monitor/Logger	3	EA	\$ 10,000	\$ 30,000
6	Groundwater Quality Monitoring	8	EA	\$ 10,000	\$ 80,000
7	Traffic Control	1	LS	\$ 25,000	\$ 25,000

**Basin Construction Subtotal: \$ 6,270,000**

**Total: \$ 12,779,195**

**Rounded Total: \$ 12,800,000**



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (P) Commercial/Industrial/Institutional Performance-Based Water Use Efficiency Program (MWDOC)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 32,760	\$ 79,365	\$ -	\$ 112,125
<b>(b)</b>	Land Purchase/Easement			\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation			\$ -	\$ -
<b>(d)</b>	Construction/Implementation	\$ 380,768	\$ 1,786,547	\$ -	\$ 2,167,315
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement			\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ 107,312	\$ 25,000	\$ -	\$ 132,312
<b>(g)</b>	Other Costs	\$ -	\$ 36,600	\$ -	\$ 36,600
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 520,840	\$ 1,927,512	\$ -	\$ 2,448,352

**\*List sources of funding:** Non-State Fund sources include the Municipal Water District of Orange County (MWDOC) general fund and rebate incentives provided through the Metropolitan Water District of Southern California SoCal Water Smart program.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Detailed breakdown of the Administrative costs for the Municipal Water District of Orange County (MWDOC) staff are provided Table A-Project Administration. These costs include the (1) direct administrative time for management of the contract, (2) developing the quarterly report associated with the grant and additional reporting, and (3) costs for developing and the marketing and promotions of this Program. These costs will be performed by MWDOC staff which is reflected in the estimated man-hours and rates.

Table 7a - Project Administration

<b>Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>	<b>MWDOC Funding</b>	<b>Prop 84 Funding</b>
Project Administrator (Joe Berg)	\$81.97	94	\$7,672.39	\$6,670.52	\$1,001.87
Project Manager (Steve Hedges)	\$59.86	390	\$23,345.40	\$20,296.92	\$3,048.48
Marketing Staff (Jessica Ouwerkerk)	\$44.56	23	\$1,042.70	\$906.55	\$136.16
Project Support 1 (Melissa Baum-Haley)	\$49.38	624	\$30,813.12	\$26,789.50	\$4,023.62
Project Support 2 (Beth Fahl)	\$43.32	624	\$27,031.68	\$23,501.84	\$3,529.84
Project Support 3 (Sergio Ramirez)	\$35.38	39	\$1,379.82	\$1,199.64	\$180.18
<b>Project Administration:</b>		<b>1,794</b>	<b>\$91,285.12</b>	<b>\$79,364.97</b>	<b>\$11,920.15</b>
<b>Other Project Administration Costs</b>	Supplies Travel		\$0.00	\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00
<b>Total Project Administration Costs</b>			<b>\$91,285.12</b>	<b>\$79,364.97</b>	<b>\$11,920.15</b>

While each staff member will bring their own experience to the Program, Collectively, the overall MWDOC team has over 45 years of experience managing similar water use efficiency projects. Mr. Berg, as the MWDOC Water Use Efficiency (WUE) Department Programs Manager, will be responsible for reviewing quarterly reports prior to submittal and providing the overall guidance for the Program. Mr. Hedges will act as Program Manager - directing the day to day operations of the Program; overseeing the marketing/promotional component development and implementation; managing the various Program consultants, including the installation verification inspection contractor handling all financial aspect for the Program; enhancing the Program’s database with the Program’s monthly participant data; and reviewing all written reports.

Ms. Fahl and Mr. Ramirez will assist Mr. Hedges with Program management responsibilities. Ms. Fahl, WUE Programs Coordinator, has administered the current Hotel Program and CII rebates, while Mr. Ramirez, WUE Programs Analyst, has administered MWDOC’s Turf Removal Programs. Under the supervision of Mr. Hedges, they will facilitate the daily operations of the Program along with preparation of the written reports, issuing pre-and post-inspection work orders, and management of the Program database.

Salary increases for the proposed Program staff would occur at the beginning of each fiscal year (July to June) and have averaged 2.0% over the last five years for both cost of living and merit. It is anticipated over the term of this Program agreement this average will remain.

**Task 2: Reporting**

Following the reporting schedule set forth in the agreement, MWDOC will submit quarterly reports and a comprehensive final report that will include all necessary invoicing documentation, a written Program progress narrative, tabular data tables, and all required back-up to support the requested reimbursement. The funding for Task 2, Reporting, is captured within Task 1, Program Administration.

**B. Row (B) Land Purchase/Easement**

Not applicable.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

Task 3: Environmental Documentation

**Sub-Task – Categorical Exemption Filing**

Prior to Program commencement, MWDOC will file a Categorical Exemption under Section 15304 – MINOR ALTERATIONS TO LAND (Class 4), and Categorical Exemption under Section 15301 – EXISTING FACILITIES (Class 1), and MWDOC filed a Categorical Exemption under Section 15306 INFORMATION COLLECTION–(Class 6) with the County of Orange in October of 2006. This Program does not involve construction. The Program does involve data collection and resource evaluation of CII/LL water use and will result in water saving process change recommendations and engineering assistance for businesses and institutions. Financial incentives are provided for businesses who implement recommended changes. The Program’s activities do not result in a serious or major disturbance to an environmental resource. None of the exceptions to categorical exemptions set forth in CEQA Guidelines Section 15300.2 are applicable. The proposed Project does not include land disturbance, therefore NEPA will not be required.

**D. Row (D) Construction / Implementation**

Task 4: Construction

Sub-Task – Rebate Incentives

Funding - DWR \$380,768; Recipient \$1,786,547; Total \$2,167,315

Through this Program, monetary incentives will be provided to CII sites including LL sites based on water savings, the average incentive rate for the Program is \$176 per AF. The incentive rate for comprehensive CII projects is \$150 to \$195 per AF of water saved, with a savings life up to ten years, with an expected total of \$368,846. The incentive rate for one-for-one improvements will enhance the Metropolitan regional rebate rates. Incentives may not exceed engineering, equipment, and construction costs. It is estimated that there will be more than 3,000 one-for-one devices replaced through this Program. The estimated total for the one-for-one device rebates through this Program is \$368,765. The incentive rate for the LL improvements is \$150 per AF of water saved, with a savings life up to ten years, and is estimated to achieve \$1,429,704 in rebates. In all, MWDOC will provide \$1,786,547 and \$380,768 is requested from DWR.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Not applicable.

## **F. Row (F) Construction Administration**

### Task 5: Construction Administration

#### Sub-Task – Marketing

Funding – DWR \$0; Recipient \$25,000; Total \$25,000

MWDOC will develop promotional and marketing pieces in support of this Program. It is estimated over the Program's term that \$25,000 will be needed for Program advertising, where, MWDOC, as the Recipient, will provide the full \$25,000, with \$0 requested of DWR. MWDOC will design and produce marketing promotional advertising pieces to be included in targeted trade publications. Marketing and promotional pieces will include half or full page advertisements in 15 issues of monthly publications at an average of rate of \$1,666 per issue. Monthly publications for consideration include the OC Metro with a distribution rate of over 60,000 copies per issue and the California Landscape Contractors Association: Orange County Chapter publication. All printed materials will contain the appropriate DWR recognition.

#### Sub-Task – Site Inspections

Funding - DWR \$107,312; Recipient \$0; Total \$107,312

MWDOC currently has URS Corp under contract for CII process improvements audits. URS provides specialized engineering services to characterize water savings potential and feasibility at CII sites. URS also provides additional engineering assistance for case-specific process improvements. For the LL inspections, MWDOC has Mission under contract for the next three (3) years to provide audit/verification services for a variety of landscape and irrigation system programs. Mission, as a Non-Profit Special District and an arm of the Natural Resource Conservation Service, is uniquely qualified to perform irrigation audits, device installation, and landscape conversion verifications. URS charges a flat rate of \$9,750 per survey at performance-based sites plus a \$1,415 administrative fee to a lump sum of \$11,165 per survey. Mission will perform LL site inspections. For commercial sites, Mission charges MWDOC on a time and materials basis at \$38 per hour, where the average commercial inspection is \$165.36 per site. MWDOC is requesting the full \$107,312 inspection direct cost total from DWR.

## **G. Row (G) Other Costs**

### Task 6: Assessment and Evaluation

#### Sub-Task – Benefit Analysis

Funding – DWR \$0; Recipient \$36,600; Total \$36,600

Through a project advisory committee, a statistical evaluation personnel will be identified and process the Program's data for the statistician, liaise between the involved retail water agencies and their water consumption data, manage the selected statistician consulting firm, and review draft and final reports. Using the experience of having done over six similar evaluations in the past, it is estimated an evaluation of this type will cost \$36,600. MWDOC will fund \$36,600 with \$0 requested of DWR.

This cost estimate is estimated to require approximately 250 hours from the consultant at an average hourly rate of \$137 per hour. In a recently completed water savings evaluation of a similar type, a consultant service charged MWDOC \$220/hr for 220 hours of the Consultant's Principle Statistician time; \$110/hr for 180 hours the Consultant's Information Technician time; and \$50/hr for 100 hours of the Consultant's Associate Technician time. This recent involvement with a statistical water savings consulting firm is the basis for the numbers represented here.

## **H. Row (H) Construction / Implementation Contingency**

Not applicable.

## **I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (Q) Peters Canyon Channel Water Capture and Reuse Pipeline (City of Irvine)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 41,690	\$ 139,220	\$ -	\$ 180,910
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 995,338	\$ -	\$ 995,338
<b>(d)</b>	Construction/Implementation	\$ 1,000,000	\$ 4,412,100	\$ -	\$ 5,412,100
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ 538,074	\$ -	\$ 538,074
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 1,606,380	\$ -	\$ 1,606,380
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 7,691,112	\$ -	\$ 8,732,802

\*List sources of funding: Partner funding match from City of Irvine, City of Tustin, Caltrans, Orange County Flood Control District; Additional funding from OCTA Measure M2 Tier 2 grant program

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Administration costs were estimated to be 2% of construction capital cost based on prior experience. Costs for the grant required Labor Compliance Program and reporting have not yet been determined at the 15% design phase.

**B. Row (B) Land Purchase/Easement**

In the 15% Design/Feasibility study, easements from six entities have been identified. Four of the entities are project partners and will assist the easement/encroachment permit process. The costs for the remaining two entities and any others which may be identified in later design development have not yet been determined.

### C. Row (C) Planning / Design/Engineering / Environmental Documentation

15% Design for the project is complete. The cost estimates for 30%, 60%, 90% and 100% design are based on the total construction cost and at this time have not been defined further. Task 4 which includes 30% design is estimated at 2% of total construction costs. Task 5 includes 60%, 90% and 100% design and is estimated at 10% of total construction costs and includes staff time for IRWD review of the final design.

### D. Row (D) Construction / Implementation

Description	Quantity		Unit Price <sup>1,3</sup>	Cost <sup>2</sup>
Mobilization (~4%)	1	LS	\$210,000.00	\$210,000
Site work, fencing, general items	1	LS	\$100,000.00	\$100,000
Caltrans GWTF Pump Station Connection	1	LS	\$30,000.00	\$30,000
Como Pump Station and Diversion Structure	1	EA	\$444,000.00	\$444,000
<i>Diversion Structure</i>	1	EA	\$30,000.00	
<i>Pump, Motor, and Guide Rails</i>	2	EA	\$40,000.00	
<i>Motor Control Center</i>	1	EA	\$100,000.00	
<i>Control Panel with PLC and Radio, Programming, Antenna Pole</i>	1	EA	\$95,000.00	
<i>Vaults and Hatches</i>	1	LS	\$75,000.00	
<i>Meter Pedestal and Connection Fee</i>	1	LS	\$10,000.00	
<i>Concrete Transformer Pad</i>	1	LS	\$4,000.00	
<i>Conduit/Wire</i>	1	LS	\$20,000.00	
<i>Instrumentation</i>	1	LS	\$30,000.00	
Edinger Pump Station and Diversion Structure	1	EA	\$339,000.00	\$339,000
<i>Diversion Structure</i>	1	EA	\$40,000.00	
<i>Pump, Motor, and Guide Rails</i>	2	EA	\$15,000.00	
<i>Motor Control Center</i>	1	EA	\$50,000.00	
<i>Control Panel with PLC and Radio, Programming, Antenna Pole</i>	1	EA	\$95,000.00	
<i>Vaults and Hatches</i>	1	LS	\$60,000.00	
<i>Meter Pedestal and Connection Fee</i>	1	LS	\$10,000.00	
<i>Concrete Transformer Pad</i>	1	LS	\$4,000.00	
<i>Conduit/Wire</i>	1	LS	\$20,000.00	
<i>Instrumentation</i>	1	LS	\$30,000.00	
Valencia Pump Station and Diversion Structure	1	EA	\$509,000.00	\$509,000
<i>Diversion Structure</i>	1	EA	\$95,000.00	
<i>Pump, Motor, and Guide Rails</i>	2	EA	\$40,000.00	
<i>Motor Control Center</i>	1	EA	\$100,000.00	
<i>Control Panel with PLC and Radio, Programming, Antenna Pole</i>	1	EA	\$95,000.00	
<i>Vaults and Hatches</i>	1	LS	\$75,000.00	
<i>Meter Pedestal and Connection Fee</i>	1	LS	\$10,000.00	
<i>Concrete Transformer Pad</i>	1	LS	\$4,000.00	
<i>Conduit/Wire</i>	1	LS	\$20,000.00	
<i>Instrumentation</i>	1	LS	\$30,000.00	
8-inch C900 PVC pressure pipe, Class 165	2,400	LF	\$65.00	\$156,000
<i>8-inch C900, DR 25, Material</i>	2,400	LF	\$15.00	
<i>Short Pipe Length Markup</i>	2,400	LF	\$0.00	
<i>Pipe Installation and Profit</i>	2,400	LF	\$21.00	
<i>Trench Excavation and Backfill</i>	2,400	LF	\$10.80	

Slurry Backfill	0	CY	\$125.00	
Sawcut, Remove and Replace 4-inch AC Pavement	2,400	LF	\$15.00	
Sawcut, Remove and Replace 6-inch AC Pavement	0	LF	\$22.00	
<b>12-inch C900 PVC pressure pipe, Class 165</b>	<b>2,500</b>	<b>LF</b>	<b>\$80.00</b>	<b>\$200,000</b>
12-inch C900, DR 25, Material	2,500	LF	\$19.00	
Short Pipe Length Markup	2,500	LF	\$0.00	
Pipe Installation and Profit	2,500	LF	\$23.00	
Trench Excavation and Backfill	2,500	LF	\$13.50	
Slurry Backfill	0	CY	\$125.00	
Sawcut, Remove and Replace 4-inch AC Pavement	2,500	LF	\$18.00	
Sawcut, Remove and Replace 6-inch AC Pavement	200	LF	\$25.00	
<b>14-inch C905 PVC pressure pipe, Class 165</b>	<b>11,200</b>	<b>LF</b>	<b>\$85.00</b>	<b>\$952,000</b>
14-inch C905, DR 25, Material	11,200	LF	\$22.00	
Short Pipe Length Markup	11,200	LF	\$0.00	
Pipe Installation and Profit	11,200	LF	\$27.00	
Trench Excavation and Backfill	11,200	LF	\$13.50	
Slurry Backfill	0	CY	\$125.00	
Sawcut, Remove and Replace 4-inch AC Pavement	11,250	LF	\$18.00	
Sawcut, Remove and Replace 6-inch AC Pavement	350	LF	\$25.00	
<b>Jacked Crossings (2 Channel, 1 Railroad, 3 Major Streets)</b>	<b>1,170</b>	<b>LF</b>	<b>\$1,900.00</b>	<b>\$2,223,000</b>
Peter's Canyon Channel 2 Places (Walnut and Barranca)	320	LF		
A.T. & S.F. Railroad / Como Channel	250	LF		
Edinger Ave, Barranca Pkwy, Alton Pkwy	600	LF		
<b>Discharge Connection Manhole</b>	<b>1</b>	<b>LS</b>	<b>\$40,000.00</b>	<b>\$40,000</b>
<b>Traffic Control</b>	<b>1</b>	<b>EA</b>	<b>\$10,800.00</b>	<b>\$10,800</b>
Main Street Connection	250	LF	\$43.00	
<b>Trench Safety Measures</b>	<b>1</b>	<b>LS</b>	<b>\$48,300.00</b>	<b>\$48,300</b>
<b>Potholes</b>	<b>8</b>	<b>EA</b>	<b>\$2,000.00</b>	<b>\$16,000</b>
<b>Valves and Blowoffs</b>	<b>1</b>	<b>LS</b>	<b>\$89,000.00</b>	<b>\$89,000</b>
8-inch buried gate valve with valve box assembly	2	EA	\$2,000.00	
10-inch buried gate valve with valve box assembly	2	EA	\$3,000.00	
12-inch buried butterfly valve with valve box assembly	6	EA	\$4,000.00	
2-inch combination air valve (CAV) assembly	5	EA	\$6,000.00	
4-inch blow-off assembly	5	EA	\$5,000.00	

**Notes**

1) Unit prices include material, labor, equipment, and overhead.

2) Estimate assumes a trench width per the following table:

Pipe Diameter	Trench Width
8 In.	2.0 ft.
12 In.	2.5 ft.
14 In.	2.5 ft.

Trenches deeper than 10 ft are assumed to be laid back at a 2:1 slope above 10 ft.

3) Unit costs developed using RSMMeans, quotations, and previous bid results.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

The level of environmental mitigation/enhancement required for the project is unknown at this time, but is not anticipated to be significant due to the fact that the pipeline will be placed under an existing bike trail and not anticipated to impact any significant environmental resources. Any required mitigation will be identified once Task 6 Environmental Documentation is completed.

**F. Row (F) Construction Administration**

Construction Administration was estimated at 7.5% of construction costs based on previous experience.

**G. Row (G) Other Costs**

Not Applicable.

**H. Row (H) Construction / Implementation Contingency**

Construction Contingency was estimated at 23% based on previous project experience.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (R) Wastewater Project (Soboba Band of Luiseño Indians)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 6,250	\$ -	\$ -	\$ 6,250
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ 150,000	\$ 53,000	\$ -	\$ 203,000
<b>(d)</b>	Construction/Implementation	\$ -	\$ -	\$ -	\$ -
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ -	\$ -	\$ -
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ -	\$ -	\$ -
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 156,250	\$ 53,000	\$ -	\$ 209,250

\*List sources of funding:

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

**B. Row (B) Land Purchase/Easement**

Not applicable.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The purpose of the project is to develop and implement a Development Plan (i.e. feasibility study) to evaluate the proposed waste management facility. A new wastewater management facility will allow the Tribe to better handle future development and population needs on the reservation while potentially freeing up potable water by replacing its usage with grey water in some areas. The costs to develop this plan are estimated at approximately \$200,000 including approximately \$50,000 in staff time to prepare the report.

**D. Row (D) Construction / Implementation**

Not applicable.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

Not applicable.

**F. Row (F) Construction Administration**

Not applicable.

**G. Row (G) Other Costs**

Not applicable.

**H. Row (H) Construction / Implementation Contingency**

Not applicable.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**

**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (S) Recycled Water Project Phase I (Arlington-Central Avenue Pipeline)(City of Riverside)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 41,690	\$ 702,240	\$ -	\$ 743,930
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 4,149,360	\$ -	\$ 4,149,360
<b>(d)</b>	Construction/Implementation	\$ 1,000,000	\$ 19,340,000	\$ -	\$ 20,340,000
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ -	\$ -	\$ -
<b>(f)</b>	Construction Administration	\$ -	\$ 610,200	\$ -	\$ 610,200
<b>(g)</b>	Other Costs	\$ -	\$ -	\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 4,068,000	\$ -	\$ 4,068,000
<b>(i)</b>	<b>Grand Total</b> <b>(Sum rows (a) through (h) for each column)</b>	\$ 1,041,690	\$ 28,869,800	\$ -	\$ 29,911,490

\*List sources of funding: City of Riverside Public Utilities

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

The City of Riverside Public Utilities will fund the Project Administrative Costs from its own funds and will not seek reimbursement from IRWM Implementation Grant. The project administrative cost is estimated at threepercent (3%)based on past experience. The total estimated cost is \$702,240.

**B. Row (B) Land Purchase/Easement**

Not Applicable.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The City of Riverside Public Utilities will fund the Planning/Design/Engineering/Environmental Documentation cost from its own funds and will not seek reimbursement from the IRWM Implementation Grant. The project planning, design, engineering and environmental documentation costs are estimated at a percentage based on the total construction cost including contingency. The percentagerates are based on the City’s past experience implemented similar projects and are outlined as follows:

Category	Percentage Rate	Estimate Cost
Planning	5%	\$0
Design/Engineering	10%	\$0
Environmental	2%	\$0
<b>Total</b>		<b>\$0</b>

Total Construction + Contingency 24,408,000

**D. Row (D) Construction / Implementation**

The project is currently in the planning phase and therefore, the construction cost is a planning level estimate based on the following:

Planning Construction Cost Estimate						
Items	Description	Quantity	Units		Unit Cost	Total
1	8-inch Pipeline	4,400	LF	\$25	\$200	\$880,000
2	12-inch Pipeline	7,000	LF	\$25	\$300	\$2,100,000
3	16-inch Pipeline	15,600	LF	\$25	\$400	\$6,240,000
4	24-inch Pipeline	17,000	LF	\$25	\$600	\$10,200,000
5	SWPPP	1	LS		\$15,000	\$15,000
6	Redundancy Connection	1	LS		\$200,000	\$200,000
7	Proposed Booster Station	1	LS		\$705,000	\$705,000
Sub-Total						\$20,340,000
Contingency (20%)						\$4,068,000
<b>Total</b>						<b>\$24,408,000</b>

It is anticipated that construction will commence by October 2016 and be completed by July 2018. The City of Riverside Public Utilities is seeking reimbursement of \$1,000,000 from the IRWM Implementation grant for this line item. The total construction cost is anticipated to be \$20,340,000 and therefore, the grant requirement of 25% matching funds is included within the construction budget.

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

The City of Riverside Public Utilities will fund the Environmental Compliance/Mitigation/Enhancement cost from its own funds and will not seek reimbursement from the IRWM Implementation Grant. The cost is estimated to be approximately \$15,000 in order to cover construction related Stormwater Pollution Prevention activities. The cost for this item is included within the construction cost.

**F. Row (F) Construction Administration**

The City of Riverside Public Utilities staff will oversee the construction administration for the Project. The cost is estimated at 3% of the construction cost in the amount of \$610,200. This percentage is based upon RPU's experience in managing construction activities.

**G. Row (G) Other Costs**

Not Applicable.

**H. Row (H) Construction / Implementation Contingency**

The City of Riverside Public Utilities has included a 20% contingency in the amount of \$4, 068,000 to cover any unforeseen circumstances with the implementation of the project.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**



**Table 7 – Project Budget**

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation Proposal

Project Title: Project (T) \_Wilson III Basins Project and Wilson Basins/Spreading Grounds\_(City of Yucaipa)

Project serves a need of a DAC?: No

Funding Match Waiver request?: No

Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
<b>(a)</b>	Direct Project Administration Costs	\$ 31,270	\$ 340,108	\$ -	\$ 371,378
<b>(b)</b>	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$ -	\$ 819,610	\$ -	\$ 819,610
<b>(d)</b>	Construction/Implementation	\$ 750,000	\$ 8,904,423	\$ -	\$ 9,654,423
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$ -	\$ 327,400	\$ -	\$ 327,400
<b>(f)</b>	Construction Administration	\$ -	\$ 534,265	\$ -	\$ 534,265
<b>(g)</b>	Other Costs	\$ -		\$ -	\$ -
<b>(h)</b>	Construction/Implementation Contingency	\$ -	\$ 1,366,915	\$ -	\$ 1,366,915
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	\$ 781,270	\$ 12,292,721	\$ -	\$ 13,073,991

**\*List sources of funding:** The City of Yucaipa will use... See Table 7 Support tables for detailed costs.

**A. Row (A) Direct Administration Costs**

The Santa Ana Watershed Project Authority (SAWPA) has extensive experience with managing various State and Federal Grant Programs. The budget of direct administration cost is estimated at roughly 4% of the allotted grant funding. This estimate based on SAWPA's extensive experience in administering round 1 of proposition 84, as well as, Propositions 13 and 50 grant programs.

Direct administration costs by the City of Yucaipa are estimated as follows:

Row (a) Direct project Administration Costs			
City of Yucaipa Project Administration	Hourly Rate	Hours Total	Total Wages
City Manager	\$ 175	200	\$ 35,043
Public Works Director	\$ 140	500	\$ 70,014
Deputy City Engineer	\$ 85	900	\$ 76,074
Associate Engineer	\$ 84	1,100	\$ 92,361
Construction Engineer	\$ 84	150	\$ 12,595
Administrative Assistant	\$ 49	300	\$ 14,795
Finance Director	\$ 138	50	\$ 6,919
Accounting Manager	\$ 67	120	\$ 8,008
Contract Staff	\$ 81	300	\$ 24,300
SAWPA Project Administration:		<b>3,620</b>	<b>\$ 340,108</b>

**B. Row (B) Land Purchase/Easement**

Property is owned by project partners, SBCFCD and a small portion by YVWD.

**C. Row (C) Planning / Design/Engineering / Environmental Documentation**

The following is a table of all the contracts that have been awarded for these types of services. Note that the City is not requesting State funding for these contracts and that the contracts have already been let.

Service Provided	Consultant	Contract Amount
Preliminary & Final Design	RBF Consulting	\$ 460,700
Wilson III EIR	The Planning Center	\$ 358,910
SAWPA Project Planning/Design/Enviro:		<b>\$ 819,610</b>

### D. Row (D) Construction / Implementation

See construction cost estimate as follows:

Line Item	Description	Unit	Quantity	Unit Cost	Cost	Category Cost
1.0	Wilson III Basin/Spreading Basins					\$ 5,854,208
1.01	Mobilization (5%)	LS	1	\$ 333,628	\$ 333,628	
1.02	Clearing and Grubbing	LS	1	\$ 50,000	\$ 50,000	
1.03	Water Control	LS	1	\$ 30,000	\$ 30,000	
1.04	Unclassified Excavation	CY	1,077,130	\$ 3.50	\$ 3,769,955	
1.05	AB Maintenance Road	SF	48,875	\$ 1.00	\$ 48,875	
1.06	Wilson Creek Basin Inlet Structure (grouted rock)	CY	1,749	\$ 125	\$ 218,625	
1.07	Oak Glen Creek Basin Inlet Structure (grouted rock)	CY	1,393	\$ 125	\$ 174,125	
1.08	Wilson Spreading Basin Inlet Structure	CY	800	\$ 125	\$ 100,000	
1.09	Spreading Basin Levy - Regrade and Compact	CY	10,000	\$ 7.00	\$ 70,000	
1.10	Spreading Basin Piping Modifications	LS	1	\$ 10,000	\$ 10,000	
1.11	Basin Outlet Weir Structure	CY	200	\$ 700	\$ 140,000	
1.12	(4 Cell) 10' (h) x 12' (w) RCB	LF	150	\$ 4,000	\$ 600,000	
1.13	Recharge Basin Piping	LF	500	\$ 130	\$ 65,000	
1.14	Headwall/Wingwall Outlet Structure	CY	92	\$ 700	\$ 64,400	
1.15	Rock Riprap (loose rock)	CY	1,796	\$ 100	\$ 179,600	
2.0	Wilson Creek Improvements					\$ 902,840
2.01	AB Road/Trail	SF	31,965	\$ 1.00	\$ 31,965	
2.02	Drop Structures	CY	3,087	\$ 125	\$ 385,875	
2.03	Turf Reinforcing Mat (TRM)	SF	39,500	\$ 4.00	\$ 158,000	
2.04	RC Headwall/Wingwall	CY	42	\$ 700	\$ 29,400	
2.05	Dual Cell 12' (W) x 8' (H) RCB Culvert	LF	124	\$ 2,400	\$ 297,600	
3.0	Oak Glen Creek Improvements					\$ 108,400
3.01	RC Headwall/Wingwall	CY	42	\$ 700	\$ 29,400	
3.02	Dual Cell 10' (W) x 8' (H) RCB Culvert	LF	30	\$ 1,800	\$ 54,000	
3.03	Concrete Diversion Structure	EA	1	\$ 25,000	\$ 25,000	

**E. Row (E) Environmental Compliance / Mitigation / Enhancement**

See cost estimate as follows:

Line Item	Description	Unit	Quantity	Unit Cost	Cost
1.0	Wilson III Basin/Spreading Basins Offsite Enhance				
1.01	Mobilization (5%)	LS	1.0	\$ 20,000	\$ 20,000
1.02	Clearing, Grubbing, Invasive Species Removal	AC	3.4	\$ 10,000	\$ 34,000
1.03	Plant Native Species	AC	3.4	\$ 11,000	\$ 37,400
1.04	Plant Establishment/Monitoring	LS	1.0	\$ 20,000	\$ 20,000
1.05	Temporary Irrigation	AC	3.4	\$ 15,000	\$ 51,000
1.06	Conservation Easement Preparation/Agreement	LS	1.0	\$ 15,000	\$ 15,000
1.06	IERCD Endowment Fund for Maint. In Perpetuity	LS	1.0	\$ 150,000	\$ 150,000
<b>Total Environmental Cost:</b>					<b>\$ 327,400</b>

**F. Row (F) Construction Administration**

Based on experience from similar projects, the City used an estimate of 6% for construction administration.

**G. Row (G) Other Costs**

Not Applicable.

**H. Row (H) Construction / Implementation Contingency**

The City believes that all the project costs are contained in the other line items.

**I. Row (I) Grand Total (Sum rows (A) through (H) for each column)**