

# PROPOSAL EVALUATION

## *Proposition 84 Integrated Regional Water Management (IRWM) Grant Program Implementation Grant, Round 2, 2013*

---

<b>Applicant</b>	County of Orange	<b>Amount Requested</b>	\$ 1,708,647
<b>Proposal Title</b>	South Orange County WMA IRWM Prop 84 Round 2 Implementation Proposal	<b>Total Proposal Cost</b>	\$ 81,083,911

---

### PROJECT SUMMARY

The proposal includes the following projects: (1) Municipal Water District of Orange County's (MWDOC) Comprehensive Landscape Water Use Efficiency Program (CLWUE); (2) Audubon Starr Ranch Sanctuary's Riparian Invasion Control, Restoration, Monitoring, and Education Project (Starr Ranch Sanctuary); (3) Irvine Ranch Water District's (IRWD) Baker Water Treatment Plant; (4) South Coast Water District's (SCWD) Targeted Water Conservation Program; and (5) Grant Administration.

### PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	9/15	Technical Justification	6/10
Budget	3/5		
Schedule	3/5	Benefits and Cost Analysis	18/30
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	8/10
<b>Total Score (max. possible = 80)</b>			<b>50</b>

### EVALUATION SUMMARY

#### WORK PLAN

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. For example, although the applicant indicates that performance measures and monitoring plans will be used to determine the effectiveness of each project, no task specifically addresses the development of this plan (for any of the 4 projects). No deliverables are specified for project 2, task 5 (implementation) or for project 3, task 10 (construction). Finally, the description and/or the deliverables for Tasks 3, 4, and 5 for Project 4 are not sufficiently detailed. Otherwise, applicant adequately addresses the required elements of this criterion.

#### BUDGET

Budgets for more than half of the projects in the proposal have detailed cost information but not all costs appear reasonable, or supporting documentation is lacking for a majority of the budget categories. For example, project 4's

budget does not include an explanation of how costs are estimated for tasks 1, 2, 3, 4, 5, and 7; task 4 does not include a breakdown of estimated hours or hourly rates by discipline; although an hourly rate by discipline is provided for tasks 1, 2, 3, and 7, no breakdown of hours for each is provided to substantiate the budget estimated provided; and the task 5 (materials) budget estimate does not include the quantity or the itemized costs of material/ number or units estimated in the budget.

## **SCHEDULE**

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. None of the project schedules include the Task “Development of Project Monitoring Plan”, which is one of the “minimum” tasks required in the schedule; and grant administration for the suite of projects ends on November 30, 2015 but Project 1 will not be completed until January 30, 2017. The schedule is consistent with the work plan and budget. Construction of at least one project will begin by October 2014.

## **MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES**

The criterion is less than fully addressed and documentation or rationales are incomplete and insufficient. Project 1, 2, 3, and 4’s targets, measurement tools, and project objectives are confusing and do not appear to provide effective means for measuring some project benefits. For example, project 3’s objectives include: (a) increasing water supply reliability especially during unplanned or extended outages of the Diemer Filtration Plant and/or the Allen-McColloch Pipeline (Att. 6, pg. 18); and (b) increasing local water supply (by treating surface water runoff captured and stored in Irvine Lake); however, neither the identified performance indicators, measurement tools and methods, nor the targets provided appear to provide an effective means for measuring these benefits. Project 2 contains some task items as goals that don’t seem to fit with the tables. For example, one of the goals is to map invasive tree species to produce GIS maps and to aid interns on where to remove invasive species. Benefit/Goal 6 in project 2 of the table (page 4) also does not have clear measurement tools and targets.

## **TECHNICAL JUSTIFICATION**

The proposal appears to be technically justified to achieve the claimed benefits but lacks documentation that demonstrate the technical adequacy of the projects and physical benefits are not well described. For example, project 3 claims that the project will enhance “potable water supply reliability to the region by providing a supplemental supply of drinking water for south Orange County”. The applicant provides several studies and engineering work on the project but does not adequately justify the need for a redundant potable water treatment system. For example, the applicant could quantify the magnitude of the reduced supplies during the one outage described. In addition, although the applicant claims project 3 will provide a new potable water resource by “also utilizing the local surface water runoff”, it is not clear what the expected quantity might be for this “new water resource”. Documentation provided clearly indicates that the source water for the proposed project for the majority of the year will be water from the Colorado River or State Water Project.

## **BENEFITS AND COST ANALYSIS**

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost and this finding is supported by detailed, high quality analysis and clear and complete documentation. This application would help fund a potable water treatment plant, a landscape water use efficiency program, an invasive plants project, and a water conservation program. Most of the grant request would fund a small share of the water treatment plant costs and the landscape conservation program.

Project 1 would achieve up to 888 acre feet per year (AFY) of savings, primarily from installing smart water application irrigation controllers at commercial sites. Savings are valued using nominal water rates. Assuming 2% inflation, corrected benefits are \$5.65 million, still well in excess of costs.

Project 2 is justified primarily based on habitat acres restored. The value of \$21,000 per half acre of mitigation credit should be annualized using discounting relationships consistent with the application guidelines. Land does not depreciate, so the annual cost of \$42,000 per acre per year is the real interest of 6% or \$2,520 per year. The analysis claims a small water supply benefit based on “installation of trash racks and a slide gate. . .” Costs of the trash racks and slide gate do not appear in the construction budget in Attachment 4. Still, this appears to be a good project.

Project 3 would provide a water supply reliability benefit due to redundancy, but this benefit is not quantified. In short, the application does not provide a good economic rationale for the Baker facility. Project 3 would cost about \$724 million in present value terms. The project would sell up to 28 million gallon day of potable water in South Orange County. The economic analysis claims that, in the future, “the Project is anticipated to produce water at a lower cost than as purchase through MWD” and quantified benefits are based on Diemer water costs avoided. This claim cannot be confirmed by the analysis for two reasons.

First, the Metropolitan rates appear to be nominal rates, so they include expected inflation as well as real cost increases. These types of assumptions are not included for the assumed costs of the Baker treatment plant, but they should be consistent. Second, as stated in the PSP, wholesale and retail water prices would generally be accepted as appropriate unit benefits for water cost savings, so long as these prices approximately reflect the cost of providing the next increment of water supply service. The Metropolitan rates may include a capital recovery component that reflects sunk costs. This rate component should not be included because it does not represent an economic cost. Since Diemer has many sunk costs and Baker does not, Diemer is likely to be more cost-efficient to continue to use to produce the region’s potable water unless (1) there is a need for more capacity to meet growing demand; (2) major capital components at Diemer need to be replaced; or (3) technological change makes Baker a more efficient choice even though many costs at Diemer are sunk. None of these conditions is used to justify the new facility.

Project 4 would achieve up to 490 AFY of water savings, primarily by reduced irrigation, by 2013. This level of implementation in the short run seems unrealistic. Savings are valued using nominal water rates. Still, this appears to be an economical project.

#### **PROGRAM PREFERENCES**

Applicant claims that eight program preferences and eight statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty, and adequate documentation for nine of the preferences claimed: (1) Include regional projects or programs; (2) Effectively integrate water management programs; (3) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program (4) Drought Preparedness; (5) Use and Reuse Water More Efficiently; (6) Use and Reuse Water More Efficiently; (7) Climate Change Response Actions; (8) Expand Environmental Stewardship; and (9) Practice Integrated Flood Management.