

# Integrated Regional Water Management Grant

Step 2 Application  
September 7, 2005

**Regional Water Management Group**  
San Diego County Water Authority  
San Diego County  
City of San Diego

## GLOSSARY

- Applicant – RWMG
- IRWM – Integrated Regional Water Management
- Project proponents – sponsors of individual proposed projects
- Proposal – IRWM Grant request (collection of individual projects)
- RWMG – Regional Water Management Group (City, County, Water Authority)
- Step 1, Step 2 – applications for Prop 50 funding

## AGENDA

- Introduction to IRWM grant process and relationship to IRWM Plan (10 minutes)
- Timeline for Step 2 application (10 minutes)
- What needs to be done now and tasks for project proponents – matrix handout (85 minutes)
- IRWM Plan development (10 minutes)
- Wrap up (5 minutes)

## INTRODUCTION TO PROP 50 -- GRANT AND IRWM PLAN

- Review application on-line (state website and PCW)
- Step 1 – Status
- Step 2 – New/updated information is requested
- What RWMG will do with Step 2 information
- High scores given to Work Plan, Economic Analysis, Scientific Merit, and Other Expected Benefits
- Selection process for proposed projects
- Fiscal relationship between project proponents and RWMG as applicant
- Adoption of IRWM Plan by 1/1/07

## SCHEDULE FOR STEP 2 GRANT PROCESS

<b>September 7, 2005</b>	Project proponents meet w/RWVG re Step 2 applications
<b>September TBD</b>	State meets with RWVG re Step 2 requirements
<b>October 28, 2005</b>	Step 2 information due from project proponents to RWVG
<b>December 12, 2005</b>	Draft Step 2 application delivered to RWVG by consultant team
<b>December TBD</b>	State notifies RWVG re invitation to submit Step 2 application
<b>January 20, 2005</b>	Final Draft application delivered to RWVG by consultant team
<b>January TBD</b>	Project applicant workshop with RWVG re Step 2 applications
<b>February TBD</b>	Step 2 application due to State
<b>April 2006, TBD</b>	State notifies RWVG re funding
<b>April 2006, TBD</b>	Project proponents meet with RWVG re funding

## REQUIRED DETAILS FOR THE STEP 2 APPLICATION

## MOVING FROM STEP 1 TO STEP 2

- Provide a work plan
- Provide an economic analysis (Tables F4-F7)
- Provide justification of scientific and technical merit (see Exhibits H1-H3)
- Describe other expected benefits
- Provide description of performance measures (Table I-1)

**PROVIDE INFORMATION TO RWMG BY 10/28/05**

## THE MATRIX AS A GUIDE

## NEW SCHEDULE ITEMS

- Add development of financing to the Schedule
- Update major milestones (i.e., work items) of the project on the Schedule
- Add all project deliverables and reporting periods on the Schedule

Update Attachment 8 to original application

## NEW BUDGET DETAIL

### Direct Administrative Costs

- Provide the hourly wage paid by discipline for project administration costs
- Provide the number of hours to be expended for project administration
- Provide backup for equipment, supplies, or travel costs

Update Attachment 7 to the original application

## UPDATE BUDGET DETAIL

### Land Purchase or Easement

- Indicate if land is already owned by project proponent
- If already owned, when was it purchased and how for much?

Update Attachment 7 to the original application

## NEW BUDGET DETAIL

### Planning, Design, Engineering, and Environmental Documentation

- Detail hourly wages paid by discipline, the number of hours, and the total cost for the work item
- Explanation the rationale used to determine the contingency percentage

Update Attachment 7 to the original application

## NEW BUDGET DETAIL

### Construction/Implementation Costs

- Determine the design stage that your project at (10, 30, 60, 90 percent, ready to go)
- Provide cost estimate appropriate for that design stage

Update Attachment 7 to the original application

## NEW BUDGET DETAIL

### Environmental Compliance, Mitigation, and Enhancement

- Determine the design stage that your project at (10, 30, 60, 90 percent, ready to go)
- Provide cost estimate for environmental compliance appropriate for that design stage

Update Attachment 7 to the original application

## NEW BUDGET DETAIL

### Construction Administration

- Explain how you determined the estimated cost to administer and manage construction, if any
- If a percentage of construction costs is used, indicate the percentage used
- If the estimate is based on expected hours of effort, list the hours, by discipline, unit cost, equipment costs, and total cost

Update Attachment 7 to the original application

## UPDATE BUDGET DETAIL

### Other Costs

- Legal services
- Licenses
- Permits
- *Construction/implementation* monitoring and assessment costs

Update Attachment 7 to the original application

## NEW BUDGET DETAIL

### Contingency Costs

- Include costs to handle unknown conditions encountered during *construction or implementation* of the project
- Specify the percentage used for this cost, and provide a reason for using the percentage used

Update Attachment 7 to the original application

## NEW BUDGET ITEM

- O&M costs (Annual administrative costs; annual operating costs; annual maintenance costs, and other annual costs, such as monitoring)
- Replacements costs (replacement costs over the project's life cycle, normally 50 years)

Update Attachment 7 to the original application



## MAKE BUDGET AND SCHEDULE CONSISTENT



## **NEW** WORK PLAN

Work Plan Items Needed from Project Applicant

- Description of “standards” such as construction standards, health and safety standards, laboratory analysis, etc., used for project development and implementation
- Discussion of the merits of the building materials or computational methods that were or will be used for project development

Provide new narrative “Work Plan”

## NEW WORK PLAN

If not provided already, provide:

- A description of the work under each work item
- A map of project area as prescribed in the PSP, p. 29
- A plan for environmental compliance

Include in new narrative "Work Plan"

## ECONOMIC ANALYSIS

## NEW ECONOMIC ANALYSIS

If a project does not have quantified economic benefits, summarize any water supply or water quality benefits that can and have been physically quantified, and provide a qualitative discussion of benefits not quantifiable.

## NEW ECONOMIC ANALYSIS

- Complete Table F3 – Annual Costs of Project
- Complete Table F4 – Annual Benefits of Water Supply/Water Quality Benefits for each benefit
- Complete narrative to support Table F4
- Complete Table F5 – Annual Costs of Avoided Action or Project for each avoided cost
- Complete Table F6 – Annual Benefits of Other Water Supply or Water Quality Benefits
- Provide supporting narrative to support estimated benefits
- Complete Table F7

**Table F-3 - Annual Costs of Proposal**  
(All costs should be in 2004 dollars)

YEAR	Capital Costs								Operations and Maintenance Costs				Discounting Calculations			
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	
	Project Admin	Land Opp. Cost	Planning/ Design/ Documentation	Construction /Implementation	Envir Compliance/ Mitigation/ Enhancement	Const. Admin	Other	Replace- ment	Admin	Opera- tion	Main- tenance	Other	Total Costs (a+b+...l)	Discount Factor	Discounted Costs (m÷n)	
2005															1.06	
2006															1.12	
2007															1.19	
...															...	
...															...	
...															...	
2053															17.38	
2054															18.42	
Total Present Value of Discounted Costs (Sum of Column (o))																
Comment Box																

**Table F-4 - Annual Benefits of Water Supply and Water Quality Benefits**  
(All benefits should be in 2004 dollars)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
YEAR	Benefit: Replicate headers (Columns (b) – (f)) and full range of year rows for each benefit					Discounting Calculations for Economic Benefits (If claiming \$ Value for the Benefit)		
	Measure of Benefit: (Identify units for each water supply or water quality benefit to be measured)			Complete these 2 columns if claiming \$ Value for the Benefit		Total Benefits (Sum of Annual \$ Value for each benefit)	Discount Factor	Discounted Benefits (g ÷ h)
Without Proposal	With Proposal	Change Resulting from Proposal (c - b)	Unit \$ Value	Annual \$ Value (d x e)				
2005								1.06
2006								1.12
2007								1.19
...								...
...								...
...								...
2053								17.38
2054								18.42
Total Present Value of Discounted Benefits Based on Unit Value (Sum of the values in Column (i) for all Benefits shown in Table)								
Comment Box								

Table F-4 - Annual Costs of Avoided Action or Project (All avoided costs should be in 2004 dollars)							
Costs				Discounting Calculations			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
YEAR	Avoided Alternative: Replicate this column block with headers for each avoided alternative						
	Avoided Capital Costs	Avoided Replacement Costs	Avoided Operations and Maintenance Costs	Total Cost Avoided for Individual Alternatives (b) + (c) + (d)	Total Cost Avoided for All Alternatives (Sum of Total Cost Avoided for Individual Alternatives)	Discount Factor	Discounted Costs (f) ÷ (g)
2005						1.06	
2006						1.12	
2007						1.19	
...						...	
...						...	
...						...	
2053						17.38	
2054						18.42	
Total Present Value of Discounted Costs (Sum of Column (h))							
% Avoided Cost Claimed by Proposal							
Total Present Value of Discounted Avoided Project Costs Claimed by Proposal (Total Present Value of Discounted Costs x % Avoided Cost Claimed by Proposal)							
Comment Box							

Table F-5 - Annual Benefits of Other Water Supply or Other Water Quality Benefits (in 2004 Dollars)			
(a)	(b)	(c)	(d)
YEAR	Type of Benefit Claimed: Replicate headers and rows for each benefit type		
	Describe the Benefit Claimed: _____ _____ _____ _____		
	Annual Benefit (\$)	Discount Factor	Discounted Benefits (b ÷ c)
2005			1.06
2006			1.12
2007			1.19
...			...
...			...
...			...
2053			17.38
2054			18.42
Total Present Value of Discounted Other Benefits (Sum of the values in Column (d))			
Comment Box:			

Table F-7 - Total Water Supply and Water Quality Economic Benefits (in 2011 Dollars)		
(1)	Total Present Value of Discounted Benefits Based on Unit Value If completed from Table F-4, bottom of Column (i).	
(2)	Total Present Value of Discounted Avoided Project Costs Claimed by Proposal If completed from Table F-5, bottom of Column (h).	
(3)	Total Present Value of Discounted Other Benefits Claimed If completed from Table F-6, bottom of Column (d).	
(4)	Total Discounted Water Supply and Water Quality Benefits Sum of Rows 1, 2, and 3	

## NEW SCIENTIFIC AND TECHNICAL MERIT

New packaging of provided information, and requires additional information:

- Technical adequacy of the project
- Certification of Feasibility
- Environmental documentation and permits (already in Step 1 app)

# NEW SCIENTIFIC AND TECHNICAL MERIT

Technical adequacy of the project

- Document/discuss the use of technically feasible methods and proven technologies to identify and develop the project

Certification of Feasibility

- Certifies project is feasible
- Complete (one) Figures H1-H3

Figure H-1. Engineering Feasibility Certification

I, \_\_\_\_\_, a California registered civil engineer, have reviewed the information presented in support of this Proposal for the following project: \_\_\_\_\_ . Based on this information, and other knowledge I have regarding the proposed project, I find that it can be designed, constructed, and operated to accomplish the purpose for which it is planned. The information I have reviewed to document this statement is listed below.

\_\_\_\_\_  
(Original signature)

List information supporting this certification: (provide a list, e.g., feasibility studies, engineering design studies, construction plans and specifications, water rights permits, etc.).

Figure H-2. Hydrogeologic Feasibility Certification

I, \_\_\_\_\_, a California registered professional geologist, have reviewed the information presented in support of this Proposal for the following project: \_\_\_\_\_ . Based on this information, and other knowledge I have regarding the proposed project, I find that the project's hydrogeological/geological properties adequately support the project. The information I have reviewed to document these statements is listed below.

\_\_\_\_\_  
(Original signature)

List information supporting this certification: (provide a list, e.g., feasibility studies, geologic, geographical, and/or hydrogeologic studies, construction plans and specifications, etc.).

Figure H-3. Project Feasibility Certification  
(For projects that do not involve design work by a licensed professional)

I, \_\_\_\_\_, a \_\_\_\_\_, have reviewed the information presented in support of this Proposal for the following project: \_\_\_\_\_ . Based on this information, and other knowledge I have regarding the proposed project, I find that it can be implemented and operated to accomplish the purpose for which it is planned. The information I have reviewed to document this statement is listed below. My curriculum vita is also attached.

\_\_\_\_\_  
(Original signature)

List information supporting this certification: (provide a list, e.g., project evaluation studies, habitat conservation plans, project implementation plans, monitoring plans, etc.).

Attach curriculum vita

## NEW OTHER EXPECTED BENEFITS

The Step 1 application asked for “multiple” benefits – this section expands and quantifies these types of benefits:

- Ecosystem restoration
- Flood control
- Recreation and public access
- Power cost savings and production

## NEW OTHER EXPECTED BENEFITS

- Descriptions to be as quantitative as possible
- Determine economic value of benefit, if possible (Tables F4-F7 are useful)
- Describe with and without project conditions
- Description of methods to monitor performance of expected benefits
- Describe who will receive and when will they receive the benefits
- Provide full citations for data and method sources

# NEW PERFORMANCE MEASUREMENT MATRIX

Use info from Step 1 and add text as necessary to provide the information required in Exhibit I to the Step 2 package (p. 58):

- Create NEW Attachment 10
- Complete Table I-1

**Table I-1: Performance Measurement Matrix**

Project Objectives and Benefits	No.	Performance Measurements	Source for Measurement Protocol	Baseline Measurement	Proposed Monitoring Interval	Specific Success Criteria

**Explanation of Row:**  
Each row should be a project objective or a project benefit as claimed in the Proposal.

**Explanation of Columns:**

**Project Objectives and Benefits**—The project objectives are associated with a work item or work item description. A work item may contain several sub-work items or may contain several Performance Measurements. The same is true for project benefits.

**Performance Measurements**—Brief descriptions of the purpose or type of measurement, not a full specification of the measurement protocol. The measurement number corresponding to the performance measurement should be used in describing measurement sampling and monitoring design.

**Source for Measurement Protocol**—Cite the agency, website, or other resources that may provide the information on the best methods for conducting recommended measurements. There are accepted protocols that were developed and published by state agencies and other sources. Applicants are encouraged to use those accepted protocols, as appropriate, because they will provide consistency among all site-specific approaches to measure, monitor, and evaluate project success.

**Baseline Measurement**—Specification of special baseline conditions or considerations. It may be left blank if the circumstances of the baseline monitoring do not warrant specific consideration.

**Specific Success Criteria**—Specification of success or performance assessment criteria.

## Status of IRWM Plan Development

- Timeline is being developed by RWMG
- RWMG will discuss an outreach strategy
- Final Plan is due to the State of California on January 1, 2007

FOLLOW UP MEETINGS TO BE  
ANNOUNCED

# Integrated Regional Water Management Grant

Step 2 Application  
Responses Due  
October 28, 2005

## **Regional Water Management Group**

San Diego County Water Authority – Vickie Driver  
San Diego County – Jon Van Rhyn, Trish Boaz  
City of San Diego – Bob Collins