



**FINAL
2004
Water Use Efficiency
Proposal
Solicitation
Package**

**Section A: Agricultural and Urban
Water Use Efficiency Implementation Projects**

**Section B: Research and Development;
Feasibility Studies, Pilot or Demonstration Projects;
Training, Education or Public Information;
Technical Assistance**

November 15, 2004

**2004 WATER USE EFFICIENCY
PROPOSAL SOLICITATION PACKAGE**

**Section A: Agricultural and Urban Water Use Efficiency
Implementation Projects**

**Section B: Research and Development;
Feasibility Studies, Pilot, or Demonstration Projects;
Training, Education or Public Information;
Technical Assistance**

November 15, 2004

The California Department of Water Resources (DWR) invites you to submit a proposal for funding of a Water Use Efficiency Project.

PROPOSAL DUE DATE:

3:00 p.m., January 11, 2005

Must be received at the **Department of Water Resources, not postmarked, by this time and date.**

SUBMIT PROPOSAL TO:

Submit one original, eight photocopies, and one electronic copy for each proposal, on 3.5 inch diskettes or CD-ROM (preferably in a PDF format, or in MS Word and/or Excel compatible format) to:

**California Department of Water Resources
Office of Water Use Efficiency
P.O. Box 942836, Sacramento, CA 94236-0001
Attention: Debra Gonzalez**

or overnight carrier or hand deliver to:

**California Department of Water Resources
Office of Water Use Efficiency
1416 Ninth Street, Room 338, Sacramento, CA 95814
Attention: Debra Gonzalez**

QUESTIONS? NEED ASSISTANCE? CONTACT:

Debra Gonzalez, (916) 651-7026 or
debrag@water.ca.gov

For an electronic copy of this Proposal Solicitation Package, please go to this website: <http://www.owue.water.ca.gov/finance/index.cfm>

**Notice of Public Workshops
for the
2004 Water Use Efficiency
Proposal Solicitation Package**

Workshop Dates and Locations:

Sacramento	Modesto	Chino
November 30, 2004 10:00 – 12:00 pm	December 2, 2004 10:00 am – 12:00 pm	December 6, 2004 10:00 – 12:00 pm
California Department of Water Resources Hearing Room, 1 st Floor Bonderson Building 901 P Street Sacramento, California 95814	Modesto Irrigation District Multipurpose Room 1231 11 th Street Modesto, California 95354	Inland Empire Utilities Agency Events Center, Building B 6075 Kimball Avenue Chino, California 91710

Purpose of Workshops:

This public workshop will provide information about the Final Proposal Solicitation Package (PSP); describe the application, the guidelines for review and selection process.

Workshop Agenda:

(questions will be welcomed during each agenda item)

- Welcome and Introductions 10:00 am
- WUE Proposal Solicitation Package:
How to submit a proposal 10:20 am
- Questions 11:00 am
- Adjourn 12:00 pm

For More Information:

If you have any questions contact Debra Gonzalez at (916) 651- 7026, debra@water.ca.gov

**2004 WATER USE EFFICIENCY
PROPOSAL SOLICITATION PACKAGE
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SECTION A: Agricultural and Urban Water Use Efficiency Implementation Projects

Introduction

The California Bay-Delta Program, a cooperative effort of 24 State and federal agencies with management or regulatory responsibilities for the Bay-Delta, is committed to identifying and assisting in funding the most promising water use efficiency projects that contribute toward its goals. The California Department of Water Resources (DWR), as part of Stage One Implementation, is releasing this Proposal Solicitation Package for the California Bay-Delta Program's Water Use Efficiency Program. DWR is the State Agency designated to manage these grant programs. The focus of this grant program is to fund water use efficiency projects that achieve direct or indirect benefits for water supply reliability, water quality, or other environmental quality to the Bay-Delta System. Direct¹ benefits are project outcomes that contribute to a CALFED Water Use Efficiency objective within the Bay-Delta system. Indirect² benefits are project outcomes that help to reduce dependency on the Bay-Delta related system or improve a region's water supply reliability and quality.

To meet the WUE objectives, DWR is seeking proposals for agricultural and urban water use efficiency projects. DWR is soliciting proposals for two types of projects:

- Section A Implementation Projects: these are water use efficiency implementation projects providing direct or indirect benefits to the Bay-Delta.
- Section B Projects: these are Research and Development Projects; Feasibility Studies, Pilot, or Demonstration Projects; Training, Education or Public Outreach Programs; or Technical Assistance Programs related to Water Use Efficiency. These proposals' outcome should be transferable to other parts of the State and must support the CALFED Water Use Efficiency program goals and objectives.

The total amount of funding for Agricultural and Urban Water Use Efficiency Grants under Proposition 50 is \$120 million. Funding available for the 2004 PSP is \$34 million with 50% for agricultural and 50% for urban water use efficiency projects.

A-1. BACKGROUND, GOALS, AND OBJECTIVES

In November 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. This grant program implements Water Code Chapter 7, Section 79550 (g) of Proposition 50.

Water Code Section 79552 of Proposition 50 states "All projects financed pursuant to this chapter shall be consistent with the CALFED Programmatic Record of Decision including its provision regarding finance and balanced implementation". Water Code Section 79553 of Proposition 50 requires that priority shall be given to projects that achieve multiple benefits across CALFED Program elements.

The 2000 Record of Decision (ROD) defines the Water Use Efficiency Program (WUEP) broadly. "The Water Use Efficiency Program will assure high efficiency

¹ For example, a direct benefit contributes toward a stated Quantifiable Objective for in-stream flow and timing.

² For example, through project implementation an agency can delay the need for additional deliveries from the Bay-Delta system.

through programs that benefit local water users, districts, regions, and the State". To achieve CALFED fundamental goals, the ROD WUEP (pages 2.1 and 2.2), in part, has the following objectives:

- "reduce existing irrecoverable losses – by reducing losses currently unavailable for reuse (because they flow to salt sink, inaccessible or degraded aquifer, or the atmosphere), CALFED will increase the overall volume of available water.
- Achieve multiple benefits - by reducing losses that currently return to the water system (either as groundwater recharge, river accretion, or direct reuse) CALFED can achieve multiple benefits, such as making water available for irrigation or in-stream flow during dry periods, improving water quality, decreasing diversion impacts, and improving flow between the point of diversion and the point of reentry.
- Preserve local flexibility - ,...maintaining the flexibility of implementing water use management and efficiency improvements at the local level while exploring regional program to maximize benefits.
- Use incentive-based over regulatory action. Principal incentives include planning, technical, and financing assistance to local water users and suppliers...
- Build on existing water use efficiency programs, CALFED will enhance the positive momentum established by the existing programs."

The goals of the California Bay-Delta Program's Water Use Efficiency Program include in-stream flow and timing, water quantity and water quality improvements that directly or indirectly provide benefits to the Bay-Delta. The California Bay-Delta Program is committed to identifying and funding the most promising water use efficiency projects, from the CALFED Bay-Delta Program watershed, State Water Project watershed, and watersheds that currently can exchange water with the above watersheds and that directly or indirectly contribute to the California Bay-Delta Program goals.

DWR is seeking proposals for agricultural and urban water use efficiency implementation projects (Section A) as well as proposals that support California Bay-Delta Program goals, including Research and Development Projects; Feasibility Studies, Pilot, or Demonstration Projects; Training, Education or Public Outreach Programs; or Technical Assistance Programs related to Water Use Efficiency (Section B).

A-2. ELIGIBLE APPLICANTS

Eligible applicants are entities involved with water management activities comprised of one of the following:

cities

counties

cities and counties

joint power authorities

public water districts

tribes

nonprofit organizations, including watershed management groups*

other political subdivisions of the State

universities and colleges (Section B only)

State agencies (Section B only)

federal agencies (Section B only)

***nonprofits are defined in Proposition 50 (see Water Code Section 79505)**

The issue of whether investor-owned utilities regulated by the California Public Utilities Commission and incorporated mutual water companies are eligible to receive Proposition 50 bond funds under section 79550(g) is still not resolved at this time. In order to expedite this important program, applications from such entities may be submitted for Section A of this PSP only. (Projects must have a clear and definite public purpose and must benefit consumers of water systems.) The Department will evaluate developments regarding eligibility of these entities and will determine in the near future whether these applications can be processed.

Applicants who wish to collaborate on a project and pursue a regional approach to water use efficiency may elect to use a contractor-subcontractor relationship, a joint venture, a joint powers authority or other appropriate mechanism. Contracts shall be executed with one entity only. The proposal shall clearly indicate who will sign the contract, and who will thereby be responsible for payments, reporting, and accounting. The proposal must describe the nature of the agreement between the other participants, including the allocation of decision-making authority and liability as well as the tasks to be performed by the different entities and costs associated with the tasks. The costs of tasks must be reasonable.

Agencies subject to the Urban Water Management Planning Act must have adopted a complete plan that meets the requirements of the law and submitted it to DWR to be eligible for this program. If you have questions regarding compliance with the Urban Water Management Planning Act, please contact David Todd at (916) 651-7027 or dtodd@water.ca.gov.

A-3. ELIGIBLE PROJECTS

This Program relates to the first action item of the California Bay-Delta Program's Water Use Efficiency Plan: implement agricultural and urban incentive programs to provide funding for water use efficiency projects that will provide benefits to the Bay-Delta including water quantity, water quality, and environmental benefits.

Locally cost effective projects³ are eligible⁴ for State funding only if the applicant can make a compelling case that the project would, in addition to providing Bay-Delta system benefits, provide broad transferable benefits, overcome implementation barriers, or accelerate implementation.

Bay-Delta system benefits may be accomplished through the implementation of projects that demonstrate a potential for achieving California Bay-Delta Program objectives including:

- (a) Urban Best Management Practices (BMPs and PBMPs),
 - i. Residential Water Surveys
 - ii. Residential Plumbing Retrofits
 - iii. System Water Audits, Leak Detection, and Repair
 - iv. Metering
 - v. Large Landscape Conservation
 - vi. High Efficiency Clothes Washers (Specify water factor of models selected for rebates)
 - vii. Public Information (Section B only)
 - viii. School Education (Section B only)
 - ix. Commercial, Industrial, Institutional Conservation
 - x. Residential ULFT Replacement
 - xi. Replacement of Existing Water Use Appliances (except toilets and showerheads)
 - xii. Retrofit of Existing Car Washes
 - xiii. Graywater Use
 - xiv. Distribution System Pressure Regulation
 - xv. Swimming Pool and Spa Water Conservation
 - xvi. Restrictions or Prohibitions on Devices that use Evaporation to Cool Exterior spaces
 - xvii. Point of Use Water Heaters, Recirculating Hot Water Systems and Hot Water Pipe Insulation

³ Proposed projects are either “locally cost effective” or “not locally cost effective”. A project is locally cost effective if its local monetary benefits (include cost of avoided water supply, energy savings, labor savings, or other avoided costs or savings) are greater than or equal to its total cost. Conversely, a project is not locally cost effective if its local monetary benefits are less than its total cost. Applicants must declare whether the project is locally cost effective or not.

In general, local water agencies will not implement projects they judge are not locally cost effective because doing so would not be in the best interest of their rate payers. This is true even when such investments are desirable from a statewide perspective. Therefore, state grant assistance for these projects is provided in cases where the project results in Bay-Delta benefits.

In general, locally cost effective projects are expected to be implemented without state funding because they represent a net economic gain for the implementing agency and in many cases local agencies are compelled to implement locally cost effective projects. For example, signatories of the California Urban Water Conservation Council Memorandum of Understanding have agreed to implement urban water conservation practices that are locally cost effective unless institutional or legal impediments prevent them from doing so. Therefore, state grant assistance may be provided to locally cost effective projects where there are significant Bay-Delta benefits.

⁴ Eligibility does not guarantee funding. An eligible project would be funded only after meeting other tests including whether the proposed Bay-Delta benefits are appropriate for the proposed level of state funding.

(b) Agricultural Efficient Water Management Practices (EWMPs)

- i. Evaluate and improve efficiencies of water suppliers' pumps
- ii. Line or pipe ditches and canals
- iii. Construct and operate water supplier spill and tailwater recovery systems
- iv. Automate canal structures
- v. Water measurement

(c) And other WUE projects that demonstrate a potential contribution toward the CALFED objectives for in-stream flow and timing, water quantity, and water quality that directly or indirectly provide benefits to the Bay-Delta (including projects that address California Bay-Delta Authority Targeted Benefits and Quantifiable Objectives, or WUE projects that help meet Bay-Delta inflow water quality objectives).

Urban projects that focus on landscape water use efficiency and commercial, industrial, and institutional water use efficiency are encouraged.

For more information about BMPs, contact the California Urban Water Conservation Council at www.cuwcc.org, or call (916) 552-5885. For more information about EWMPs or Targeted Benefits, contact the Agricultural Water Management Council at www.agwatercouncil.org or (916) 441-7868.

A-4. INELIGIBLE PROJECTS

Research and development, feasibility studies, pilot or demonstration projects, training, education, or public information, or technical assistance **are not eligible** under Section A, but are eligible under Section B of this package.

Wellhead rehabilitation, new storage tanks providing expanded capacity, water supply development, water treatment, wastewater treatment, flood control, conjunctive use, recycled water, or groundwater banking projects **are not eligible** for funding through this program. No funds will be available to replace existing funding sources for on-going projects, for political advocacy, for the purchase of water, for the establishment of a reserve fund, or for an applicant's litigation costs. Projects that do not achieve direct or indirect in-stream flow and timing, water quantity, and/or water quality benefits to the Bay-Delta **are not eligible** for funding. A project is not eligible for funding through this PSP if it is currently required by regulation, law, or contract.

A-5. GEOGRAPHIC SCOPE

Projects from throughout the State that contribute to the California Bay-Delta Program goals will be considered for funding through this program. Projects from the CALFED Bay-Delta Program watershed, State Water Project watershed, and watersheds that currently can exchange water with the above watersheds and that contribute directly or indirectly to the California Bay-Delta Program goals will be considered for Section A projects. Section B projects may be from throughout the State that demonstrate transferable benefits to other parts of the State and must support the CALFED Water Use Efficiency Program goals and objectives. Consideration will be given in the selection process to the distribution of projects throughout these geographic regions of California: Southern California, Bay Area, San Joaquin Valley, and Sacramento Valley.

A-6. DISTRIBUTION OF FUNDS

Approximately half of the funds will be dedicated to urban projects and half to agricultural projects. Approximately 75 percent will go toward implementation projects (Section A) and 25 percent to other projects that support the overall program (Section B). There is no per-project limit.

Contract execution and disbursements are subject to the availability of funds.

A-7. MATCHING FUNDS

Grant funds are provided as an incentive to local entities to implement projects that are expected to create broad direct or indirect public Bay-Delta system benefits. Grant funds are provided as incentives for projects that would not occur or would not happen in a way that generates broad Bay-Delta system benefits.

Examples of Bay-Delta system benefits include water supply benefits to the Bay-Delta system beyond local benefits, and water quality improvements in the Bay-Delta solution area, increased in-stream flows in the Bay-Delta system, or broadly transferable practices that improve the management and efficient use of the State's water resources.

The applicant is responsible for providing a cost share or donated services from non state sources. The cost share for a project funded under this PSP is based on the relative balance of Bay-Delta and local benefits expected from the project. Because project benefits and the relative balance of Bay-Delta and local benefits are difficult or impossible to quantify, project applicants are expected to propose a subjective cost share and provide a descriptive case for the proposed share (See Table C-8). All applicants must make a compelling case that their project would create Bay-Delta benefits. DWR may offer a lower State cost share than proposed by the applicant based on the grant selection panel's assessment of the relative balance of benefits.

For a project to receive more than a 50% State cost share, the proposal must make a compelling case that the Bay-Delta system benefits exceed the local benefits. Grant applications that offer more tangible Bay-Delta system benefits will be considered more competitive in the selection process and receive greater cost share. In addition, projects that commit to creating quantifiable Bay-Delta system benefits will tend to receive the highest ranking in the selection process and thus receive greater State cost share. As such, Table C-5 requests (but does not require) information on quantified benefits.

Locally cost effective projects are eligible for funding only if the applicant can make a compelling case that the project would provide broad transferable benefits, overcome implementation barriers, or accelerate implementation.

Applicants proposing locally cost effective projects must still propose a cost share commensurate with the relative balance of Bay-Delta and local benefits. However, locally cost effective projects are only eligible for up to 25% State cost share because these projects are likely to be implemented without State funding. In addition, DWR intends to limit the total awards for locally cost effective projects to approximately 10% of the funds available under Section A. As such, DWR may reduce the per-project State cost share for locally cost effective projects if many of these projects are awarded.

With respect to the foregoing, applicant is responsible for ascertaining and complying with all applicable legal requirements concerning such matching funds or donated services.

Only work performed after the effective date of the contract will be eligible for reimbursement. Costs incurred after November 5, 2002 but prior to the effective date of the grant contract are not eligible for reimbursement, but may be considered, at DWR's discretion, as a part of the applicant's local match. Reimbursement is subject to contract execution. Therefore, applicants wishing to start work before contract execution should do so at their own risk. Advance funds cannot be provided.

Disadvantaged Communities

Cost share is not required of projects that serve communities with an annual median household income that is less than 80 percent of the statewide annual median household income. (Eighty percent of the statewide annual median household income for 2002 is \$38,000.) The applicant shall provide the source of information documenting project geographic scope and annual median household income for the specific disadvantaged community.

A-8. DURATION OF PROJECTS

Funds shall be expended within three years of the award of the grant. If the project exceeds one year in duration, a budget with discrete 12-month periods shall be provided.

Projects may be multiyear efforts if necessary and appropriate, but proposal timelines and budgets that will be incorporated into the contract shall not exceed three years. In addition, since funding may be awarded for only a portion of each submitted project, the applicant should clearly show which tasks could be funded separately. When a portion of a project is funded, there is no guarantee that the remaining portions or future phases of that project will be funded. Future funding will depend on the progress of the project, the nature and extent of competing proposals, priorities, program authorization, and funding availability. However, if unexpected delays cause a grantee to need more than a three year agreement period to complete the project tasks, the applicant may apply for an extension before the end of the initial agreement period at no additional cost to the State beyond the initial grant amount. The extension is subject to DWR approval.

A-9. AGREEMENT REQUIREMENTS

a. Standard Terms and Conditions. Projects selected for funding will be subject to standard terms and conditions as specified by authorizing legislation and DWR procedures. The recipient must sign an agreement containing standard terms and conditions with DWR before the State can disburse funds. Funds will be delivered in accordance with the executed agreement. Applicants should not begin work on projects prior to the execution of the agreement.

b. Reports. Successful applicants will be required to submit quarterly fiscal and programmatic reports January 15, April 15, July 15, and October 15 throughout the project and a comprehensive final report at the end of the project. Water use data will also be required including the data described in Section A-15e, Monitoring and Assessment. All data and information obtained under the contract will be made available in the public domain.

The applicant will be required to provide the following items, c and d, only if the proposal is selected for funding. The applicant need not submit these items with the proposal.

c. Matching Funds Commitment Letter. The applicant shall provide an institutional cost-sharing agreement (letter) signed by an official authorized to commit the applicant to all or part of the matching share or a letter authorizing third party, in-kind contribution signed by an official authorized to commit the third party.

d. Resolution. Prior to the execution of the contract, the applicant shall provide a resolution from their governing board accepting the funds and designating a representative authorized to execute the contract and sign requests for disbursement.

A-10. LABOR CODE COMPLIANCE

Applicants awarded grants shall keep informed of and take all measures necessary to ensure compliance with Labor Code requirements, including but not limited to Section 1720 *et seq.* of the Labor Code regarding public works.

A-11. CONFLICT OF INTEREST AND CONFIDENTIALITY AND INTELLECTUAL AND PROPRIETARY RIGHTS

All participants, including applicants and reviewers, are subject to State conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the proposal being rejected and/or any subsequent contract being rejected and/or subsequent contract being declared void. Applicable statutes include, but are not limited to, Government Code Section 1090, Public Contract Code Sections 10410 and 10411.

All proposals will become public information upon submittal to DWR. Once the proposal is signed and submitted to DWR, the applicant waives any rights to privacy and the confidentiality of the proposal.

Applicants awarded grants will be required to waive any copyright, intellectual or proprietary rights for deliverables, designs and patents emanating from the contracted work.

A-12. PROPOSAL REVIEW, SELECTION, AND AWARD PROCESS

1. Proposals are received by DWR and initially reviewed by the CALFED Water Use Efficiency Program Agency Team: Department of Water Resources, Bureau of Reclamation, Natural Resources Conservation Service, State Water Resources Control Board, and CBDA.
2. Proposals are reviewed by the Science and Economics Technical Teams.
3. Proposals are provided to the Technical Review Panel (composed of CBDA agencies, stakeholders, and subject matter experts) with reports from the Technical Teams.
4. The Review Panel members submit preliminary ratings, based on criteria established in this Proposal Solicitation Package.
5. The Review Panel convenes to discuss proposals, receive any additional clarification from the technical teams, and revise their scores, as desired.

6. The CBDA Agency Team receives final ratings and comments from the Review Panel and produces a draft list of projects recommended for funding based on Review Panel ratings, geographic and categorical distribution, and the availability of funds.
7. A public workshop is held to release the draft funding recommendations and to receive public comments.
8. Final funding recommendations are presented to DWR and CBDA.
9. DWR makes the final funding decision.
10. Projects selected for funding will be posted on the DWR website at: www.owue.water.ca.gov
11. Contract negotiations begin.
12. Final contracts are executed.
13. Projects begin.

A-13. ANTICIPATED SCHEDULE

The anticipated schedule for this process is as follows:

By 11/15/04	Final Proposal Solicitation Package released
By 01/11/05	Proposals due.
By 04/18/05	Review process completed, workshops conducted, recommendations presented to CBDA, and DWR Management.
By 05/09/05	DWR makes final funding decision.
By 06/01/05	Contract negotiations begin.
By 12/01/05	Contracts executed, projects begin.

A-14. SELECTION CRITERIA

Section A proposals will be reviewed and evaluated according to the following criteria:

	<u>Criteria</u>	<u>Points</u>
A	Relevance and Importance	10
B	Technical/Scientific Merit, Feasibility	20
C	Monitoring and Assessment	15
D	Qualifications of the Applicants and Cooperators	5
E	Outreach, Community Involvement and Acceptance	5
F	Innovation	10
G	Costs and Benefits	35

No project with an average total score of less than 70 points shall be funded.

A-15. PROPOSAL SUBMITTAL AND CONTENTS

The proposal, including one original, eight photocopies and one electronic copy on 3.5 inch diskettes or CD-ROM (preferably in a PDF format or in MS Word and/or Excel compatible format), must be received by 3:00 p.m, January 11, 2005 at:

**California Department of Water Resources
Office of Water Use Efficiency
P.O. Box 942836, Sacramento, CA 94236-0001,
Attention: Debra Gonzalez,**

or by overnight carrier or hand delivered to:

**California Department of Water Resources
Office of Water Use Efficiency
1416 Ninth Street, Room 338, Sacramento, CA 95814
Attention: Debra Gonzalez, (916) 651-7026**

The entire proposal shall be in 12-point font or larger on 8 ½-11 inch paper. The proposal shall not exceed 30 single-spaced, consecutively numbered pages. Maps, photographs, figures, tables, or resumes attached to the Proposal are not included in the page limit. Proposals that exceed the 30-page limit will be excluded from consideration.

A complete proposal consists of the following:

- Project Information Form (Appendix A)
- Signature Page (Appendix B)
- Statement of Work, Section One: Relevance and Importance
- Statement of Work, Section Two: Technical/Scientific Merit, Feasibility
- Statement of Work, Section Three: Monitoring and Assessment
- Qualifications of the Applicants and Cooperators
- Outreach, Community Involvement, and Acceptance
- Innovation
- Benefits (supporting documentation)
- Costs (Tables in Appendix C and supporting documentation)

A-15a. Project Information Form: Complete Appendix A.

A-15b. Signature Page: Complete Appendix B.

A-15c. Statement of Work, Section 1: Relevance and Importance (Section A projects: 10 points)

Water Code Chapter 7, Section 79553 of Proposition 50, sets a priority for projects that achieve multiple benefits across CALFED program elements consistent with the CALFED Programmatic Record of Decision. Describe the goals and objectives of the project. Include an explanation of the need for the project as related to critical local, regional, Bay-Delta, State, or federal water issues. Describe how this project would be consistent with local or regional water management plans or other integrated resource management plans. Document the implementation of water demand management activities that have been identified in urban or agricultural water management plans. Describe how the project will further implement existing water management activities or initiate new ones.

A-15d. Statement of Work, Section 2: Technical/Scientific Merit, Feasibility (Section A projects: 20 points)

Describe methods, procedures, equipment, and facilities. Provide enough information to permit evaluation of the feasibility and technical adequacy of the approach to satisfy the objectives and the applicant's readiness to proceed.

Provide a task list and schedule. Provide a project plan and work schedule with tasks, deliverable items, start and end dates, and projected costs for each task. This plan will form the basis of the required quarterly and annual project fiscal and programmatic reports. Should a project be awarded a grant, these items will be used in development of the contract and used for project tracking purposes.

Preliminary Plans and Specifications and Certification Statements (for construction projects only). Submit Final Plans and Specifications or Preliminary Plans and Specifications for the proposed project if Final Plans and Specifications are not complete. The Preliminary Plans should indicate, at a minimum, types and quantities of materials, dimensions, and location. Certification Statements verify that the project is feasible. A California registered civil engineer must prepare the Plans and Specifications and Certification Statements.

Environmental Documentation

Include a plan for compliance with all applicable environmental requirements. The plan should address all the potential environmental, social and economic impacts of the proposed project, including mitigation, required under the California Environmental Quality Act (CEQA) and, if applicable, the National Environmental Policy Act (NEPA). The plan should also address compliance with local, county, State, and federal permitting requirements.

Submit the following items:

- A detailed plan for compliance with all applicable environmental laws.
- A schedule for completion of all appropriate environmental documentation.
- A completed Environmental Impact Checklist that can be found at:
http://ceres.ca.gov/topic/env_law/ceqa/guidelines/Appendix_G.html

If an Initial Study has been prepared for the project, provide a copy of the checklist accompanying that document.

Compliance with NEPA must also be demonstrated if NEPA requirements apply to the project.

If this is not a "project" as defined by CEQA, state in this section.

A "project" as defined by CEQA, California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15378 is:

"... the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment...."

For general information about environmental compliance, refer to this website:
<http://ceres.ca.gov/ceqa>.

For information about environmental regulatory compliance for California Bay-Delta Program projects, please refer to the "Guide to Regulatory Compliance for Implementing CALFED Actions" at: <http://www.calwater.ca.gov/CALFEDDocuments/GuideToRegulatoryCompliance.shtml>. For assistance in establishing environmental significance of project specific impacts to farmland, refer to this website: <http://www.consrv.ca.gov/DLRP/index.htm>.

A-15e. Statement of Work, Section 3: Monitoring and Assessment (Section A projects: 15 points)

Provide a plan for project monitoring and evaluation that will be used to document water savings and other Bay-Delta system benefits (identified in Table C-5) to mark progress and to determine the success of the project. Monitoring and evaluation costs are expected to be an integral part of each project and may be assigned as a Bay-Delta Benefit. (See Table C-8). Monitoring plans should include:

- A description of how pre-project conditions and data baselines will be determined, the basic assumptions being used, and the anticipated accuracy of the data to be produced.
- An explanation of the monitoring methodologies that will be used and the project monitoring data that will be collected to assess project results.
- An explanation of how the above data will be used to evaluate success in relation to project goals and objectives.
- A description of how external factors such as changes in weather, cropping programs, or social conditions will be taken into account.
- Information about how the data and other information will be handled, stored, and reported and made accessible to DWR and others.
- The estimated costs associated with the implementation of the monitoring and evaluation plan.

Applicants will be asked to re-evaluate project cost/benefit analysis as part of the final report. Applicants will also be asked to submit annual reports of benefits and costs for five years after the completion of the project.

A-15f. Qualifications of the Applicants and Cooperators (Section A projects: 5 points)

1. Include a resume(s) of the project manager(s). Resumes may be attached to the end of the proposal and shall not exceed two pages.
2. Identify and describe the role of any external cooperators that will be used for this project.
3. Describe briefly any previous water use efficiency grant projects in which the applicant has participated. Consideration will be given to the applicant's performance in prior water use efficiency programs.

4. If applicant is a disadvantaged community, provide geographic scope and the source of information documenting annual median household income.

A-15g. Outreach, Community Involvement, and Acceptance (Section A projects: 5 points)

Applicants are encouraged to coordinate prior to submitting a proposal with local governments and other local entities such as community based organizations and watershed groups. The proposal shall describe a plan for public outreach to the groups or individuals that may be affected by the project. Identify which local groups or other interested organizations are aware of the project and their level of support or opposition. Identify any potential third party impacts. Estimate the number of people or organizations that are expected to receive training, employment, or other social or economic benefits from the project. Describe any opposition to the proposed project.

A-15h. Innovation (Section A projects: 10 points)

Describe innovative technologies or methodologies to be employed in the project that could contribute to improved efficiencies in projects throughout the State.

A-15i. Benefits and Costs (Section A projects: 35 points)

The focus of this grant program is to fund projects that achieve direct or indirect in-stream flow and timing, water quantity, and water quality benefits to the Bay-Delta System. All applicants must provide a qualitative description, and where available a quantitative assessment of the project's local and Bay-Delta system benefits.

Costs and Benefits Tables

Complete Project Costs Tables C-1, C-2, and C-3 and Benefit Tables C-5, C-6, and C-7 in Appendix C. Files are available at this website:

<http://www.owue.water.ca.gov/finance/index.cfm>

All major assumptions, methodologies, computations and other relevant information must be documented.

Table C-1: Project Costs (Budget). Provide a brief explanation for the labor costs (including consultants), equipment, supplies, and travel included in the budget. Complete only the lines that are applicable for your particular project. Table C-1 will be used as the basis for the contract budget for the project, if selected for funding. Applicant's contingency for each cost category should be no more than 10% of the cost of the category. Convert all capital costs to present value (2004 dollars) using the capital recovery factor in Table C-4 which is based on a six percent discount rate.

Table C-2: Annual Operations and Maintenance Costs. Include annual administration, operations, maintenance, and other annual costs. Annual O&M costs are not eligible costs that can be paid out of the grant.

Table C-3: Total Annual Project Costs. This table totals annual project implementation costs from Table C-1 and annual operations and maintenance costs from Table C-2.

Table C-4: Capital Recovery Factor

This is a reference table that may be used for Table C-1.

Table C-5: Project Annual Physical Benefits (Qualitative and Quantitative). All applicants must qualitatively describe the type of physical benefits (in-stream flow and timing, water quantity or water quality) that will be realized for each beneficiary (Bay-Delta and Local). The following qualitative information should be included: type of benefit (in-stream flow and timing, water quantity or water quality), the time pattern and location of where the benefit will be realized as well as the duration of the benefit to each beneficiary. For Bay-Delta system benefits, applicants must describe why the benefit is Direct, Indirect or both. Provide description in a narrative form.

If available, applicants should provide quantitative benefit information. For in-stream flow and timing and water quantity benefits this would include water volumes, for water quality benefits this should be the change in constituent concentration (or temperature) that would be realized through project implementation. If local quantified benefits include the value of water conserved the volume in acre-feet should be provided in Table C-5. The avoided cost of the volume of water conserved should be provided in Table C-6 (below).

Table C-6: Project Annual Local Monetary Benefits. All applicants must provide the local monetary benefits of the project. These could include avoided water supply, energy, wastewater treatment and labor costs. If there are other local monetary benefits please list and describe them.

Table C-7: Project Local Monetary Benefits and Project Costs. This is a summary of the Annual Project Costs (Table C-3) and Project Annual Local Monetary Benefits (C-6).

Table C-8: Applicant's Cost Share and Description. This table describes the applicant's local cost share percentage. This is the maximum amount of cost share that the applicant is willing to provide in matching funds for the project. In addition all applicants must describe how the cost share percentage, based on the relative balance between Bay-Delta system and local benefits, are derived. Provide description in narrative form.

A total of 35 points will be awarded for the Benefits and Costs Section.

SECTION B: Research and Development; Feasibility Studies, Pilot, or Demonstration Projects; Training, Education or Public Information; Technical Assistance

B-1. BACKGROUND, GOALS, AND OBJECTIVES:

See A-1.

B-2. ELIGIBLE APPLICANTS:

See A-2.

B-3. ELIGIBLE PROJECTS

This Program supports the first action item of the California Bay-Delta Program's Water Use Efficiency Plan: implement agricultural and urban incentive programs to provide funding for water use efficiency projects that will provide multiple benefits including water quantity, water quality, and environmental benefits. Projects from throughout the State that support, promote, evaluate, or explore the California Bay-Delta Program's Water Use Efficiency Program Plan are eligible for funding under this section. The benefits identified by the proposed projects should be transferable to other parts of the State and must support the CALFED Water Use Efficiency program goals and objectives. All Section B applicants are required to complete Qualitative Description of Benefits in Table C-5. Following is a partial list of agricultural and urban projects of interest.

1. Agricultural water use efficiency research and development, feasibility studies, pilot or demonstration projects

- Estimation of past, present, and future water savings in agriculture
- Monitoring and evaluation of current and completed water use efficiency projects to validate results and make recommendations for future projects
- Applied research projects on specific soil, water, plant issues as related to water use efficiency
- Exploration of links between efforts to reduce total maximum daily loads (TMDLs) and water use efficiency practices
- Potential benefits and costs of regulated deficit irrigation technologies and management practices for all applicable crops
- Potential benefits and costs of employing remote sensing technology to improve water use efficiency
- Potential benefits and costs of alfalfa summer dry down
- Potential benefits and costs of improved water use practices associated with crops, crop processing, or land management practices affecting water use efficiency (for example rice, processing tomatoes, reduced tillage, grazing lands)

- Potential benefits and costs of improved water use efficiency associated with reduced tillage
- Potential benefits and costs of improved furrow irrigation
- Potential benefits and costs of efficient water and land management practices for grazing lands
- Exploration of new technologies and water management practices to improve water use efficiency

2. Urban water use efficiency feasibility studies, research and development, pilot or demonstration projects

- Estimate past, present, and future water savings in the urban sector
- Monitoring and evaluation of current and completed water use efficiency projects to validate results and make recommendations for future projects
- Identify total urban irrigated landscape areas in State by region
- Develop demonstration gardens that promote water use efficiency
- Survey water districts to ascertain indoor versus outdoor residential water use, market penetration of water conservation devices, customer motivation to conserve, etc.
- Explore the production and promotion of standardized billing and reporting systems (customer type, units of measure, etc.)
- Produce data protocols for evaluating water conservation programs in terms of benefits and costs
- Bench test data loggers
- Explore flapper replacement
- Develop Water Star rating system for water using appliances
- Develop Water Star Home certification program for new and existing residences
- Explore new technologies and water management practices to improve water use efficiency
- Evaluate the water conservation, environmental benefits and overall cost/benefits of artificial turf

3. Statewide agricultural water use efficiency training, education, or public education programs

- 4. Statewide urban water use efficiency training, education, or public education programs**
- 5. Statewide agricultural water use efficiency technical assistance programs**
 - Statewide technical assistance to facilitate the implementation of Efficient Water Management Practices or other agricultural water use efficiency actions
 - Statewide technical assistance to facilitate the preparation of Agricultural Water Management Plans including Net Benefit Analyses
 - Statewide technical assistance to facilitate the submittal of a proposal to receive funds through Proposition 50 or other programs
- 6. Statewide urban water use efficiency technical assistance programs**
 - Statewide technical assistance to facilitate the implementation of Best Management Practices or other urban water use efficiency actions
 - Statewide technical assistance to facilitate the preparation of Urban Water Management Plans
 - Statewide technical assistance to facilitate the submittal of a proposal to receive funds through Proposition 50 or other programs
 - CIMIS program build-out to accommodate urban non-ideal station data on DWR website

B-4. INELIGIBLE PROJECTS
SEE A-4

B-5. GEOGRAPHIC SCOPE
Projects from throughout the State will be considered for funding. Applicant must demonstrate how project outcome supports the California Bay-Delta Program's Water Use Efficiency Program Plan.

B-6. DISTRIBUTION OF FUNDS
SEE A-6

B-7. MATCHING FUNDS
There is no matching fund requirement for Section B projects. However, the provision of matching funds from non-State sources is encouraged.

B-8. DURATION OF PROJECTS
SEE A-8.

B-9. AGREEMENT REQUIREMENTS

SEE A-9.

B-10. LABOR CODE COMPLIANCE

SEE A-10.

B-11. CONFLICT OF INTEREST AND CONFIDENTIALITY

SEE A-11.

B-12. PROPOSAL REVIEW, SELECTION, AND AWARD PROCESS

SEE A-12.

B-13. ANTICIPATED SCHEDULE

SEE A-13.

B-14. SELECTION CRITERIA

	<u>Criteria</u>	R&D, Feasibility. Studies, Pilots, Demos Points	Training, Education, Public Info Points	Technical Assistance Points
A	Relevance and Importance	10	15	10
B	Technical/Scientific Merit, Feasibility	25	20	25
C	Monitoring and Assessment	25	10	15
D	Qualifications of the Applicants and Cooperators	5	5	5
E	Outreach, Community Involvement and Acceptance	10	25	20
F	Innovation	10	10	10
G	Costs and Benefits	15	15	15

No project with an average total score of less than 70 points shall be funded.

B-15. PROPOSAL CONTENTS

SEE A-15, except for Outreach, Community Involvement and Acceptance, A-15g, and Benefits and Costs, A-15i.

For projects under Section B, provide the following information:

Describe how this project will contribute toward or support California Bay-Delta Program goals.

Provide estimates of total expected water savings for proposals that are designed to lead to quantifiable water savings. Provide an explanation for all assumptions, methodologies, and computations used to arrive at the values.

Provide a plan for project monitoring and evaluation that will be used to document the benefits to mark progress and to determine the success of the project in relation to project goals and objectives.

Statement of Work, See A-15c, A-15d, A-15e.

In addition:

For Research and Development projects:

Provide hypothesis upon which the research is based, background of existing pertinent research in this area and research and monitoring and assessment methodologies.

For Training, Education or Public Outreach Programs:

Provide a clear scope of the program and materials that will be used or developed and strategy for implementing the program on a statewide basis.

For Technical Assistance:

Describe the scope and target recipients of the assistance and purpose for providing assistance to the proposed clients.

Outreach, Community Involvement and Acceptance

Feasibility studies, research, pilot, or demonstration projects such as the investigation of new technologies, methodologies, approaches, institutional frameworks; quantification of existing water use efficiency projects; or market transformation studies conducted exclusively in a laboratory or office should describe how information and project results will be disseminated.

Benefits and Costs

Complete Appendix C, Table C-1: Project Costs (Budget), Fill in shaded areas of column I – VI only.

Provide a brief explanation for the labor costs (including consultants), equipment, supplies, and travel included in the budget. Provide information about the amount of cost sharing for each element as well as direct and indirect costs.

Describe the potential benefits and information to be gained in terms of water use efficiency.

Compare the potential benefits and anticipated information to be gained to the anticipated costs.

2004 Water Use Efficiency Proposal Solicitation Package

APPENDIX A: Project Information Form

Applying for:

Urban

Agricultural

1. (Section A) **Urban or Agricultural Water Use Efficiency Implementation Project**

(a) implementation of Urban Best Management Practice, # _____

(b) implementation of Agricultural Efficient Water Management Practice, # _____

(c) implementation of other projects to meet California Bay-Delta Program objectives, Targeted Benefit # or Quantifiable Objective #, if applicable 53, 66, 67, 68, 71, 75, 88, 106, 107, 113, 114, 127, 130, 132, 144, 147 and 157

2. (Section B) **Urban or Agricultural Research and Development; Feasibility Studies, Pilot, or Demonstration Projects; Training, Education or Public Information; Technical Assistance**

(d) Specify other: _____

(e) research and development, feasibility studies, pilot, or demonstration projects

(f) training, education or public information programs with statewide application

(g) technical assistance

(h) other

3. Principal applicant (Organization or affiliation):

San Joaquin County Resources Conservation District

4. Project Title:

Expanded Mobile Irrigation Lab and Irrigation Workshops n Spanish

5. Person authorized to sign and submit proposal and contract:

Name, title

Bill Koster. President

Mailing address

3422 West Hammer Lane, A

Stockton, CA 95219

Telephone

209 472-7127 x125

Fax.

209 472-7890

E-mail

6. Contact person (if different):	Name, title.	Ruth Mulrooney, Program Mgr
	Mailing address.	Same
	Telephone	Same
	Fax.	Same
	E-mail	ruthmulrooney@softnet.com

7. Grant funds requested (dollar amount): **\$865,000.00**
(from Table C-1, column VI)

8. Applicant funds pledged (dollar amount): **In Kind \$974,100.00**

9. Total project costs (dollar amount): **\$1,839,000.00**
(from Table C-1, column IV, row n)

10. Percent of State share requested (%): **47%**
(from Table C-1)

11. Percent of local share as match (%): **53%**
(from Table C-1)

12. Is your project locally cost effective?
Locally cost effective means that the benefits to an entity (in dollar terms) of implementing a program exceed the costs of that program within the boundaries of that entity.
(If yes, provide information that the project in addition to Bay-Delta benefit meets one of the following conditions: broad transferable benefits, overcome implementation barriers, or accelerate implementation.)

(a) yes
 (b) no

11. Is your project required by regulation, law or contract? (a) yes
 If no, your project is eligible. (b) no
- If yes, your project may be eligible only if there will be accelerated implementation to fulfill a future requirement and is not currently required.

Provide a description of the regulation, law or contract and an explanation of why the project is not currently required.

12. Duration of project (month/year to month/year): **01/2006 to 04/2008**
13. State Assembly District where the project is to be conducted: **15,17,19,25,26,27,28,30**
14. State Senate District where the project is to be conducted: **5,8,11,12,14,15,16**
15. Congressional district(s) where the project is to be conducted: **10,11,12,13,14,16,17,18,19,20**
16. County where the project is to be conducted: **San Joaquin, Stanislaus, Merced, Fresno, Santa Cruz, San Mateo, Monterey and San Benito**
17. Location of project (longitude and latitude)
18. How many service connections in your service area (urban)? **N/A**
19. How many acre-feet of water per year does your agency serve? **N/A**

20. Type of applicant (select one):

- (a) City
- (b) County
- (c) City and County
- (d) Joint Powers Authority
- (e) Public Water District
- (f) Tribe
- (g) Non Profit Organization
- (h) University, College
- (i) State Agency
- (j) Federal Agency
- (k) Other
 - (i) Investor-Owned Utility
 - (ii) Incorporated Mutual Water Co.
 - (iii) Specify _____

21. Is applicant a disadvantaged community? If 'yes' include annual median household income.

(Provide supporting documentation.)

- (a) yes, _____ median household income
- (b) no

2004 Water Use Efficiency Proposal Solicitation Package
APPENDIX B: Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form has the legal authority to submit the proposal on behalf of the applicant;

There is no pending litigation that may impact the financial condition of the applicant or its ability to complete the proposed project;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant;

The applicant will comply with all terms and conditions identified in this PSP if selected for funding; and

The applicant has legal authority to enter into a contract with the State.

Signature

Bill Koster , President
Name and title

Date

APPENDIX C: Project Costs and Benefits Tables

Table C- 1: Project Implementation Costs (Budget)

Table C- 2: Annual Operations and Maintenance Costs

Table C- 3: Total Annual Project Costs

Table C-4: Capital Recovery Factor

Table C- 5: Project Annual Physical Benefits (Quantitative and Qualitative Description of Benefits)

Table C- 6: Project Annual Local Monetary Benefits

Table C- 7: Project Local Monetary Benefits and Project Costs

Table C- 8: Applicant's Cost Share and Description

**APPENDIX C
PROJECT IMPLEMENTATION COSTS TABLE**

APPLICANT: San Joaquin County Resource Conservation District
Project Title: Expanded Mobile Irrigation Lab and Irrigation Workshops in Spanish

If using the excel tables on DWR website, complete shaded areas only.

Section A projects must complete Life of Investment, column VII and Capital Recovery Factor, column VIII. Do not use 0.

Table C-1: Project Costs (Budget)

	Category	Project Costs \$	Contingency % (ex. 5 or 10)	Project Cost + Contingency \$	Applicant Share \$	State Share \$	Life of investment (Years)	Capital Recovery Factor (Table C-4)	Annualized costs \$
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
	Administration (for initiation of project)								
	Salaries, wages	\$109K		\$1.839 mil		\$109K			
	Fringe benefits								
	Supplies								
	Equipment								
	Consulting services	\$756K				\$756K			
	Travel								
	Other INKIND				\$974K				
(a)	Total Administration Costs ¹								
(b)	Planning/Design/Engineering								
(c)	Equipment Purchases/Rentals/Rebates/Vouchers								
(d)	Materials/Installation/Implementation								
(e)	Implementation Verification								
(f)	Project Legal/License Fees								
(g)	Monitoring and Assessment								
(h)	Report Preparation								
(i)	Structures								
(j)	Land Purchase/Easement								
(k)	Environmental Compliance/Mitigation/Enhancement								
(l)	Construction								
(m)	Other (Specify)								
(n)	TOTAL (=a+...+m)	\$865K	NA	\$1.839 mil	\$974K		NA	NA	
(o)	Cost Share Percentage	NA	NA	NA	53%	47%	NA	NA	NA

¹ (Excludes administration O & M costs)

Table C-2: Annual Operations and Maintenance Costs

Operations (1) (I)	Maintenance (II)	Other (III)	Total (IV) (I + II + III)
			0

(1) Include annual O&M administration costs here.

Table C-3: Total Annual Project Costs

Annual Project Costs (1) (I)	Annual O & M Costs (2) (II)	Total Annual Project Costs (III) (I + II)

(1) From Table C-1, row (n) column (IX)

(2) From Table C-2, column (IV)

Table C-4: Capital Recovery Factor

(for a discount rate of 6%)

Life of Project (in years)	Capital Recovery Factor
1	1.0600
2	0.5454
3	0.3741
4	0.2886
5	0.2374
6	0.2034
7	0.1791
8	0.1610
9	0.1470
10	0.1359
11	0.1268
12	0.1193
13	0.1130
14	0.1076
15	0.1030
16	0.0990
17	0.0954
18	0.0924
19	0.0896
20	0.0872
21	0.0850
22	0.0830
23	0.0813
24	0.0797
25	0.0782

Life of Project (in years)	Capital Recovery Factor
26	0.0769
27	0.0757
28	0.0746
29	0.0736
30	0.0726
31	0.0718
32	0.0710
33	0.0703
34	0.0696
35	0.0690
36	0.0684
37	0.0679
38	0.0674
39	0.0669
40	0.0665
41	0.0661
42	0.0657
43	0.0653
44	0.0650
45	0.0647
46	0.0644
47	0.0641
48	0.0639
49	0.0637
50	0.0634

Table C-5: Project Annual Physical Benefits (Quantitative and Qualitative Description of Benefits)

QUALITATIVE DESCRIPTION - REQUIRED OF ALL APPLICANTS ¹				QUANTITATIVE BENEFITS –(where data are available) ²
Description of physical benefits (in-stream flow and timing, water quantity and water quality) for:	Time Pattern and Location of Benefit	Project Life: Duration of Benefits	State Why Project Bay-Delta benefit is Direct ³ , Indirect ⁴ or Both	Quantified Benefits (in-stream flow and timing, water quantity and water quality)
Bay-Delta:				
Local:			Not Applicable	

¹The qualitative benefits should be provided in a narrative description. Use additional sheets to describe the benefits.

²The project benefits that can be quantified (i.e. volume of water saved or mass of constituents reduced) should be provided.

³Direct benefits are project outcomes that contribute to a CALFED objective within the Bay-Delta system during the life of the project.

⁴Indirect benefits are project outcomes that help to reduce dependency on the Bay-Delta system. Indirect benefits may be realized over time.

Table C-6. Project Annual Local Monetary Benefits

ANNUAL LOCAL BENEFITS	ANNUAL QUANTITY ⁴	UNIT OF MEASUREMENT	ANNUAL MONETARY BENEFITS (Thousands \$/yr)
(a) Avoided Water Supply Costs (Current or Future Sources)			
(b) Avoided Energy Costs			
(c) Avoided Waste Water Treatment Costs			
(d) Avoided Labor Costs			
(e) Other (describe)			
(f) Total [(a)+(b)+(c)+(d)+(e)]	NA	NA	

⁴ Examples include avoided cost of current water supply (or future supply if available), energy savings, labor savings, waste water treatment.

Table C-7: Project Local Monetary Benefits and Project Costs

(a) Total Annual Monetary Benefits (Table C-6, row(f))	\$
(b) Total Annual Project Costs (Table C-3, column III)	\$

Table C-8: Applicant's Cost Share and Description

Applicant's cost share (%): (from Table C-1, row o, column V)	
Describe how the cost share (based on relative balance between Bay-Delta and Local benefits) is derived (see Section A-7 for description). Provide description in a narrative form.	



*California Department of Water Resources
Office of Water Use Efficiency
P.O. Box 942836
Sacramento, CA 94236-0001*

Prop 50 WUE

Task # 1

Title: Expanded Mobile Irrigation Lab

Statement of Work, Section One: Relevance and Importance

The San Joaquin County Resource Conservation District (SJCRCDD) was founded in the early 1980's with the consolidation of all of the Soil Conservation Service office that had been operating in the county since the mid 1950's. The SJCRCDD as had a long history of successful conservation projects, including:

Wind and water soil erosion and air and water quality improvement demonstration projects.

Grant of \$25,000.00, from the Natural Resources Conservation Services, USDA

The SJCRCDD, a California special district, and NRCS have a common objective of helping to bring about the conservation and wise use of land, water and other natural resources, including erosion control. Both SJCRCDD and NRCS have coordinated activities and worked closely with the San Joaquin Valley Air Pollution Control District (SJVAPCD) to educate and inform agricultural producers of their options in maintaining and improving wind and water soil erosion and air and water quality improvement. Through the use of county wide demonstration projects producers have had the opportunity to observe road dust control measures on a variety of soil types, and under various traffic conditions. Their observations have allowed them to make informed decisions as to what soil erosions control method would best suit their needs.

Grant: \$22,000.00 for Air Quality Project, EQIP Contracts – Technical Assistance
From: California Association of Resource Conservation Districts (CARCD)

Grant: \$ 40,000.00 for Air Quality Project, EQIP Contracts - Technical Assistance
From: Natural Resource Conservation Service, USDA

PM10 is a serious health issue in the San Joaquin Valley Air Basin because particles that are small can enter the respiratory system and are not expelled. Although agriculture is only responsible for a portion of these geologic emissions, several agricultural source categories are likely to exceed significant source thresholds. In order to reduce PM10 emissions from agricultural operations NRCS, CARCD and Resource Conservation Districts (RCDs) will develop Conservation Management Plans (CMPs). Plan participants will choose one or more conservation management practices in each of the five potential emission categories.

The RCDs has the knowledge and experience of mitigating watershed conservation problems and has a working relationship with local landowners and operators to provide the assistance needed to meet state requirements which will also meet federal goals as they relate to soil erosion prevention.

Growers will be provided technical assistance to complete individual CMP Plans that address air quality PM10 emission reduction on agricultural lands. The RCDs will verify the completed plans prior to their submission to the San Joaquin Valley Air Pollution Control District. Technical assistance will also be provided with the Environmental Quality Incentive Program (EQIP).

Outreach will occur in the forms of grower group sponsored county CMP planning meetings, round table groups, direct mail informational flyers, and news releases.

Other Grants currently being implemented by the SJCRCD:

- The CALFED Watershed Program (Murphy Creek Project), \$282,000 for a fish passage improvement project.
- The CALFED Ecosystem Restoration Program (Restoration and Monitoring of Riparian Habitat along the Lower Mokelumne River) (\$860,000) for Riparian Restoration and monitoring of neotropical migrant songbirds;
- Department of Conservation (Watershed Coordinator Grant), \$182,505 to support the activities of a Watershed Coordinator and implementation of the Lower Mokelumne River Watershed Stewardship Plan;
- A grant agreement through the consolidated RFP (Implementation of the Lower Mokelumne River Watershed Stewardship Plan) is pending for \$1.38 million for a variety of projects implementing the Lower Mokelumne River Watershed Stewardship Plan.

In addition, the San Joaquin County RCD has successfully completed grants from the Great Valley Center, the Department of Conservation, and the National Fish and Wildlife Foundation totaling \$175,000.00

Mobile Irrigation Laboratory: The SJCRCD currently does not have a Mobile Irrigation Lab but several of the Irrigation Districts within the Districts boundaries use the same contract Mobile Lab Service that we plan on using if we are awarded the funding. This contractor currently provides services to Stockton East Water District, The San Luis Delta-Mendota Water Authority, San Benito County Water District, Pajaro Valley Water Agency, both The East and West Stanislaus Resource Conservation Districts and the Santa Clara Valley Water District. We are selecting this Mobile Lab Contractor because of their long standing relationship with the growers in the project area.

Justification:

Agriculture is San Joaquin County's number one industry accounting for between 30 and 35% of the region's total economy ¹. San Joaquin County is ranked 6th overall in

agricultural production for California counties placing it among the top ten agricultural-producing counties in the nation ². According to the *2000 Agricultural Report-San Joaquin County* (San Joaquin County Agricultural Commissioner's Office) the gross value of agricultural products in all of San Joaquin County is estimated at \$1,348,628,000. Approximately 90% (808,838 acres) of San Joaquin County's 895,640 acres is farmland. There are approximately 3,862 farms in San Joaquin County averaging 209 acres in size and employing more than 15,700 persons (8.5% of the county's total employment).³ San Joaquin County is a leader in producing many agricultural products. Many of these products are grown within the LMR watershed. In summary, the county ⁴:

San Joaquin County Agricultural Ranking in California

Ranks #1 in the state in the production of cherries, asparagus, grain corn, apples, English walnuts, and dry beans; Ranks #2 in the state in the production of fresh tomatoes, safflower, potatoes and cucumbers; and Ranks #3 in the state in the production of sugar beets and processing tomatoes

¹ Outlook 2001, The Record, Sunday March 7, 2001, "Agriculture and the Future" ² Labor Market Information Division, CA Employment Development Department, www.calmis.ca.gov, 2000 ³ Percent of total labor force: Labor Market Information Division, CA Employment Development Department, www.calmis.ca.gov, 2000. Individuals employed: The San Joaquin County Agricultural Commissioner's Office, 2000 Agricultural Report. ⁴ Dairy production: Labor Market Information Division, CA Employment Development Department, www.calmis.ca.gov, 2000. Crop ranking in state based on gross value (1999 crop year): The San Joaquin County Agricultural Commissioner's Office, 2000 Agricultural Report. ***Lower Mokelumne River Watershed Stewardship Plan***

The other counties involved in this proposal have numbers that are equally impressive. In 2003 Monterey County produced crop revenues of over \$3.3 Billion, Merced County was \$1.9 Billion, Stanislaus County was \$1.4 Billion, Santa Cruz was over \$400 Million, San Benito County was over \$238 Million and San Mateo County was \$180 Million. This means that in 2003 \$8.8 Billion (or one third of the \$27.5 Billion State wide) of crops were grown in the project area.

Statement of Work, Section Two: Technical/Scientific Merit

The SJCRCD Mobile Lab will use a very successful model where their Mobile Lab will go beyond just measuring Distribution Uniformity (DU) and will look at the entire irrigation system. Our Mobile Lab will perform a complete PG&E style pump test (when the system has a pump) so we can look at energy efficiency and total water applied on the field. This allows the Mobile Lab Team Leader to find ways to equate the BMPs suggested to money savings for the grower. We have found that the growers are more likely to implement the BMPs if there are cost savings for them. Our Mobile Lab has also been a pioneer in water quality BMPs with the PAM and Humic Acid studies that they have completed.

While there are several Mobile Irrigation Labs in the southern part of the state, there is only two in the central and northern portion. The SJCRCD would like to expand its Mobile Lab and offer these services to all of the RCDs and Irrigation Districts in the counties of Stanislaus, San Joaquin, Merced, San Benito, Santa Cruz, San Mateo and Monterey counties and to the members of the San Luis & Delta/Mendota Water Authority.

With this type of expansion we could expedite the information transfer of BMPs and make a major impact on water conservation, water quality and energy conservation.

We are proposing to enter into MOUs with each of the RCDs and Irrigation Districts in these areas to provide Mobile Lab service to the growers in their district and to conduct at least two field days/growers meetings for them each year (See Task # 2). We will provide each of the districts a year-end report that will identify potential water and energy savings as well as a summary of what was found and what BMPs were recommended on each field evaluated. If we receive complete funding our Mobile Lab could perform up to 160 irrigation evaluations and test an additional 350 irrigation pumps per year. We are seeking funding to provide this level of service for two to three years (from either 6/05 or 12/05 through 4/08 depending on when grant contracts are put in place).

Statement of Work, Section Three: Monitoring and Assessment

The SJCRCD and the Contractor will be able to provide growers with detailed information on what BMP's would benefit them and how much water, electricity and money they would be able to save if they implemented those BMP's. Monitoring a program like this is very straight forward due to the fact that all savings are verifiable and all calculations are industry standard. We will be using a database created by the Contractor that will track these savings and we will generate annual reports to both the DWR and Irrigation District that the grower farms in.

An assessment of the program will be performed annually and adjustments will be made to insure that the program achieves the highest possible return on investment for the State of California and the Bay Delta Region.

Task # 2

Title: Irrigation Principles Training in Spanish for Irrigators

Statement of Work:

The San Joaquin County RCD (SJCRCD) has a long history of being the leader in water conservation and sediment reduction in California. We would like to continue this tradition by offering workshops both in English and in Spanish that will outline the principles behind efficient irrigation events.

The goal of this workshop will be to help local growers train irrigators before the irrigation season and to learn themselves the BMP's for efficient irrigations. We hope to gain the support of the local Irrigation Districts to fund future workshops and possibly make this class a requirement for the growers to receive their irrigation water each year.

Many growers don't have the time to properly train their Irrigators when they arrive from Mexico each year so the growers give them some basic instructions and send them out. The result is water that runs off the field for hours or water that is applied so slowly that it takes forever to get out. Both of these problems are very common and make for very inefficient irrigations. We feel that the right training will help the growers and their irrigators. By empowering the irrigators to make educated decisions regarding the management of the irrigation water the grower should see an increase in yields and a decrease in the amount of water used to grow the crop.

This is a very important topic and we are sure we will get good participation from the growers. We hope to offer a minimum of 20 classes each of the three years that the project is funded. We will offer this class in two different formats. The first will be on farm for one or two grower's irrigation staff. The second format will be the traditional field day style class with open attendance. We are offering both types to ensure participation from area growers. If we are willing to come to them in a one on one format, they are less likely to come up with excuses for not being able to attend.

Our target audience is the growers of the RCDs and Irrigation Districts in the counties of Stanislaus, San Joaquin, Merced, San Benito, Santa Cruz, San Mateo and Monterey counties and to the members of the San Luis & Delta/Mendota Water Authority. We will of course always welcome representatives from the local water districts and the industries that service the growers. We hope that the workshop in Spanish will help the growing number of Hispanic growers in the participating counties by making this information available to them in their native language.

We will be distributing evaluation forms for the attendees to fill out at the end of the workshop and will review these with the NRCS and the UCCE to improve future workshops. We will also have sign in sheets that will have the Growers list the crops they grow and the number of acres farmed. This will also help with the evaluation process.

If we can help growers to improve their irrigation's and reduce the amount of runoff in the participating Counties this will help the environmental concerns of the Delta/Bay Region and the State.

Outreach, Community Involvement and Cooperators

The following Irrigation Districts will be working on this project. The Modesto Irrigation District, the Turlock Irrigation District, the Oakdale Irrigation District, the West Stanislaus Irrigation District, the Patterson Irrigation District, the Del Puerto Water District, the Central California Irrigation District, the Panoche Water District, the Stockton East Water District, the Pacheco Water District, the Banta-Carbona Irrigation District, the Merced Irrigation District, the West Side Irrigation District, the San Luis Water District, the San Benito County Water District, the Plain View Water District, the San Luis Canal

Company, the Pajaro Valley Water Management Agency and the Mercey Springs Water District.

We also have a number of supporters from the following agencies. They are the USDA's Natural Resources Conservation Service, the University of California Cooperative Extension, East Merced RCD, San Luis RCD, West Stanislaus RCD, East Stanislaus RCD, Poso RCD, Panoche RCD, Los Banos RCD, and the San Luis & Delta–Mendota Water Authority.

Qualifications of the Applicants and the Contractor

As demonstrated above, the San Joaquin County Resource Conservation District (SJCRCD) has a long history of stellar performances on projects that benefit the environment along with the agricultural community. Our **“Lower Mokelumne River Watershed Stewardship Plan”** is the mater plan for all of our watershed restoration projects. This plan combined with our **“Air Quality Technical Assistance Project”** shows that the SJCRCD has the professional staff in place that can work with our contractor to ensure a very productive program.

We are including with this grant application information regarding the Mobile Irrigation Lab Contractor that shows that this company has the experience needed to succeed with this program.

Benefits and Costs

We are attaching several documents that will illustrate the funding needs and benefit of this proposal. These documents are a cost break down by services that will be provided by the contractor, an Inkind cost analysis and a Budget Timeline.

All of the monies that are required to fund this program are consumed by two things, administration monies to pay Ruth Mulrooney who will act as program administrator for the SJCRCD and the Contractor.

Ruth will be the contact with the DWR for this contract and be submitting reports and invoices. She will also coordinate with all of the participating Districts. Ruth will collect all of the MOU's and insure that growers in all of those Districts receive the services that they request. She will act as the main contact person for the Contractor and work with both the Contractor and participating Districts to develop strategies to grower participation. She will maintain a database of growers and services that they received. This database will hold information about those services that will include information about the irrigation system, pumping plant, BMP's that were suggested and potential savings that would be realized if those BMP's were implemented. This database will become part of the final report.

The Contractor fees make up the balance on the monies requested. The contractor that the SJCRCD plans on using has been in business offering these services to growers in California for over thirteen years. Attached to this proposal is a bio of the owner, Bill

Power, and flyers from his company, Power Services, Inc describing the Mobile Irrigation Lab services. We are also attaching a cost breakdown spreadsheet that demonstrates how the monies will be spent by the contactor. Power Services, Inc will be able to provide these services to the participating growers for less than the average cost of many of the other Mobile Irrigation Labs in the State. The spread sheet gives a “minimum number” goal for the services that the Contractor will perform. It is the desire of both the Contractor and the SJCRCD that we surpass this goal and provide services to any and all growers that request them. All travel, time and materials needed to perform the tasks described in this proposal are included in the costs listed on the spreadsheet.

The “Match” for this program will come through “InKind” support from the participating growers and their employees and from the participating Irrigation Districts and Resource Conservation Districts. We have attached a spreadsheet that outlines how this dollar amount was derived. In this spreadsheet we utilized industry standard labor costs that include both benefits and “roll-ups”.

Past results have shown a reduction in the amount of water used in areas where there is a Mobile Irrigation Lab. Based on the water savings we have found in the areas within this project area that are now served by the Mobile Lab, we project a potential water savings of 1000 acre-feet per year per area served. This of course may be lower in some of the eight areas but should be higher in others. Along with these potential water savings will come the potential energy savings. According to the Western Area Power Administration, it is possible to realize a savings of at least 50% with a comprehensive pump test program. While it is hard to put a firm number on what 50% savings means, based on the tests we conducted over the last couple of years you could easily see a reduction of 175,000 to 450,000 kWh per year by improving efficiencies and not pumping excess water. Put into monetary terms this is about \$250,000 to \$320,000 savings per year in water and about \$21,000 to \$54,000 per year in energy. That gives this program a value that is matching if not greater than the amount of funding that is requested.

As stated above all of the actual savings numbers will be tracked each year in a year-end report submitted to the participating Districts. We will accomplish this by using grower information all with energy consumption data to accurately calculate the savings that the Mobile Lab identifies.

If we are not able to secure these funds, the expansion will be delayed until funds are found. The proposed project and accomplishments outlined for both Tasks # 1 and 2 are based on the budget provided. Output will be proportioned to grant received.

Applicant:

THE TABLES ARE FORMATTED WITH FORMULAS: **FILL IN THE SHADED AREAS ONLY**

Section A projects must complete Life of investment, column VII and Capital Recovery Factor Column VIII. Do not use 0.

Table C-1: Project Costs (Budget) in Dollars

	Category (I)	Project Costs \$ (II)	Contingency % (ex. 5 or 10) (III)	Project Cost + Contingency \$ (IV)	Applicant Share \$ (V)	State Share Grant \$ (VI)	Life of investment (years) (VII)	Capital Recovery Factor (VIII)	Annualized Costs \$ (IX)
	Administration ¹								
	Salaries, wages	\$1,083,000	0	\$1,083,000	\$974,000	\$109,000	0	0.0000	\$0
	Fringe benefits	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Supplies	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Equipment	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Consulting services	\$756,000	0	\$756,000	\$0	\$756,000	0	0.0000	\$0
	Travel	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Other	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(a)	Total Administration Costs	\$1,839,000		\$1,839,000	\$974,000	\$865,000			\$0
(b)	Planning/Design/Engineering	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(c)	Equipment Purchases/Rentals/Rebates/Vouchers	\$0	0	\$0	\$0	\$0	10	0.0000	\$0
(d)	Materials/Installation/Implementation	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(e)	Implementation Verification	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(f)	Project Legal/License Fees	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(g)	Structures	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(h)	Land Purchase/Easement	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(i)	Environmental Compliance/Mitigation/Enhancement	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(j)	Construction	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(k)	Other (Specify)	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(l)	Monitoring and Assessment	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(m)	Report Preparation	\$0	5	\$0	\$0	\$0	0	0.0000	\$0
(n)	TOTAL	\$1,839,000		\$1,839,000	\$974,000	\$865,000			\$0
(o)	Cost Share -Percentage				53	47			

1- excludes administration O&M.

Applicant:

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Table C-2: Annual Operations and Maintenance Costs

Operations (1) (I)	Maintenance (II)	Other (III)	Total (IV) (I + II + III)
\$0	\$0	\$0	\$0

(1) Include annual O & M administration costs here.

Table C-3: Total Annual Project Costs

Annual Project Costs (1) (I)	Annual O&M Costs (2) (II)	Total Annual Project Costs (III) (I + II)
\$0	\$0	\$0

(1) From Table C-1, row (n) column (IX)

(2) From Table C-2, column (IV)

Table C- 4: Capital Recovery Table (1)

Life of Project (in years)	Capital Recovery Factor
1	1.0600
2	0.5454
3	0.3741
4	0.2886
5	0.2374
6	0.2034
7	0.1791
8	0.1610
9	0.1470
10	0.1359
11	0.1268
12	0.1193
13	0.1130
14	0.1076
15	0.1030
16	0.0990
17	0.0954
18	0.0924
19	0.0896
20	0.0872
21	0.0850
22	0.0830
23	0.0813
24	0.0797
25	0.0782
26	0.0769
27	0.0757
28	0.0746
29	0.0736
30	0.0726
31	0.0718
32	0.0710
33	0.0703
34	0.0696
35	0.0690
36	0.0684
37	0.0679
38	0.0674
39	0.0669
40	0.0665
41	0.0661
42	0.0657
43	0.0653
44	0.0650
45	0.0647
46	0.0644
47	0.0641
48	0.0639
49	0.0637
50	0.0634

(1) Based on 6% discount rate.

Applicant: _____

THE TABLES ARE FORMATTED WITH FORMULAS: **FILL IN THE SHADED AREAS ONLY**

Table C-5 Project Annual Physical Benefits (Quantitative and Qualitative Description of Benefits)

	Qualitative Description - Required of all applicants ¹				Quantitative Benefits - where data are available ²
	Description of physical benefits (in-stream flow and timing, water quantity and water quality) for:	Time pattern and Location of Benefit	Project Life: Duration of Benefits	State Why Project Bay Delta benefit is Direct ³ Indirect ⁴ or Both	Quantified Benefits (in-stream flow and timing, water quantity and water quality)
Bay Delta					0
Local				Not applicable.	

¹ The qualitative benefits should be provided in a narrative description. Use additional sheet.

² Direct benefits are project outcomes that contribute to a CALFED objective within the Bay-Delta system during the life of the project.

³ Indirect benefits are project outcomes that help to reduce dependency on the Bay-Delta system. Indirect benefits may be realized over time.

⁴ The project benefits that can be quantified (i.e. volume of water saved or mass of constituents reduced) should be provided.