

Agricultural Water Management Informational Resources Directory

January 11, 2005

2004 Water Use Efficiency
Proposal Solicitation Package

Agricultural Water Management Council
Mike Wade
Kathryn Charlton



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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 _____
- (d) Specify other: _____

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

- (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):

Agricultural Water Management Council

4. Project Title:

Agricultural Water Management Informational Resources Directory

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

Name, title	Mr. Mike Wade, Executive Director
Mailing address	Agricultural Water Management Council 717 K Street, Suite 511 Sacramento, CA 95814
Telephone	(916) 441-7868
Fax	(916) 441-7864
E-mail	mwade@agwatercouncil.org

6. Contact person (if different):	Name, title.	Kathryn Charlton, Asst. Exec. Dir.
	Mailing address.	Agricultural Water Management Council 717 K Street, Suite 511 Sacramento, CA 95814
	Telephone	(916) 441-7868
	Fax.	(916) 441-7864
	E-mail	kcharlton@agwatercouncil.org

7. Grant funds requested (dollar amount): **\$62,680**
(from Table C-1, column VI)

8. Applicant funds pledged (dollar amount): \$0

9. Total project costs (dollar amount): \$62,680
(from Table C-1, column IV, row n)

10. Percent of State share requested (%): 100%
(from Table C-1)

11. Percent of local share as match (%): 0%
(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):

12/1/2005 thru
12/1/2008

13. State Assembly District where the project is to be conducted:

Statewide

14. State Senate District where the project is to be conducted:

Statewide

15. Congressional district(s) where the project is to be conducted:

Statewide

16. County where the project is to be conducted:

Statewide

17. Location of project (longitude and latitude)

Statewide

18. How many service connections in your service area (urban)?

Not Applicable

19. How many acre-feet of water per year does your agency serve?

Not Applicable

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?

- (a) yes, _____ median household income

If 'yes' include annual median household income.

- (b) no

(Provide supporting documentation.)

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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.



Mike Wade, Executive Director

January 11, 2005

Signature

Name and title

Date

Statement of Work, Section 1: *Relevance and Importance*

The Agricultural Water Management Council (AWMC) proposes to create an information clearing house for water management resources. Access to information enables the making of informed decisions that maximize the effectiveness of integrated resource management to conserve water, reduce costs and enhance environmental conditions as well as improve district service to its users.

AWMC is the link between the agricultural water suppliers and the information they need. As it is, information relevant to agricultural water management is decentralized and scattered. There is no clearing house or directory that identifies the resources available. Each agency, firm, and organization conducts its own research and studies with no coordinated mechanism to bring the information back to the water supplier for application and use; as a result water suppliers do not have access to the necessary tools for optimal water management efficiency and conservation planning. AWMC seeks to fill this communication gap by serving the agricultural water community with the provision and promotion of information sources to meet their needs for education and reference.

This project proposes to research and identify available agricultural water management information sources and organize the findings into an online database and directory. This would include the review of models used to describe various processes relevant to water management resources, such as canal seepage, regulating reservoir sizing, etc that have a direct connection to cost-effective solutions for implementing the AB 3616 Efficient Water Management Practices and practices that provide contributions to the California Bay-Delta Targeted Benefits and Quantifiable Objectives. This project would meet the following goals and objectives:

GOAL 1 Identify and classify information sources.

Water suppliers require specific information to enhance productivity and efficiency. AWMC will identify and develop a collection of resources and information services that are focused to the needs of the agricultural water suppliers. AWMC will continue in its role to encourage the exchange of information between the different groups in the water industry for the benefit of education and effective planning and implementation.

GOAL 2 Provide timely access to information sources.

Information is a resource which underpins the work of effective integrated resource management and planning. Timely access is required to enable the agricultural water community achieve excellence as management issues and projects arise. The provision of access to the resources will include on site holdings, the means to identify and locate items elsewhere, and document delivery from other agencies.

GOAL 3 Promote and facilitate the use of existing and new information sources.

AWMC will work to maintain and increase the awareness of new emerging technologies. AWMC will work in cooperation with other agencies to provide new information to water suppliers and alert them of its availability. When the database is completed and functional AWMC will promote and facilitate the use of electronic services, web links and databases to water suppliers.

GOAL 4 Optimize resource sharing at local and regional levels.

Cooperation and collaboration at all levels is essential to maximize access to the range of information resources. With this project AWMC seeks to increase cooperation and resources sharing at the regional level. Additional benefits can be accrued from participation in cooperative ventures. AWMC will strengthen existing relationships and forge new partnerships with government agencies, universities and agricultural consulting firms while continuing to act as a catalyst to promote awareness, development and use of appropriate information technologies to facilitate water management efficiency strategies and research findings.

Statement of Work, Section 2: *Technical/Scientific Merit, Feasibility*

Scope of Work and Deliverables

The following tasks would be performed to accomplish the goals and objectives of this project.

Task 1 Identify agricultural water management resources in California.

AWMC will survey members of the agricultural water community to locate and identify reference materials and information sources that can assist agricultural water suppliers improve their water management efficiency and may contribute to the California Bay-Delta objectives including the AB 3616 Efficient Water Management Practices and the Targeted Benefits and Quantifiable Objectives. Those interviewed will include representatives from agricultural water suppliers, agricultural engineering and consulting firms, the academic community, CBDA agencies and other related organizations.

The survey will include the following items:

1. Title
2. Author
3. Date
4. Subject
5. Abstract

When possible AWMC will obtain its own copy of the material to house at the AWMC office and loan to water suppliers upon request.

Deliverables:

- Develop survey and questionnaire format.
- Schedule and perform surveys.
- Analyze and organize survey results into a descriptive database to track relevant resources.
- Obtain copy of the reference materials, when possible.

Task 2 Evaluate and characterize the identified resource materials.

AWMC will review the materials identified in the previous task and characterize each resource into a brief abstract that outlines the purpose of the document, what information it contains, and how it may be used for agricultural water management. The descriptive summary allows the information resource directory to be tailored to the specific needs of the user. The comprehensive structure will facilitate effective use of the resources to increase their applicability in both research and planning for water use efficiency activities while improving the opportunities for users to be able to access the most relevant information.

Deliverables:

- Abstract (1-2 paragraphs) for each reference entry in the database.
- Updated database with the abstracts each reference entry.

Task 3 Upload information resource directory to the AWMC website.

AWMC will upload the database informational resource directory to the AWMC website for water suppliers and other interested parties to access online. The online format enables users to have timely access to the information with the convenience of being able to access the database from any location with an Internet connection. The online convenience promotes awareness of the informational sources available and encourages information sharing at the local and regional levels. Users will be able to search the online directory for resource items by title, author, subject, date, and location.

Deliverables:

- Navigable map of the website and links.
- Brochure depicting the navigation and structure of the online directory.
- Interactive web directory with access to the database and inquiry searches.

Task 4 Review and Update

AWMC will periodically review and update the agricultural water management resources directory so that it is current and that new publications are added to the database. AWMC will coordinate with the academic and engineering communities to remain abreast of new and emerging technologies. AWMC will work in cooperation with other agencies to provide new information to water suppliers and alert them of its availability.

The tables below describe the costs per task and work schedule for the project.

Task	Start Date	End Date	Cost
Task 1: Identify agricultural water management resources in California.	12/1/05	1/31/06	\$16,000
Task 2: Characterize and evaluate identified resource materials.	2/1/06	2/28/06	\$12,000
Task 3: Upload information resource directory to the AWMC website	3/1/06	5/31/06	\$25,180
Task 4: Review and Update	6/1/06	12/1/08	\$9,500
Total	12/1/05	5/31/06	\$62,680

Statement of Work, Section 3: *Monitoring and Assessment*

The primary objective of this project is to link water suppliers and other interest groups to available agricultural water management information resources. The success of this project can be assessed through the extent of satisfaction of the users with the services provided by the AWMC Informational Resource Directory. AWMC will provide opportunities for user interaction and feedback. The online application will include a user questionnaire and a section for users to submit comments. The questionnaire will address the degree users are able to identify, locate, and access wanted materials and information. AWMC will review the submitted comments and take them into consideration when updating the directory.

Qualifications of the Applicants and Cooperators

Resume of Project Manager

Mike Wade, Executive Director of the Agricultural Water Management Council will be the Project Manager and supervise the project implementation. Mr. Wade's resume is included in Appendix A at the end of this application.

The Agricultural Water Management Council

The AWMC is a non-profit organization established in 1996 dedicated to bringing together all interested parties in agricultural water management. The AWMC formed as a result of AB 3616 - the Agricultural Water Suppliers Efficient Water Management Practices Act of 1990. The purpose of the AWMC is to work with agricultural water suppliers to improve water management efficiency and to

Agricultural Water Management Council

Agricultural Water Management Informational Resources Directory

demonstrate to the public and water industry how agricultural water is efficiently used.

The AWMC works in a voluntary and cooperative manner to establish a consistent, unified, and credible process that will advance agricultural water management in California. It is the AWMC's responsibility to aid the signatory water suppliers through development and implementation of Water Management Plans to increase efficiency.

The AWMC maintains a unique position to provide research and data to agencies and the public interested in California water resource management. The AWMC has formed partnerships with the California Department of Water Resources, U.S. Bureau of Reclamation, California Bay-Delta Authority, California Department of Food and Agriculture and California Irrigation Institute as well as members from the agricultural community and environmental and public interest groups. All are signatories to the AB 3616 Memorandum of Understanding (MOU). Partnerships strengthen the consensus-based actions of the AWMC and ensure various points of view are represented in AWMC actions. The AWMC continues to seek partnerships with those interested in efficient water management.

The AWMC strives to create a forum to share and communicate water management strategies and new technologies. AWMC maintains a positive relationship with agricultural water suppliers throughout California and works cooperatively on projects that support water use efficiency. Over 100 water suppliers and water resource conservation districts are signatories to the AB 3616 MOU.

External Cooperators

AWMC will use the expertise of a qualified consultant to support the AWMC in the review of informational resources and the development of the interactive online application. The consultant for the review of identified resources will have experience and knowledge in agricultural engineering and water use efficiency.

Previous Water Use Efficiency Grants

USBR Education Grants (2000-2001)

AWMC received an \$85,000 grant in 2001 from the US Bureau of Reclamation (USBR) to conduct irrigation water management education to farmers. Grant funds were redistributed to irrigation and resource conservation districts for the purpose of conducting a variety of water management workshops including micro-irrigation, improvement of irrigation practices to reduce deep percolation, irrigation system maintenance, mobile lab training and water use efficiency workshops. Program goals were met on-time and under budget.

Three-way Cooperative Agreement (2002-2004)

AWMC received additional support in 2001 when a three-way cooperative agreement was signed between the AWMC, DWR and USBR. The Cooperative Agreement's primary purpose was to implement AB3616, the Efficient Management Practices by Agricultural Water Suppliers Act of 1990. The California Bay-Delta Authority (CBDA) assisted in negotiations to bring the three parties together and develop a work plan outlining the tasks that would guide AWMC activities. DWR and USBR each provided \$600,000 in funding over the three year Cooperative Agreement contract period.

Under the guidance of the Cooperative Agreement the AWMC assisted member-districts in developing water management plans, oversaw independent audits of the Plans, worked to integrate CBDA Quantifiable Objectives into the Plans, created a database for tracking Plan implementation as well as initiated additional cooperative activities within the water management community. Today over 4 million irrigated acres are part of the AWMC water management planning process and efforts continue to increase AWMC membership among non-member districts and the environmental community.

Integration of Quantifiable Objectives into Water Management Planning

As part of the Cooperative Agreement, AWMC developed a process for agricultural water suppliers to identify local water management opportunities that contribute to specific Bay-Delta Authority objectives. This project communicates regional objectives to the local water management planning level and assists water suppliers understand the relationship between local and statewide management objectives. The Targeted Benefits and Quantifiable Objectives were developed for specific geographic regions and water bodies. AWMC has developed district reports for members showing which Targeted Benefits and Quantifiable Objectives are applicable to each district and a methodology for linking the Targeted Benefits and Quantifiable Objectives to local actions. AWMC is currently working to develop a format to integrate the Quantifiable Objectives into the water management planning process.

USBR Water Conservation Plan Update Reporting Website (2004-2007)

AWMC and USBR worked together in 2004 to develop an Internet web site that would allow federal water contractors with water conservation plans to complete and submit their required annual updates completely on-line. The project is funded through a \$101,000 USBR grant over three years. Utilizing a special data base on a secure server, AWMC will be able to collect and report data to USBR in a variety of report formats that will improve the speed and accuracy of the reporting process. AWMC members can access the web site with a secure username and password, edit their reports, print copies and submit a final version in electronic format.

Outreach and Communication

The AWMC works in a voluntary and cooperative manner to provide technical assistance that will advance agricultural water management efficiency in California. The AWMC maintains a unique position in the agricultural water community to provide technical assistance and current information to water suppliers that can improve water management. AWMC strives to create a forum where stakeholders interact and share water management strategies. With over 100 water suppliers and water resource conservation districts members, AWMC has already utilized this unique relationship when seeking stakeholder input and acceptance to build an informational resources directory. AWMC will also optimize this relationship to promote and facilitate use of the directory within the agricultural water community.

AWMC holds quarterly public meetings that are attended by stakeholders in the agricultural community throughout the state, including members of environmental and public interest groups, the academic community and representatives from the California Department of Water Resources and U.S. Bureau of Reclamation. The AWMC has worked through these public meetings when seeking input for this grant proposal. At the January 27, 2004 meeting, AWMC staff presented the project concept to develop system automation reference materials to members and meeting attendees for input and feedback. A subcommittee was thereby appointed to work with AWMC staff and develop the project concept further. At the April 21, 2004 meeting, the AWMC discussed a comprehensive project outline and agreed by common consent to pursue Proposition 50 grant funding to create an online information resources directory. Furthermore, AWMC publishes a quarterly newsletter, *Best Management*. An article appeared in the August 2004 issue of *Best Management* that was distributed to all agricultural water suppliers, including a wider distribution to urban counterparts on the Urban Water Conservation Council, notifying readers of AWMC's intent to pursue this project. Through the public meetings and newsletter, AWMC has not received any opposition or negative responses to this project.

The AWMC will use several methods to notify water suppliers, member agencies and stakeholders of the informational directory when it becomes available online. AWMC will produce a brochure depicting the navigation and components of the directory. The handout will be available and distributed at the AWMC quarterly public meetings as well as AWMC attended conferences. AWMC is a regular exhibitor at the semi-annual Association of California Water Agencies conferences, the Mid-Pacific Region Water Contractors Conference, and the California Irrigation Institute Conference.

In addition, AWMC will mail an announcement to agricultural water suppliers (both AWMC members and non-members) as well as post an announcement in an issue of the AWMC quarterly newsletter, *Best Management*, and the Association of California Water Agencies newsletter, *ACWA News*, to notify the agricultural water community about the project.

The AWMC already hosts a full functioning website at www.agwatercouncil.org that provides tools and resources for agricultural water suppliers to evaluate their water operations and prepare water management plans. The AWMC can host the new directory on the current website as well as post an announcement on the *What's New* page alerting visitors of the new online feature.

Innovation

AWMC will strengthen existing relationships and forge new partnerships with government agencies, universities and agricultural consulting firms while continuing to act as a catalyst to promote awareness, development and use of new information technologies. Cooperation and collaboration at all levels is essential to maximize access to the range of information resources that facilitates the development of innovative efficient water management strategies and projects.

Benefits and Costs

Local Benefits

This project allows for the skilled use of available resources to increase usefulness in both research and planning when analyzing local costs and benefits for Efficient Water Management Implementation.

CALFED Bay-Delta Benefits

With this project AWMC seeks to increase cooperation and resources sharing at the regional level. Additional benefits can be accrued from participation in cooperative ventures that can expand beyond what is locally cost-effective and provide regional benefits. This project improves access to information that enables the making of informed decisions that will maximize the effectiveness of integrated resource management to conserve water, reduce costs and enhance environmental conditions. The informational resources identified in the Directory will have direct correlations for designs and implementation of activities that contribute to the CBDA Targeted Benefits and Quantifiable Objectives.

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: System Automation Reference Materials 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	\$17,250	10	\$18,975	\$0	\$18,975	0	0.0000	\$0
	Fringe benefits	\$8,500	10	\$9,350	\$0	\$9,350	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	\$22,750	10	\$25,025	\$0	\$25,025	0	0.0000	\$0
	Travel	\$4,500	0	\$4,500	\$0	\$4,500	0	0.0000	\$0
	Other	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(a)	Total Administration Costs	\$53,000		\$57,850	\$0	\$57,850			\$0
(b)	Planning/Design/Engineering		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	\$3,500	5	\$3,675	\$0	\$3,675	0	0.0000	\$0
(m)	Report Preparation	\$1,100	5	\$1,155	\$0	\$1,155	0	0.0000	\$0
(n)	TOTAL	\$57,600		\$62,680	\$0	\$62,680			\$0
(o)	Cost Share -Percentage				0	100			\$0