

**2004 Water Use Efficiency Proposal Solicitation Package
 Proposal Part One:
 Appendix A: Project Information Form**

Applying for (select one):

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

- Urban Agricultural
- (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

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)

California Urban Water Conservation Council

4. Project Title:

**Urban Water Efficiency
 Technical Assistance Program**

5. Person authorized to sign and submit proposal and contract

Name, title Mary Ann Dickinson
 Mailing address 455 Capitol Ave \$703
 Sacramento, CA 95814
 Telephone 916-552-5885
 Fax 916-552-5877
 E-mail maryann@cuwcc.org

6. Contact person (if different):

Name, title _____
 Mailing address _____

 Telephone _____
 Fax _____
 E-mail _____

7. Funds requested (dollar amount) (from Table C-8, column II)

\$1,911,349

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8. Applicant funds pledged (dollar amount): \$603,584
9. Total project costs (dollar amount *(from Table C-1, column II, row 1)*) \$2,514,933

10. Is your project locally cost effective? (a) yes

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.

(b) no

(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.)

11. Is your project required by regulation, law or contract? If no, your project is eligible. (a) yes

(b) no

If yes, the project is eligible if it is not currently required? Provide a description of the regulation, law or contract and an explanation of why the project is not currently required.

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A: Project Information Form (continued)

12. Duration of project (month/year to month/year): 10/05 to 12/08
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)? Statewide
19. How many acre-feet of water per year does your agency serve? Statewide
20. Type of applicant (select one):
- (a) City
 - (b) County
 - I 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 _____

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A: Project Information Form (continued)

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

(Provide supporting documentation.)

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

However, this application targets technical assistance to water agencies in need. Often these agencies are in economically disadvantaged regions.

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Proposal Part One:**

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.

	Mary Ann Dickinson	
	<u>Executive Director</u>	<u>January 11, 2005</u>
Signature	Name and title	Date

Statement of Work, Section One: Relevance and Importance

The California Urban Water Conservation Council, since its creation in 1991, has dedicated itself to providing a number of important services to the water conservation community. This community includes not only the water supply agencies, but also public advocacy groups, elected officials, members of the public, and state and federal agencies such as the California Department of Water Resources, the California Bay Delta Authority, and the U.S. Bureau of Reclamation. The services provided have been funded by dues payments of its members and grants from state and federal agencies.

Especially because of the current fiscal crisis in California, the Council has been particularly attuned to assisting DWR with whatever needs it has. From providing data for the California Water Plan or the California Energy Commission, to answering conservation research questions for water agencies, the Council is committed to improving the information network on water efficiency products and programs, identifying and conducting needed research, and increasing the level of conservation program implementation by water supply agencies throughout the state.

The mission of the Council has always been to improve water use efficiency statewide. The funds requested in this grant proposal application will support the entire water efficiency network associated with the Council and its 328 members, who represent over 75% of California's urban water deliveries. The Council supports the water conservation efforts of its member organizations through assistance in implementing the BMPs, collaborative research and development among the membership, and through monitoring and evaluation of the urban water conservation programs and activities undertaken by the membership. A special interest of the Council is the overall integration of urban water conservation BMPs into the planning and management of California's water resources.

The principal challenge facing the Council in these upcoming years is funding source reliability. This grant will meet critical needs such as provide staffing for technical assistance to water agencies, funding for needed water efficiency research programs, and creation and/or maintenance of technical analysis tools and web sites for water agencies rely on to help them put conservation programs in place for their customers. At this time there is no other organization providing this service to the water agency community. The extraordinary depth of the Council's technical assistance efforts – funded at similar levels by state and federal agencies in the past – can only be maintained if supplementary funding is received. Without this funding, the Council's level of activity will be nearly eliminated.

Why is this technical assistance important?

Water conservation in California has already been proven effective for meeting the multiple benefits established by CALFED. Numerous studies have been conducted, but it is clear from all of them that a significant potential exists to reduce demand – perhaps as much as one-third statewide. Likely nearly 800,000 acre-feet per year will have been saved by 2010 —enough for one and a half million households in Los Angeles. This proposal will provide the necessary

support to enable the Council to continue procuring additional water conservation savings from conservation programs. Not only does the Council assist local water agency staff in their implementation questions and needs, but the Council also conducts statewide conservation programs on their behalf.

CALFED recognized the important role of water use efficiency in its Record of Decision, issued in August of 2000¹. It specifically mentioned the Council, indicating that CALFED's Water Use Efficiency Program should work with the "California Urban Water Conservation Council process, supporting and supplementing those processes through planning and technical assistance and through targeted financial incentives (both loans and grants)." The Record of Decision further stated that the Water Use Efficiency Program should "work with the California Urban Water Conservation Council (CUWCC) to establish an urban water conservation BMP certification process and set appropriate levels of effort in order to ensure that water suppliers are implementing cost-effective feasible measures" and also to "help urban water suppliers comply with the Urban Water Management Planning Act." These are all activities currently conducted by the Council.

While most water agencies are meeting or close to meeting their BMP targets, others have yet to begin. The Council must provide technical expertise and support services to both of these constituencies. Providing up-to-date manuals, training, information and technology transfer, frameworks for new initiatives, and relationships with other organizations continues to be an important ongoing focus of the Council.

The Council strives continue its principal mission to support full BMP implementation through acquiring supplemental funding beyond membership dues, hence this Proposition 50 grant proposal. It must continue its now-established role of promoting water use efficiency as a viable and important part of the state's resource mix. It also must continue to develop new BMPs, and revise existing ones, as the technology improves and as the additional opportunities for water conservation present themselves. The development of new stakeholder partnerships must also be pursued. In accomplishing this, outreach efforts to legislators, media and other policy makers will be more important than ever.

The full scope of this Proposition 50 grant proposal touches on all aspects of moving water conservation in California forward to meeting CALFED goals and objectives. Through awarding the Council this grant, the CALFED agencies will be further investing in its objective to support voluntary urban Water Use Efficiency incentive grant programs and its intention to motivate water suppliers and water users to institute practices that are locally cost effective, along with those that are not locally cost effective but can effectively and efficiently address regional or statewide objectives. The technical assistance supported through these funds will be fundamentally achieving region-specific, CALFED program benefits related to water quality, quantity and in-stream flow/timing.

¹ CALFED Bay-Delta Program, Record of Decision , August 28, 2000, page 20

Statement of Work, Section Two: Technical/Scientific Merit, Feasibility

The activities for which the Council is seeking funding are summarized in the table below. This table divides all of the Council’s programs into five “Elements” of activity. Each element of the proposal is then further divided into programmatic “Subelement” tasks. The narrative in this proposal will describe these elements in as much detail as is possible; the remaining information will appear in the Appendix, organized according to the Five areas or elements.

CUWCC Technical Assistance		
Elem. No.	Elements of Technical Assistance	
	Main Element	Sub-Element
1	Statewide Technical Assistance	(a) On-call technical assistance to water utilities, CUWCC committees, model ordinances, and others for programmatic and technical support
		(b) Council committee technical support
		(c) CIMIS Weather Station Monitor
		(d) On-call grant assistance to agencies
2	Technical Committees, Standards and Codes	(a) ASME & IAPMO Plumbing Standards Committees participation and tracking
		(b) Calif. Energy Commission Standards
		(c) US Green Building Council LEED Program development of LEED Version 3.0 - Membership in WETAG
		(d) EPA Water Star Program - support to U.S. EPA program development effort
		(e) Plumbing Codes tracking and support - IAPMO and State of California
		(f) UNAR development and maintenance - product evaluation, testing, and listing for water utilities' programs
3	Statewide Communications and Education - Web Support	(a) WaterLogue Newsletter
		(b) Communications Plan (training, background materials, beginning media outreach)
		(c) WUE Certification Briefing Book
		(d) CII Outreach Materials Assistance - Components, Marketing Audits & Rebates
		(e) Technical Information Page
		(f) Water Saver Home Newsletter
		(g) CUWCC Web site General Support
		(e) Web Hosting
4	Research	(a) Product research, beta testing, field trials and customer satisfaction surveys
		(b) PBMPs
		(c) CEE Commerical Kitchens Initiative
		(d) Statewide Imagery Plan & Specification of Options
5	Conservation Education Curriculum	(a) Conservation Education Curriculum

The Council has developed the proposed Work Elements as a “menu” of activities which will collectively provide sufficient technical support towards fulfilling the shared goals of DWR, California Bay Delta Authority and CUWCC’s goal of implementation of urban water conservation BMPs. In general Elements 1, 2 and 3 are critical core functions for the Council. We have requested three years of funding for each of these. Elements 4 and 5 are highly desirable, but not as vital to the operation of the Council as the first three.

Element 1: Statewide Technical Assistance

This element includes the heart of BMP implementation, the daily assistance provided by Council staff to water agencies and other organizations. The Council employs “technical advisors” to provide information on request and to research data as needed. This assistance is well known nationally for the depth of expertise on conservation issues.

1. On-call Technical Assistance

The Council serves is as a wealth of information for the water conservation community. It currently has on-call technical advisors that daily answer emails and phone calls from water conservation coordinators and DWR staff alike. These calls or emails generally consist of technical interpretations or programmatic implementation issues of the Memorandum of Understanding regarding Urban Water Conservation, which contains the 14 best management practices. Each inquiry along with the answer provided is logged into an Access database, originally created in 2002, for future quick researching of similar questions and also to track the level of need by different BMPs. This “tech log” serves as a record of the Council’s assistance program, and can be sorted by the key types of issues requiring assistance. This gives the Council a guide to future planning as to manual development, training workshops, and the basis of research projects. Currently, the CUWCC receives an average of 2.7 inquiries a day that get logged, based on data from March 2002 to December 2004. 635 inquiries were logged for 2004.

(b) Council Committee Technical Support

The Council has a conservation-program driven committee structure which is a forum for water agency training and research in conservation implementation. The Council staff serves as support to these committees, bringing new data and programs to the committees for review. For example, the Research and Evaluation Committee is currently conducting a study of water agency avoided cost, specifically considering the environmental benefit of conservation programs. The Residential Committee is revising the *Practical Plumbing Handbook* and reviewing a recent study on deterioration of toilet flappers in the field. These committees are the lifeblood of the Council, one of the primary ways agency conservation staff remain current in their field.

(c) CIMIS Weather Station Monitor

Water agencies interested in ET controllers are now pursuing installation of additional CIMIS weather stations to better represent the urban microclimates of their service areas. The Council would like to assist these agencies in acquiring weather stations and calibrating any “non-ideal”

urban station to a nearby CIMIS reference station. The water agencies are interested in purchasing the weather stations if the Council can fund a person to work with DWR in calibrating the data for urban use and in maintaining the “urban” station network.

(d) On-call grant writing assistance

Grant funding applications require cost-benefit analyses, and water agency conservation coordinators are not always skilled in preparing these applications. This subelement would fund assistance for water agencies in preparing these applications, particularly for the small or medium sized water agencies with no staff who desperately need the water efficiency funding to conduct programs.

Element 2: Technical Committees, Standards and Codes

One of the most effective (and certainly the least expensive) ways the state and water agency community can achieve urban water efficiency measures implementation is through legal mandates, namely regulations, technical codes and standards. For example, the Council worked with the California Energy Commission on their adoption of water factor standards for both commercial and residential clothes washers. Once such a standard or code is enacted, the ensuing conservation benefit is “free” to the water agencies and the state. The Council supports the development of both national and state-wide standards to achieve our state’s collective goal of multiple benefits from saving the most water for the least cost both to public agencies and private consumers. The Council’s activity in this area ensures not only new successes, but that previous successes are not eroded.

(a) Plumbing Standards Committee Participation and Tracking

The American Society of Mechanical Engineers (ASME) and the International Association of Plumbing and Mechanical Officials (IAPMO) are both accredited by the American National Standards Institute (ANSI) to develop U.S. standards for plumbing fixtures and fittings. Within these organizations, the ASME A112 and IAPMO Z124 committees are developing and maintaining standards related to toilets, urinals, showerheads, faucets, pre-rinse spray valves, and other fixtures and fittings used in indoor plumbing systems.

Standards committees and project teams are comprised of a variety of stakeholder interests and are required by ANSI to maintain a “balance” of interests. As such, these groups include representatives of manufacturers, laboratories, government, private sector consultants, and others. (Unfortunately, with the exception of California’s water conservation interests, the water utility sector nationally has not chosen to fully represent itself at the “standards table.”)

Representation by the water utility industry at the various plumbing standards committees is necessary in order to convey the need for water efficient products (with sustainable efficiencies) to those who establish those standards. The Council has been represented on those committees for about 10 years. Over that period of time, the relationship between the plumbing industry and those promoting water efficiency has developed into a cooperative one, wherein industry and water conservation practitioners are working together to improve the efficiency and performance

of plumbing products in the U.S. This mutually beneficial relationship must continue to grow through participation by the Council.

(b) California Energy Commission Standards

The California Energy Commission (CEC) considers and adopts regulations directed primarily at products and practices leading to improved energy efficiency within the state. In some cases, the products or practices being considered not only reduce energy consumption and/or peak loads, but also have a significant direct effect² upon water use as well.

In the past, the various items that needed to be jointly addressed with the CEC have suffered from a funding shortfall and, as such, the Council's role has not always been one of aggressively fostering, initiating, and supporting the CEC in exploring new opportunities. Even with the funding limitations, however, the Council has recently played significant roles in assisting the CEC in these areas:

1. Clothes Washers (as an advocate for a maximum water factor on new residential washers)
2. Pre-Rinse Spray Valves (as the prime initiator of regulations relating to hot water pre-rinse spray valves in commercial food service operations)
3. Building Codes related to hot water delivery systems (as a strong supporter of the CEC's investigations into the most energy- and water-efficient means for delivering hot water within residential dwellings)

A more formal ongoing cooperative relationship between the Council and the CEC is now developing, as represented by a draft Memorandum of Understanding between the two organizations now being considered. This agreement will undoubtedly lead to new explorations and opportunities for water efficient products and California standards.

(c) USGBC LEED Program Design (A "GREEN BUILDING" program)

The United States Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED) Program in 1998 to foster sustainable building design and construction, also known as "green building." Focused nearly entirely on energy consumption and sustainable building practices, the LEED Program provides only token acknowledgement of water. A voluntary, consensus-based, market-driven building rating system, LEED only allocates five (5) points³ for water issues out of its total of 69 points available.

In 2003, the USGBC recognized that water issues were under-represented in the system and, as a result, decided that more attention needed to be given to this area. In late 2003, an 11-member Water Efficiency Technical Advisory Group (WETAG) was recruited, qualified by the USGBC

² The reader should be aware that most such products and practices also have an indirect effect upon water consumption, as the production of electricity requires substantial quantities of water (potable and non-potable). Reductions in energy demands, therefore, lead to reductions in water demands.

³ Those five (5) points are allocated as follows: 2 points for landscaping and irrigation; 1 point for wastewater technologies; and 2 points for indoor water consumption.

Board of Directors, and then appointed by the organization to begin addressing the shortcomings and prepare for development of an entirely new version 3.0 of LEED beginning in 2005.

The Council is represented on the WETAG by one of its technical advisors. Other WETAG members come from elsewhere in the U.S. and represent a variety of water-related disciplines. The WETAG has worked throughout 2004 on existing LEED applications, but with an eye toward 2005 when new water measures will be added into the updated LEED system of building evaluation.

(d) Support to EPA's Water Star Program

In 2003, the U.S. Environmental Protection Agency (EPA) was encouraged by the Council and others to consider the launch of a product labeling and market enhancement program for water-efficient products similar to the very successful Energy Star program. This was supported by a "manifesto" of support for such from over 115 diverse stakeholders⁴ in the U.S. In response, the EPA commenced a process whereby stakeholder interest was solicited through a series of four regional stakeholder meetings in Washington D.C., Austin TX, Phoenix AZ, and Seattle WA. These meetings yielded positive results and the EPA proceeded to deepen its efforts to move forward. In early 2004, the agency hired two nationally recognized consultant firms to flesh out detailed programmatic and product issues.

During the course of these developments, the Council has been both a participant and an observer. The Council has offered assistance to the EPA staff as required. In addition, as a dues-paying member of a self-appointed stakeholder steering committee, the Council has deliberated with other stakeholders in a process designed to develop and provide consensus-based input to the EPA on issues of interest. Finally, Council members, through their professional associations with the EPA, have been able to gather ongoing status reports on the internal workings (or non-workings) of the EPA on this important initiative.

Since California interests were largely responsible for the EPA initiating the "Water Star" product labeling effort, the Council needs to continue to support the Water Office of the EPA..

(e) California Plumbing Codes

Codes are promulgated by code authorities and adopted by jurisdictions in order to protect the health and safety of the citizens. Plumbing codes in California are generally the outgrowth of work by the International Association of Plumbing and Mechanical Officials (IAPMO), authors of the Uniform Plumbing Code (UPC), and the State of California, which adopts a state plumbing code. Whereas the national standards approved by the American National Standards Institute are voluntary consensus-based standards, the codes (which may or may not adopt the national standards by reference) are mandatory within the jurisdiction that adopts them.

In a very significant area, the California Energy Commission (CEC) is currently investigating hot water distribution systems within residential dwellings. This is with an eye toward amending

⁴ Stakeholders include water utilities, state and local governments, product manufacturers, environmental organizations, other non-governmental organizations, testing laboratories, consultants, and others.

codes in California to require that certain design and construction practices be used in new residences that would reduce the amount of energy lost (and water lost) with existing construction practices. The process of amending plumbing codes to achieve resource efficiencies is laborious, usually contentious, and in need of support from the water stakeholders.

The influence of the Council on the code amendment process is essential and, in many cases, groundbreaking. Representation by the water utility interests in the plumbing code development process is necessary to offset those contingents of industry that are clearly resistant to any change, even if that change does not endanger the health or safety of citizenry – such as amendments that would allow for non-water consuming urinals or that would provide for changes to construction practices relating to hot water piping in residential dwellings. Both of these actions are necessary first steps to addressing some of the inherent inefficiencies in existing plumbing products and water delivery systems.

(f) UNAR (Unified North American Requirements for toilet fixtures)

The plumbing industry and water conservation professionals generally agree that the current patchwork of toilet specifications, requirements, and “approved toilet lists” promulgated by water authorities in the U.S. and Canada do not always serve the cause of water conservation in the most effective way. Nor do they take advantage of the highly competitive market environment that exists within the plumbing industry. As a consequence, there has been some confusion in the marketplace, a very limited availability of qualified products in some areas, and possibly higher product prices resulting from a smaller customer base.

Therefore, a group of individuals representing the conservation interests of some of the largest water providers in North America met in Austin TX in January 2004 to discuss and initiate an effort to develop a set of minimum requirements for toilets subsidized through their water conservation programs. Additional supporters have expressed support for the UNAR concept⁵, which would ultimately be applied to other plumbing products as well, including urinals, showerheads and shower systems, pre-rinse spray valves, faucets and sensor-operated valves.

By combining the elements of the very successful Los Angeles DWP Supplementary Purchase Specification (SPS) with the requirements of the also successful Maximum Performance (MaP) testing developed by 22 water utilities, a single uniform set of requirements would benefit all those water utilities engaged in toilet replacement programs in California.

The Council is key to this process. Without this proposal’s funding support this involvement would cease.

Element 3: Statewide Communications

In order to implement the most efficient water-conservation practices, the water supply industry must stay informed with up-to-date technological advances. Educational opportunities are

⁵ Beside the Council, current supporters include: Los Angeles DWP; City of Santa Monica; Otay Water District; San Diego CWA; East Bay MUD; Denver Water; Phoenix AZ; New York, NY; Austin TX; Seattle WA; Tampa Bay Water; Toronto, Ontario; Durham Region, Ontario; Waterloo, Ontario; Peel Region, Ontario, Calgary, Alberta; Winnipeg, Manitoba

extremely scarce for Water Conservation Coordinators and their staff. What these providers need is a “one-stop-shop” for the most current studies, the latest plumbing codes and standards, successful program information, and news on highly efficient hardware and appliances.

The Council is endeavoring to serve as a clearinghouse for water use efficiency information, providing water suppliers with resources they have difficulty finding elsewhere. Communication with water providers and their customers via the Council websites and newsletters promotes water use efficiency measures in the urban sector, educates end users (homeowners) in water-conserving practices, and provides technical expertise to urban agencies. These communication tools, including the WaterLogue newsletter and the Technical Information page of the Council’s website (www.cuwcc.org), require daily to weekly updating to ensure the newest information is readily available.

Additionally, the Council committee meetings and workshops, held statewide, offer conservation personnel the opportunity to learn from their peers and from experts in the field. The costs to attend these meetings, however, have become a burden to agencies whose funding has already been significantly reduced. With the advent of the “electronic meeting,” meetings and workshops could be attended via phone and the Internet at a fraction of the cost overall than for everyone to attend in person.

Keeping the Council websites and newsletters current and investing in an electronic meeting format will guarantee that water suppliers and their customers receive timely, useful information in a cost-effective manner.

(a) WaterLogue Newsletter

The WaterLogue Newsletter is an important part of the core services the Council provides. Without continued funding to support this publication, a valuable conservation resource would no longer be available to Council members and to the water industry at large. The extensive research involved in producing this newsletter necessitates that a significant amount of time be allotted to its creation.

The WaterLogue requires thorough research of the current field technology. Information for the WaterLogue newsletter is gathered through existing relationships with the various industries and companies developing or producing water-efficient products, testing laboratories, and other water utility conservation practitioners throughout North America. Among the venues where product information is gathered are codes and standards meetings with industry representatives, trade shows that include water-using products, and personal meetings with the engineers and marketing personnel of individual companies. Using these information avenues, the WaterLogue reports items of interest to water conservation personnel. More information is provided in the Appendix about this newsletter.

(d) Outreach Communications Plan

The Council has been the urban water conservation leader in California for over ten years, yet the average citizen is unaware of the Council and its programs. Additionally, many water

utilities would like to utilize the Council's many successful pilot programs and research efforts but lack access to information (e.g. press releases, fact sheets) about the Council's activities. Finally, the Council currently needs the expertise and assistance of media relations professionals to develop an appropriate strategy for conducting an effective public and media outreach campaign.

The Council proposes to develop a Communications Strategy to increase public awareness of the importance of water conservation programs. One of the goals of this task would be to maximize the Council's existing efforts and resources by ensuring the public, through the media, is aware of programs, publications and resources of the Council. Improved awareness and education will help agencies achieve greater participation on the part of their customers as well as provide tools for water suppliers to use to promote programs locally.

More detail on this item can be found in the Appendix.

(c) Urban Water Use Efficiency Certification Briefing Book

The Council believes that not enough water agencies are familiar with the potential urban water use efficiency certification requirements proposed by the California Bay Delta Authority. This subelement proposes that a briefing book on this issue be prepared by the Council and the nonpartisan Water Education Foundation to assist in the public discussion and understanding of water conservation and water recycling. This book would be analytical in scope, with a strong focus on current policy issues under discussion. It also will be based on interviews with the leading stakeholders on all sides of these debates, and include quotes that will allow readers the equivalent of firsthand access to these policy-makers' points of view.

More detail on this item can be found in the Appendix.

(a) CII Outreach Materials Assistance

The 2003-2005 Strategic Plan for the Council identified the marketing challenges of the commercial, industrial, and institutional customer and suggested that the Council undertake a special marketing training program for water conservation staff. Due to a budgetary lack of funds, such a training program has not yet been undertaken. Funding under this subelement would provide an opportunity for the Council to commission a marketing expert to identify strategies to reach this hard-to-convince customer. The implementation of BMP 9 has been poor to date because of these barriers.

(e) CUWCC Web Site: Technical Information Web Page

The Technical Information web page contains descriptions of water conservation studies, standards, product specifications and lists, water conservation technologies, and manufacturer links. The information on this page consists largely of downloadable documents designed to aid water conservation practitioners in designing, implementing and measuring conservation programs. In many cases, the information on the Technical Information page is also useful to consumers in evaluating and selecting products for purchase. Where possible, consumer-oriented

organizations are encouraged to make these documents available to their constituency through the Council's website.

The work effort involves researching and obtaining the documents to be posted on the Technical information page from individuals, water utilities, and related organizations throughout North America. The postings to this section of the Council's website occur on almost a weekly basis. The documents are screened for their applicability to California water utilities before they are posted. The reports are converted to PDF format and the Technical Information Page coded to include new items.

(f) Water Saver Home Newsletter

To promote efficient water use by urban residents, the Council began posting another newsletter on its Water Saver Home website (<http://www.H2Ouse.org>). The purpose of this newsletter is to communicate water conservation news of interest to homeowners and consumers. Potential topics range from the newest water efficient appliances on the market to seasonal tips and reminders on water use around the home.

To prepare this newsletter, research is conducted on water conservation tips and news of interest to the average homeowner. After in-house review, the modified newsletter is posted on the website. Four newsletter issues will be produced per year on a quarterly basis under this proposal.

(g) CUWCC Web site Support

The Council's main web site (<http://www.cuwcc.org>) is the primary method through which the Council communicates with the water conservation community. This web site contains a multitude of technical resources: lists of approved consultants; articles of interest on a wide range of conservation-related subjects (drought, metering, commercial retrofits); conservation program cost-effectiveness models; workshop materials and details; a calendar of conservation events; conservation publications available for download; and links to internet resources. Additionally, the latest industry Hot News is posted on a weekly basis.

While website maintenance is partially funded through membership dues, this does not cover the entire cost of upkeep. It is imperative that the technical resources posted on the Council website be updated in a timely manner to avoid outdated conservation ideas being disseminated throughout the water community.

Consultant lists are posted twice annually and updated throughout the year. On average, one new item per month is added to the Articles of Interest page. Workshop information is added to the website as needed. Generally there are six different sessions per year, including Cost Effectiveness, Best Management Practices, and Conservation Coordinator Training workshops. Most sessions have three to five workshops. Publications are posted as received. Several are added to the website per month.

Further details related to this subelement are available in the Appendix.

(h) Hosting for [cuwcc.org](http://www.cuwcc.org) and [h2ouse.org](http://www.h2ouse.org) websites

The Council's two websites, www.cuwcc.org and www.h2ouse.org, are vital to the continuing outreach to and education of the water conservation community. The Council does not host the servers for these websites in-house. These sites are hosted with the companies who originally designed them: www.cuwcc.org with Richard Carlton Consulting and www.h2ouse.org with Jel Productions, Inc. Richard Carlton also performs monthly maintenance to the [cuwcc.org](http://www.cuwcc.org) website, beyond what is covered in the hosting agreement.

Water utilities throughout California and even nationwide often look to the Council's main website for Best Management Practices (BMP) water-efficiency program implementation and technology information. Without future funding ensured to maintain these websites, this informational resource may no longer be available, making it that much more difficult for the water community at large to locate the information necessary for effecting successful programs.

Additionally, these utilities refer their customers to the Water Saver Home website for tips on conserving water around the house. One of the major roadblocks to running successful programs is the marketing of conservation activities in a manner that the homeowner can understand and is motivated to use. The H2Ouse website offers agencies a fun and graphically interesting tool for their customers and the public at large to learn about water conservation in the home. Web hosting funds must be secured on an annual basis to ensure this resource is available in the future.

CUWCC.org web hosting involves continued hosting of website and rental of two website servers located at Richard Carlton Consulting. This includes one server for the website itself and a transaction server for the online commerce portion (i.e. Publications) of the website. The H2Ouse.org website hosting involves the continued hosting of website on shared server located at Jel Productions, Inc.

(i) Electronic Meeting Format

As the budgets for many California cities and water agencies have been dramatically cut back, the first thing to go has been funding for travel expenses. This affects the ability of many water agencies and non-profit organizations to attend Council meetings and workshops. These forums are an important place for those in water conservation to learn about water efficiency practices, programs and technology. Attendance should be encouraged, without cost being a factor.

Budgets for traveling to Council meetings are not likely to be reinstated in the near future; rather, they are expected to be decreased even further. An electronic meeting format, where everyone can participate via computer and phone, would effectively solve this issue. Presentations and meeting materials would be instantly available to all attendees. Immediate feedback would be available from all participants, enabling discussion and fast decision-making on important issues.

To start this program the Council would enter into a contract with MCI Communications for the services necessary for an electronic meeting format, which include a conferencing account and training of Council staff in use of the audio and net conferencing tools. The Council, in turn,

would inform all applicable parties of the new meeting format availability and introduce them to the online product tutorials. This new meeting format could be available almost immediately.

Further details on this subelement are available in the Appendix.

Element 4: Research

Because the Council is very involved in new programs and issues, it is often a good forum for determining where additional research or data gathering may be necessary. One of the very first functions that the Council served for its members was to undertake needed studies on behalf of its membership. Often these studies are funded by dues or by “passing the hat” among the members, but the larger efforts can only be accomplished with additional grant funding. The following research proposals are ones that fall into that latter category of needing support.

(a) Product research, beta-testing, field trials and customer satisfaction surveys

Over the past five years, manufacturers, water utilities, and other organizations have routinely requested water conservation professionals to evaluate products, including prototypes, new products in production, and older products that might be candidates for marketing to the water conservation sector. During this time, the water utilities have funded and/or performed independent laboratory and field testing of:

- Irrigation controllers
- Pre-rinse spray valves
- Food steamers
- Dual-flush gravity toilets
- New toilet technologies
- Toilet flappers
- High-efficiency toilets (HETs)
- Showerheads
- Residential clothes washers
- Multi-load coin-operated clothes washers
- Water broom
- Data logger software

Included were product life cycle testing, physical durability testing, performance testing, flow rate testing, water consumption measurements, customer satisfaction surveys, and similar evaluative studies.

Future requirements and/or needs. The commitment of the water utilities to measure actual “real world” water savings, evaluate products, and verify manufacturer claims is an essential piece of California’s water-efficiency programs. This process represents the “checks and balances” needed when dealing with the varied industries and companies developing and marketing products into our market sector. Further, customers frequently ask their own water utility about products that are rebated or otherwise subsidized. As such, water utilities are very

concerned that products that are an integral part of a water-efficiency program be thoroughly evaluated and the water savings scientifically verified.

Without a product evaluation and testing process, water utilities are placed in a somewhat “helpless” position when it comes to developing a product-based water-efficiency program. By centralizing the evaluation process under the Council umbrella of services, its cost effectiveness is maximized and all California water utilities benefit.

Actions to be taken to satisfy the requirements/needs. The Council will continue to serve as a “clearinghouse” for product evaluation and testing, although other water utilities organizations (outside the state) may join with California in jointly funding such efforts. Joint funding of specialized studies of national or international interest or application has become the favored way to obtain the critical information needed by water efficiency programs everywhere. As such, the authority and excellent reputation that the Council brings to any such joint funding proposal is usually sufficient to draw out funds from sources outside the state, recognizing that the results of the work will be: based upon scientific principles, reliable, available to all, and broadly applicable to water conservation programs everywhere.

As in the past, the Council will actively promote and seek cooperative funding for evaluating a variety of products and their emerging technologies. Examples are:

Product Category	Research Question
Faucets and faucet controllers (CII)	Do sensor-operated faucets actually save water?
Wet cleaning systems (Commercial)	Does wet cleaning use more or less water than traditional dry cleaning?
Ice makers (Commercial)	What levels of water savings accrue through the application of the various new ice making technologies available?
Ice cream and soft serve machines (Commercial)	What water efficient technologies are available to reduce water consumption?
Combination ovens (Commercial)	What products and technologies save the most water over conventional ovens and steamers?
Hot water delivery systems (Residential)	Which systems and system layouts save the most water? Which are best suited to retrofit applications? To new construction?

Beneficiaries. While the primary beneficiaries of the research work are intended to be California water providers and their water conservation professionals and customers, benefits will also accrue to similar interests throughout the United States (thus, the likelihood of cost sharing with other interests outside of the state). Furthermore, this element of Technical Assistance is critical to the work with the California Energy Commission, the Standards and Codes bodies, the LEED program, and “Water Star”, inasmuch as these research findings will form the foundation for much of the work of these other organizations and programs. Ultimately, however, among the most important beneficiaries are the individuals and businesses that will have independently developed, “real world” data on product performance and reliability available to them without cost.

Further details on related to this subelement are available in the Appendix.

(b) Develop Potential Best Management Practices (PBMPs)

Signatory water suppliers to the *Memorandum of Understanding Regarding Urban Water Conservation in California (MOU)* agree to make good faith efforts to implement 14 urban water conservation Best Management Practices (BMPs). In addition to the current 14 BMPs, Exhibit 1 of the MOU includes a list of 11 potential BMPs (PBMPs). Under the terms of the MOU, the Council is responsible for maintaining a dynamic BMP/PBMP assessment process,

In January 2003, the Council undertook a new evaluation of PBMPs for urban water conservation. By early 2006, from 14 to 16 new potential PBMPs will have been evaluated to determine their suitability for a detailed examination in considering them for full BMP status.

Over the past few years, technology development has accelerated with respect to water-efficient practices and products. Consequently, new products that claim to be water-efficient are appearing in the marketplace at an unprecedented pace. While not all of these products may be true contenders for a place in the water-efficiency hall of fame, some are definitely worthy of consideration as a stand-alone PBMP, a component of a PBMP, or as a component of an existing BMP.

As noted above, many new products and practices are worth consideration as part of the BMP/PBMP structure. As such, they need to be evaluated as to their efficacy, cost, water savings potential, and overall suitability as a statewide practice. On an annual basis, somewhere between two and six such items require evaluation by technical and program specialists.

Under this proposal each candidate PBMP identified by the Council’s Research and Evaluation Committee would be subjected to reconnaissance study to determine the essential facts related to the item, i.e., technical efficacy, cost and reliability, water savings, and applicability on statewide basis. Such reconnaissance studies cost in the neighborhood of \$5,000 to \$10,000 depending upon the complexity of the product or practice.

Beneficiaries. The primary beneficiaries of the PBMP reconnaissance studies will be the water utilities and their customers. Both groups will gain important knowledge about the products in advance of any significant investments in programs.

Further details related to this subelement are available in the Appendix.

(e) California Launch of Consortium Energy Efficiency's Kitchen Initiative

Food service operations in the commercial sector including restaurants, cafeterias, institutional kitchens and food preparation companies exhibit significant water conservation potential. For example, the dishwashing operation in a typical restaurant consumes over two-thirds of all of the water used by that establishment. In some cases, nearly one-half of the water used in dishwashing is consumed by a pre-rinse spray valve used to remove food from dishware, utensils, and pans prior to placing them in the dishwasher.

In the food preparation area, food steamers, ice makers, and other pieces of equipment use significant amounts of water, due, in part, to once-through cooling. The energy consumption of food service equipment is likewise significant and has led to numerous initiatives directed at energy efficiency. The Food Service Technology Center, San Ramon, CA, and the Consortium for Energy Efficiency (CEE), Boston, MA, have both been at the forefront of specification development and qualification of food service equipment as to energy efficiency.

In November 2004, the Consortium for Energy Efficiency⁶ (CEE), together with a group of U.S. water utilities, initiated a joint effort with energy-efficiency program administrators and other public stakeholders directed at bringing water efficiency into the mix of energy efficiency services that CEE provides. This effort is currently exploring a new national initiative that promotes the opportunities for water and energy efficiency in commercial food service operations, including food processing, food storage, food waste disposal products, and dishwashing.

CEE and the participating water organizations (including the Council) established a new program committee open to interested CEE members and water utilities. The program committee's intent is to provide the established framework of a national initiative that both water and energy programs can implement locally – either individually or together. This project will be CEE's first water and energy saving initiative to involve water utilities from the inception.

Future Requirements and Needs. The Pacific Institute⁷ modeled daily water use in California restaurants and determined that a medium sized establishment (25 employees and 60 seats) consumes approximately 25,000 gallons per day of water. Given the large number of food service establishments in California (over 75,000), the Pacific Institute estimates that 163,000 acre-feet of water are consumed by the restaurant industry each year⁸. As such, it is critical that

⁶ The CEE is a not-for-profit organization. It plays a major role in the Energy Star program, developing product test methods (for energy consumption), working with manufacturers to "list" products for Energy Star qualification, and providing water and energy consumption data for clothes washers. This water data is used by water utilities throughout North America to structure their rebate programs for clothes washers.

⁷ Pacific Institute, 2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, November. Appendix E, Table E-18.

⁸ Ibid, Table E-20

the Council be active with the CEE kitchen initiative in order to assure that the outcomes are consistent with the goals and practices of California water utilities.

Council participation will be necessary to: (1) assist CEE in addressing those items of equipment that represent the largest opportunities for savings capture, (2) establish tiers of water efficiency that can be adopted into the typical outreach and incentive programs of the water utilities, (3) provide “real world” field testing platforms for verification of calculated efficiencies⁹, and (4) provide authoritative advice to CEE as it proceeds with this initiative.

Beneficiaries. The water utilities of California will benefit from the structure and tiered efficiency information resulting from this initiative, facilitating the implementation of conservation programs directed at the food service sector. The greatest beneficiaries, however, will be the food service industry (restaurants, commercial and institutional kitchens, food producers), which will have valuable information upon which to make purchase decisions, thereby deriving sizable cost savings from improved efficiencies (water, wastewater, and energy cost reductions).

Further details related to this subelement are available in the Appendix.

(f) Statewide Land Use and Landscaping Imagery & Specifications of Options

Although there is broad agreement that outdoor residential water use accounts for at least 50% of all residential water use, we really know very little about this usage on a macro level. Yet the potential for landscape water conservation is extraordinarily significant. *Waste Not, Want Not* concluded that a reduction of 360,000 to 580,000 acre-feet in residential landscape water is possible. What is important to note here is not the absolute quantity of water savings possible, but rather the variability of the Pacific Institute’s estimates. It is clear that no meaningful data set exists on a statewide level to quantify the amount of irrigation area – both agricultural as well as urban.

Using extremely high resolution satellite imagery to capture, map, and quantify irrigated landscape areas can solve this problem. Forestry and agriculture professionals are among those who regularly employ these technologies to quantify such things as timber resources and planted cotton acreage. These above-earth imagery technologies have performed well in monoculture situations or where micro-level detail is not necessary. Forestry and agriculture have been able to take advantage of satellite technology that is considered obsolete or primitive by today’s standards. Regrettably, the complexity and diversity of irrigated urban landscapes has historically limited the applicability of aerial and satellite imagery.

We believe that multi-spectral, one meter resolution satellite imagery may have reached a technology price-point that allows us to readily and accurately measure irrigated landscapes in California. We also strongly believe that the “scale-economies” associated with processing satellite imagery and combining it with real estate parcel databases are significant. While it may

⁹ It is the contention of water conservation practitioners that savings “claims” or “calculations” must be field verified in real world installations, where possible, in order to provide the level of confidence necessary to structure meaningful incentive-based programs.

be tempting (and possible in some cases) for regional organizations such as water agencies to go-it-alone and acquire, process, and interpret satellite data, the results will be less cost effective than those accomplished under an organization solely focused on the task. The cost of acquiring the data will no doubt be higher if acquired piecemeal than if sourced in aggregate. It also makes little sense for each regional agency to face the same learning curve when processing the data.

The Council is proposing to devote time to better understanding the full scope of landscape irrigation issues in California and to match those against available, proven imagery technologies. A well-conceived set of program goals, technology specifications, and an aggressive negotiation with imagery providers could provide the greatest benefit for the least cost. Costs will be minimized if the data is acquired statewide in aggregate and is in a format that requires minimal post-capture manipulation by humans. There are likely other parties (e.g., agricultural engineers, climate researchers, foresters, watershed planners, parks & recreation planners, land use planners, and others) who may be interested in participating with the Council in acquiring satellite imagery data, thus improving our negotiation with providers and enabling a low “per pixel” cost for the water agencies.

For this proposal, the Council would like to research the issues surrounding satellite imaging and landscape irrigation. We would like to develop a set of specifications that would enable us to cost-effectively acquire imagery data if it proves cost effective. Little or no imagery data will be acquired under this grant, but a feasibility review, recommendation and funding proposal would be developed. The steps in this process would include:

1. Define goals of a statewide satellite imaging program
2. Evaluate existing satellite imaging technology
3. Determine whether existing technology meets program goals
4. Create a cost/benefit profile for program goals
5. Identify spatial imaging applications for other partners
6. Identify partnership opportunities with other interested parties
7. Develop strategy, funding schedule and list of recommendations

Element 5: Conservation Education Curriculum

The Council is proposing to create a water conservation education curriculum, called “WaterCares” which will be directed principally toward the 8th grade level. This curriculum would be offered by the Council to its members as a way to fulfill the requirements of BMP 8, on School Education. The 8th grade level was chosen because of its focus on the physical sciences in science, US history and geography in history/social sciences, and algebra, geometry, and probability/statistics in mathematics. All of these topic areas address critical issues related to water use, public policy, sustainability, and conservation.

Historically, many lessons have been developed related to water, the environment, and conservation. None, however, have taken a broad focus on the issues of a single state, particularly one as large and diverse as California. With effective development and

implementation, this program will make a significant contribution to the state's environment, economy, and educational efforts simultaneously.

By making it available to teachers at little or no charge, by making the materials consumable, by keeping it standards driven, and by offering numerous teacher workshops at meetings throughout the state throughout the school year, this program will be well received and appreciated by the teaching community. It will provide a useful tool that engages, teaches and entertains students while not adding more work to the teachers' already busy and stressed schedules.

To further add to teacher ease-of-use, the program will rely entirely on readily available low-cost, no-cost materials rather than materials that are costly, hard to obtain, or difficult to maintain. Discarded one-gallon plastic jugs, measuring cups, plastic hose, the Internet, and watches with second hands provide the tools for weeks worth of water conservation education.

Much of the program's use and success will depend on how it is disseminated, thus we will employ several strategies. It will be introduced to teachers via direct mail. To do that, we will gather the names and addresses of all the middle schools in the state and send a solicitation to the appropriate teachers. Classroom packs of materials will then be sent to the responding teachers. The materials will also be presented and distributed at teacher meetings throughout the state.

In addition, materials will be distributed by the education staffs of water agencies and irrigation districts from across the state. This strategy will enable teachers and water agency staff to work with individuals with whom they are already familiar.

Further details related to this subelement are available in the appendix.

Statement of Work, Section Three: Monitoring and Assessment

Water management in California, and urban water conservation in particular, are complex and dynamic. Thus, it is essential for the Council to monitor its own policies, practices, and activities on a continuous basis to ensure that it continues to provide a leadership role.

The CUWCC proposes to monitor each Element of this grant proposal as fits the work effort. The following is an overview of the monitoring and evaluation methods and reporting. Specific details on the implementation of the Monitoring and Reporting for each Element are provided by subelement in their respective Appendix.

Element 1 : Statewide Technical Assistance

The Council keeps excellent records on the technical assistance that it provides because this function has an important tracking purpose. The Technical Log shown below will be used to track technical assistance requests received and responded to. In addition, these logs can be shared as quarterly deliverables with DWR staff.

Figure 1. Screen Shot of the Technical Log Input Screen

The screenshot shows a web-based form titled "TA_NewLog : Form". The form is organized into several sections:

- Header Section:** Contains three dropdown menus: "Entered By:", "Inquiry Method:", and "Request Date:".
- Organization and Contact Section:** Includes "Organization:" and "Contact Name:" dropdown menus, and a button labeled "Add New Contact".
- Question Section:** A large text area labeled "Question:" for entering the request details.
- Topic Section:** A dropdown menu labeled "Topic:".
- Response Section:** A large text area labeled "Response:" for providing the answer.
- Footer Section:** Contains three dropdown menus: "Assigned To:", "Answer Method:", and "Completion Date:". Below these are two buttons: "Close" and "Save and Close".

CUWCC Technical Assistance November 2004

Topic:	BMP 1: Residential Surveys
Date:	11/5/2004
Requested By:	Mary Forrest Burbank, City of, PSD
Answered By:	Beth Emsberger
Question:	They are considering putting an online residential survey tool on their website. Would this meet the requirements for surveys under BMP 1?
Answer:	According to the language of Exhibit 1: BMP 1, the survey must include physical checks for leaks and flow rates indoors and irrigation system checks outdoors. This would be impossible to do via the Internet, so their survey tool would not meet the requirements of this BMP. It may meet the requirement of contacting customers, but the preferred method would be via letter or telephone.
Topic:	BMP 1: Residential Surveys
Date:	11/10/2004
Requested By:	Cari DeWolf El Dorado Irrigation District
Answered By:	Thomas Pape
Question:	We heard at the RWA meeting that BMP 1 and BMP 2 were being phased out, and there was no need to continue implementing the programs. Is this true?
Answer:	BMP 1 is to sunset in 2007. This does not relax the water supplier's obligations of the MOU. BMP 15 is in the final stages of revision and will focus only on residential outdoor water use. All work performed in accordance with BMP 1 is given full credit in BMP 15. BMP 2 is in the initial stages of revision to focus on the indoor water use not covered by BMP 6, and BMP 15.
Topic:	BMP 2: Residential Plumbing
Date:	11/2/2004
Requested By:	Sandra Holliman HUD project group Gilroy
Answered By:	Thomas Pape
Question:	We are building a low-income housing project and are searching for submeters to install. Do you know of any good submeters?
Answer:	Submetering existing apartment buildings is difficult and full of complications. In new construction, it is much much easier to plumb the building so each apartment has one water supply pipe. The local water utility would probably install and read the meters and do all billing. (long discussion ensued)
CUWCC Technical Assistance	
November 2004	
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Element 2: Technical Committees, Standards and Codes

A memorandum outlining recent developments in standards and codes will be prepared on a quarterly basis. This report will compare the current status quo with the baseline of codes and

standards goals and objectives desired during the grant project. The final report will include a summary compilation of activities throughout the duration of the grant contract.

Element 3: Statewide Communications

The WebTrends statistical report shown below for both the www.cuwcc.org and the www.h2ouse.org web sites will be the key monitoring and assessment tool for this element. For example, the latest issue of the WaterLogue was the tenth most downloaded document on the Council website in December. These reports will be reviewed on a monthly basis will be summarized in each quarterly status report to DWR.



Default Report
IIS 4 Log File Number 1

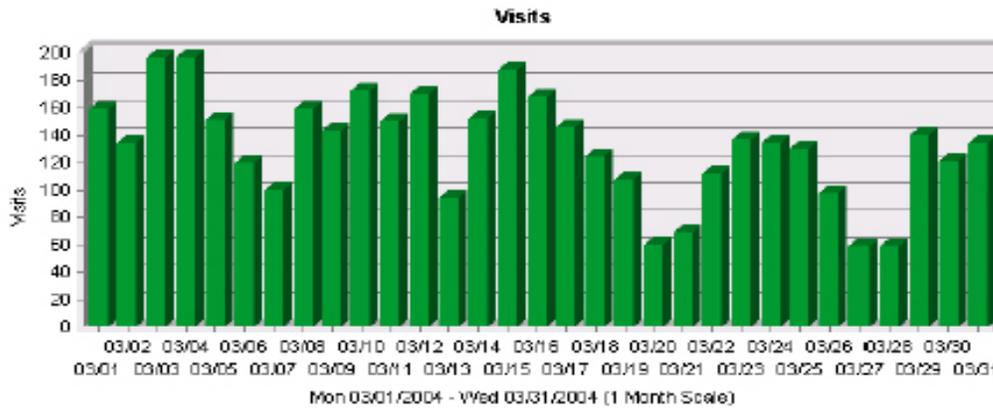
03/01/2004 00:00:00 - 03/31/2004 23:59:59

Tuesday April 06, 2004 - 00:00:19

General Statistics

Help

The Visits graph displays the overall number of visits to your Web site. The General Statistics table provides an overview of the activity for your Web site during the specified time frame.



General Statistics

Hits	Entire Site (Successful)	62,105
	Average Per Day	2,003
	Home Page	N/A
Page Views	Page Views (Impressions)	18,878
	Average Per Day	608
	Document Views	46
Visits	Visits	4,097
	Average Per Day	132
	Average Visit Length	01:13:50
	Median Visit Length	00:01:31
	International Visits	0%
	Visits of Unknown Origin	100%
Visitors	Visits from United States	0%
	Unique Visitors	2,369
	Visitors Who Visited Once	1,762
	Visitors Who Visited More Than Once	607

Element 4: Research

Quarterly reports will be provided to summarize the ongoing activities, and a final report prepared for those subelements (like PBMP research) that will be providing recommendations.

Element 5. Conservation Education Curriculum

Quarterly reports will be provided on the status of the education program development, with the final curriculum being the end deliverable.

At the time that these materials begin widespread use, we will solicit feedback from both the teachers and the students who use it. We will make available to teachers an objective pre-test/post-test assessment tool designed to test student learning, and we will provide instruction to the teacher on how to use the students' work on the lessons themselves as a tool for authentic portfolio assessment of progress and learning.

We will compile and record this feedback, presenting it in quarterly reports and making the electronic or hard copy summary program evaluation reports readily available upon request by DWR and others.

To comply with DWR funding requirements, the CUWCC will re-evaluate project cost/benefits to extent practical and possible under this Category B type proposal as part of the final report and will submit annual reports of qualified and quantified benefits and costs for five years after the completion of the project.

Qualifications of the Applicants

The Council is a non-profit organization composed of 328 member urban water supply agencies, environmental groups, and other entities. The organization's goal is to implement, or aid members in implementing, California water conservation best management practices and other conservation initiatives.

Mary Ann Dickinson, CUWCC Executive Director

With over 16 years of conservation experience, Mary Ann Dickinson has a diverse background in water efficiency program design, implementation, marketing, and management. She has over 30 years of experience in project management. Her goal is to bring water efficiency to its highest possible level statewide by bringing new products to market as well as implementation of statewide retrofit programs. An example of her stewardship is the CUWCC Rinse and Save Program, operating since 2002. Under Mary Ann's watchful eye the Rinse and Save Program, a statewide spray valve retrofit program, has delivered 25,850 AF of savings to 20,000 customer sites.

Mary Ann is also involved in State water policy issues. She serves on the California Bulletin 160 State Water Plan Advisory Committee, and on the California Bay-Delta Water Use Efficiency Subcommittee, where she has been an active participant working closely on programs and issues benefiting the Bay Delta watershed.

Prior to joining the Council in January of 1999, Mary Ann was a Branch Manager for the Metropolitan Water District of Southern California, where she worked on planning, legislative, conservation, and community conservation programs since 1992. From 1989 to 1992 served as Deputy Director for Public and Governmental Affairs at the South Central Connecticut Regional Water Authority. In that capacity she coordinated state and local government activities and managed a statewide conservation program involving 63 water utilities. Mary Ann also has a depth of experience as a resource manager, having worked at the Connecticut Department of Environmental Protection for 18 years as a coastal management regulator, planning specialist, and legislative lobbyist.

Katie Shulte Joung, CUWCC Project Manager

Katie Shulte Joung is a Project Manager with the California Urban Water Conservation Council. Katie's work at the Council includes managing sixteen research and local assistance projects as part of a \$1.9 million three-way cooperative agreement (see item 3 below) with the California Department of Water Resources, CALFED, and the Bureau of Reclamation. For the first two years of this 3-year cooperative agreement, all projects funded by DWR were completed on time and within budget; we are currently on track to complete the remainder of work in year three before the April 30, 2005 deadline in the contract. Katie has extensive experience in coordinating public outreach, facilitating and organizing workshops, and providing training and technical assistance on water supply and land use planning linkages as well as numerous conservation activities.

Prior to joining the Council, Katie was with the Governor's Office of Planning and Research (OPR) where she was an Associate Planner specializing in land-use planning and water policy issues and providing local agencies with technical assistance regarding the California Environmental Quality Act and state planning law, and water supply planning legislation (SB 221 and SB 610). She has a B.A. from U.C. Berkeley with an emphasis on environmental policy and planning.

Beth Ernsberger, CUWCC Database/Website Manager

Beth is the Database and Website Manager for the California Urban Water Conservation Council. She is the webmaster for the Council's three websites, maintains the Council's membership database and provides technical support to the office staff. Beth's main focus involves assisting the member water agencies in utilizing the Best Management Practices online reporting system to submit data on their conservation activities. Prior to working for the Council she was a Technical Workshop Instructor and Database Administrator for the City of Sacramento. Beth is a graduate of California State University, Sacramento, with a Bachelor of Science in Management Information Systems.

Thomas E. Pape, CUWCC Program Manager

Thomas Pape, an expert water consultant and principal of Best Management Partners, is a long time veteran of the water efficiency industry. As program manager of the CUWCC One Stop Rebate Program, Mr. Pape will carry responsibility for the overall attainment of program goals. Tom will handle the contracting process with DWR and participating water agencies as well as the RFP and contracting process with the program rebate contractor. Invoicing and reporting will be submitted by Tom as required by DWR. The program rebate contractor will report to Tom.

Gaining his experience through implementation of efficiency programs, Tom has managed many of the state's premiere water efficiency initiatives. Starting in the efficiency industry in 1983, Tom worked as a program manager for DMC Services, now known as Honeywell DMC. He designed and managed programs including door-to-door Santa Monica Energy Fitness Program (energy and water measures) and PG&E's House Doctor Program. He went on to manage the City of Austin, Texas Water Conservation Program and many others.

Tom moved on to the City of Pasadena's Department of Water and Power, developing and implementing water and energy utility programs. He also designed measurement and evaluation programs to study the impact of program measures.

From 1990-1998, Tom worked for VIEWtech as Director for Western Region. He held operational and fiscal responsibility for over \$12 million dollars annually.

In 1997, Tom established Best Management Partners, a consulting business that aids CUWCC and water agencies throughout the state in the design, implementation, and assessment of water efficiency initiatives.

John Koeller, CUWCC Monitoring and Assessment Technical Consultant

John Koeller has been engaged as a consultant in the water and energy efficiency market since 1992. John, principal consultant with Koeller and Company, has more than 30 years of experience serving clients in both the public and private sectors. He has performed more than 230 technical assignments for a variety of clients, including Metropolitan Water District of Southern California, East Bay MUD, Municipal Water District of Orange County, SDG&E, Southern California Edison, Inland Empire Utilities Agency and Seattle Public Utilities.

John is currently a technical consultant to CUWCC handling an array of technical assignments including oversight of the measurement and verification (M&V) for the CUWCC Rinse and Save Program. Overseeing the measurement and verification consultant, John was responsible for the technical viability of the M&V methodology and ensuring the validity of the savings numbers overall.

Outreach, Community Involvement, and Acceptance

The letters of support contained in this proposal clearly show the strong water agency interest in Council conservation assistance. These entities have worked closely with the Council as we have reached out to the water agency community. In the description of the project tasks, it is clear that all of the Council's work is about providing conservation implementation assistance to not only its members, but any one who asks.

Every work product produced at the Council is posted on the Council's web site. In addition, the Council regularly emails the water agency community with news to share and information to disseminate. The outreach goes to environmental advocacy groups and community based organizations as well as water agencies, as these organizations are also active participants in urban water conservation and the Council.

Finally, our technical assistance involves exhibiting a booth at fairs, conferences, and other public gathering places. We take great pride in our desire to be open and helpful to the general public. Although the Council cannot exhibit as much as it would like to because of the constraints on staffing and funds, we do attend at two two or three events a year.

For additional information on Council outreach, please visit the Council's website:
www.cuwcc.org

Innovation

With the Council's guidance and participation, California is at the forefront of urban water conservation research, development and implementation. The research, method and models developed in this project would have practical application throughout California, and foster awareness of the cost-effectiveness and environmental benefits of water conservation.

Fostering good science ensures that water conservation remains credible. The complexities of California water conservation present a hard-to-hit target. New technologies continue to emerge. Economic cycles and cycles of drought influence public sentiment and acceptance. Legislative changes bring about mandates for certain initiatives. The Council is in the position of both responding to and driving those changes. Retaining its leadership role requires strong, credible information that is readily accessible and easy to use. Conservation, however, does not fit a traditional engineering model of striving to increase supplies; it diminishes a need for supply by controlling demand. As such, it must constantly be explained, sold, and updated. The Council is in a unique position to drive that conversation among the public, among professionals, and among policy makers.

In the coming years, the Council plans to continue its now-established role of promoting water use efficiency as a viable and important part of the state's resource mix. It must also continue to develop new BMPs, and revise existing ones, as technologies improve and as additional opportunities for water conservation present themselves. The development of new stakeholder partnerships must also be pursued. In accomplishing this, credible, substantive outreach efforts to legislators, media, and other policy makers will be more important than ever.

Through this project, the Council will provide an innovative approach to technical assistance using the most advanced technologies available, such as electronic meeting formats and web based information postings for quick and easy dissemination and updating of current quality research on water conservation.

Benefits

The California Urban Water Conservation Council is applying for funding to complete broad spectrum of technical assistance required that will assist water utilities with implementing the urban water conservation BMPs. These benefits included supporting their efforts to stay up-date on the latest technologies, on calculating avoided costs and establish internal water agency budget justifications and developing methods to quantify for the first time the environment benefits and costs associated with implementation of water efficiency programs.

Water efficiency can yield substantial water quality benefits. It is important to be able to calculate these as part of the utility avoided cost analysis.

The following environmental benefits (a partial list) are derived from urban water conservation activities: reduced demand to a source watershed; increased flows at a certain time of year in a source watershed; reduced environmental mitigation in a source watershed; reduced runoff in a receiving watershed; reduced pollutant loading in a receiving watershed; reduced green waste or hazardous waste in a receiving watershed; reduced wastewater flow into one or more treatment plants; and reduced energy consumption (e.g. avoided pumping and treatment of urban water supply and avoided hot water use).

In response to the federal Clean Water Action Plan released in 1998, the California State Water Resources Control Board identified 66 priority watersheds including the Russian River, the Sacramento River (upper and lower), San Francisco Bay, the San Joaquin Delta, and Santa Monica Bay. The Council's member urban water suppliers either receive or discharge their water either directly/indirectly to/from these watersheds. This project would enhance the ability of the regulated community (water utilities) to deal with non-traditional pollution problems, such as nutrient run-off, in these priority watersheds by providing the necessary data, methods and model(s) to assist water agencies in determining the true costs and benefits associated with a proposed conservation program. This improved capability to evaluate program costs and benefits will facilitate more widespread implementation of each BMP and, therefore, generate less demand on source waters and reduce wastewater discharge and nutrient run-off (e.g. less landscape irrigation results in less fertilizer and water run-off into watersheds)

Costs

This technical assistance application provides three years of core funding for the Council. All of the programs are scalable; that is, funding can be assigned by years as well as by element. We do ask, however, that the proposed work elements be considered in the following priority order:

1. Element 3: Statewide Communications
2. Element 1: Statewide Technical Assistance
3. Element 2: Technical Committees, Standards and Codes
4. Element 4: Research
5. Element 5: Statewide Education Curriculum Development

We firmly believe that all the elements and subelements are worthy; we are just providing guidance should cuts be necessary.

Finally, as indicated in our budget documents and according to our auditor, the Council's indirect cost rate is 39%. We are offering 24% of that as direct match. That equates to a 24% cost share in this project. However, the Council is also willing to offer as match the dues funds that are collected yearly from the membership. In 2004 that amounted to \$615,833. By adding that in, our cost share then rises to 48%.

Urban Water Efficiency Technical Assistance Program
Schedule

Project	Budget	Year 1				Year 1 Subtotal	Year 2				Year 2 Subtotal	Year 3				Year 3 Subtotal	Total
		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		
Statewide Technical Assistance																	\$0
On call Technical Assistance	\$476,976	\$39,748	\$39,748	\$39,748	\$39,748	\$158,992	\$39,748	\$39,748	\$39,748	\$39,748	\$158,992	\$39,748	\$39,748	\$39,748	\$39,748	\$158,992	\$476,976
Committee Support	\$123,107	\$10,259	\$10,259	\$10,259	\$10,259	\$41,036	\$10,259	\$10,259	\$10,259	\$10,259	\$41,036	\$10,259	\$10,259	\$10,259	\$10,259	\$41,036	\$123,107
CIMIS Monitor	\$126,768	\$10,564	\$10,564	\$10,564	\$10,564	\$42,256	\$10,564	\$10,564	\$10,564	\$10,564	\$42,256	\$10,564	\$10,564	\$10,564	\$10,564	\$42,256	\$126,768
On Call Grant Assistance	\$95,737	\$7,978	\$7,978	\$7,978	\$7,978	\$31,912	\$7,978	\$7,978	\$7,978	\$7,978	\$31,912	\$7,978	\$7,978	\$7,978	\$7,978	\$31,912	\$95,737
Statewide Technical Assistance	\$822,587																
Technical Committees, Standards and Codes																	
ASMEand IAPMO Plumbing Standards	\$37,661	\$3,138	\$3,138	\$3,138	\$3,138	\$12,554	\$3,138	\$3,138	\$3,138	\$3,138	\$12,554	\$3,138	\$3,138	\$3,138	\$3,138	\$12,554	\$37,661
CEC Standards	\$11,303	\$942	\$942	\$942	\$942	\$3,768	\$942	\$942	\$942	\$942	\$3,768	\$942	\$942	\$942	\$942	\$3,768	\$11,303
LEED Program Development	\$34,333	\$2,861	\$2,861	\$2,861	\$2,861	\$11,444	\$2,861	\$2,861	\$2,861	\$2,861	\$11,444	\$2,861	\$2,861	\$2,861	\$2,861	\$11,444	\$34,333
EPA Water Star	\$56,222	\$4,685	\$4,685	\$4,685	\$4,685	\$18,741	\$4,685	\$4,685	\$4,685	\$4,685	\$18,741	\$4,685	\$4,685	\$4,685	\$4,685	\$18,741	\$56,222
Certified Landscape Contractors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing Codes, Tracking and Support	\$16,110	\$1,343	\$1,343	\$1,343	\$1,343	\$5,370	\$1,343	\$1,343	\$1,343	\$1,343	\$5,370	\$1,343	\$1,343	\$1,343	\$1,343	\$5,370	\$16,110
UNAR Development and Maintenance	\$79,230	\$6,603	\$6,603	\$6,603	\$6,603	\$26,410	\$6,603	\$6,603	\$6,603	\$6,603	\$26,410	\$6,603	\$6,603	\$6,603	\$6,603	\$26,410	\$79,230
Technical Committees, Standards and Codes	\$234,859																
Statewide Communications and Education-Web Support																	
Waterlogue Newsletter	\$36,129	\$3,011	\$3,011	\$3,011	\$3,011	\$12,043	\$3,011	\$3,011	\$3,011	\$3,011	\$12,043	\$3,011	\$3,011	\$3,011	\$3,011	\$12,043	\$36,129
Communications Plan	\$31,699	\$2,642	\$2,642	\$2,642	\$2,642	\$10,566	\$2,642	\$2,642	\$2,642	\$2,642	\$10,566	\$2,642	\$2,642	\$2,642	\$2,642	\$10,566	\$31,699
Certification Briefing Book	\$1,898	\$158	\$158	\$158	\$158	\$633	\$158	\$158	\$158	\$158	\$633	\$158	\$158	\$158	\$158	\$633	\$1,898
CII Outreach Materials	\$26,410	\$2,201	\$2,201	\$2,201	\$2,201	\$8,803	\$2,201	\$2,201	\$2,201	\$2,201	\$8,803	\$2,201	\$2,201	\$2,201	\$2,201	\$8,803	\$26,410
Technical Information Page	\$18,053	\$1,504	\$1,504	\$1,504	\$1,504	\$6,018	\$1,504	\$1,504	\$1,504	\$1,504	\$6,018	\$1,504	\$1,504	\$1,504	\$1,504	\$6,018	\$18,053
Water Saver Home Newsletter	\$9,032	\$753	\$753	\$753	\$753	\$3,011	\$753	\$753	\$753	\$753	\$3,011	\$753	\$753	\$753	\$753	\$3,011	\$9,032
Web-Technical Resources	\$20,885	\$1,740	\$1,740	\$1,740	\$1,740	\$6,962	\$1,740	\$1,740	\$1,740	\$1,740	\$6,962	\$1,740	\$1,740	\$1,740	\$1,740	\$6,962	\$20,885
Web-Ordinance Library	\$11,993	\$999	\$999	\$999	\$999	\$3,998	\$999	\$999	\$999	\$999	\$3,998	\$999	\$999	\$999	\$999	\$3,998	\$11,993
Web-Re-organization	\$40,333	\$3,361	\$3,361	\$3,361	\$3,361	\$13,444	\$3,361	\$3,361	\$3,361	\$3,361	\$13,444	\$3,361	\$3,361	\$3,361	\$3,361	\$13,444	\$40,333
Web Hosting	\$76,406	\$6,367	\$6,367	\$6,367	\$6,367	\$25,469	\$6,367	\$6,367	\$6,367	\$6,367	\$25,469	\$6,367	\$6,367	\$6,367	\$6,367	\$25,469	\$76,406
Electronic Meetings	\$404,889	\$33,741	\$33,741	\$33,741	\$33,741	\$134,963	\$33,741	\$33,741	\$33,741	\$33,741	\$134,963	\$33,741	\$33,741	\$33,741	\$33,741	\$134,963	\$404,889
Conservation Education Curriculum	\$7,593	\$633	\$633	\$633	\$633	\$2,531	\$633	\$633	\$633	\$633	\$2,531	\$633	\$633	\$633	\$633	\$2,531	\$7,593
Statewide Communications and Education-Web Support	\$685,321																
Research																	
Product Research, Testing and Trials	\$35,389	\$2,949	\$2,949	\$2,949	\$2,949	\$11,796	\$2,949	\$2,949	\$2,949	\$2,949	\$11,796	\$2,949	\$2,949	\$2,949	\$2,949	\$11,796	\$35,389
PMBPs	\$20,600	\$1,717	\$1,717	\$1,717	\$1,717	\$6,867	\$1,717	\$1,717	\$1,717	\$1,717	\$6,867	\$1,717	\$1,717	\$1,717	\$1,717	\$6,867	\$20,600
CEE Commercial Kitchens Initiative	\$52,292	\$4,358	\$4,358	\$4,358	\$4,358	\$17,431	\$4,358	\$4,358	\$4,358	\$4,358	\$17,431	\$4,358	\$4,358	\$4,358	\$4,358	\$17,431	\$52,292
Statewide Imagery Plan	\$52,820	\$4,402	\$4,402	\$4,402	\$4,402	\$17,607	\$4,402	\$4,402	\$4,402	\$4,402	\$17,607	\$4,402	\$4,402	\$4,402	\$4,402	\$17,607	\$52,820
Research	\$161,101																
Monitoring and Assessment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reporting (Contract Management)	\$7,481	\$623	\$623	\$623	\$623	\$2,494	\$623	\$623	\$623	\$623	\$2,494	\$623	\$623	\$623	\$623	\$2,494	\$7,481
Total	\$1,911,349	\$159,279	\$159,279	\$159,279	\$159,279	\$637,116	\$159,279	\$159,279	\$159,279	\$159,279	\$637,116	\$159,279	\$159,279	\$159,279	\$159,279	\$637,116	\$1,911,349

Applicant: California Urban Water Conservation Council-Urban Water Efficiency Technical Assistance Program

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	\$0	0	\$0	\$0	\$0	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	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Travel	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
	Indirect Costs	\$0	0	\$0	\$0	\$0	0	0.0000	\$0
(a)	Total Administration Costs	\$0		\$0	\$0	\$0			\$0
(b)	Statewide Technical Assistance	\$1,082,352	0	\$1,082,352	\$259,764	\$822,588	0	0.0000	\$0
(c)	Technical Committees, Standards & Codes	\$309,025	0	\$309,025	\$74,166	\$234,859	0	0.0000	\$0
(d)	Statewide Communications & Education Web Support	\$901,739	0	\$901,739	\$216,417	\$685,322	0	0.0000	\$0
(e)	Research	\$211,975	0	\$211,975	\$50,874	\$50,874	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	\$9,842	0	\$9,842	\$2,363	\$7,479	0	0.0000	\$0
(n)	TOTAL	\$2,514,933		\$2,514,933	\$603,584	\$1,911,349			\$0
(o)	Cost Share -Percentage				24	76			

1- excludes administration O&M.

Applicant: California Urban Water Conservation Council

Urban Water Efficiency Technical Assistance Program

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)
\$2,514,933	\$0	\$0	\$2,514,933

(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	\$2,514,933	\$2,514,933

(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: California Urban Water Conservation Council
Urban Water Efficiency Technical Assistance Program

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	<ul style="list-style-type: none"> *Reduced water demand throughout the year; *Avoided costs associated with demand reduction (supply, distribution, energy, etc.) *Improved reliability for Bay Delta region *Reduction of runoff nonpoint contaminants *Reduced unrecoverable water losses due to evaporation *General improvements to ecosystem related to reduced drought stress 	<ul style="list-style-type: none"> *Time pattern: year round with special emphasis during dry summer months *Location: statewide 	<ul style="list-style-type: none"> Indefinite life span. Improving implementation and planning will yield benefits as long as more effective planning and implementation is carried out into the future. 	<ul style="list-style-type: none"> The majority of benefits are indirect in that they encourage conservation program implementation through the state. 	<ul style="list-style-type: none"> This project is designed to improve planning and implementation of statewide conservation programs, most of which will directly benefit the Bay Delta watershed because of the local of most of the water agency supply shortages.
Local	<ul style="list-style-type: none"> *Reduced water demand throughout the year; *Avoided costs associated with demand reduction (supply, distribution, energy, etc.) *Improved reliability *Reduction of runoff nonpoint contaminants *General improvements to ecosystem related to reduced drought stress 	<ul style="list-style-type: none"> *Time pattern: year round with special emphasis during dry summer months *Location: statewide 	<ul style="list-style-type: none"> Indefinite life span. Improving implementation and planning will yield benefits as long as it is carried out into the future. 	<ul style="list-style-type: none"> The majority of benefits are indirect in that they encourage conservation program implementation through the state. 	<ul style="list-style-type: none"> This project is designed to improve planning and implementation of statewide conservation programs, most of which will directly benefit the Bay Delta watershed because of the local of most of the water agency supply shortages.

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.

Applicant: California Urban Water Conservation Council
Statewide Urban Water Efficiency Technical Assistance Program

Table C-6 Project Annual Local Monetary Benefits

ANNUAL LOCAL BENEFITS	ANNUAL QUANTITY	UNIT OF MEASUREMENT	ANNUAL MONETARY BENEFITS
(a) Avoided Water Supply Costs (Current or Future Source)	0		\$0
(b) Avoided Energy Costs	0		\$0
(c) Avoided Waste Water Treatment Costs	0		\$0
(d) Avoided Labor Costs	0		\$0
(e) Other (describe)	0		\$0
(f) Total [(a) + (b) + (c) + (d) + (e)]			\$0

Table C-7 Project Local Monetary Benefits and Project Costs

(a) Total Annual Monetary Benefits [(Table C-6, row (f))]	\$0
(b) Total Annual Project Costs (Table C-3, column III)	\$2,514,933

Table C-8 Applicant's Cost Share and Description

Applicant's cost share %: (from Table C-1, row o, column V)	24
Describe how the cost share (based on relative balance between Bay-Delta and Local Benefits) is derived. (See Section A-7 for description.)	
<p>The California Urban Water Conservation Council (Council) will provide 24% of its indirect costs to this project. Our overhead rate for 2004 is 39% and includes salaries, benefits, contractors not funded by grant programs, equipment, supplies, travel, printing, telephone, rent, parking, training and other administrative expenses. Our overhead rate appears to be high since we perform many functions in-house rather than through consultants. This percentage was developed by our on-contract Chief Financial Officer. The Council utilizes a separate auditing firm to perform voluntary annual audits. We provide many services to member water agencies, state and federal agencies, and others in the areas of technical assistance, research, and information services.</p>	



43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110, FREMONT, CALIFORNIA 94537-5110
(510) 659-1970 • FAX (510) 770-1793 • www.acwd.org

January 6, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Alameda County Water District (ACWD) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, ACWD strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Piraino", is written over the word "Sincerely,".

Paul Piraino
General Manager

DEPARTMENT OF WATER AND POWER



January 4, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM

Dear Ms. Dickinson:

City of Big Bear Lake Department of Water and Power wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

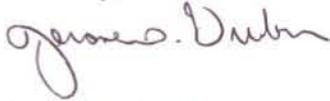
The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, City of Big Bear Lake Department of Water and Power strongly supports this application for funding under Proposition

50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerome D. Gruber". The signature is fluid and cursive, with a large initial "J" and "D".

Jerome D. Gruber
General Manager
City of Big Bear Lake
Department of Water and Power



CALIFORNIA WATER SERVICE COMPANY

1720 NORTH FIRST STREET • SAN JOSE, CA 95112-4598
(408) 367-8200

January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: California Department Of Water Resources Prop 50 Grant Application For: **Urban Water Efficiency Technical Assistance Program**

Dear Ms. Dickinson:

California Water Service Company (Cal Water) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for **Urban Water Efficiency Technical Assistance Program**.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The record of accomplishment of the Council has been impressive. As a result, Cal Water strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul Ekstrom".

Paul Ekstrom
Vice President, Corporate Secretary
California Water Service Company

January 5, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROPOSITION 50
GRANT APPLICATION FOR STATEWIDE URBAN WATER EFFICIENCY
TECHNICAL ASSISTANCE PROGRAM

MARY ANN
Dear Ms. Dickinson:

Castaic Lake Water Agency wishes to convey its strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Statewide Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members, such as CLWA.

The track record of the Council has been impressive. As a result, CLWA strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community. In addition, it will provide water savings to help enhance not only our own service area but also the California Bay-Delta estuary.



DIRECTORS
E.G. "JERRY" GLADBACH
DEAN D. EFSTATHIOU
WILLIAM C. COOPER
ROBERT J. DIPRIMIO
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R.J. KELLY

GENERAL MANAGER
DAN MASNADA

GENERAL COUNSEL
McCORMICK, KIDMAN &
BEHRENS, LLP

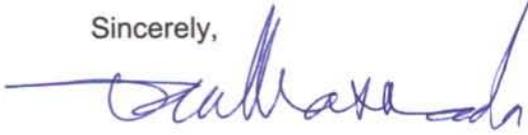
SECRETARY
MARCIA WARD

"A PUBLIC AGENCY PROVIDING RELIABLE, QUALITY WATER AT A REASONABLE COST TO THE SANTA CLARITA VALLEY"

27234 BOUQUET CANYON ROAD • SANTA CLARITA, CALIFORNIA 91350-2173 • 661 297-1600 FAX 661 297-1611
website address: www.clwa.org

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Masnada". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

Dan Masnada
General Manager

xc: CLWA Board of Directors



1515 SIXTH STREET • COACHELLA, CA 92236

Fax: (760) 398-8117

Administration	398-3502	Grants	398-5110
Animal Control	398-4978	Housing	398-5110
Building	398-3002	Personnel	398-3502
City Clerk	398-3502	Planning	398-3102
City Council	391-5009	Public Works	398-5744
Code Enforcement	398-4978	Recreation	398-3502
Economic Develop.	398-5110	Riverside Sheriff's Office	863-8990
Engineering	398-5744	Sanitary	391-5008
Finance	398-3502	Senior Svs.	398-0104
Fire	398-8895	Utilities	398-2702

January 7, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM

Dear Ms. Dickinson:

City of Coachella wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

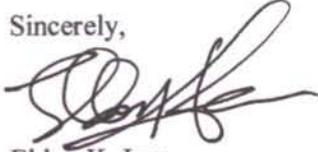
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The track record of the Council has been impressive. As a result, City of Coachella strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Lee', written over a horizontal line.

Eldon K. Lee
Director of Public Works
City of Coachella



January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR
URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

Coastside County Water District wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, Coastside County Water District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Ed Schmidt
General Manager
Coastside County Water District



1331 Concord Avenue
P.O. Box H20
Concord, CA 94524
(925) 688-8000 FAX (925) 688-8122

January 3, 2005

Directors
Joseph L. Campbell
President

Elizabeth R. Anello
Vice President

Bette Boatman
John A. Burgh
Karl L. Wandry

Walter J. Bishop
General Manager

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: Urban Water Efficiency Technical Assistance Program Grant Application

Dear Ms. Dickinson:

Contra Costa Water District wishes to express our strong support for the California Urban Water Conservation Council's (CUWCC) application for Proposition 50 Water Use Efficiency grant funding for the **Urban Water Efficiency Technical Assistance Program Grant Application**.

Since its creation in December 1991, the CUWCC has become a leading force in the promotion and implementation of water conservation programs in California.

Technical assistance is one of the best benefits of CUWCC membership. It is the carrot that convinces many agencies to pay their dues and participate in the CUWCC activities. In addition, the CUWCC On-line Reporting Database is extremely valuable to its members. Without it, BMP the number and quality of reporting would be diminished. The DWR funding for these and other technical assistance programs is extremely important.

The Contra Costa Water District strongly supports this application for Proposition 50 grant funding.

Sincerely,

A handwritten signature in blue ink that reads "Chris Dundon".

Chris Dundon
Water Conservation Supervisor
Contra Costa Water District



January 5, 2005

Board of Directors

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Richard R. Hall

Vice President

Randy A. Record

Rodger D. Siems

David J. Slawson

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Board Secretary

Rosemarie V. Howell

General Manager

Anthony J. Pack

*Director of the
Metropolitan Water
District of So. Calif.*

Randy A. Record

Treasurer

Joseph J. Kuebler, CPA

Legal Counsel

Redwine and Sherrill

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATIONS

Dear Ms. Dickinson:

Eastern Municipal Water District wishes to convey its support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the following grant applications:

- Urban Water Efficiency Technical Assistance Program
- Urban Water Efficiency Agency Training Program
- Statewide Pilot Turf Buy-Back Program
- Statewide Urban Water Agency One-Stop Rebate Program
- Statewide Urban Pilot Rebate Program for Cooling Tower Conductivity
- Water Saving Home Website Customer Feedback Program

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing these programs. The Council has also successfully managed conservation implementation programs on behalf of its members.

Mary Ann Dickinson
January 5, 2005
Page 2

The track record of the Council has been impressive. As a result, Eastern Municipal Water District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefits to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in cursive script that reads "Melanie Nieman".

Melanie Nieman, Director
Community Involvement Department



El Dorado Irrigation District

In Reply Refer To: WP0105-30

January 6, 2005

Mary Ann Dickinson, Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

**RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR CALIFORNIA URBAN WATER CONSERVATION COUNCIL**

Dear Ms. Dickinson:

El Dorado Irrigation District wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funds.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, El Dorado Irrigation District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read 'David Witter', is written over a horizontal line. The signature is stylized and cursive.

David Witter
Director of Water Policy Coordination

DW:clr



January 4, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

City of Escondido wishes to convey support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, the City of Escondido strongly supports this application for funding under Proposition 50. We believe this proposal will provide a great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink that reads "Deborah Jardin".

Deborah Jardin
City of Escondido
Program Coordinator/Water Conservation



4699 HOLLISTER AVENUE
GOLETA, CALIFORNIA 93110-1999
TELEPHONE 805/964-6761
FAX 805/964-7002

January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Goleta Water District wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for an Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, the Goleta Water District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

GOLETA WATER DISTRICT

Misty Gonzales
Water Conservation Coordinator



Inland Empire
UTILITIES AGENCY*

6075 Kimball Avenue • Chino, CA 91710
P.O. Box 9020 • Chino Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 597-8875
www.ieua.org
* A Municipal Water District

January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Inland Empire Utilities Agency wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, the Inland Empire Utilities Agency strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,
INLAND EMPIRE UTILITIES AGENCY

Richard W. Atwater
Chief Executive Officer/
General Manager

RWA:DH:bk



JAMES K. HAHN
Mayor

Commission
DOMINICK W. RUBALCAVA, *President*
SID C. STOLPER, *Vice president*
ANNIE E. CHO
GERARD McCALLUM II
SILVIA SAUCEDO
BARBARA E. MOSCHOS, *Secretary*

RONALD F. DEATON, *General Manager*

January 6, 2005

Ms. Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, California 95814

Dear Ms. Dickinson:

Subject: California Department of Water Resources Proposition 50 Grant
Application for the Urban Water Efficiency Technical Assistance Program

The Los Angeles Department of Water and Power (LADWP) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council (Council) has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices, urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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Water and Power Conservation ... a way of life

111 North Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles 90051-5700
Telephone: (213) 367-4211 Cable address: DEWAPOLA



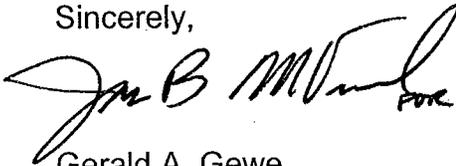
Ms. Mary Ann Dickinson
Page 2
January 6, 2005

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals, and technical help to assist in developing conservation programs. The Council has also directly managed, very successfully, conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, LADWP strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to the urban water efficiency community.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "G. A. Gewe". The signature is stylized and cursive, with a large initial "G" and "A".

Gerald A. Gewe
Chief Operating Officer – Water System

**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

January 7, 2005

Ms. Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

Dear Ms. Dickinson:

**Support of Proposition 50 Water Use Efficiency Grant
Application for Urban Water Efficiency Technical Assistance Program**

The Metropolitan Water District of Southern California wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for an Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Ms. Mary Ann Dickinson

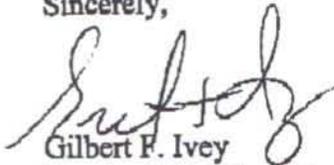
Page 2

January 7, 2005

The track record of the Council has been impressive. As a result, Metropolitan strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,



Gilbert F. Ivey

Interim Chief Executive Officer

AIW:adminwrm

o:\a\slc\AIW_Prop 50 Letter of Support CUWCC 5



10500 Ellis Avenue
P.O. Box 20895
Fountain Valley, California 92728
(714) 963-3058
Fax: (714) 964-9389
www.mwdoc.com

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Director
Wayne A. Clark
Director
Larry D. Dick
Director
Joan C. Finnegan
Director
Kevin P. Hunt, P.E.
General Manager

MEMBER AGENCIES

City of Brea
City of Buena Park
East Orange County Water District
El Toro Water District
Emerald Bay Service District
City of Fountain Valley
City of Garden Grove
City of Huntington Beach
Irvine Ranch Water District
Laguna Beach County Water District
City of La Habra
City of La Palma
Mesa Consolidated Water District
Moulton Niguel Water District
City of Newport Beach
City of Orange
Orange County Water District
Orange Park Acres Mutual Water Co.
City of San Clemente
City of San Juan Capistrano
Santa Margarita Water District
Santiago County Water District
City of Seal Beach
Serrano Water District
South Coast Water District
Southern California Water Co.
Trabuco Canyon Water District
City of Tustin
City of Westminster
Yorba Linda Water District

January 5, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50
GRANT APPLICATION FOR AN URBAN WATER EFFICIENCY
TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Municipal Water District of Orange County wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for an Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

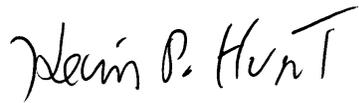
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The track record of the Council has been impressive. As a result, the Municipal Water District of Orange County strongly supports this application

for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink that reads "Kevin P. Hunt". The signature is written in a cursive style with a prominent initial "K" and a stylized "H".

Kevin P. Hunt
General Manager
Municipal Water District of Orange County



CITY of NAPA

January 6, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

PUBLIC WORKS DEPARTMENT
1600 First Street
Mailing Address:
P.O. Box 660
Napa, California 94559-0660
(707) 257-9520
FAX (707) 257-9522

**RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM**

Dear Ms. Dickinson:

The City of Napa wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, the City of Napa strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Phil Brun
General Manager, Water Division



...Dedicated to Community Service

2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2096
TELEPHONE: 670-2222, AREA CODE 619

January 5, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR
Urban Water Efficiency Technical Assistance Program

Dear Ms. Dickinson:

The Otay Water District (Otay) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also successfully managed conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, Otay strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink that reads "William E. Granger". The signature is fluid and cursive, with a large loop at the end of the last name.

William E. Granger
Water Conservation Manager

Placer County Water Agency

Business Center: 144 Ferguson Rd. • Mail: P.O. Box 6570 • Auburn, California 95604-6570
(530) 823-4850 800-464-0030 www.pcwa.net

January 5, 2005



A Public Agency

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Michael R. Lee

David A. Breninger, General Manager

Ed Tiedemann, General Counsel

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR
URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

Placer County Water Agency wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, Placer County Water Agency strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

PLACER COUNTY WATER AGENCY

David A. Breninger
General Manager



January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR **URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM**

Dear Ms. Dickinson:

The City of Redwood City wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the **Urban Water Efficiency Technical Assistance Program**.

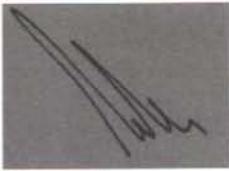
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The track record of the Council has been impressive. As a result, **The City of Redwood City** strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A square box containing a handwritten signature in black ink. The signature is slanted downwards from left to right and appears to read 'Manny Rosas'.

Manny Rosas
Superintendent, Urban Water Management Program
City of Redwood City



San Diego County Water Authority

4677 Overland Avenue • San Diego, California 92123-1233
(858) 522-6600 FAX (858) 522-6568 www.sdcwa.org

January 4, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

MEMBER AGENCIES

- Carlsbad
Municipal Water District
- City of Del Mar
- City of Escondido
- City of National City
- City of Oceanside
- City of Poway
- City of San Diego
- Fallbrook
Public Utility District
- Helix Water District
- Olivienhain
Municipal Water District
- Otay Water District
- Padre Dam
Municipal Water District
- Camp Pendleton
Marine Corps Base
- Rainbow
Municipal Water District
- Ranoma
Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center
Municipal Water District
- Vista Irrigation District
- Yuima
Municipal Water District

OTHER REPRESENTATIVE

County of San Diego

RE: California Department Of Water Resources Prop 50 Grant Application for an Urban Water Efficiency Technical Assistance Program

Dear Ms. Dickinson

The San Diego County Water Authority (Water Authority) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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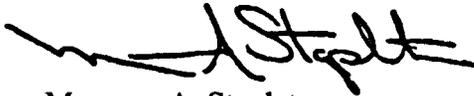
A public agency providing a safe and reliable water supply to the San Diego region

Mary Ann Dickinson
January 4, 2005
Page 2 of 2

The track record of the Council has been impressive. As a result, the Water Authority strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Maureen A. Stapleton', written in a cursive style.

Maureen A. Stapleton
General Manager



SAN FRANCISCO PUBLIC UTILITIES COMMISSION

1155 Market St., 11th Floor, San Francisco, CA 94103 • Tel. (415) 554-3155 • Fax (415) 554-3161



January 3, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

GAVIN NEWSOM
MAYOR

E. DENNIS NORMANDY
PRESIDENT

RICHARD SKLAR
VICE PRESIDENT

ANN MOLLER CAEN
ADAM WERBACH
RYAN L. BROOKS

SUSAN LEAL
GENERAL MANAGER

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM

Dear Ms. Dickinson:

The San Francisco Public Utilities Commission (SFPUC) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for an Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, the SFPUC strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Susan Leal
General Manager

DIRECTOR'S OFFICE

January 6, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR Urban Water Efficiency Technical Assistance Program.

Dear Ms. Dickinson:

The City of San Jose wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, the City of San Jose strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Linden Skjeie, Manager
Water Efficiency Program
City of San Jose



City of Santa Barbara

Public Works Department

www.ci.santa-barbara.ca.us

January 5, 2005

Main Offices

630 Garden Street
P.O. Box 1990
Santa Barbara, CA
93102-1990

Administration

Tel.: 805.564.5377
Fax: 805.897.2613

Engineering

Tel.: 805.564.5363
Fax: 805.564.5467

**Building Maintenance/
Street Lights**

Tel.: 805.564.5416
Fax: 805.897.2577

Permit Counter

Tel.: 805.564.5388
Fax: 805.897.1927

Transportation Operations

Transportation Planning
Tel.: 805.564.5385
Fax: 805.564.5467

Water Maintenance

Street Maintenance
Tel.: 805.564.5413
Fax: 805.564.2613

Water Supply Management

Water Conservation
Tel.: 805.564.5460
Fax: 805.897.2613

Downtown Parking

1115 Anacapa Street
Santa Barbara, CA
93101
Tel.: 805.963.1581
Fax: 805.963.1542

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

**SUBJECT: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR THE URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM**

Dear Ms. Dickinson:

The City of Santa Barbara (City) wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, the City strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed, but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Alison Jordan
Water Resources Specialist

AJ/dm

January 11, 2004

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION FOR THE
URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Santa Clara Valley Water District wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

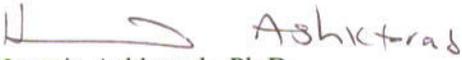
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The track record of the Council has been impressive. As a result, the Santa Clara Valley Water District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,


Hossein Ashktorab, Ph.D.
Manager, Water Use Efficiency Unit



Santa Fe Irrigation District

POST OFFICE BOX 409
RANCHO SANTA FE, CALIFORNIA 92067-0409

(858) 756-2424
FAX (858) 756-0450

January 6, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR Urban Water Efficiency Technical Assistance Program

Dear Ms. Dickinson:

Santa Fe Irrigation District wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

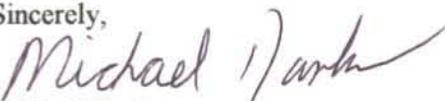
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The track record of the Council has been impressive. As a result, Santa Fe Irrigation District strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,



Michael Banks
Water Conservation Specialist

January 5, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814



**RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM**

Dear Ms. Dickinson:

The City of Santa Rosa wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

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The track record of the Council has been impressive. As a result, we strongly support this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Dowd', is written over a white background.

RICHARD DOWD
Chair, Board of Public Utilities

WALNUT VALLEY WATER DISTRICT



BOARD OF DIRECTORS

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Election Division III

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Director
Election Division I

STAFF:

Karen J. Powers
General Manager
Secretary / Treasurer

LEGAL COUNSEL:
H. Jess Senecal

271 South Brea Canyon Road • P.O. Box 508
Walnut, California 91789-3002 • (909) 595-1268 • (626) 964-6551
Website: www.wvwd.com • Fax: (909) 594-9532

January 7, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL
ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The District wishes to convey its strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, comprised of 328 members who are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, these entities provide the Council with a broad view of three key areas of water conservation: 1) the needs of urban water suppliers, 2) the development of water efficient technologies, and 3) the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed, very successfully, conservation implementation programs on behalf of its members.

Page Two
January 7, 2005

The track record of the Council has been impressive. As a result, the District strongly supports the Council's application for funding under Proposition 50 and believes this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

The District looks forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

A handwritten signature in cursive script that reads "Karen Powers".

KAREN POWERS
General Manager

KP:vm



ADRO *ADRO ENVIRONMENTAL, INC.*

Phone: (310) 514-1400

Fax: (310) 514-1316

ADROInc@aol.com

January 4, 2005

www.adro-environmental.com

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM

Dear Ms. Dickinson:

ADRO Environmental, Inc., wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

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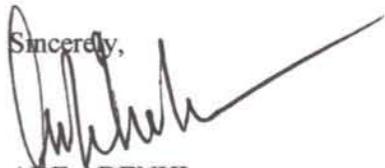
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The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, ADRO Environmental, Inc., strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,



ADE ADENIJI
Chief Executive Officer
ADRO Environmental, Inc.

BAWSCA

Bay Area Water Supply & Conservation Agency

January 5, 2005

Ms. Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

**RE: SUPPORT FOR CALIFORNIA URBAN WATER CONSERVATION COUNCIL'S
APPLICATIONS FOR CALIFORNIA DEPARTMENT OF WATER RESOURCES
PROPOSITION 50 GRANTS**

Dear Ms. Dickinson:

The Bay Area Water Supply and Conservation Agency (BAWSCA) wishes to convey its strong support for the California Urban Water Conservation Council's applications for Proposition 50 Water Use Efficiency grant funding for these programs:

- Statewide Urban Water Agency One-Stop Rebate Program,
- Statewide Turf Buy Back Program,
- Statewide Urban Rebate Program for Cooling Tower Conductivity Meters,
- Urban Water Efficiency Technical Assistance Program,
- Urban Water Efficiency Agency Training Program,
- Water Saving Home Website Customer Feedback Program,
- Empirical Analysis of Rate Impacts on Urban Water Consumption, and
- "Smart From the Start".

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs. The Council provides training programs, manuals and technical help to assist in

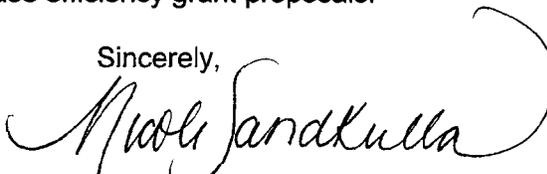
Ms. Mary Ann Dickinson
January 5, 2005
Page 2 of 2

developing conservation programs. The Council has also directly managed implementation of successful conservation programs on behalf of its members.

The track record of the Council has been impressive. As a result, BAWSCA strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in these important and innovative water use efficiency grant proposals.

Sincerely,

A handwritten signature in cursive script that reads "Nicole Sandkulla". The signature is written in black ink and is positioned above the typed name.

Nicole Sandkulla, P. E.
Senior Water Resources Engineer



California Sod
Producers Association

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

January 7, 2005

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL
ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The California Sod Producers Association wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

The California Urban Water Conservation Council has been a leader in the effort to promote efficient use of landscape water, something critical to the future of our industry. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, California Sod Producers Association strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

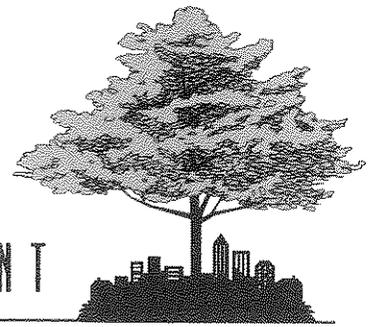
Sincerely,

Sarah West
Executive Director, CSPA

*Turfgrass Sod: Cooling and
Cleaning our Environment*

926 J Street, Suite 815
Sacramento, CA 95814
(916) 442-7195
(916) 442-7198 FAX

THE COUNCIL FOR A GREEN ENVIRONMENT



January 7, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL
ASSISTANCE PROGRAM

Dear Ms. Dickinson:

The Council for a Green Environment, the organization of California's Green Industry CEOs, wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program. California's \$12 billion Green Industry, including out 150,000 employees, are at risk from water shortage. Without more efficient use of available water California will begin to lose the green infrastructure so critical to mitigating the effects of intensive urban/suburban living.

The CUWCC has been a leader in promoting successful, cost-effective conservation programs. The Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, CGE strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to California's Green Industry.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Richard Rogers
Chair, Council for a Green Environment

President
Richard Rogers
Chairman of the Board,
Pacific Earth Resources

Vice President
Mike Kunce
President, Armstrong Garden Centers

Secretary
Mickey Strauss
President,
American Landscape, Inc.
Past President,
California Landscape and Irrigation
Council

Jurgen Gramckow
Managing Partner, Southland Sod Farms

Richard Hunter
President and CEO,
Hunter Industries

Miles Rosedale
President, Monrovia Nursery Company

Dean L. Schenone
President
Flora Tech Landscaping Management

Stuart J. Sperber
President,
Valley Crest Tree Company
Vice President,
Environmental Industries, Inc.

Lynn Strohsahl
President, Bordier's Nursery, Inc.

Steve Thigpen
President, Hines Nurseries

Dale Tiglio
President, Hydro-Scape Products



ENVIRONMENTAL DEFENSE

finding the ways that work

January 7, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CUWCC's Application for Prop 50 Funding for Urban Water Efficiency Technical Assistance Program and Urban Water Efficiency Agency Training Program

Dear Ms. Dickinson:

Environmental Defense would like to express support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for both the Urban Water Efficiency Technical Assistance Program and the Urban Water Efficiency Agency Training Program.

The Council is a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, comprised of water agencies, environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. This assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also successfully managed conservation implementation programs on behalf of its members.

Given the impressive track record of the Council, Environmental Defense strongly supports the Council's applications for programs which we believe will provide great

benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also direct benefits to the California Bay-Delta estuary.

Sincerely,

A handwritten signature in black ink that reads "Ann Hayden". The signature is written in a cursive, flowing style.

Ann Hayden
Water Resource Analyst



January 10, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT
APPLICATION FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE
PROGRAM

Dear Ms. Dickinson:

Falcon Waterfree Technologies wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, Falcon Waterfree Technologies strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Gleberman", is written over the typed name.

Daniel Gleberman, AICP
Vice President-Government Affairs
Falcon Waterfree Technologies



**MONO LAKE
COMMITTEE**

P.O. Box 29
Hwy 395 and Third Street
Lee Vining, CA 93541

Phone (760) 647-6595
Fax (760) 647-6377

January 5, 2005

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www.monobasinresearch.org

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50
GRANT APPLICATION FOR Urban Water Efficiency Technical Assistance
Program.

Dear Ms. Dickinson:

On behalf of our 15,000 members, the Mono Lake Committee strongly supports the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also directly managed – very successfully – conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, the Mono Lake Committee strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary. We look forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Frances Spivy-Weber
Executive Director, Policy



NATURAL RESOURCES DEFENSE COUNCIL

January 6, 2005

Mary Ann Dickinson
Executive Director
California Urban Water Conservation Council
455 Capitol Mall, Suite 703
Sacramento, CA 95814

RE: Prop 50 Grant Application for Urban Water Efficiency Technical Assistance Program

Dear Ms. Dickinson:

On behalf of The Natural Resources Defense Council (NRDC), I am writing to support the California Urban Water Conservation Council (CUWCC) application for Proposition 50 Water Use Efficiency grant funding for the Urban Water Efficiency Technical Assistance Program.

Water conservation is key to meeting California's water demands. Since its creation in December 1991, the CUWCC has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, at a cost far less than the cost of procuring new water supplies.

Technical assistance and training for agencies implementing these BMPs are core activities of the Council. Without this assistance, urban water conservation efforts would suffer. As a result, NRDC strongly supports this application for funding under Proposition 50.

Sincerely,

Ronnie Cohen
Senior Policy Analyst
Natural Resources Defense Council



January 5, 2005

Debra Gonzalez
California Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50 GRANT APPLICATION
FOR URBAN WATER EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Dear Ms. Gonzalez:

The Regional Water Authority (RWA) supports the California Urban Water Conservation Council's (Council) application for Proposition 50 Water Use Efficiency grant funding for Urban Water Efficiency Technical Assistance Program. RWA is a joint powers authority that represents the interests of more than 20 water providers in the greater Sacramento, Placer, and El Dorado County region. RWA and 10 of its member agencies are members of the Council.

Since its creation in December 1991, the California Urban Water Conservation Council has become a leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving hundreds of thousands of acre-feet of water annually.

The Council is a unique organization, for its 328 members are not only water agencies, but also environmental advocacy groups as well as state agencies, academic institutions, and private consulting and product firms. In signing the Memorandum of Understanding, this assortment of entities provides the Council with a broad view of three key areas of water conservation: the needs of urban water suppliers, the development of water efficient technologies, and the impact of water usage on the environment through water conservation programs.

The needs of urban water suppliers are the primary concern of the Council. California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Council has also successfully managed conservation implementation programs on behalf of its members.

The track record of the Council has been impressive. As a result, RWA supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to California's urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but also the California Bay-Delta estuary.

We look forward to coordinating with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read 'E. Winkler', is written over a light blue horizontal line.

Edward D. Winkler
Executive Director



WATER EDUCATION FOUNDATION

717 K Street, Suite 317
Sacramento, CA 95814
Phone: (916) 444-6240
FAX: (916) 448-7699
www.watereducation.org

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California Urban Water Conservation Council

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Colorado River Indian Tribes

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Walter Yep

Walter Yep Inc.

William R. Gianelli
President Emeritus

January 6, 2005

Mary Ann Dickinson

Executive Director

California Urban Water Conservation Council

455 Capitol Mall, Suite 703

Sacramento, CA 95814

**RE: CALIFORNIA DEPARTMENT OF WATER RESOURCES PROP 50
GRANT APPLICATION FOR CALIFORNIA URBAN WATER
CONSERVATION COUNCIL**

Dear Ms. Dickinson:

The Water Education Foundation wishes to convey our strong support for the California Urban Water Conservation Council's application for Proposition 50 Water Use Efficiency grant funding the Urban Water Efficiency Technical Assistance Program.

The California Urban Water Conservation Council is the leading force in the promotion and implementation of water conservation programs in California. Through the execution of the Council's 14 Best Management Practices (BMPs), urban water agencies across the state are now saving an estimated 750,000 acre-feet of water annually, and all at a cost far less than the cost of procuring new water supplies.

However, there is more work to do. The Water Education Foundation pledges our support to CUWCC to provide educational materials and support to continue and broaden this work. We will work as a partner to provide briefing information for council members.

California's increasing demand for water can be met in part by successful, cost-effective conservation programs, and the Council provides training programs, manuals and technical help to assist in developing conservation programs. The Water Education Foundation will support these efforts.

The Water Education Foundation strongly supports this application for funding under Proposition 50. We believe this proposal will provide great benefit to our urban water efficiency community in addition to providing water savings to help enhance not only our own watershed but direct benefits to the California Bay-Delta estuary.

The Water Education Foundation looks forward to being a partner with the Council and other community organizations in this important and innovative water use efficiency grant proposal.

Sincerely,

Rita Schmidt Sudman

Executive Director

Appendix Material

Technical Committees, Standards and Codes

Plumbing Standards

Since 1994, representatives of California's water conservation community have been heavily involved in the ASME and IAPMO committees and project teams. Specifically, this participation (and membership) by a Council technical advisor has been critical to achieving implementation of new toilet flapper durability and marking standards, changing dual-flush performance requirements, increasing toilet fixture performance requirements, and achieving a non-water consuming urinal standard.

Over that period of time, the relationship between the plumbing industry and those promoting water efficiency has developed into a cooperative one, wherein industry and water conservation practitioners are working together to improve the efficiency and performance of plumbing products in the U.S. This mutually beneficial relationship must continue to grow through participation by a Council representative.

Future requirements and/or needs

With the continuing involvement of the Council, plumbing fixture standards can evolve toward more efficient products. In particular, goals for the period 2005-2007 include:

- Reducing the urinal flush volume maximum from 1.0-gallons to 0.5-gallons,
- Modifying the standard to enable the introduction of 1.0-liter flushing urinals, and
- Refining the standard for pre-rinse spray valves.

If implemented, each of these actions could significantly affect indoor water consumption in California over the long-term. The California water conservation community needs to continue its proactive role in this national standards process.

Actions to be taken to satisfy the requirements/needs

The Council will continue to support plumbing fixture standards development by assigning one of its technical advisors to the ASME and IAPMO organizations as a participant member in the relevant project teams and committees as follows:

- ASME/ANSI A112.19.2 - Vitreous China Plumbing Fixtures
- ASME/ANSI A112.19.5 - Trim For Water Closet Bowls, Tanks, and Urinals
- ASME/ANSI A112.19.14 - Dual Flush for 6-liter Water Closets
- ASME/ANSI A112.4.7 - Point of Use and Branch Water Sub-Metering Systems
- ASME/ANSI A112.19.19 – Non-Water Consuming Urinals
- IAPMO/ANSI Z124 - Plastic Plumbing Fixtures

The predominant part of the standards effort takes place within California. However, the standards committees regularly schedule meetings throughout the country in order to spread

travel costs fairly among the balanced interests. Combining all six of the above teams and committees, an average of five meetings (averaging two days each) per year take place outside of California.

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter will also be used to update members and others of progress with the standards-writing organizations.

<u>Budget Summary for Sub-element (a). Plumbing Standards</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Standards committee meetings (5 per year)	0	0	0	0	\$21,600	\$10,000	
2. Standards development and review	0	0	0	0	\$10,800	0	

California Energy Commission Regulations and Standards

The California Energy Commission (CEC) considers and adopts regulations directed primarily at products and practices leading to improved energy efficiency within the state. In some cases, the products or practices being considered not only reduce energy consumption and/or peak loads, but also have a significant direct effect¹⁰ upon water use as well.

In the past, the various items that needed to be jointly addressed with the CEC have suffered from a funding shortfall and, as such, the Council's role has not always been one of aggressively fostering, initiating, and supporting the CEC in exploring new opportunities. Even with the funding limitations, however, the Council has recently played significant roles in assisting the CEC in these areas:

1. Clothes Washers (as an advocate for a maximum water factor on new residential washers)
2. Pre-Rinse Spray Valves (as the prime initiator of regulations relating to hot water pre-rinse spray valves in commercial food service operations)
3. Building Codes related to hot water delivery systems (as a strong supporter of the CEC's investigations into the most energy- and water-efficient means for delivering hot water within residential dwellings)

¹⁰ The reader should be aware that most such products and practices also have an indirect effect upon water consumption, as the production of electricity requires substantial quantities of water (potable and non-potable). Reductions in energy demands, therefore, lead to reductions in water demands.

A more formal ongoing cooperative relationship between the Council and the CEC is now developing, as represented by the recent Memorandum of Understanding (MOU) between the two organizations (see MOU document included within this appendix). This agreement will undoubtedly lead to new explorations and opportunities for water efficient products and California standards.

Future requirements and/or needs

More aggressive and committed participation with the CEC on water-energy opportunities is required of the Council. Joint studies with the CEC of selected products and practices (e.g., hot water distribution systems, commercial and institutional clothes washers, medical support systems, food service equipment, etc.) will yield results benefiting both resource areas. In turn, this type of joint effort with the CEC will also ultimately result in more cooperative market transformation and other incentive programs with California's energy utilities (through the California Public Utilities Commission).

Actions to be taken to satisfy the requirements/needs

Under the terms and goals of the MOU, the Council will continue to work with the CEC on existing projects, but also expand participation by introducing new areas of study and possible regulation to that organization. In addition, the Council will provide a "water representative" to the various project and study teams occasionally formed by the CEC for specific investigations. The Council will also provide testimony as required when formal actions are undertaken by the CEC.

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter may be used occasionally to update members and others of progress.

<u>Budget Summary for Sub-element (b). CEC Standards</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. CEC public meeting participation	0	0	0	0	\$5,760	\$800	
2. Standards development and review with CEC staff	0	0	0	0	\$6,240	\$400	

USGBC LEED Program Support

The United States Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED) Program in 1998 to foster sustainable building design and construction, also known as “green building”. Focused nearly entirely upon energy consumption and sustainable building practices, the LEED Program provides only token acknowledgement of water. A voluntary, consensus-based, market-driven building rating system, LEED only allocates five (5) points¹¹ for water issues out of its total of 69 points available.

In 2003, the USGBC recognized that water issues were under-represented in the system and, as such, decided that more attention needed to be given to this area. In late 2003, an 11-member Water Efficiency Technical Advisory Group (WETAG) was recruited, qualified by the USGBC Board of Directors, and then appointed by the organization to begin addressing the shortcomings and prepare for development of an entirely new version 3.0 of LEED beginning in 2005.

The Council is represented on the WETAG by one of its technical advisors. Other WETAG members come from elsewhere in the U.S. and represent a variety of water-related disciplines. The WETAG has worked throughout 2004 on existing LEED applications, but with an eye toward 2005 when new water measures will (hopefully) be added into the updated LEED system of building evaluation.

Future requirements and/or needs

Continued participation in the LEED activities is critical. As LEED becomes the sustainable buildings program of choice for both public and private sector buildings in the U.S., it is important that water resources be brought into the design, development and evaluation processes, and acknowledged as important. California, through the Council and the WETAG, must influence the changes being made.

Actions to be taken to satisfy the requirements/needs

The Council will continue to work through the WETAG to respond to applicant requests for interpretation of the existing LEED rules. However, more importantly, the WETAG must make meaningful changes to the LEED program and process, including the new LEED version 3.0. To date, however, the Council’s time commitment has been somewhat limited by the resources made available for this purpose. While the USGBC would like for WETAG members to voluntarily contribute 10 hours per week to their LEED commitment, there is no WETAG member that is able to dedicate such a large amount of time. As such, we have projected that approximately 15 hours per month is required of the Council representative to adequately serve the program needs.

¹¹ Those five (5) points are allocated as follows: 2 points for landscaping and irrigation; 1 point for wastewater technologies; and 2 points for indoor water consumption.

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter may occasionally be used to update members and others of WETAG progress.

Budget Summary for Sub-element (c). USGBC LEED Program Support							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. WETAG conference calls (2/month)	0	0	0	0	\$12,960	0	
2. USGBC – WETAG meetings	0	0	0	0	\$11,520	\$4,000	
3. Version 3.0 language development	0	0	0	0	\$11,520	0	

Support to U.S. EPA “Water Star”¹² Program

In 2003, the U.S. Environmental Protection Agency (EPA) was encouraged by the Council and others to consider the launch of a product labeling and market enhancement program for water-efficient products similar to the very successful Energy Star program. This was supported by a “manifesto” of support for such from over 115 diverse stakeholders¹³ in the U.S. In response, the EPA commenced a process whereby stakeholder interest was solicited through a series of four regional stakeholder meetings in Washington D.C., Austin TX, Phoenix AZ, and Seattle WA. These meetings yielded positive results and the EPA proceeded to deepen its efforts to move forward. In early 2004, the agency hired two nationally recognized consultant firms to flesh out detailed programmatic and product issues.

During the course of these developments, the Council has been both a participant and an observer. The Council has offered assistance to the EPA staff as required. In addition, as a dues-paying member of a self-appointed stakeholder steering committee, the Council has deliberated with other stakeholders in a process designed to develop and provide consensus-based input to the EPA on issues of interest. Finally, Council members, through their professional associations with the EPA, have been able to gather ongoing status reports on the internal workings (or non-workings) of the EPA on this important initiative.

¹² Although frequently termed “Water Star” by program proponents and others, the EPA has actually determined that another name will be chosen for the program.

Future requirements and/or needs

The Council is frequently asked for input on various issues by EPA staff. Technical issues are addressed by the Council's technical advisors, while policy and programmatic issues are addressed by the Council's Executive Director. In addition, continued participation and membership in the stakeholder steering committee is essential to assuring that a consistent and representative message is provided to the EPA from that group. Since California interests were largely responsible for the EPA initiating the "Water Star" product labeling effort, the Council needs to continue to support the Water Office of the EPA at every turn.

Actions to be taken to satisfy the requirements/needs

The Council will retain membership in the stakeholder steering committee as a voice for California's water utilities, environmental interests, and others. In this way, the Council will continue to influence the stakeholders' input to the EPA on this important program. Moreover, the Council will continue to provide advice and assistance upon direct request from the EPA. Finally, the Council will monitor the actions of the EPA as it moves forward to assure that its direction is consistent with the overarching goal of a water-efficient product labeling and market enhancement program.

SPECIAL NOTE: It should be noted that as of late 2004, the EPA dramatically slowed its implementation of their "Water Star" labeling program due to internal disagreements over the form of the program. It is possible that the EPA may reduce or eliminate its sponsorship of any such program because of these conflicts and budget shortfalls. Therefore, the Council and EBMUD are jointly proposing to DWR a separate California "Water Star" effort that could either complement or replace the EPA initiative, depending upon EPA's level of commitment. In the event that the EPA moves ahead aggressively with their program, the funding requested here would be necessary to work with the EPA. On the other hand, if the EPA terminates its involvement entirely, then this request would be void and the California "Water Star" would become the dominant program. The EPA position on this matter should be fully known by Fall 2005.

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter will definitely be used to update members and others of progress on this vital program.

¹³ Stakeholders include water utilities, state and local governments, product manufacturers, environmental organizations, other non-governmental organizations, testing laboratories, consultants, and others.

Budget Summary for Sub-element (d). Support to EPA Water Star							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Technical and policy support to EPA	0	0	0	0	\$30,240	0	
2. EPA meetings	0	0	0	0	\$5,760	\$2,000	
3. Coordination with California Water Star	0	0	0	0	\$6,000	0	

California Plumbing Codes

Codes are promulgated by code authorities and adopted by jurisdictions in order to protect the health and safety of the citizens. Plumbing codes in California are generally the outgrowth of work by the International Association of Plumbing and Mechanical Officials (IAPMO), authors of the Uniform Plumbing Code (UPC), and the State of California, which adopts a state plumbing code. Whereas the national standards approved by the American National Standards Institute are voluntary consensus-based standards, the codes (which may or may not adopt the national standards by reference) are mandatory within the jurisdiction that adopts them.

Moving a new product, technology, or practice into a plumbing code can be a very contentious process. For example, the current difficulties experienced with allowing non-water consuming urinals (aka waterless urinals) in certain jurisdictions can usually be traced back to the code process. That is, the UPC requires that urinals wash down with water. So, even though national standards exist and are also being written for non-water consuming urinals, there is no assurance that such fixtures will eventually be allowed within the UPC.

In another very significant area, the California Energy Commission (CEC) is currently investigating hot water distribution systems within residential dwellings. This is with an eye toward amending codes in California to require that certain design and construction practices be used in new residences that would reduce the amount of energy lost (and water lost) with existing construction practices. The process of amending plumbing codes to achieve resource efficiencies is laborious, usually contentious, and in need of support from the water stakeholders.

Future requirements and/or needs

The influence of the Council on the code amendment process is essential and, in many cases, groundbreaking. Representation by the water utility interests in the plumbing code development process is necessary to offset those contingents of industry that are clearly resistant to any change, even if that change does not endanger the health or safety of citizenry. Needs exist today to implement amendments that would allow for non-water consuming urinals and would provide for changes to construction practices relating to hot water piping in residential dwellings.

Both of these actions are necessary first steps to addressing some of the inherent inefficiencies in existing plumbing products and water delivery systems.

In addition, a future issue that must be addressed within the code process are urinals flushing at 1-liter or less, a plumbing fixture that is likely to appear in the marketplace within five years.

Actions to be taken to satisfy the requirements/needs

The Council will continue to support code development and amendment by assigning at least one of its technical advisors to the IAPMO Technical Committee and to oversight of the State of California code process as a participant in the relevant discussions there.

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter may occasionally be used to update members and others of progress with the code authorities.

<u>Budget Summary for Sub-element (f). California Plumbing Codes</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Participation in IAPMO, State of California , and other code hearings	0	0	0	0	\$7,680	\$1,000	
2. Review of code documents and assistance to local water agencies regarding plumbing code issues	0	0	0	0	\$10,320	0	

UNAR Development and Maintenance

The plumbing industry and water conservation professionals generally agree that the current patchwork of toilet specifications, requirements, and "approved toilet lists" promulgated by water authorities in the U.S. and Canada do not always serve the cause of water conservation in the most effective way. Nor do they take advantage of the highly competitive market environment that exists within the plumbing industry. As a consequence, there has been some confusion in the marketplace, a very limited availability of qualified products in some areas, and possibly higher product prices resulting from a smaller customer base.

Therefore, a group of individuals representing the conservation interests of some of the largest water providers in North America met in Austin TX in January 2004 to discuss and initiate an effort to develop a set of minimum requirements for toilets and other products subsidized through their water conservation programs. Termed the Unified North American Requirements (UNAR), the first products to be considered are toilet fixtures. In addition to the initial group

expressing their desire to move forward with this program, many new organizations have also expressed support for the UNAR concept.¹⁴

Future requirements and/or needs

The UNAR for toilet fixtures¹⁵ would, at a minimum, address goals that have never before been fully addressed by the water utility industry:

- Form a common, scientific basis for incentivizing future toilet installations - retrofit and new construction – in California and elsewhere
- Become a possible pre-cursor to a water-efficient product labeling system for toilet fixtures (Note: the EPA “Water Star” program does not contemplate the labeling of toilet fixtures).
- Assemble a consortium of water providers to assist and influence the plumbing industry in developing quality products that sustain water savings over the life of the fixtures.

The development of UNAR is critical to consistent and quantifiable toilet replacement programs being undertaken in the name of water conservation. The UNAR concept is the result of many years of study and much debate over whether or not water authorities should play a more influential role in product specifications and in consumer education and fixture selection. The success of the Los Angeles Supplementary Purchase Specification (SPS) in driving the plumbing industry to develop toilet fixtures with “durable water savings” is evidence that the industry is responsive to the need for water-efficiency over the long-term.

Only the California water utilities possess the knowledge and experience needed to lead this effort. Those water utilities in the state that have yet to fully implement toilet replacement programs (both residential and CII) that they will be required to under BMPs 9 and 14 will benefit significantly from UNAR.

Actions to be taken to satisfy the requirements/needs

UNAR is a strictly voluntary qualification system that could be adopted by those water utilities that believe it is critical to:

- 1) achieving sustainable water savings from toilet fixture replacements, and
- 2) ensuring a high level of customer satisfaction with flushing performance.

UNAR is intended to incorporate not only the Maximum Performance (MaP) testing protocol as described within the MaP Final Report¹⁶, but also the Los Angeles SPS requirements¹⁷ for

¹⁴ Current supporters of UNAR include: Los Angeles DWP; City of Santa Monica; Otay Water District; San Diego CWA; East Bay MUD; Denver Water; Phoenix AZ; New York, NY; Austin TX; Seattle WA; Tampa Bay Water; Toronto, Ontario; Durham Region, Ontario; Waterloo, Ontario; Peel Region, Ontario, Calgary, Alberta; Winnipeg, Manitoba

¹⁵ Water conservation professionals also have expressed an interest in a UNAR for other plumbing fixtures and water-efficient equipment, including showerheads, faucet controllers, clothes washers, dishwashers, commercial food service equipment, and other residential and non-residential products.

chemical resistant flappers and a maximum flush volume under maximum adjustment conditions. UNAR will also address the following issues of concern:

- 1) “Out-of-the-box” flush volume
 - 2) Fill valves and pressure-induced “creep” and leakage
 - 3) Replacement parts identification and availability
 - 4) Photographs of trim components and important physical measurements to facilitate on-site inspection by conservation agencies
 - 5) Certification to mandated requirements by the appropriate authorities
- 1) Preferences to High-Efficiency-Toilets (HETs)¹⁸

Comprehensive data sheets for each toilet model tested in the program will be posted on the Council website and available for downloading by consumers, builders, water utilities and other interested parties without restriction. Brief explanations of some of current terms used and initiatives undertaken by water authorities and others are shown on the following pages.

Timing of actions

The development of UNAR is a joint effort of a wide variety of stakeholders, including representatives of both the water industry and the plumbing industry. In July 2004, these stakeholders met to discuss both the technical and administrative aspects of this proposal and seek to resolve differences over specific features and requirements of the proposal. An eight-member Advisory Committee comprised of representatives of participating water utilities and the plumbing industry has been formed to assist in the development of UNAR specifics.

The following timetable of actions is anticipated:

First draft - UNAR for toilet fixtures for review by the Advisory Committee	March 1, 2005
Final draft of UNAR for toilet fixtures issued and posted	June 1, 2005
Water utilities begin adoption of UNAR	July 1, 2005

¹⁶ Gauley and Koeller, 2004. *Maximum Performance Testing of Popular Toilet Models, A Cooperative Canadian and American Project, Third Edition*, November 2004. This testing and rating effort was underwritten by 22 water utilities and related organizations in the U.S. and Canada and represents the most comprehensive effort to date by the water industry to assess the performance of the products that they routinely subsidize. The test protocol and the resulting test reports have received worldwide recognition as the best indicator of toilet fixture performance. The Third Edition report is available for download from the website of the California Urban Water Conservation Council: http://www.cuwcc.org/products_tech.lasso

¹⁷ The complete requirements of the Los Angeles Supplementary Purchase Specification (SPS), as well as current listings of the fixtures qualified as meeting the specification, may be downloaded the website of the California Urban Water Conservation Council: http://www.cuwcc.org/products_tech.lasso

¹⁸ High-efficiency toilets (HETs) are those toilet fixtures certified to flush at 1.3-gallons per flush or less, representing a 20 percent reduction from the mandated 1.6-gpf maximum. A listing of the currently certified HETs may be found on the Council website as noted above.

Certification/qualification of toilet fixtures as compliant with UNAR	Begin June 1, 2005
Listing of qualified toilet fixtures	Begin June 1, 2005
Ongoing testing and qualification	Begin June 1, 2005

Monitoring and Reporting

This task will be monitored through periodic status reports (at a minimum, on a quarterly basis) to the Council, its members, and the DWR. The Council's WaterLogue Newsletter will be used to update members and others of progress with the UNAR efforts.

<u>Budget Summary for Sub-element (g). UNAR Development & Maintenance</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Finalize UNAR policy documentation, including stakeholder meetings	0	0	0	0	\$28,000	\$9,000	
2. Support to ongoing testing and qualification of fixtures	0	0	0	0	\$38,000	\$9,000	
3. Publication and posting of UNAR-qualified fixtures	0	0	0	0	\$6,000	0	

Toilet Fixtures in 2004 and beyond.....the Programs, Initiatives, & Specifications:

- ✓ **MaP™:** The Maximum Performance (MaP™) testing of toilet fixtures has become an accepted and necessary requirement for toilet performance in North America. Plumbing manufacturers worldwide are designing product to meet the minimum 250-gram performance threshold established by MaP™. They recognize that much of the water industry (and, specifically, water conservation professionals) is looking to MaP™ testing as one measure (among several) of performance that will aid their water customers. MaP™ testing continues for new toilet fixtures as they are introduced by the plumbing industry.
- ✓ **SPS:** At the same time, the Los Angeles Supplementary Purchase Specification (SPS) for toilets has gained acceptance by the water industry as a way to assure that flapper failure and replacement does not lead to the degradation of water savings. The SPS mandates chemical resistant flappers and sets a maximum flush volume under maximum adjustment conditions. Although first developed in 2000, the SPS is in a continual mode of improvement and refining. Each month, new fixtures are tested and qualified to the SPS requirements.
- ✓ **HET:** The plumbing industry is introducing many new technologies and fixture models that reduce effective flush volumes well below the mandated 1.6-gpf/6.0-lpf maximum. Thus, the High Efficiency Toilet (HET) is becoming part of the toilet replacement spectrum as water agencies and municipalities incorporate them into their toilet programs. The HET is defined as a fixture that flushes at 20% below the 1.6-gpf/6.0-lpf maximum or better, equating to 1.28-gpf/4.8-lpf. This 20% threshold is consistent with one of the efficiency thresholds in the LEED program.

Statewide Communications

In order to implement the most efficient water-conservation practices, the water supply industry must stay informed with up-to-date technological advances. Educational opportunities are extremely scarce for Water Conservation Coordinators and their staff. What these providers need is a “one-stop-shop” for the most current studies, the latest plumbing codes and standards, successful program information, and news on highly efficient hardware and appliances.

The California Urban Water Conservation Council is endeavoring to serve as a clearinghouse for water use efficiency information, providing water suppliers with resources they have difficulty finding elsewhere. Communication with water providers and their customers via the Council websites and newsletters promotes water use efficiency measures in the urban sector, educates end users (homeowners) in water-conserving practices, and provides technical expertise to urban agencies. These communication tools, including the WaterLogue newsletter and the Technical Information page of the Council’s website, require constant updating to ensure the newest information is readily available.

Additionally, the Council committee meetings and workshops, held statewide, offer conservation personnel the opportunity to learn from their peers and from experts in the field. The costs to attend these meetings, however, have become a burden to agencies whose funding has already been significantly reduced. With the advent of the “electronic meeting,” meetings and workshops could be attended via phone and the Internet at a fraction of the cost overall than for everyone to attend in person.

Keeping the Council websites and newsletters current and investing in an electronic meeting format will guarantee that water suppliers and their customers receive timely, useful information in a cost-effective manner.

WaterLogue Newsletter

One of the methods by which the Council communicates the latest industry trends and innovations to its members and the water industry, is through its newsletter, the WaterLogue. This newsletter is an excellent medium for showcasing the newest high-efficiency appliances and fixtures on the market, such as low-flow toilets and weather-based irrigation controllers. Council members look to the WaterLogue for the most up-to-date standards, studies, and water conservation news. The WaterLogue is currently written by a Council technical consultant and posted on the Council’s website on a quarterly basis.

Future requirements and/or needs

The WaterLogue Newsletter is an important part of the core services the Council provides. Without continued funding to support this publication, a valuable conservation resource will no longer be available to Council members and to the water industry at large. The extensive research involved in producing this newsletter necessitates a significant amount of time be allotted to its creation. Hence, the higher budget for this newsletter than for the Council's H2ouse.org Latest News newsletter.

Actions to be taken to satisfy the requirements/needs

1. Kickoff: The first newsletter issue of the year will be posted by March 1.
2. Development: The Council consultant will thoroughly research current field technology. Information for the WaterLogue newsletter is gathered by the Council consultant through existing relationships with the various industries and companies developing or producing water-efficient products, testing laboratories, and other water utility conservation practitioners throughout North America. Among the venues where product information is gathered are codes and standards meetings with industry representative, trade shows that include water-using products, and personal meetings with the engineers and marketing personnel of individual companies. Using this information, the Consultant will write about items of interest to water conservation personnel.
3. Review and Revision: The Council Executive Director, Mary Ann Dickinson, will review each issue of the newsletter for appropriateness of content. She will make suggestions for additional content and revise as needed. The modified newsletter will be returned to the Consultant for the final write-up.
4. Deliverables: Four newsletter issues will be produced per year on a quarterly basis.

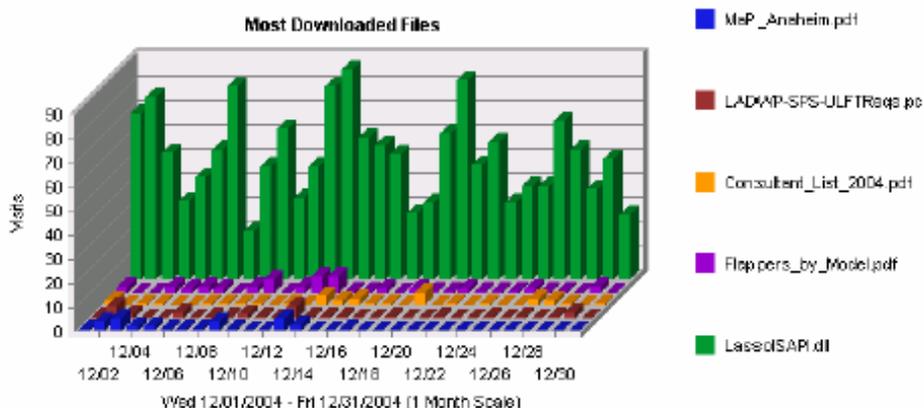
WaterLogue Issue	Submittal Date	Website Posting Date
Spring	February 15	March 1
Summer	May 15	June 1
Fall	August 15	September 1
Winter	November 15	December 1

Monitoring and Reporting

According to the www.cuwcc.org WebTrends statistical reports (as shown in Figure 1 below), the latest issue of the WaterLogue was the tenth most downloaded document on the Council website in December. These reports will be reviewed on a monthly basis for increases in the number of times the WaterLogue Newsletter is downloaded. This task will be monitored through quarterly status reports to DWR.

Figure 1. WebTrends

http://cuwcc.org/weblog/REPORT_02_b.HTM



Most Downloaded Files

	File	No. of Downloads	% of Total Downloads	Visits
1	/scripts/Lasso(SAPI).dll	22,788	90.11%	1,607
2	/Uploads/product/ Flappers_by_Model.pdf	135	0.53%	59
3	/Uploads/tech_docs/ Consultant_List_2004.pdf	72	0.28%	34
4	/Uploads/product/ LADWP-SPS-ULFTReqs.pdf	65	0.33%	32
5	/Uploads/product/ MaP_Anaheim.pdf	299	1.18%	31
6	/Uploads/product/ Water_Logue_Volume_2_No_2.pdf	44	0.17%	25
7	/Uploads/tech_docs/ BMP_Program_Expertise_2004.pdf	52	0.2%	20
8	/Uploads/product/ LADWP-SPS-Certified-ULFT-List-11-4-04.pdf	30	0.11%	19
9	/Uploads/Tech_Docs/ Internet_Resources.pdf	78	0.3%	18
10	/Uploads/product/ Water_Logue_Volume_2_No_5.pdf	37	0.14%	16
11	/Uploads/product/ LADWP-SPS-Certified- Flapper-List-10-12-04.pdf	14	0.05%	10
12	/Uploads/tech_docs/ Consultant_List_2002.pdf	19	0.07%	9
13	/Uploads/ Group2_Description.pdf	10	0.03%	8
14	/Uploads/product/ WaterLogue_INDEX.pdf	13	0.05%	8
15	/Uploads/committee/ AWWAWaterLossPolicySurvey.pdf	32	0.12%	8
16	/Uploads/ membership_packet.pdf	9	0.03%	8
17	/Uploads/product/ Water_Logue_Volume_1_No_2.pdf	11	0.04%	8
18	/Uploads/product/ LADWP-SPS-QA.pdf	11	0.04%	8
19	/Uploads/product/ International_Project_7.pdf	15	0.05%	8
20	/Uploads/product/ Water_Logue_Volume_1_No_1.pdf	15	0.05%	7
Total For the Files Above		23,769	93.99%	N/A

Most Downloaded Files - Help Card

- Downloads** - Number of times the specified file was downloaded by a visitor. If an error occurred during the transfer, that transfer is not counted.
- Files** - The path and filename of the downloaded file.
- Visits** - Number of visits which resulted in at least one download of the specified file. If a visitor downloads the file more than once per visit, it does not count as another visit. If a visitor is idle longer than the idle-time limit, WebTrends assumes the visit was voluntarily terminated. If the visitor continues to browse your site after they reach the idle-time limit, a new visit is counted. The default idle-time limit is thirty minutes.
- %** - Percentage of times the specified file was downloaded out of all downloaded files.

This information shows you the most popular downloadable files on your Web site. Files that don't appear on the list, or appear low on the list, may require maintenance such as decreasing the file size, improving link placement, or elimination to make room for more popular content.

Budget Summary for Sub-element (a) WaterLogue Newsletter	
Task	Annual Cost Estimate
Content Development	\$21,600
TOTAL	\$21,600

Technical Information Web Pages

As the water conservation industry advances, standards are continually being updated and new studies are released on a frequent basis. To keep water agencies duly informed regarding advancements in the industry, the Council has created a “Technical Information” web page (http://www.cuwcc.org/products_tech.lasso) on its main website.

The Technical Information page contains descriptions of water conservation studies, standards, product specifications and lists, water conservation technologies, and manufacturer links. The information on this page consists largely of downloadable documents designed to aid water conservation practitioners in designing, implementing and measuring conservation programs. In many cases, the information on the Technical Information page is also useful to consumers in evaluating and selecting products for purchase. Where possible, consumer-oriented organizations are encouraged to make these documents available to their constituency through the Council's website.

Future requirements and/or needs

This web page is being tasked out separately, due to its being the most frequently accessed portion of the Council’s website. According to the website’s WebTrends statistical report for December, four of the reports on this page alone were in the top ten most downloaded documents on the entire Council website. To keep up with the constantly shifting face of the conservation technology landscape, new information must be gathered on an ongoing basis by a Council technical consultant and posted to the website by Council staff. The Technical Information page will continue to require constant revision to satisfy the informational needs of Council website visitors.

Actions to be taken to satisfy the requirements/needs

1. Kickoff: The Technical Information Page has already been created and is an integral part of the Council website.
2. Development: The Consultant researches and obtains the documents to be posted on the Technical information page from individuals, water utilities, and related organizations throughout North America.

3. Review and revision: The Consultant's findings are submitted to the Council website administrator, Beth Ernsberger, on a weekly basis. The documents are screened for their applicability to California water utilities before they are posted. The web administrator converts reports to PDF format and codes the Technical Information Page to include new items.
4. Deliverable: New articles are posted to the Technical Information Page by Council staff within one week of receipt from the Consultant.

Monitoring and Reporting

The www.cuwcc.org WebTrends statistical reports will be reviewed on a monthly basis for increased visitation to the Technical Information page. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (e) Technical Information Page	
Task	Annual Cost Estimate
Consultant updates	\$4,000
Website updates	\$4,800
Total	\$8,800

Water Saver Home Newsletter

Not only does the Council seek to keep water industry participants informed, it also has another audience for water conservation information: the water users themselves. While residential water use does not account for the largest percentage of freshwater usage, it is the highest priority use and has a large conservation potential. To promote efficient water use by urban residents, the Council began posting another newsletter on its Water Saver Home website (<http://www.H2Ouse.org>). The purpose of this newsletter is to communicate water conservation news of interest to homeowners and consumers. Potential topics range from the newest water efficient appliances on the market to seasonal tips and reminders on water use around the home.

Future requirements and/or needs

Due to funding constraints, thus far only three issues of this newsletter have been placed online. The "Latest News" would be posted quarterly on the Water Saver Home website.

Actions to be taken to satisfy the requirements/needs

2. Kickoff: While there is already a spot on the Water Saver Home for this Newsletter, the last issue produced was in 2003. The first newsletter issue of the year will be posted by March 1.
3. Development, The Council's technical consultant, John Koeller, will research water conservation tips and news of interest to the average homeowner.

4. Review, revise: The Council Executive Director, Mary Ann Dickinson, will review each issue of the newsletter for appropriateness of content. She will make suggestions for additional content and revise as needed. The modified newsletter will be returned to the Consultant for the final write-up.
5. Deliverables: Four newsletter issues will be produced per year on a quarterly basis

Latest News Issue	Submittal Date	Website Posting Date
Spring	February 15	March 1
Summer	May 15	June 1
Fall	August 15	September 1
Winter	November 15	December 1

Monitoring and Reporting

The www.h2ouse.org website also has WebTrends statistical reports that can be run on a monthly basis. These reports will determine a baseline figure for visitation to the Latest News page. They can then be reviewed monthly for increased viewership of the newsletter. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (f) Water Saver Home Newsletter	
Task	Annual Cost Estimate
Content Development	\$3,600
TOTAL	\$3,600

CUWCC Web site Support

The Council's main web site (<http://www.cuwcc.org>) is the primary method through which the Council communicates with the water conservation community. This web site contains a multitude of technical resources: lists of approved consultants; articles of interest on a wide range of conservation-related subjects (drought, metering, commercial retrofits); conservation program cost-effectiveness models; workshop materials and details; a calendar of conservation events; conservation publications available for download; and links to internet resources. Additionally, the latest industry Hot News is posted on a weekly basis.

Future requirements and/or needs

While website maintenance is partially funded through membership dues, this does not cover the entire cost of upkeep. It is imperative that the technical resources posted on the Council website be updated in a timely manner to avoid outdated conservation ideas being disseminated throughout the water community.

Actions to be taken to satisfy the requirements/needs

Consultant lists are posted twice annually and updated throughout the year. On average, one new item per month is added to the Articles of Interest page. Workshop information is added to the website as needed. Generally there are six different sessions per year, including Cost Effectiveness, Best Management Practices, and Conservation Coordinator Training workshops. Most sessions have three to five workshops. Publications are posted as received. Several are added to the website per month.

Monitoring and Reporting

The www.cuwcc.org WebTrends statistical reports will be reviewed on a monthly basis, with any increase in the number of document downloads and overall visitation to the Council website noted. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (g) CUWCC Web site Support	
1. Online Technical Resources	
Budget	Annual Cost Estimate
Staff time to update and maintain website	\$10,000

Ordinance Library

The Council repeatedly receives requests from water suppliers, both members and non-members, for samples of water conservation ordinances. To date, there is no one place a water supplier can go to view examples of the regulations being enforced by other cities and districts. An online Ordinance Library would solve this dilemma. The Council proposes to add a new section to its website containing electronic copies of water conserving ordinances in effect throughout the state of California.

Future requirements and/or needs

Creating an online Ordinance Library would entail collecting current ordinances from water agencies, scanning any ordinances not in electronic format, and creating a new web page for the library. As new ordinances are put into effect or old ordinances are revised, the library would require regular updating.

Actions to be taken to satisfy the requirements/needs

1. Collection of ordinances: Council staff assigned to this task will contact water suppliers throughout California via e-mail and phone to request current ordinances. If no electronic versions are available, the ordinances will be scanned into PDF format.
2. Data entry: These ordinances will be separated by type (i.e. Water Waste) and a description entered into a database for tracking.

3. Updating database: As ordinances are created and/or revised, new information will be entered into the database and outdated ordinances will be deleted.
4. Web page coding: The Council's website administrator will create new web pages for the searchable online Ordinance library.
5. Deliverable: A fully searchable, online library of water conservation ordinances would be developed and available on the Council website within three months of the time funding is provided.

Monitoring and Reporting

WebTrends statistical reports will be run to determine baseline figures for visitation to and downloads of documents from the Ordinance Library. These reports will be reviewed on a monthly basis for increased visitor activity. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (g) CUWCC Web site Support 2. Ordinance Library		
Task	Hours	Cost Estimate
Collection of ordinances	120	\$6,000
Data entry	80	\$4,000
Updating database	60	\$3,000
Web page coding	30	\$1,500
TOTAL		\$14,500

Website Reorganization

The Council website was originally designed, with limited funding, to be a tool to communicate with Council members. New pages were added to the website on an as-needed basis, to meet the needs of an expanding audience. The Council website is a good storehouse for industry information. However, as numerous pages have been added, it has become increasingly difficult to find resources in a timely manner. A complete reorganization of this website would promote effective and user-friendly communication with online information seekers.

Future requirements and/or needs

Accomplishing this objective would first require conducting a usability study of the website. Before the website can be improved, it needs to be evaluated from the user's perspective. A usability study would define all of the issues facing a user of the website in their search for specific water conservation data. The website would be recoded and restructured following the results and recommendations of this study.

Actions to be taken to satisfy the requirements/needs

Consumers would be tested on the following: their comfort with the navigation system; the user interface; the site's visual appeal; the relevance of information and the value of the overall content. The results of these evaluations will be summarized into a document which will include: overview of evaluation goals; three of the most universally identified problems; and recommendations for improvement. The Council's management team can then prioritize these recommendations for implementation into the Council's web site.

Web Site Usability Evaluation Steps

1. Conduct a two-day web site evaluation.
2. Identify consumers who represent our target audience.
3. Contact and schedule 10 members of our target audience to participate in a 50-minute site evaluation.
4. Conduct one-on-one, videotaped web site evaluations using a moderator and a note taker.
5. During the evaluation, each site evaluator will be asked to perform specific tasks on the web site. We will observe how easily they are able to move through the site.
6. Write a final Web Site Usability Evaluation Report.
7. Provide copies of videotapes to the Council's staff.
8. Present findings and recommendations for website improvement to Council's staff

Once the usability testing has been completed, Council staff will review the recommendations and determine a plan for implementation. The website will be restructured within six months from the time the findings are received.

Monitoring and Reporting

The www.cuwcc.org WebTrends statistical reports will be reviewed on a monthly basis, with any increase in the number of document downloads and overall visitation to the Council website noted. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (g) CUWCC Web site Support 3. Website Reorganization

Task	Estimated Hours	Estimated Cost
Consultant Project Management (8 hrs/week)	24	\$7,200.00
Travel Trip Fee (\$700 per trip, 3 trips)		\$2,100.00
Council Project Management	80	\$4,000.00
<u>Week One</u>		
Discovery (meeting, research review, recruiting names)	4	\$1,200.00
Screeener and Test Script (development, approval)	3	\$900.00
Recruiting* (\$120 per participant)		\$1,200.00
<u>Week Two</u>		
Testing (2 days, 5 participants per day)	20	\$6,000.00

Testing Facilities Rental (in Sacramento)		\$1,800.00
Refreshments and lunch		\$200.00
<u>Week Three</u>		
Stipends* (\$50 per participant, 10 participants)		\$500.00
Report (analysis, findings, recommendations)	5	\$1,500.00
Video Production (transfer of video to tape)		\$300.00
Presentation (preparation and presentation)	4	\$1,200.00
Prioritization Meeting	3	\$900.00
	TOTAL	\$29,000.00

*Recruiting fees and stipends may vary based on availability and accessibility of potential subjects.

Hosting for cuwcc.org and h2ouse.org websites

The Council's two websites, www.cuwcc.org and www.h2ouse.org, are vital to the continuing outreach to and education of the water conservation community. The Council does not host the servers for these websites in-house. These sites are hosted with the companies who originally designed them: www.cuwcc.org with Richard Carlton Consulting and www.h2ouse.org with Jel Productions, Inc. Richard Carlton also performs monthly maintenance to the cuwcc.org website, beyond what is covered in the hosting agreement.

Future requirements and/or needs

Water utilities often look to the Council's main website for Best Management Practices (BMP) water-efficiency program implementation and technology information. Without future funding ensured to maintain these websites, this informational resource may no longer be available, making it that much more difficult for the water community at large to locate the information necessary for effecting successful programs.

Additionally, these utilities refer their customers to the Water Saver Home website for tips on conserving water around the house. One of the major roadblocks to running successful programs is the marketing of conservation activities in a manner that the homeowner can understand and is motivated to use. The H2Ouse website offers agencies a fun and graphically interesting tool for their customers and the public at large to learn about water conservation in the home. Web hosting funds must be secured on an annual basis to ensure this resource is available in the future.

Actions to be taken to satisfy the requirements/needs

2. CUWCC.org web hosting: Continued hosting of website and rental of two website servers located at Richard Carlton Consulting. This includes one server for the website itself and a transaction server for the online commerce portion (i.e. Publications) of the website.
3. H2Ouse.org web hosting: Continued hosting of website on shared server located at Jel Productions, Inc.
4. Maintenance of CUWCC.org website includes:
 - i. Web site backups: Verification of operational IP addresses and network configuration. Use Timbuktu to open a remote connection to RCC backup server and then transfer

- the HTML related files from the web server to the remote backup server. Supervise this process until complete. Performed every two weeks, or after any major web site upgrades.
- ii. Verification of the database backups and archival of most recent backup to general archive server: Accessing the FileMaker Pro Server management console and reviewing the current scheduled backups. If errors are seen, the FileMaker Log must be read, and solution determined. Performed every two weeks, or after any major web site upgrades.
 - iii. Verification of web site responsiveness and performance in main areas: Working through the system as an end user to ensure that system performance is nominal. Restarting servers if performance is found to be slow or sluggish. This task is performed every two weeks, or after any major web site upgrades.
 - iv. Reboot of web server and transaction servers to clear buffers and cache: Restarting servers if performance is found to be slow or sluggish. Restarts are often performed preemptively. Performed every two weeks, or after any major web site upgrades.
 - v. Response to any site interruptions as communicated via email by the computer system programmed to check web site responsiveness every 20 to 30 minutes. Typically, a server has crashed or other problem has occurred, requiring a server restart. This is not a scheduled event.
 - vi. Response to any and all queries by CUWCC relating to web site and database status and current performance levels. Make staff available to respond to CUWCC's server questions on a near 24/7 basis. This task is performed two to four times per month. Staff may:
 - check status of Windows 2000 on three separate systems,
 - review performance manager,
 - log onto Lasso security settings,
 - check the Lasso and IIS logs,
 - review FileMaker Server status,
 - review FileMaker Server logs.
 - vii. Installation and continuous updates of Virus Protection Software. Weekly check of the virus protection software to ensure that the software is downloading the latest virus definitions. Weekly check of the virus protection software to ensure that the software is installing security patches as released by software vendors. This task is performed once per week.
 - viii. Trouble shooting of Server, Domain, DNS registry, and other internet technologies affecting the server. Internet connection failure to the CUWCC server may be CUWCC-specific issue and must be investigated by senior engineering staff. Various fixes due to: failure of DNS setting, or server, failure of SSL encryption for secure documents, failure of key Windows 2000 technologies such as IIS, or third party technologies such as Lasso. This is not a scheduled event (emergency basis only).
 - ix. Installation, management, and updates of encryption keys for the Secure Socket Layers (SSL) as installed on the web Server. Generating public and private keys, and submitting those keys to Verisign. A file is returned that must be installed on the server properly and then tested. This task is performed once per year.

Monitoring and Reporting

These web servers are monitored by the hosting companies and the data for both websites is backed up on a daily basis to ensure continuity of service. Additionally, the WebTrends statistical reports for the cuwcc.org and the h2ouse.org websites detail the number of server errors on a monthly basis. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (h) Hosting for cuwcc.org and h2ouse.org websites		
Task	Rate	Annual Cost Estimate
1. CUWCC.org web hosting	\$450/ mo. x 12 mos. =	\$5,400
2. H2Ouse.org web hosting	\$200/mo. x 12 mos. =	\$2,400
3. Richard Carlton Consulting website maintenance	\$1300/mo. x 12 mos. =	\$15,600
Total		\$23,400

Communications Strategy Plan

The Council has been the urban water conservation leader in California for over ten years yet the average citizen is unaware of the Council and its programs. Additionally, many water utilities would like to utilize the Council’s many successful pilot programs and research efforts but lack access to information (e.g. press releases, fact sheets) about the Council’s activities. Finally, the Council currently needs the expertise and assistance of media relations professionals to develop an appropriate strategy for conducting an effective public and media outreach campaign.

The Council proposes to develop a Communications Strategy to increase public awareness of the importance of water conservation programs. One of the goals of this task would be to maximize the Council’s existing efforts and resources by ensuring the public, through the media, is aware of programs, publications and resources of the Council. Improved awareness and education will help agencies achieve greater participation on the part of their customers as well as provide tools for water suppliers to use to promote programs locally.

The Council proposes to:

- Develop a set of measurable goals for a communications strategy that would include: a) identification of the target audience; b) priorities; c) a schedule for funding and implementation;
- Develop public outreach materials promoting the Council as well as its programs and its goals
- Develop media materials to facilitate public outreach and assistance to the Council’s member agencies

4Q05	1Q06	2Q06	3Q06	4Q06
\$2,500	\$11,000	\$10,250	\$6,250	

Start: 1/1/06

End: 8/30/06

Deliverables

1. Written report containing measurable goals for a communications strategy that would include: a) identification of the target audience; b) priorities; c) a schedule for funding and implementation;
2. Fact sheets describing various Council activities and accomplishments including urban water conservation programs, practices and technologies to use in public outreach efforts
3. Media relations materials

Water Use Efficiency Certification Briefing Book

Once just a rather obscure technical term used by water wonks, “water use efficiency” has taken center stage in the ongoing drama that is California water. Water use efficiency is one of 11 program elements in the comprehensive CALFED Bay-Delta plan. The two mainstays of water use efficiency – water recycling and water conservation – have long been touted as a significant part of the solution to provide more water to the environment *and* to a growing urban population.

Water conservation is a proven response in times of drought. The installation of water-saving plumbing fixtures and extraordinary water cutbacks by urban homeowners, along with the voluntary transfer of water from fallowed farm fields to cities, helped the state through the 1987-1992 drought. Such conservation has become part of the everyday water picture. According to statistics, Los Angeles is using the same amount of water today as in 1972, despite the addition of 1 million people. Faced with a cutback in its Colorado River supplies, the Metropolitan Water District of Southern California has launched a major new water conservation campaign that includes a program to convince southern California homeowners to landscape with native, desert plants. At the state level, a new state law mandates the sale of water-efficient clothes washers in California by 2007.

But how much water can really be conserved? Who has rights to that water? Where should that water be stored? Does water use efficiency induce growth? Should water conservation programs be voluntary or mandatory? These are the questions now being debated as the three water stakeholder groups – agricultural, urban and environmental – consider the practical and political applications of water conservation.

What about water recycling? Already, some 200 water reclamation facilities are recycling about 450,000 acre-feet of water each year. This treated wastewater is used in a variety of ways, ranging from irrigation to groundwater recharge. With another 162 recycling plants expected to be on line in the next 10 years, officials predict some 1 million acre-feet of recycled water will be produced annually by 2020. Whether the public will accept a growing role for recycled wastewater is a major concern – especially when it comes to groundwater recharge and potential potable reuse. Some recent projects, even those proposed for landscape irrigation, have had some problems gaining public acceptance. The so-called “yuck factor” has, in several instances, killed entire water recycling projects.

As political leaders weigh the effectiveness of water use efficiency and debate further water use efficiency efforts – including mandatory conservation measures – an impartial analysis of these and other questions is greatly needed. A new publication proposed for development by the nonpartisan Water Education Foundation, *Water Use Efficiency: A Briefing*, would assist in the public discussion and understanding of water conservation and water recycling. When completed, this 24- to 28-page, color publication would be the third title in the Foundation’s “A Briefing” series. *Water Use Efficiency: A Briefing* would include general text that explains the background of water conservation and water recycling, extensive subsections on the current-day issues surrounding water use efficiency, quotes from and interviews with representatives and leaders of the various stakeholder communities, photos and diagrams of water use efficiency measures, a

glossary of terms, and a list of additional organizations/agencies and web sites for further information. This new publication would differ from the Foundation's *Layperson's Guide to Water Conservation* and *Layperson's Guide to Water Recycling* because it will be more analytical in scope, with a strong focus on current policy issues under discussion. It also will be based on interviews with the leading stakeholders on all sides of these debates, and include quotes that will allow readers the equivalent of firsthand access to these policy-makers' points of view.

As part of this proposal, the Foundation proposes to distribute 470 complimentary copies of *Water Use Efficiency: A Briefing*. Distribution would occur with: 120 members of the state Legislature, to 100 members of the media located throughout the state, 150 key agencies, interest groups and stakeholders listed in the Foundation's "Directory of Water Interests." And 100 additional copies would be provided to the California Bay-Delta Authority for distribution to key staff, the CALFED Bay-Delta Advisory Committee, and the CALFED Water Use Efficiency Subcommittee.

The Foundation would offer for sale copies of the publication for a modest fee and would promote the new publication through a press release mailed to its 5,000-name list; an announcement in *Western Water*, which reaches some 12,000 readers; in its printed catalog of materials; on its web site, www.water-education.org; and in an email announcement to its 1,000-person email subscriber list.

The Water Education Foundation is an impartial, non-profit, 501 (c) 3 organization whose mission is to create a better understanding of water issues and help resolve water resource problems through educational programs. The Foundation's publications and programs have earned a reputation for balance and thoroughness. As with all other its other publications, the Foundation would circulate a draft for factual and technical review to a wide variety of stakeholders and key governmental officials. These comments would be carefully considered in editing the final document, although the Foundation would retain editorial control over the published piece.

DRAFT Outline of proposed *Water Use Efficiency: A Briefing* publication

Introduction – What is Water Use Efficiency?

- Introduction to topic
- Current issues of debate
- What the various stakeholder groups think
- What issues/thoughts may move to legislative or legal arenas
- Glossary of terms

Background

- Water conservation programs tied to 1987-1992 drought
- What the CALFED plan says
- What is a BMP?
- What is a EWMP?
- How much water has been conserved?
- How much more do people estimate can be conserved?
- What is water recycling?
- How much water is recycled?
- What the CALFED plan proposes
- What about public perception?

By the Numbers

- More detail on the estimates for urban conservation, with some discussion of agricultural conservation and how these numbers were generated.
- More detail on quantities of water recycled and its uses
- How do you quantify how much water has been saved?
- Technological Breakthroughs – discussion of new clothes washers, water treatment, etc.
- Sidebar/Case Studies of agencies/regions that have made major conservation/recycling successes

Rights to Conserved/Recycled Water

- A look at California's water rights system and the legal issues of water conservation and water recycling
- Should conserved/recycled water be dedicated to the environment?
- Should conserved/recycled water be transferred outside the area of use?

The Water Storage-Water Use Efficiency Debate

- If we conserve/recycle enough water, will we still need new storage?
- What the CALFED plan says
- What others say

Water Use Efficiency and Growth

- Historical connection between water and growth

- Statutory connection between water and growth – have water conservation or recycled water been identified as a source of supply for new developments?
- Discussion of water use efficiency measures and growth. Comments from a statewide perspective would be supplemented with examples of specific communities where the link is an issue.

Voluntary or Mandatory? The Debate Over Water Conservation Regulations

- Background on current urban BMPS
- Recent state laws passed on conservation (i.e. water efficient clothes washers)
- Analysis of debate on CALFED certification – potential legislation on mandatory measures

Summary

- What the future might hold
- List of agencies/organizations and web sites for further information

Electronic Meeting Format

As the budgets for many California cities and water agencies have been dramatically cut back, the first thing to go has been money allotted for travel expenses. This affects the ability of many water agencies and non-profit organizations to attend Council meetings and workshops. These forums are an important place for those in water conservation to learn about water efficiency practices, programs and technology. Attendance should be encouraged, without cost being a factor.

Future requirements and/or needs

Budgets for traveling to Council meetings are not likely to be reinstated in the near future; rather, they are expected to be decreased even further. An electronic meeting format, where everyone can participate via computer and phone, would effectively solve this issue. Presentations and meeting materials would be instantly available to all attendees. Immediate feedback would be available from all participants. This would facilitate fast decision-making and consensus building on important issues.

Actions to be taken to satisfy the requirements/needs

1. Kickoff: A contract will be entered into with MCI Communications for the services necessary for an electronic meeting format.
2. Development: An MCI Conferencing account will be set up by MCI for the use of Council staff and all Council meeting participants. The MCI contact will train Council staff in use of the Audio and Net Conferencing tools. The Council, in turn, will inform all applicable parties of the new meeting format availability and introduce them to the online product tutorials.
3. Deliverable: This new meeting format will be available for utilization within thirty days of funding approval.

Monitoring and Reporting

A moderator will be assigned for each meeting. That person will be responsible for monitoring the meeting and tracking attendance. Net Conferencing includes Instant Meeting Replay which ensures that a record is kept of all meeting activities. This task will be monitored through quarterly status reports to DWR.

Budget Summary for Sub-element (i) Electronic Meeting Format					
Committees	Meetings per Year	Participants per Meeting	Minutes per Meeting	Rate per Minute	Annual Cost Estimate
Commercial Industrial Institutional	4	40	240	\$0.34	\$13,056
Communications	4	40	240	\$0.34	\$13,056
Finance	4	40	240	\$0.34	\$13,056
Governance	6	40	240	\$0.34	\$19,584
Landscape	4	40	240	\$0.34	\$13,056
Membership	4	40	240	\$0.34	\$13,056
Research & Evaluation	4	40	240	\$0.34	\$13,056
Residential	4	40	240	\$0.34	\$13,056
Utility Operations	4	40	240	\$0.34	\$13,056
TOTAL					124,032

Research and Testing

Product Research and Field Trials

Over the past five years, manufacturers, water utilities, and other organizations have routinely requested water conservation professionals to evaluate products, including prototypes, new products in production, and older products that might be candidates for marketing to the water conservation sector. During this time, the water utilities have funded and/or performed independent laboratory and field testing of:

- Irrigation controllers
- Pre-rinse spray valves
- Food steamers
- Dual-flush gravity toilets
- New toilet technologies
- Toilet flappers
- High-efficiency toilets (HETs)
- Showerheads
- Residential clothes washers
- Multi-load coin-operated clothes washers
- Water broom
- Data logger software

Included were product life cycle testing, physical durability testing, performance testing, flow rate testing, water consumption measurements, customer satisfaction surveys, and similar evaluative studies.

Future requirements and/or needs

The commitment of the water utilities to measure actual “real world” water savings, evaluate products, and verify manufacturer claims is an essential piece of California’s water-efficiency programs. This process represents the “checks and balances” needed when dealing with the varied industries and companies developing and marketing products into our market sector. Further, customers frequently ask their own water utility about products that are rebated or otherwise subsidized. As such, water utilities are very concerned that products that are an integral part of a water-efficiency program be thoroughly evaluated and the water savings scientifically verified.

Without a product evaluation and testing process, water utilities are placed in a somewhat “helpless” position when it comes to developing a product-based water-efficiency program. By centralizing the evaluation process under the Council umbrella of services, its cost effectiveness is maximized and all California water utilities benefit.

Actions to be taken to satisfy the requirements/needs

The Council will continue to serve as a “clearinghouse” for product evaluation and testing, although other water utilities organizations (outside the state) may join with California in jointly funding such efforts. Joint funding of specialized studies of national or international interest or application has become the favored way to obtain the critical information needed by water efficiency programs everywhere. As such, the authority and excellent reputation that the Council brings to any such joint funding proposal is usually sufficient to draw out funds from sources outside the state, recognizing that the results of the work will be: based upon scientific principles, reliable, available to all, and broadly applicable to water conservation programs everywhere.

As in the past, the Council will actively promote and seek cooperative funding for evaluating a variety of products and their emerging technologies. Examples are:

Product Category	Research Question
Faucets and faucet controllers (CII)	Do sensor-operated faucets actually save water?
Wet cleaning systems (Commercial)	Does wet cleaning use more or less water than traditional dry cleaning?
Ice makers (Commercial)	What levels of water savings accrue through the application of the various new ice making technologies available?
Ice cream and soft serve machines (Commercial)	What water efficient technologies are available to reduce water consumption?
Combination ovens (Commercial)	What products and technologies save the most water over conventional ovens and steamers?
Hot water delivery systems (Residential)	Which systems and system layouts save the most water? Which are best suited to retrofit applications? To new construction?

A. Beneficiaries

While the primary beneficiaries of the research work are intended to be California water providers and their water conservation professionals and customers, benefits will also accrue to similar interests throughout the United States (thus, the likelihood of cost sharing with other interests outside of the state). Furthermore, this element of Technical Assistance is critical to the work with the California Energy Commission, the Standards and Codes bodies, the LEED program, and “Water Star”, inasmuch as these research findings will form the foundation for much of the work of these other organizations and programs.

Ultimately, however, among the most important beneficiaries are the individuals and businesses that will have independently developed, “real world” data on product performance and reliability available to them without cost.

<u>Budget Summary for Sub-element (a). Product Research and Testing</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Finalize UNAR policy documentation, including stakeholder meetings	0	0	0	0	\$28,000	\$9,000	
The above represents 50 percent of the funding required to complete the projects that likely to be undertaken during the three-year period, the remaining 50 percent being derived from cooperative funding provided by out-of-state organizations.							

Potential Best Management Practices (PBMPs)

Signatory water suppliers to the *Memorandum of Understanding Regarding Urban Water Conservation in California (MOU)* agree to make good faith efforts to implement 14 urban water conservation Best Management Practices (BMPs). In addition to the current 14 BMPs, Exhibit 1 of the MOU includes a list of 11 potential BMPs (PBMPs). Under the terms of the MOU, the Council is responsible for maintaining a dynamic BMP/PBMP assessment process,

In January 2003, the Council undertook a new evaluation of PBMPs for urban water conservation. By early 2006, from 14 to 16 new potential PBMPs will have been evaluated to determine their suitability for a detailed examination in considering them for full BMP status.

Over the past few years, technology development has accelerated with respect to water-efficient practices and products. Consequently, new products that claim to be water-efficient are appearing in the marketplace at an unprecedented pace. While not all of these products may be true contenders for a place in the water-efficiency hall of fame, some are definitely worthy of consideration as a stand-alone PBMP, a component of a PBMP, or as a component of an existing BMP.

Future Requirements and Needs

As noted above, many new products and practices are worth consideration as part of the BMP/PBMP structure. As such, they need to be evaluated as to their efficacy, cost, water savings potential, and overall suitability as a statewide practice. On an annual basis, somewhere between two and six such items require evaluation by technical and program specialists.

Actions to be taken to satisfy the requirements/needs

Each candidate PBMP identified by the Council's Research and Evaluation Committee will be subjected to reconnaissance study to determine the essential facts related to the item, i.e., technical efficacy, cost and reliability, water savings, and applicability on statewide basis. Such reconnaissance studies cost in the neighborhood of \$5,000 to \$10,000 depending upon the complexity of the product or practice.

Beneficiaries

The primary beneficiaries of the PBMP reconnaissance studies will be the water utilities and their customers. Both groups will gain important knowledge about the products in advance of any significant investments in programs.

<u>Budget Summary for Sub-element (b). Potential BMPs</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Evaluate candidate PBMPs (2 per year)	0	0	0	0	\$24,000	\$500	

CEE Commercial Kitchen Initiative

Food service operations in the commercial sector including restaurants, cafeterias, institutional kitchens and food preparation companies exhibit significant water conservation potential. For example, the dishwashing operation in a typical restaurant consumes over two-thirds of all of the water used by that establishment. In some cases, nearly one-half of the water used in dishwashing is consumed by a pre-rinse spray valve used to remove food from dishware, utensils, and pans prior to placing them in the dishwasher.

In the food preparation area, food steamers, ice makers, and other pieces of equipment use significant amounts of water, due, in part, to once-through cooling. The energy consumption of food service equipment is likewise significant and has led to numerous initiatives directed at energy efficiency. The Food Service Technology Center, San Ramon, CA, and the Consortium for Energy Efficiency (CEE), Boston, MA, have both been at the forefront of specification development and qualification of food service equipment as to energy efficiency.

In November 2004, the Consortium for Energy Efficiency¹⁹ (CEE), together with a group of U.S. water utilities, initiated a joint effort with energy-efficiency program administrators and other public stakeholders directed at bringing water efficiency into the mix of energy efficiency services that CEE provides. This effort is currently exploring a new national initiative that promotes the opportunities for water and energy efficiency in commercial food service operations, including food processing, food storage, food waste disposal products, and dishwashing.

CEE and the participating water organizations (including the Council) established a new program committee open to interested CEE members and water utilities. The program committee's intent is to provide the established framework of a national initiative that both water and energy programs can implement locally – either individually or together. This project will be CEE's first water and energy saving initiative to involve water utilities from the inception.

Future Requirements and Needs

The Pacific Institute²⁰ modeled daily water use in California restaurants and determined that a medium sized establishment (25 employees and 60 seats) consumes approximately 25,000 gallons per day of water. Given the large number of food service establishments in California (over 75,000), the Pacific Institute estimates that 163,000 acre-feet of water are consumed by the restaurant industry each year²¹. As such, it is critical that the Council be active with the CEE

¹⁹ The CEE is a not-for-profit organization. It plays a major role in the Energy Star program, developing product test methods (for energy consumption), working with manufacturers to “list” products for Energy Star qualification, and providing water and energy consumption data for clothes washers. This water data is used by water utilities throughout North America to structure their rebate programs for clothes washers.

²⁰ Pacific Institute, 2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, November. Appendix E, Table E-18.

²¹ Ibid, Table E-20

kitchen initiative in order to assure that the outcomes are consistent with the goals and practices of California water utilities.

Council participation will be necessary to: (1) assist CEE in addressing those items of equipment that represent the largest opportunities for savings capture, (2) establish tiers of water efficiency that can be adopted into the typical outreach and incentive programs of the water utilities, (3) provide “real world” field testing platforms for verification of calculated efficiencies²², and (4) provide authoritative advice to CEE as it proceeds with this initiative.

Actions to be taken to satisfy the requirements/needs

The Council has appointed one of its technical advisors as a member of the program committee and its subsidiary working groups. The Council’s representative will participate in all meetings of the committee and will assemble and forward the collective feedback and input of California water utilities to the CEE and the program committee.

Further, the Council will strongly suggest to the CEE that first priority be given to products in the following priority order:

- Pre-rinse spray valves
- Food steamers
- Ice makers
- Commercial dishwashers
- Combination ovens

Other products would be added to the Council’s priority list once work on the above five products is underway.

Beneficiaries

The water utilities of California will benefit from the structure and tiered efficiency information resulting from this initiative, facilitating the implementation of conservation programs directed at the food service sector. The greatest beneficiaries, however, will be the food service industry (restaurants, commercial and institutional kitchens, food producers), which will have valuable information upon which to make purchase decisions, thereby deriving sizable cost savings from improved efficiencies (water, wastewater, and energy cost reductions).

²² It is the contention of water conservation practitioners that savings “claims” or “calculations” must be field verified in real world installations, where possible, in order to provide the level of confidence necessary to structure meaningful incentive-based programs.

<u>Budget Summary for Sub-element (c). CEE Comm'l Kitchens Initiative</u>							
Task	Salary	Fringe Benefits	Supplies	Equip	Consulting Services	Travel	Other
1. Evaluate candidate PBMPs (2 per year)	0	0	0	0	\$12,000	\$3,000	

Conservation Education Curriculum

The California Urban Water Conservation Council, in collaboration with member organization The Writing Company, proposes to develop an original, multi-disciplinary school-based water conservation program. The program will focus on the curriculum requirements of 8th graders, but will be suitable for students in grades 7, 9 and 10 as well.

The title of the program, “WaterCare: Building an Ethic of Stewardship and Sustainability,” focuses on “stewardship” and “sustainability” in an effort to help students realize that 1) there are significant statewide problems related to water supply reliability, water quality, and long-term environmental protection, especially in the Bay-Delta, 2) these problems affect individuals, the economy, and the environment, 3) water conservation is a viable strategy for helping to address the supply problems, 4) water conservation can be achieved through passive savings and behavioral changes, 5) each student can play an important role in enabling the long-term success of conservation efforts, and 6) long-term solutions require a combination of large-scale actions and very small-scale, individual actions.

California currently supports one of the most vibrant economies in the world. Our future depends on the ability of future generations to make fundamental changes that will ensure long-term sustainability. These changes will come through a combination of knowledge and motivation. This program will strive to nurture both: knowledge of systems, practices and technology coupled with a desire to do what is right and necessary to protect our futures.

The obvious target for such a program is our young people: today’s students. They are the leaders of tomorrow and major influences on today.

First and foremost, however, they are students, and their job is to gain the skills and knowledge that will enable them to succeed and to lead society in the future. Thus, this program must and will be educational in its scope, addressing the learning requirements of the students. As a result, it will prepare the students for their graduation requirements, and it will provide teachers with a tool they can use with confidence to teach to the required curriculum.

The program will simultaneously be academic and hands-on. It will contain in-depth, age- and curriculum-appropriate lessons related to such topics as the geography of the Bay-Delta, flow-rates, the science of plant watering, economic analyses, and public policy as a tool for social change. In addition, it will encourage students to examine their own behavior and that of their families, friends, and community to find and implement significant water saving strategies. Perhaps most importantly, the program will be fun, engaging, and directed toward and appropriate for the students it is serving.

The developed materials will be “consumable” meaning that each student will have his or her own copy. That strategy will promote a sense of “ownership,” and it will provide a meaningful

way for parents to learn more about what their children are learning at school in hopes that the students might choose to exert some influence over them.

As a result of this effort, student will be more aware of the benefits of conservation and wise water use; they will be more cognizant of the complex systems involved, such as the water cycle, public policy, and the environment and ecosystems; they will be more aware of available technology; and they will be more aware of the need and value of their own responsible actions now and in the future.

Statement of Work

The success of existing school outreach and support efforts demonstrates the merit and feasibility of this initiative. Water agencies such as the San Diego County Water Authority and the Metropolitan Water District of Southern California have had school-based community outreach programs for several decades. The teachers in their areas have not only come to appreciate their materials, but they have also come to trust the educational value and relevance of them. Students learn best when the material they are studying is directly relevant to their lives and personally interesting. The long-term health of our region, our environment, and our planet are issues that are of the utmost importance to today's young people.

California's Department of Education has provided a valuable roadmap to what can and cannot be taught in our state's schools: students must learn a prescribed body of information at each grade level and in each discipline. Known as the "Curriculum Frameworks," these requirements provide a tool to curriculum developers for knowing that the materials being developed are age and content appropriate.

"WaterCares" will be directed principally toward the 8th grade level because of its focus on the physical sciences in science, US history and geography in history/social sciences, and algebra, geometry, and probability/statistics in mathematics. All of these topic areas address critical issues related to water use, public policy, sustainability, and conservation.

Via "consumable" lessons, teachers will be able to adapt this program to their curricula, and students will be able to learn in fresher, more relevant ways than are available via conventional textbooks. Thus, this program will be attractive to students, teachers, administrators, parents, and California's water community.

Historically, many lessons have been developed related to water, the environment, and conservation. None, however, have taken a broad focus on the issues of a single state, particularly one as large and diverse as California. With effective development and implementation, this program will make a significant contribution to the state's environment, economy, and educational efforts simultaneously.

By making it available to teachers at little or no charge, by making the materials consumable, by keeping it standards driven, and by offering numerous teacher workshops at meetings throughout the state throughout the school year, this program will be well received and appreciated by the

teaching community. It will provide a useful tool that engages, teaches and entertains students while not adding more work to the teachers' already busy and stressed schedules.

To further add to teacher ease-of-use, the program will rely entirely on readily available low-cost, no-cost materials rather than materials that are costly, hard to obtain, or difficult to maintain. Discarded one-gallon plastic jugs, measuring cups, plastic hose, the Internet, and watches with second hands provide the tools for weeks worth of water conservation education.

Much of the program's use and success will depend on how it is disseminated, thus we will employ several strategies. It will be introduced to teachers via direct mail. To do that, we will gather the names and addresses of all the middle schools in the state and send a solicitation to the appropriate teachers. Classroom packs of materials will then be sent to the responding teachers. The materials will also be presented and distributed at teacher meetings throughout the state.

In addition, materials will be distributed by the education staffs of water agencies and irrigation districts from across the state. This strategy will enable teachers and water agency staff to work with individuals with whom they are already familiar.

Monitoring and Assessment

Monitoring and assessing this effort will take place in two distinct phases: development and implementation.

At the outset of this project, we will assemble an advisory development team of teachers and water agency representatives to direct the development effort. Their input will be solicited, clarified, discussed and respected. They will review the developed materials extensively throughout the process to be sure they are accurate, substantive, thorough, useful, engaging, fun, age and skill-level appropriate, and academically sound.

At the end of the development period, the materials will undergo extensive field testing by classroom teachers and educators to be sure it engages and interests the students in the intended ways: To be successful, it must simultaneously entertain and engage the students, address the teaching standards in a substantive way, and inform and educate youth about wise water use, responsibility, and the long-term health of our planet and its ecosystems.

We will maintain written records of all developmental monitoring and assessment activities and will summarize them in the quarterly reports on progress. They will be available for review at any time upon request.

At the time that these materials begin widespread use, we will solicit feedback from both the teachers and the students who use it. We will make available to teachers an objective pre-test/post-test assessment tool designed to test student learning, and we will provide instruction to the teacher on how to use the students' work on the lessons themselves as a tool for authentic portfolio assessment of progress and learning.

We will compile and record this feedback, presenting it in quarterly reports and making it available upon request.

Cooperator. The Writing Company has been developing school-based curriculum support materials related to water, energy, and the environment since 1980. The principal of The Writing Company, Kenneth Mirvis, earned a doctorate in education from Boston University in 1980. His doctoral research involved US energy production, and he has been working in the fields of energy, water and environmental education since that time. Dr. Mirvis and his colleagues, Ms. Cathryn Delude and Mr. Neil Clark, have developed a long list of water- and environmental-related educational materials. Before joining The Writing Company, Ms. Delude worked as the Manager of Promotion and Advertising for the Mobil Solar Energy Corporation, and Mr. Clark worked as the Manager of Education Programs for the Massachusetts Water Resources Authority.

“Water Wisdom,” a high school-level water awareness/water conservation program developed for the Massachusetts Water Resources Authority, won the 1990 Camel Award from the American Water Works Association for being the nation’s best school-based water awareness material. “How Many Light Bulbs Does It Take to Change a People?” a middle school-level energy conservation program developed for the New England Electric System (now National Grid) won the 1995 Massachusetts Governor’s Energy Water for Education.

“Water Politics,” a high school-level case study-based water awareness program developed for the Metropolitan Water District of Southern California has been in widespread use in southern California’s schools for more than ten years. It spawned the annual California Water Forum, which brings together students, academics, and policy makers for intensive discussion and debate as well as an international component comparing the developed water supplies of California with the potential water supplies of that portion of the Middle East that includes Turkey, Jordan, Israel, and Palestine.

In addition to these marquee programs, The Writing Company has developed numerous other programs, including:

“The Water Times,” a standards-driven 6th-grade curriculum supplement for the Metropolitan Water District of Southern California that builds a sense of respect and stewardship for the state’s water supplies and water infrastructure. Created as a newspaper, it includes sections on California, including the Bay-Delta, water’s role in influencing weather, water’s role in human and planetary health, how water supplies have been developed, and water’s role in shaping the earth.

“WaterWays,” a 5th-grade curriculum supplement for the Metropolitan Water District of Southern California examines the role and influence of water throughout the history of our continent, including settling and developing the U.S.

“WaterWorks!” a high-school level careers program developed in conjunction with the San Diego County Board of Education, the San Diego County Water Authority, and the Metropolitan Water District of Southern California engages students through hands-on lessons that demonstrate the types of work done by water professionals. The job categories addressed in the

program include environmental engineer, water conservation specialist, and public affairs representative.

“The Qualities and Science of Water,” a high school-level water quality awareness program for the Metropolitan Water District of Southern California looks at water quality from three perspectives: 1) the uniqueness of water, 2) the science and chemistry of water, and 3) public policies related to water quality. Despite being an in-depth high school-level science program, it requires no specialized materials or equipment.

“Water Quality Testing,” a high school-level hands-on water chemistry program for the San Diego County Water Authority. The program includes an extensive Teacher’s Guide, a 60-page student booklet, and a small suitcase of water quality testing kits. Approximately 100 kits reside in the county, housed at individual schools and at the County Water Authority and its member agencies. Dr. Mirvis of The Writing Company has trained more than 1,000 teachers from the county in the program and the use of the kit. This program also spawned a bi-national effort spearheaded by the Tijuana River Estuary Reserve that brings together students from the U.S. and Mexico to monitor and protect the water of the Tijuana River Estuary.

“Eesmarts,” a standards-driven middle school-level energy awareness, energy conservation program for all middle school students in the state of Connecticut.

“To Quench a Thirst: A Brief History of Water in the San Diego Region,” a book funded by the Hans Doe Foundation and produced in conjunction with the San Diego County Water Authority specifically for the county’s policy makers, elected officials, and teachers.

In addition to these school-based materials, The Writing Company provides communications workshops to governments and agencies throughout California. It is a long-time member in good standing of the California Urban Water Conservation Council. Dr. Mirvis has facilitated numerous meetings and processes, including the first California Salinity Summit in 1999 and the CUWCC’s Strategic Planning Initiatives in 2000 and 2003.

Dr. Mirvis also serves on the Communications Committee of Water for People and is a founding member of the Board of Directors of the Massachusetts Biotechnology Education Foundation.

The collaborators on the project will include education outreach managers from water agencies across the state, principally those agencies that are current members in good standing of the CUWCC. It will also include an advisory group of approximately twelve people: six school teachers and administrators who will ensure the educational viability and usefulness of the newly development materials and six representatives of community education organizations, such as interpretive centers.

Outreach and Community Involvement

The goal of our outreach effort will be to create a program that will be meaningful and attractive to the broadest possible number of constituents. We will begin the outreach process by contacting the state's water agencies to inform them of the effort and build an advisory team. The team will be made up of representatives from urban agencies, rural agencies, and agricultural agencies.

In addition to water agencies, we will contact public teaching centers, interpretive centers, and advocacy organizations from across the state to enlist their support. Public teaching centers, such as botanic gardens and visitor's centers will provide local opportunities for field trips, materials distribution, and teacher training.

Lastly, and most importantly once the materials are fully developed, we will notify every 8th grade teacher in the state, at both public and private schools, to inform them of the program and to make it available to them. In addition, we will submit proposals to teacher organizations for making presentations at their annual meetings.

In these ways, we will present and distribute materials through direct mail, through local community education centers and organizations, and through professional meetings.

Conclusion.

Although many school materials exist related to water, the environment, and water conservation, none are fully standards driven for a specific grade on a statewide level. By making the program standards driven, it will be useful to every 8th grade science, mathematics, social studies, and/or language teacher in state. By focusing it on 8th grades, it will be more widely used than it would at the high school level because of the more specific curriculum requirements and more severe time constraints facing high school teachers and students. By focusing it completely on California, it will be more relevant and thus more engaging to the students. Such issues as the Bay-Delta, Calfed, Proposition 50, and the State Water Project are extremely relevant and important to California's students, but not to students in other parts of the nation.

This program will prepare a new generation of California citizens to make more responsible decisions as regards our limited water supplies and our vulnerable environments. It will build a foundation for a long-term sense of respect and stewardship, and it will build a baseline level of understanding that will help tomorrow's citizens better understand the controversial issues facing the long-term health of the state.