

# **CALIFORNIA URBAN WATER CONSERVATION COUNCIL**

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**Annual Report**

**2002**

**&**

**Best Management Practices Summary Report**

**2001 - 2002**



# Table of Contents

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PART I: ADMINISTRATIVE OPERATION .....	1
Signatories.....	1
Group 1: Water suppliers .....	1
Group 2: Public advocacy organizations.....	1
Group 3: Other interested groups.....	1
Strategic Planning.....	2
Budgets and Funding.....	2
Governance .....	4
Council Administration.....	4
Steering Committee.....	4
PART II: COUNCIL ACTIVITY ON BEST MANAGEMENT PRACTICES .....	6
Amendments to the MOU.....	6
Specific BMP Activities .....	7
BMP 1 Residential Surveys.....	7
BMP 2 Residential Plumbing Retrofits.....	7
BMPs 3 & 4 Audits and Metering .....	7
BMP 5 Landscape Water Conservation .....	7
BMP 6 High Efficiency Washing Machines.....	7
BMP 9 Commercial, Industrial and Institutional Water Conservation.....	8
BMP 10 Wholesaler Incentives .....	8
BMP 13 Water Waste Prohibition .....	9
BMP 14 ULFTs .....	9
BMP Reporting by Council Signatories.....	9
BMP Reporting Results .....	11
2001-2002 BMP Data Highlights .....	11
Exemptions .....	12
PART III: TECHNICAL ASSISTANCE.....	13
CALFED Certification Work Plan.....	13
RFQ for Technical Assistance .....	13
Virtual Water Efficient Home Website .....	14
Updated Council Website.....	14
Water Conservation Coordinator Training .....	15
BMP Reporting Database Workshops .....	15
Cost-Effectiveness Analysis Workshops .....	15
Leak Detection Workshop .....	16
Avoided Cost Study.....	16
ULFT Freerider Study.....	16
Practical Plumbing Handbook in Spanish .....	17
The Waterlogue Newsletter.....	17
PART IV: GENERAL OUTREACH.....	18
Bulletin 160 – California Water Plan Update 2003.....	18
Flex Your Power award .....	18
Excellence Awards .....	19

- Attachment A: Council Signatories
- Attachment B: 2000-2002 Strategic Plan
- Attachment C: Year 2002 Council Budget
- Attachment D: Council Organization Chart
- Attachment E: 2002 Steering Committee Members
- Attachment F: Signatories Submitting FY 2001/2002 BMP Reports
- Attachment G: Signatories Who Have Not Filed BMP Reports Since 1999
- Attachment H: Summary Report for Individual BMPs

March 12, 2014

Arthur G. Baggett, Jr., Chairman and Members  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95815

Dear Mr. Baggett:

We are pleased to provide you with the enclosed 2002 Annual Report for the California Urban Water Conservation Council. This report is an annual update to the State Water Resources Control Board on the status of Council activities and Best Management Practice (BMP) implementation by signatories to the *Memorandum of Understanding Regarding Urban Water Conservation in California* (MOU). The report covers Council activities for the calendar year 2002 as well as BMP implementation by signatories during the period of July 1, 2000 to June 30, 2002.

2002 was a productive year for urban water conservation efforts. To highlight a few of our most important accomplishments, the Council:

- Negotiated a \$1.5 million cooperative agreement with CALFED, the California Department of Water Resources, and the U.S. Bureau of Reclamation. The agreement funds a number of water conservation technical assistance and research projects;
- Competed for and won a \$2.2 million water and energy conservation project award from the California Public Utilities Commission to install 16,900 low-flow pre-rinse spray valves in restaurants and food establishments;
- Published a research study on the effects of Ultra Low Flush Toilet “freeriders” in water agency incentive programs;
- Published a Spanish version of the very popular Practical Plumbing Handbook for the consumer;
- Improved and expanded the Council’s [www.cuwcc.org](http://www.cuwcc.org) website with numerous features;
- Received a second grant from the U.S. Environmental Protection Agency for the next phase of the [www.h2ouse.org](http://www.h2ouse.org) web site;
- Conducted professional workshops on conservation coordinator training, cost-effectiveness analysis, utility system leak detection, and the online BMP reporting database;
- Provided assistance to water agencies in BMP implementation; and
- Compiled web-based BMP reports from 208 reporting entities for FY 2001 and FY 2002 and provided technical assistance to water agencies and districts.

We trust you will find this report helpful and the BMP summary information useful. If you have any questions, please contact us at 916-552-5885.

Sincerely,

Mary Ann Dickinson

Executive Director

## **PART I: ADMINISTRATIVE OPERATION**

### **Signatories**

As defined in the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), the Council consists of three groups:

#### **Group 1: Water suppliers**

*Any entity, including a city, which delivers or supplies water for urban use at the wholesale or retail level.*

#### **Group 2: Public advocacy organizations**

*A non-profit organization:*

- (i) whose primary function is not the representation of trade, industrial or utility entities, and*
- (ii) whose prime mission is the protection of the environment or who has a clear interest in advancing the BMP (Best Management Practices) process.*

#### **Group 3: Other interested groups**

*Any other group that does not fall into one of the two groups above.*

**Table 1: Year-by-Year Council Signatory Growth**

<b>Year</b>	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>	<b>Total</b>
Fiscal Year 1991 – 1992	96	14	22	132
Fiscal Year 1992 – 1993	4	0	4	8
Fiscal Year 1993 – 1994	12	1	2	15
Fiscal Year 1994 – 1995	11	0	4	15
Fiscal Year 1995 – 1996	12	0	4	16
Fiscal Year 1996 – 1997	3	0	6	9
Fiscal Year 1997 – 1998	8	0	8	16
Fiscal Year 1998 – 1999	6	2	11	19
Interim 1999	3	2	1	6
Calendar Year 2000	7	7	15	29
Calendar Year 2001	2	3	14	19
Calendar Year 2002	9	0	7	16
<b>Adjusted Total</b>	<b>177</b>	<b>29</b>	<b>91</b>	<b>297</b>

Attachment A lists the signatories of the Council by name. Group 1 signatories are divided into wholesale and retail water suppliers. During 2002, 16 new signatories were admitted.

## **Strategic Planning**

In December of 1999, the Council adopted a new three-year plan composed of four main sections, and 16 specific objectives. The plan sets forth tasks for planning a certification implementation function; it provides a basis for estimating Council staffing and financial needs; and it envisions full participation in the Council by signatories, including participation on committees and financial contributions.

Attachment B contains the 2000-2002 Strategic Plan. During 2002 considerable progress was made toward the objectives specified in the plan.

A Steering Committee retreat was held in October 2002 and a draft 2003-2005 Strategic Plan was crafted. A final 2003-2005 Plan will be adopted by the Council's Plenary membership in the first half of 2003.

## **Budgets and Funding**

### **CALFED Grant**

In September of 2000, the Council received a \$410,000 grant from CALFED for carrying out three broadly defined tasks in the CALFED work plan:

- Developing a plan for BMP certification
- Providing BMP reporting technical assistance and guidance; and
- Conducting research to refine urban water use efficiency program assumptions.

\$60,000 of this original grant was available to continue work in 2002.

### **DWR/USBR/CALFED Cooperative Agreement**

A \$1.5 million agreement with the Department of Water Resources (DWR), the U.S. Bureau of Reclamation, and CALFED was signed in June, 2002. The grant funding from this agreement will allow the Council to carry out specific water-use efficiency tasks and is a continuation of the funding granted in the year 2000. This grant will provide staffing for technical assistance to water agencies, funding for needed water efficiency research programs, and training and tools for water agencies to help them put in place conservation programs for their customers.

Some of the specific projects that have been undertaken through this funding are:

- Providing certification support to CALFED staff in designing a BMP certification program, including designing a BMP exemption process;

- Developing a software program to estimate water savings of BMP activities reported to the Council database;
- Updating the BMP Costs and Savings Report with new research on BMPs and Potential BMPs;
- Developing a protocol for estimating the environmental benefit of implementing BMPs; and
- Analyzing avoided cost calculation options and refining operationalized definitions of avoided cost.

### **H2Ouse Website Grants, Phase 2**

In 2002 the Council received \$69,000 from the U.S. Environmental Protection Agency to complete the technical content of the virtual home website at [www.h2ouse.org](http://www.h2ouse.org). The Council also received \$15,000 from the US Bureau of Reclamation (USBR) - Lower Colorado River Region to enhance the landscape portion of the site, including rain-water harvesting. These funds were also used to conduct usability testing and make changes based on the results of these tests. The new site will be completed in 2003.

### **USBR Guest Account Funding**

The U.S. Bureau of Reclamation paid the Council \$29,969 to add all urban water contractors to the BMP reporting database for Bureau contracts. These non-signatory agencies were also trained by the Council staff to assist them in their BMP reporting.

### **CPUC Grant for Pre-rinse Spray Valves**

The Council competed for and received a \$2.2 million project award from the California Public Utilities Commission to replace 16,900 pre-rinse spray valves in restaurants and other food service businesses throughout California. (See BMP 9, under Specific BMP Activities, for more information.)

Attachment C contains the Year 2002 Council Budget, which was approved by its Plenary membership in December, 2001. Actual expenditures as of December 31, 2002 are provided.



## **Governance**

### **Council Administration**

Several changes were made to the Council's staff. A CALFED Project Manager and two part-time Technical Advisors were hired to replace the Council's previous full-time Technical Advisor. The new Technical Advisor for the Northern California region will handle CII & residential related topics. The Technical Advisor for the Southern California region will handle landscape and residential related topics. Also hired were an Executive Assistant and an Office Manager/Accountant in 2002, who replaced the previous office manager and receptionist.

In 2002, two new Council committees were created: The Utility Operations and Legislative committees. (Attachment D contains an organization chart of the Council's structure.) In addition, the Steering Committee adopted new Financial Policies (see Budgets and Funding) and a new employee health insurance policy was instituted.

### **Steering Committee**

The Steering Committee is the Executive Board of the Council, and as such manages the financial and governance issues of the organization. In 2002, the Steering Committee added a set of governance policies. The main policy additions were:

- A requirement that members elected to the Steering committee be dues-paying members whose payments are up-to-date and, for Group 1, that they file their BMP reports in a timely manner;
- Clarification on the election of officers and members of the Steering committee as well as responsibilities of steering committee members;
- Assignment of committee creation and dissolution to the Governance committee;
- Organization and format of Steering Committee meetings;
- A process for Council policy decisions; and
- Clarification of the Council's role in legislative advocacy.

The Steering Committee also revised the Administrative policies, which impact the Council's fiscal operations. A revised budget reserve policy encourages the Council to retain a budget reserve of at least six months of operating expenses and requires a reserve of at least three months. A policy to provide health insurance to the Council's full-time employees was also approved.

Additionally, the Steering Committee sent a letter to Robin Hook, Administrator of the Drinking Water Fund at the Department of Health Services, asking that DHS incorporate the same standards as the State Water Resource Control Board uses in their administration of funds for waste treatment facilities, i.e., that they require any agency requesting funds to be required to sign the MOU or have an conservation program in effect.

Attachment E identifies the members of the Year 2002 Steering Committee.

## **PART II: COUNCIL ACTIVITY ON BEST MANAGEMENT PRACTICES**

### **Amendments to the MOU**

Changes to Exhibits 2 and 7 of the MOU were approved at the December 11, 2002 plenary meeting. These changes created two types of membership: signatory membership, and full membership. Because the Council provides professional services that require a steady stream of income, it was decided that membership benefits should be restricted to those who pay dues. Anyone signing the MOU automatically becomes a signatory member of the Council. If a Group 1 or Group 2 member, that signatory member still has voting rights in regards to the MOU. With these changes signatory members do not receive other benefits.

A Full Membership, however, would receive all benefits and privileges of Council services, based on payment of annual assessments. As of January 1, 2004 full payment of these assessments will be required or membership reverts to the Signatory Membership level. For Group 2 members, payment of annual assessments may be made in cash or by payment of in-kind services. Furthermore, to be a member “in good standing”, Group 1 members must file annual BMP reports. As noted above, the Bylaws were also revised to require that Steering Committee members and officers be Full Members in good standing.

Additionally, an obsolete section of Exhibit 2, which specifies staffing for the Council by the California Urban Water Agencies, was removed since the Council officially withdrew from this relationship in 1999 upon hiring its first Executive Director.

The vote of the Plenary on the Exhibits 2 and 7 modifications was:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>
<b>Group 1</b>	65	14	0
<b>Group 2</b>	9	0	0

In accordance with these MOU changes, the Council’s Membership Policy was revised as follows:

*Financial Contributions to the Council*

*While the signing of the MOU remains voluntary, membership in the California Urban Water Conservation Council is not free of charge. Council membership benefits and services can only be provided when the membership contributes dues to support the maintenance of those benefits and services. The Council may mail annual assessment invoices to signatories to cover budgetary expenses. Members desiring to be nominated and elected to the Council Steering Committee shall be also current dues-paying members in good standing.*

### **Specific BMP Activities**

New cost-effectiveness analysis spreadsheets were developed for members to analyze individual BMPs. These spreadsheets were presented at cost-effectiveness analysis trainings (see Technical Assistance section) and may be downloaded from the Council's website.

#### **BMP 1 Residential Surveys**

A BMP 1 committee was formed to find ways to reduce ambiguity in the current BMP language and to determine if a handbook could be written without first revising the BMP. After discussion, the committee recommended that the BMP be revised first. At present, the issue is whether BMP 1 should be quantifiable or non-quantifiable as to number of surveys conducted or amount of water saved.

#### **BMP 2 Residential Plumbing Retrofits**

The Research and Evaluation Committee looked at long-term saturation of showerheads. The committee is working on saturation studies in Orange County and in East Bay Municipal Utility District's service area.

#### **BMPs 3 & 4 Audits and Metering**

A new Utility Operations Committee was created to address amending BMPs 3 and 4 to incorporate International Water Association (IWA) performance indicators. This would integrate new methodology that is now being adopted by the American Water Works Association as recommended practice.

#### **BMP 5 Landscape Water Conservation**

The Council assisted in the application process for Proposition 13 funding, in conjunction with East Bay Municipal Utility District and Metropolitan Water District for a statewide ET (evapotranspiration) controller program. Approximately \$2.5 million was awarded in the fall of 2002 and funds will be received in 2003 by both agencies.

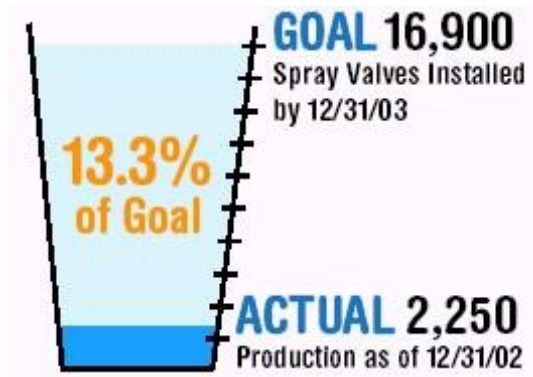
#### **BMP 6 High Efficiency Washing Machines**

In 2002, the Council worked with the California Energy Commission (CEC) on the adoption of a 9.5 water factor standard for commercial clothes washers. Subsequently, the same standard was adopted for residential clothes washers by the Legislature. This makes California the first state in the nation to have a water-based standard for washing machines. Revision of BMP 6 started in 2002 to accommodate these changes.

**BMP 9      Commercial, Industrial and Institutional Water Conservation**

In 2001 a three-year interim Ultra Low Flush Toilet (ULFT) pilot program was created. During the three years of the program, agencies will collect data and the Council will study which agencies are participating, which program techniques work, which toilet types are most successful and what impediments were encountered. In November of 2002, the CII committee held a workshop on agency experiences with implementing CII ULFT target programs.

As mentioned in the Budget section, the Council received a \$2.2 million grant from the CPUC to replace 16,900 pre-rinse spray valves in restaurants and other food service businesses. The program markets free spray valves directly to food services facilities, and will even install the valves at no charge. Each spray valve has a lifetime savings estimate of 1.1 acre-feet over a five-year life expectancy.



The Council will coordinate the project, which will run through December 2003, with the following water agencies participating as cost-sharing partners: Contra Costa Water District, East Bay Municipal Utility District, Marin Municipal Water District, Metropolitan Water District of Southern California (MWD), San Diego County Water Authority, San Francisco Public Utilities Commission, Santa Clara Valley Water District, and the Lake Arrowhead Community Services District.

In the fall of 2002, the “Rinse & Save” program officially started distribution of the spray valves to restaurants in southern California.

**BMP 10      Wholesaler Incentives**

CALFED requested that quantifiable coverage requirements be added to BMP 10 for determining wholesaler compliance with the BMP. The requirements will be specific standards that will be used to determine if an agency is in compliance. An ad-hoc committee was created to review BMP 10 with balanced membership from wholesalers, retailers, IOUs (investor owned utilities) and environmental advocacy organizations.

**BMP 13      Water Waste Prohibition**

The Council began compiling a library of water waste & other ordinances as a resource for its members. These sample ordinances are available for download from the website and will be expanded through 2003.

**BMP 14      ULFTs**

The Council commissioned a study to empirically estimate rates of freeridership within ultra-low-flush toilet (ULFT) distribution programs. “Freeriders” are program participants that, in the absence of the water agency incentive program, would still have undertaken the same action to replace their toilet. (Please see the Technical Assistance section for more information on this study.)

The Council also sent a letter to ASME requesting that ASME develop a procedure to clarify the proper identification of replacement toilet flappers in the aftermarket, i.e., a coding system to indicate the correct flapper for a toilet. A study is being undertaken by ASME in response to the Council’s request.

**PBMPs**

In 2002 the Council issued a request for proposals to evaluate potential Best Management Practices (PBMPs) for urban water conservation. This RFP is for a three-year project, funded by the United States Bureau of Reclamation, to evaluate and research PBMPs and to prepare three annual reports summarizing water savings and cost information for the eleven PBMPs in Exhibit 1 of the MOU as well as for other emerging technologies. The project will identify which of the existing PBMPs should a) be removed from the list without further research; b) be refined and made more specific in scope and objective; or c) undergo an assessment of water savings and economic potential. It is anticipated that each annual report will address a minimum of three to four PBMPs.

**BMP Reporting by Council Signatories**

In the fall of 2000, the Council launched a database-backed online reporting system that allows signatories to interactively enter BMP implementation data directly into the Council’s website. Since going online in September of 2000, the reporting database has been well received by its users. Virtually all of the feedback comments laud it as being understandable and easy to use. In 2002 the Council made improvements to the site based on this feedback. (See Updated Website.)

The information collected and summarized in this Annual Report covers Fiscal Year Reporting for the years 2001 and 2002. The Council requires its signatories to report bi-annually, although the information is still collected on an annual basis. 1999 and

2000 were the first two years that the reporting database became operational. Summary data

prior to 1999 have been entered by agencies for historical tracking purposes, and this summary information is included for reference purposes in the current BMP reports.

The Council defines a reporting unit for purposes of simplifying BMP reporting. Generally, a Group 1 signatory has a single reporting unit. There are two exceptions. First: where Group 1 signatories have multiple service areas. In such cases, each service area is a different reporting unit. Second: where Group 1 signatories have both wholesale and retail responsibilities. In such cases, each responsibility is a different reporting unit.

Reporting units enter information on those best management practices that relate directly to the reporting units' responsibility. Retail reporting units report on 13 of the 14 best management practices, as they are not required to report on BMP 10, Wholesale Agency Assistance Programs. Table 2 compares BMP reporting requirements for retail and wholesale reporting units.

**Table 2: Comparison of Retail and Wholesale BMP Reporting Requirements**

<b>Best Management Practice</b>	<b>Included in Retail Reporting</b>	<b>Included in Wholesale Reporting</b>
1 Water Survey Programs For Single-Family Residential And Multi-Family Residential Customers	Yes	
2 Residential Plumbing Retrofit	Yes	
3 System Water Audits, Leak Detection And Repair	Yes	Yes
4 Metering With Commodity Rates For All New Connections And Retrofit Of Existing Connections	Yes	
5 Large Landscape Conservation Programs And Incentives	Yes	
6 High Efficiency Washing Machine Rebates	Yes	
7 Public Information	Yes	Yes
8 School Education	Yes	Yes
9 Conservation Programs For Commercial, Industrial, And Institutional Accounts	Yes	
10 Wholesale Agency Assistance		Yes
11 Conservation Pricing	Yes	Yes
12 Water Conservation Coordinator	Yes	Yes
13 Water Waste Prohibition	Yes	
14 Residential ULFT Replacement Programs	Yes	

Attachment F presents the list of signatories submitting FY 2001 and 2002 BMP reports. Attachment G presents the list of signatories that have not filed BMP reports since 1999. Attachment H presents summary reports on individual best management practices data.

## **BMP Reporting Results**

There are 229 Reporting Units for the Council's signatories in the BMP reporting database. For the 2001 Reporting Year, 157 or 69% of those reporting units turned in some or all of their BMP Reports; 72 or 31% turned in none. For the 2002 Reporting Year, 158 or 69% of the reporting units turned in some or all of their BMP Reports; 71 or 31% turned in none.

Attachment H shows the progress made by the reporting signatories for BMPs 1-14 and in some cases also summarizes the grand total for all years, based on the historical information entered in the database by the signatories. For example, for BMP 1 (Residential Surveys) total surveys completed in 2001-2002 for single-family residences are 130,470. The grand total for all single-family surveys completed since 1991 when the MOU was signed is 502,698.

Several caveats are important to mention. The summaries in Attachment H include only data from the forms that have been formally submitted to the Council. Thus, there is very likely activity on urban water conservation statewide that is not included here. Second, the data compilations are based on self-reported data provided by the signatory water suppliers and has not been verified as accurate by the Council. The data has simply been aggregated for summary purposes.

## **2001-2002 BMP Data Highlights**

The following information summarizes highlights of the urban water conservation activity undertaken by MOU signatories reported during this period.

BMP 1:	Single Family Surveys Completed:	130,470
	Multi-Family Surveys Completed:	71,026
BMP 2:	Single Family Low Flow Showerheads Distributed:	519,985
	Multi-Family Low Flow Showerheads Distributed:	290,060
BMP 5	Number of Irrigation Accounts in 2002 with Budgets:	12,385
	Budgeted Water Use in AF in 2002:	69,899
	Actual Water Use in AF in 2002:	52,638
BMP 6	Suppliers with clothes washer rebate programs:	69
	Number of rebates awarded:	38,406
	Total value of rebates awarded:	\$4,337,243
BMP 7	Expenditures for public information programs:	\$11,408,937
BMP 8	Expenditures for school education programs:	\$8,506,573



BMP 9	Commercial & Industrial incentives awarded: Value of incentives awarded:	7248 \$1,331,550
BMP 10	Wholesale Agency Program Expenditures:	\$71,661,703
BMP 11	Percent of revenue derived from volumetric rates:	81.2% - Retail 85% - Wholesale
BMP 12	Number of Conservation Coordinator FTE's in 2002:	349
BMP 13	Percent of signatories banning gutter flooding:	71%
BMP 14	Total ULFTs replaced during this reporting period: Grand total since 1991:	308,513 2,299,216

## **Exemptions**

Section 4.5 of the MOU allows for water supplier exemptions from the best management practices when they qualify under three specific criteria:

- Implementation of the BMP is not cost-effective for the water supplier;
- Adequate funds are not available to the water supplier to implement the BMP; and
- Implementation of the BMP is not within the legal authority of the water supplier or there are legal and institutional barriers to implementing the BMP.

As part of the CALFED cooperative agreement received in 2002, the Council will develop an exemption protocol for use by the State Water Resources Control Board in a possible certification program. The protocol would define more precisely the terms under which BMP exemptions could be granted. This product deliverable should be prepared by December 2003.

### **PART III: TECHNICAL ASSISTANCE**

The Council provides general technical assistance in addition to its specific work on Best Management Practices. Some of the projects listed below are the result of specific grants; other projects are part of the general Council work plan.

#### **CALFED Certification Work Plan**

The Council continued to work with CALFED staff in 2002 with development of a work plan for implementing a program to certify urban water supplier compliance with the MOU, as called for by the CALFED Record of Decision. The Council's BMP Reporting Database will be utilized by the water suppliers and the certifying entity (likely the State Water Resources Control Board) and the Council will provide technical assistance to these agencies.

In the coming year the Council will continue with these efforts. Specific projects slated for start in 2002/03 related to the MOU certification program include:

- Development of Council protocol for estimating environmental benefits of BMP implementation;
- Preparation of Council guidelines for calculating water utility avoided cost benefits associated with BMP implementation;
- Completion of BMP benefit-cost calculation tools and statewide workshops on BMP benefit-cost analysis;
- Statewide workshops on using the Council's web-based BMP reporting system.
- Extension of the BMP reporting system to automate calculation of expected water savings from BMP implementation reported by urban water suppliers.

#### **RFQ for Technical Assistance**

As in past years, a Council committee reviewed the qualifications of a select group of consultants and approved them for use on projects. The Council issued a Request for Qualifications (RFQ) for consultants with specific experience in best management practices, planning, and cost-effectiveness analyses. The 2002 list of approved consultants was made available for downloading in the Technical Resources area of the Council website. Also available was a separate roster that classifies these consultants both by their area of expertise and by their expertise for specific BMPs.

Signatories now have access to dozens of qualified consultants who can help plan, design, implement and evaluate best management practices.

### **Virtual Water Efficient Home Website**

In August of 2000 the Council received a grant from the U.S. Environmental Protection Agency to build a consumer website of a water efficient home. The website, [www.h2ouse.org](http://www.h2ouse.org), was launched in January 2002 and had 112,000 hits in February 2002, with an average of 4,000 per day. In 2002, the Council did usability testing on the site. Participants were videotaped using the site and interviewed about their experiences. The resulting report suggested improvements that will be made in 2003. Based on this study, navigational changes will be made and the home tour will become the prominent entry point of the site. The remaining content will be added in 2003.

The Council continues to distribute marketing materials (posters and postcards) for use by water agencies to promote the website to water agency customers.

The site was a finalist for a "Dottie Award," which honors Northern California's best websites. Additionally, the website was nominated for the 2002 Governor's Environmental and Economic Leadership Award and received a certificate of recognition for its achievements.

### **Updated Council Website**

In 2002, the Council further improved its website by broadening the services and information available to members as well as to the public. New content includes the Council's grants and funding information and its annual reports. The Product News section was expanded and additional Council reports for sale and download were added; other agencies' reports were also made available. Website enhancements were made to the BMP reporting area, committee pages, library pages, and bmp/technical pages. To highlight a few of these enhancements, the BMP reporting area now offers members specialized information on each BMP, including downloadable documents such as sample city ordinances on waste water. Additionally, the Council offers an extensive lending library to its members. Over 500 books and other reference materials are listed on the Council's website and available for loan to members. Subjects include conservation and drought planning, landscapes, and evaluation and savings.

Furthermore, the website includes useful technical tools: Cost-Effectiveness Analysis spreadsheets (see section below on this workshop), BMP Target Calculator, and rates spreadsheets.

Significant changes were made to the online BMP reporting database. Based on feedback from the first round of online BMP reporting, the database's user interface was improved in preparation for the second round of reporting (2001 and 2002).

New features of the BMP reporting database were introduced:

- One login for multiple Reporting Units
- Multiple reporting periods
- New form for BMP 9a
- Comment fields on BMP forms
- Full text field print-out on printable forms

All of USBR's contractors were added to the database (regardless of Council membership) and Bureau contractors were encouraged to attend the BMP reporting workshops; special training was also held just for contractors. The Bureau's reporting requirements were consolidated with the Council's so that contractors can now enter their data directly on the Council's website, thus saving time and streamlining the reporting process.

The Council's website receives an average of 42,000 - 52,000 hits per month.

### **Water Conservation Coordinator Training**

The Council conducted two Water Conservation Coordinator training classes to help train water agency program staff in BMP program implementation and help prepare members for the American Water Works Association's Water Conservation Practitioner Level 1 Certification Exam. 32 people attended the training in San Juan (Carmichael Water District Office) and 37 attended in Pasadena.

### **BMP Reporting Database Workshops**

The Council held six workshops throughout California to train users of the BMP reporting database. The workshops covered setting up accounts, entering historical data, completing and submitting annual BMP report forms, printing forms, summary reports, the difference between retailer and wholesaler reporting and additions made to the site since the previous reporting period. The workshops also provided an opportunity for attendees to provide suggested changes to the database interface.

Three people attended in Perris, 13 in Los Angeles, 10 in Sacramento, 17 in San Rafael, 11 in Willows and 16 in San Diego for a total of 70 attendees.

### **Cost-Effectiveness Analysis Workshops**

The Council held workshops to teach BMP cost-effectiveness (CE) analysis and its role within the MOU. Participants were introduced to concepts and methods used to evaluate the benefits and costs of individual BMPs and learned how a water supplier would use this analysis to support a BMP exemption filing. Workshop participants were provided specialized spreadsheet models developed by the Council to conduct CE

analyses of individual BMPs. These spreadsheets were made available to all members on the Council website.

41 people attended in Los Angeles, 30 in Oakland, 19 in San Diego, and 19 in Sacramento for a total of 109 attendees.

### **Leak Detection Workshop**

In conjunction with the Department of Water Resources, in 2002 the Council held two, two-day leak detection workshops called “Managing Water Loss – Making BMP 3 Work”. The workshops provided techniques to identify and quantify distribution system water supplies, water uses, water losses and accounting inaccuracies. A specially designed software program for system audits was distributed to attendees.

24 conservation coordinators and utility operations staff attended in San Diego and 19 attended in Santa Clarita.

### **Avoided Cost Study**

The Council began work on an avoided cost study in 2002. The Council conducted a comprehensive review of existing literature that addresses the estimation of avoided costs resulting from implementation of utility customer demand-side-management programs. This was done to determine what materials and research were already available. The review summarized approaches currently being used by energy and water utilities, regulatory authorities, and state and federal agencies to define, identify, and quantify avoided costs attributable to utility-funded conservation programs and activities.

The literature review was completed in 2002 and will be published in 2003 as part of larger study.

### **ULFT Freerider Study**

During 2001, the Council commissioned a study to empirically estimate rates of freeridership within ultra-low-flush toilet (ULFT) distribution programs. “Freeriders” are program participants that, in the absence of the program, would have undertaken the same action to replace their toilet. Often these are participants seeking to replace broken toilets or to remove an existing toilet because of remodeling. Program free riders are a problem because they do not generate “new” water savings for the program. Because they would have replaced their toilets with or without the program, the water savings that can be attributed to the program from such replacements is zero. While program freeridership has been of growing concern among water agencies distributing ULFTs, prior to this study there were no well-grounded empirical estimates of the extent of freeridership within ULFT distribution programs.

The study was completed and published in 2002. The results of the survey led to the following recommendations: (1) Design the programs to target enough homes initially for the maximum water savings; (2) In a multi-family program, replace all toilets in the facility at one time; (3) Tighten the controls, as it is possible that the existing toilets are actually ULFTs that are being replaced by newer ULFTS; and (4) Run the program for a short duration.

### **Practical Plumbing Handbook in Spanish**

The Manual de Plomeria Practica, the Spanish translation of the popular Practical Plumbing Handbook, was released in 2002. The handbook suggests preventive maintenance measures to save water and money in homes.

### **The Waterlogue Newsletter**

The Council continued its online newsletter publication, *The WaterLogue*, on water efficiency products and emerging technologies. New issues were released on the website in 2002. In addition to news about plumbing technology, the WaterLogue covers subjects including water conservation improvements in manufacturing and industry and features interviews with experts. Issues in 2002 included dual flush toilets, residential hot water distribution systems and commercial flushometer toilet fixtures.

## **PART IV: GENERAL OUTREACH**

In 2002, the Council and its Executive Director were especially active in outreach:

- In January, Executive Director Mary Ann Dickinson chaired the conservation track of the international water conservation conference, “Water Sources”, hosted by AWWA. The Council exhibited at the conference and gave a paper on its virtual home website.
- Ms. Dickinson met with the deputy director of the State Water Resources Control Board and the Council convener about certification.
- Ms. Dickinson was elected 2003 Vice-Chair of the California Water Awareness Campaign (CWAC).
- Ms. Dickinson continued to serve on CALFED’s Water Use Efficiency Subcommittee. (See earlier section on CALFED’s measurement & evaluation of water use efficiency.)
- Ms. Dickinson also served on the Water Management Committee of the Association of California Water Agencies and the water use efficiency subcommittee.

Additionally, Ms. Dickinson gave testimony in support of AB970 Appliance Efficiency Regulations to the California Energy Commission, which was considering a 9.5 gallons/cubic foot/cycle water standard for commercial high-efficiency clothes washers. In addition to appearing in support of AB970, the Council organized other water agencies to support the bill. The bill was subsequently approved. The 9.5 water factor was later approved for residential washers as well in AB1561.

### **Bulletin 160 – California Water Plan Update 2003**

The Department of Water Resources selected approximately 60 individuals from throughout the State to serve on a Public Advisory Committee (PAC) to provide input and expertise in preparing the next California Water Plan Update 2003. The Council was nominated to the PAC in 2001. In 2002 Mary Ann Dickinson continued to represent the Council at Advisory Board meetings and numerous committee meetings to ensure water efficiency was appropriately considered in the Plan Update 2003. The plan developed into an assessment of alternative sources with water use efficiency as a prime consideration.

### **Flex Your Power Award**

The Council received an award for its participation in the Governor’s energy efficiency campaign. With the Association of California Water Agencies (ACWA) and the Department of Water Resources, the Council created a database of California water rebates available by zip code that consumers can access via the web. The database

was tied into an August promotion of high efficiency clothes washers. The participating organizations contributed staff resources towards this project.

## **Excellence Awards**

The Council awarded two annual Excellence awards, in memory of Mike Moynahan and Llana Sherman - two outstanding water conservation leaders. The Awards for the Year 2002 were presented as follows:

- Ed Thornhill of Metropolitan Water District of Southern California, for Statewide and Institutionalized Innovations
- Lynn Rodriguez, Independent Consultant, for Local and Community Innovations.

Certificates of Recognition were presented to Charlie Pike and Virginia Porter as 2002 nominees for the Local and Community Innovations Award.