APPENDIX C

BEST MANAGEMENT PRACTICES REPORTS

Included in this Appendix are the following documents:

- **City of Napa BMP Reports for Calendar Year 2003**
- **City of Napa BMP Reports for Calendar Year 2004**

CITY OF NAPA
BMP REPORTS SUBMITTED TO THE
CALIFORNIA URBAN WATER CONSERVATION COUNCIL
FOR CALENDAR YEAR 2003

Water Supply & Reuse

Reporting Unit:
City of Napa

Year:
2003

Water Supply Source Information

Supply Source Name	Quantity (AF) Supplied	Supply Type
Lake Hennessey	9863	Local Watershed
Lake Milliken	760	Local Watershed
North Bay Aqueduct (State Water Project)	3722	Imported
Napa Sanitation District	118	Recycled

Total AF: 14463

Reported as of 12/3

Accounts & Water Use

Reporting Unit Name:	Submitted to	Year:
City of Napa	CUWCC **10/26/2005**	**2003**

A. Service Area Population Information:

1. Total service area population 81790

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	20733	7443	0	0
2. Multi-Family	1365	1932	0	0
3. Commercial	1424	1941	0	0
4. Industrial	2	9	0	0
5. Institutional	241	457	0	0
6. Dedicated Irrigation	222	654	0	0
7. Recycled Water	2	118	0	0
8. Other	56	780	0	0
9. Unaccounted	NA	1083	NA	0
Total	24045	14417	0	0
	Metered		**Unmetered**	

Reported as of 12/3

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Based on your signed MOU date, 12/11/2002, your Agency STRATEGY DUE DATE is:	12/10/2004
2. Has your agency developed and implemented a targeting/ marketing strategy for SINGLE-FAMILY residential water use surveys?	yes
a. If YES, when was it implemented?	12/01/2003
3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys?	yes
a. If YES, when was it implemented?	12/01/2003

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	20700	6300
2. Number of surveys completed:	9	0
Indoor Survey:		
3. Check for leaks, including toilets, faucets and meter checks	yes	yes
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	yes	yes
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as neccesary; replace leaking toilet flapper, as necessary	yes	yes
Outdoor Survey:		
6. Check irrigation system and timers	yes	yes
7. Review or develop customer irrigation schedule	yes	yes
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	yes	yes
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	yes	yes
a. If yes, in what form are surveys tracked?		database

b. Describe how your agency tracks this information.

Surveyor retains carbon copy of completed survey checklist after leaving original checklist and information packet with customer. Data on checklist are entered into MS Access database. Data include number of toilet flappers, showerheads, and aerators replaced, toilet replacement program eligibility, and results of irrigation assessment.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	3000	20400
2. Actual Expenditures	2713	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Water-Wise Home Surveys meeting the requirements of BMP 1 were offered to ALL City of Napa single-family and multi-family residential water customers beginning December 1, 2003. Initial promotion was in the Fall 2003 issue of "The Reservoir", the Water Division newsletter included in all water bills twice per year. Atypical high water users are offered the survey in a direct targeted letter.

Reported as of 12/3

BMP 02: Residential Plumbing Retrofit

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no

   a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no
3. Estimated percent of single-family households with low-flow showerheads: %
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no
5. Estimated percent of multi-family households with low-flow showerheads: %
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? yes

   a. If YES, when did your agency begin implementing this strategy? 01/16/1991

   b. Describe your targeting/ marketing strategy.

   The City of Napa Toilet Retrofit Program described in BMP 14 includes provisions for low-flow showerhead and faucet aerator installation. That program has been marketed to all pre-1992 residential customers since its inception in 1991. In addition, all free low-flow devices available from the City are advertised continually to all residential customers through bill messages and at public events. In 2003, the City began publishing "The Reservoir" newsletter twice per year to highlight all available water conservation programs and free devices.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	1093	352
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	109	35
5. Number of faucet aerators distributed:	1051	339

6. Does your agency track the distribution and cost of low-flow devices? yes

   a. If YES, in what format are low-flow devices tracked? Spreadsheet

   b. If yes, describe your tracking and distribution system :

   Toilet Retrofit Program records are stored in an Access database. An

assumed percentage of these retrofitted residences have low-flow showerheads and faucet aerators installed at the same time. While the showerhead and aerator provisions of the program are not enforced as strictly as toilet replacement (old toilets must be turned in to the City), a special effort was initiated in 2003 to provide greater compliance. The assumed showerhead and aerator statistics from the Toilet Retrofit Program are transferred to a spreadsheet and represent the devices supplied by the program's participating plumbers. Separately, the devices supplied directly by the City are tracked in an inventory spreadsheet.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	4660	3540
2. Actual Expenditures	5179	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Free replacement toilet flappers were made available for customers beginning in 2003.

Reported as of 12/3

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year?	yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:	
a. Determine metered sales (AF)	13216
b. Determine other system verifiable uses (AF)	45
c. Determine total supply into the system (AF)	14344
d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required.	0.92
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production?	yes
4. Did your agency complete a full-scale audit during this report year?	no
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit?	no
6. Does your agency operate a system leak detection program?	no
a. If yes, describe the leak detection program:	

B. Survey Data

1. Total number of miles of distribution system line.	360
2. Number of miles of distribution system line surveyed.	0

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

The ratio of Metered Sales plus Other Verifiable Uses to Total Supply exceeded 0.9, so no full-scale system audit or leak detection survey was conducted. Aggressive meter replacement, main replacement, and plastic service replacement programs contributed to the high ratio. 2,200 meters were replaced in 2003-2004, including 30-50 large meters each year. From 2001 to 2004, more than 20,000 feet of aging water mains and approximately 600 plastic service lines were replaced, drastically reducing system leaks. The City of course responds promptly to all emergencies, repairing visible water main and service line leaks to minimize losses. In addition, the City provides financial incentives for customers to repair underground leaks on their side of the meter.

Reported as of 12/3

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use?	yes
2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use?	no
a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?	
b. Describe the program:	
3. Number of previously unmetered accounts fitted with meters during report year.	0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	no
a. If YES, when was the feasibility study conducted? (mm/dd/yy)	
b. Describe the feasibility study:	
2. Number of CII accounts with mixed-use meters.	1445
3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.	0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

E. Comments

Excluding standby fire service accounts, the system is fully metered and all customers are billed by volume of use. The City of Napa mandates that projects with 5,000 square feet or more of landscaping have dedicated irrigation meters.

Reported as of 12/3

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Water Use Budgets

1. Number of Dedicated Irrigation Meter Accounts:	222
2. Number of Dedicated Irrigation Meter Accounts with Water Budgets:	0
3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF):	0
4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF):	0
5. Does your agency provide water use notices to accounts with budgets each billing cycle?	no

B. Landscape Surveys

1. Has your agency developed a marketing / targeting strategy for landscape surveys?	no
a. If YES, when did your agency begin implementing this strategy?	
b. Description of marketing / targeting strategy:	
2. Number of Surveys Offered.	0
3. Number of Surveys Completed.	0
4. Indicate which of the following Landscape Elements are part of your survey:	
a. Irrigation System Check	no
b. Distribution Uniformity Analysis	no
c. Review / Develop Irrigation Schedules	no
d. Measure Landscape Area	no
e. Measure Total Irrigable Area	no
f. Provide Customer Report / Information	no
5. Do you track survey offers and results?	no
6. Does your agency provide follow-up surveys for previously completed surveys?	no
a. If YES, describe below:	

C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets?	yes
2. Number of CII mixed-use accounts with landscape budgets.	23
3. Do you offer landscape irrigation training?	yes
4. Does your agency offer financial incentives to improve landscape water use efficiency?	yes

Type of Financial Incentive:	Budget (Dollars/	Number Awarded to Customers	Total Amount Awarded

	Year)		
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	250000	1	249931

5. Do you provide landscape water use efficiency information to new customers and customers changing services? No

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities? yes

a. If yes, is it water-efficient? yes

b. If yes, does it have dedicated irrigation metering? yes

7. Do you provide customer notices at the start of the irrigation season? yes

8. Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	253000	304000
2. Actual Expenditures	252931	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

CENTRAL CONTROL IRRIGATION: The City of Napa Water Division is directly funding the installation of computer-based central irrigation systems controlling 25 City parks and 21 Napa Valley Unified School District fields. Affected sites include more than 200 acres of turfgrass. Full implementation will take two years. The 2003 funding amount is listed above in section C.4.c (Grants). When fully implemented, central control irrigation is expected to reduce annual water usage at these sites by 25%-45%, for a total of 130-230 AF per year. Central control employs a weather station, evapotranspiration (ET) controllers, flow sensing equipment, and a central computer. From a single PC using specialized irrigation management software, an operator can communicate with satellite controllers via radio, ethernet, or telephone lines to precisely monitor and control multiple sites. With input from a locally-installed weather station, precision irrigation schedules are automatically adjusted to provide only the water needed by the plant material. The project originated within the City of Napa Community Resources Department. Parks irrigation personnel realized the potential of the technology to reduce labor costs by eliminating manual adjustments in the field. They were also attracted by the improved system diagnostics, leak detection, and reduced water usage. After evaluating three vendors, Parks personnel chose United GreenTech's Rain Master equipment. They purchased and installed a central computer, software, base radio, and radio repeaters, along with irrigation controllers for a few park sites. Due to limited Parks funding, addition of new sites to the central control system proceeded very slowly. The City of Napa Water Division then analyzed the overall water savings that could result from a larger, accelerated implementation, finding that 130-230 AF could be saved

annually by adding more parks and including the local school district ball fields. The Water Division budgeted $550,000 toward equipment purchase and installation for 46 sites and may recoup its investment in as little as 7 years due to reduced water supply and treatment costs. Through this cooperative project, the City of Napa will not only reduce institutional water use and address provisions of BMP 5, it will effectively demonstrate this innovative ET-based irrigation control for other CII large landscape customers. Significant water savings from the project are expected beginning in 2005.

F. Comments

New commercial development with more than 1,000 square feet of landscape must meet the City's Water Efficient Landscape Guidelines which are based upon the state's AB 325 model ordinance. C.2. The City sets maximum annual water budgets for 23 public schools as part of an agreement that trades irrigation water for the right to use school facilities for City-sponsored recreation programs. C.3. In cooperation with the Town of Yountville, the City presented the "Water-Wise Landscaping Workshop Series", four sessions open to residential and CII customers. C.6. Customers were invited to visit two new Water-Wise Demonstration Gardens at the City's Water Division Building and Fire Station No. 2.

Reported as of 12/3

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? yes

   a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

   PG&E

2. Does your agency offer rebates for high-efficiency washers? no
3. What is the level of the rebate?
4. Number of rebates awarded.

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	47500
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

   a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reported as of 12/3

BMP 07: Public Information Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

The City of Napa publicizes its water conservation offerings through bimonthly water bill messages, a semi-annual newsletter, and appearances at annual public events such as Earth Day, the Napa-Solano Home & Garden Show, the Napa Town & Country Fair, and the River Festival. The Water Conservation Representative staffs a booth at the weekly Napa Downtown Farmers Market May through October. The Water Resources Specialist is available to speak to community and business groups and the media. Press releases regarding water conservation programs often garner free media mentions on local radio, public access television, and in the local newspapers. The public is encouraged to visit the Water Division Building to pick up free conservation brochures and indoor and outdoor water-saving devices. Two Water-Wise Demonstration Demonstration Gardens are open to the public.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	0
b. Public Service Announcement	yes	2
c. Bill Inserts / Newsletters / Brochures	yes	8
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	yes	3
f. Special Events, Media Events	yes	11
g. Speaker's Bureau	yes	2
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	26550	28200
2. Actual Expenditures	26318	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

A.2.c. The City introduced its new Water Division newsletter "The

Reservoir" in the spring of 2003. This primarily water conservation-oriented document is inserted in water bills twice per year and is available at the City's public counters. A.2.e. Two new Water-Wise Demonstration Gardens were established at the City's Water Division Building and Fire Station No. 2. A.2.h. In cooperation with the Town of Yountville, the City presented the "Water-Wise Landscaping Workshop Series", four sessions open to residential and CII customers.

Reported as of 12/3

BMP 08: School Education Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1.Has your agency implemented a school information program to promote water conservation? yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	8	184	1
Grades 4th-6th	yes	10	276	1
Grades 7th-8th	yes	0	0	1
High School	yes	0	0	1

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 09/01/1990

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	6700	7200
2. Actual Expenditures	5748	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The EECNC Environmental Education Guide continued to be the primary means of communicating with area teachers. Water Division offerings in the Guide include a Water Conservation Classroom Presentation, a Water Treatment Plant Field Trip, and a "Water Week" Kit. Classroom presentation and field trip statistics are both counted in A.2. The City helped fund and promote the Aquatic Outreach Institute's "Watching Our Watersheds" Workshop for K-12 teachers in April 2003.

Reported as of 12/3

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Has your agency identified and ranked COMMERCIAL customers according to use?	yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use?	yes
3. Has your agency identified and ranked INSTITUTIONAL customers according to use?	yes

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option?	no

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0

CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no

Agency CII Customer Incentives	Budget ($/Year)	No. Awarded to Customers	Total $ Amount Awarded
h. Rebates			
i. Loans			
j. Grants			
k. Others			

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	no
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	no
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	10500
2. Actual Expenditures	800	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City began identification and ranking of CII accounts in anticipation of BMP 9 activities and a new utility billing system.

Reported as of 12/3

BMP 09a: CII ULFT Water Savings

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

1. Did your agency implement a CII ULFT replacement program in the reporting year? If No, please explain why on Line B. 10. — Yes

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply. — CII Sector or subsector

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Effective December 2001, all CII customers of the City of Napa water system became eligible to volunteer for the City's Toilet Retrofit Program. Prior to that, only residential customers had been eligible since the program's inception in 1991. The program requires that developers fund the replacement of older toilets and urinals throughout the City to offset the projected water requirements of their new projects (e.g., hotels, housing subdivisions). Existing facilities benefit by having their older fixtures replaced for free. The program's participating plumbers do most of the marketing, seeking out toilet/urinal replacement volunteers among local residents, businesses, and other institutions. When the program opened up to CII customers, the City primarily targeted commercial businesses. The outreach was most effective in 2002 when free mentions in the local newspaper and inserts in business newsletters generated volunteers at minimal cost to the City.

2. How does your agency advertise this program? Check all that apply.

- Bill message
- Newsletter
- Web page
- Newspapers
- Trade publications
- Other print media
- Trade shows and events

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

By far the most effective method was direct solicitation by the participating plumbers who perform the actual toilet replacement. This method involves no expenditure of City dollars. The incentive for plumbers to obtain CII volunteers is built into the Toilet Retrofit Program. Of the City advertising methods, inserts in trade publications such as the Chamber of Commerce Hot Sheet and the Napa Valley Business Times

generated the most response.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.)	Yes
2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?	Yes
3. What is the total number of customer accounts participating in the program during the last year ?	110

CII Subsector	Number of Toilets Replaced				
4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount	Type Not Specified
a. Offices	0	0	0	0	58
b. Retail / Wholesale	0	0	0	0	24
c. Hotels	0	0	0	0	75
d. Health	0	0	0	0	75
e. Industrial	0	0	0	0	11
f. Schools: K to 12	0	0	0	0	53
g. Eating	0	0	0	0	49
h. Govern-ment	0	0	0	0	47
i. Churches	0	0	0	0	24
j. Other	0	0	0	0	38

5. Program design.	Direct installation with customer co-payment
6. Does your agency use outside services to implement this program?	Yes
a. If yes, check all that apply.	Plumbing contractors/subcontracts
7. Participant tracking and follow-up.	Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business	4
b. Inadequate payback	1
c. Inadequate ULFT performance	5
d. Lack of funding	2
e. American's with Disabilities Act	3

f. Permitting 1

g. Other. Please describe in B. 9.

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other isues affecting program implementation or effectiveness.

Opening up the City's long-running Toilet Retrofit Program to CII customers was eagerly anticipated by numerous businesses and institutions, with hundreds of them taking advantage of the free toilet and urinal replacement immediately in 2002. The City is not privy to all of the communication between soliciting plumbers and prospective CII volunteers, so the ranking of non-participation reasons in question #8 is anecdotal. Some restaurants did have qualms about ULFT flush performance.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Targeted participation exceeded as large number of office, retail, and health facilities took advantage of CII eligibility.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	600	410
c. Marketing & Advertising	500	650
d. Administration & Overhead	8000	7971
e. Outside Services	0	0
f. Total	9100	9031

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

The City of Napa CII ULFT program is unique in that the bulk of costs are borne by developers. Our agency costs are minimal, simply administration and marketing. This makes the program very cost effective from the agency perspective. Calculating cost effectiveness from society's perspective would have to include the developer costs which are not

quantified here. The City of Napa Toilet Retrofit Program requires developers to offset the projected water demand of their projects by reducing demand elsewhere in the system. Since 1991, this water offset has been achieved by replaced older high-water-use toilets and urinals with ULFTs and 1 gallon-per-flush urinals. Participating local plumbers generate "Certificates of Completion" for each site where they replace toilets. Developers must purchase a specified amount of these Certificates and turn them in to the City Water Division in order to obtain final sign-off on their new projects. The plumbers do not charge the volunteer customer for the replacement toilets or the installation, except in cases where the customer wants an upgrade. The plumbers are compensated by selling the Certificates to developers.

Reported as of 12/3

BMP 11: Conservation Pricing

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$10000000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$1225000
2. Commercial	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$2100000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$60000
3. Industrial	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$9500
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$0
4. Institutional / Government	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$240000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$0
5. Irrigation	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$740000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$20000
6. Other	

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$850000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$5000

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

All City of Napa customers are billed for water usage using uniform volumetric rates only: $3.23 per 1,000 gallons for Inside City Limits, $4.32 per 1,000 gallons for Outside City Limits. These rates are the same regardless of account type; however, internal City accounts are often billed at discounted rates or not at all. There are no flat fees or service charges in the bimonthly water bills. Non-volumetric revenue comes primarily from new account connection fees and service pipe/meter installation fees. Revenue totals by account type in Section A are estimates.

Reported as of 12/3

BMP 12: Conservation Coordinator

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

1. Does your Agency have a conservation coordinator?	yes
2. Is this a full-time position?	yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ?	
4. Partner agency's name:	
5. If your agency supplies the conservation coordinator:	
a. What percent is this conservation coordinator's position?	100%
b. Coordinator's Name	Patrick Costello
c. Coordinator's Title	Water Resources Specialist
d. Coordinator's Experience and Number of Years	10 years Research and Environmental Consulting, 3 years Water Conservation
e. Date Coordinator's position was created (mm/dd/yyyy)	09/25/2002
6. Number of conservation staff, including Conservation Coordinator.	2

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	88000	97000
2. Actual Expenditures	84450	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City of Napa was approved as a Group 1 member of the CUWCC on December 11, 2002. The City has designated its Water Resources Specialist as official Water Conservation Coordinator and contact to the CUWCC. The Water Resources Specialist position is full-time, but does involve other duties in addition to Water Conservation Coordinator. The share of the position's time devoted to conservation activities is increasing as the City addresses the BMPs. The Water Resources Specialist was certified as a Level 1 Water Conservation Practitioner by the CA-NV-AWWA in early 2003. The Water Resources Specialist is assisted by a 24-hour per week temporary employee, the Water Conservation Representative. Other City staff assist as needed during community events and other public information programs.

Reported as of 12/3

BMP 13: Water Waste Prohibition

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? yes

a. If YES, describe the ordinance:

Originally established with Urgency Ordinance 4305 in 1992, Napa Municipal Code Chapters 13.10 and 13.12 address prohibitions and limitations on water use during Moderate and Severe Water Shortages as declared by Napa City Council. Since the end of the last declared water shortage in 1993, these chapters have been inoperative.

2. Is a copy of the most current ordinance(s) on file with CUWCC? no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Napa	Urgency Ordinance 4305; Municipal Code Chapters (inoperative) 13.10, 13.12

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding yes

b. Single-pass cooling systems for new connections no

c. Non-recirculating systems in all new conveyor or car wash systems no

d. Non-recirculating systems in all new commercial laundry systems no

e. Non-recirculating systems in all new decorative fountains yes

f. Other, please name
Washing streets, sidewalks, walkways, driveways, patios, parking lots or other hard-surfaced areas with water, except as required for health and safety yes

2. Describe measures that prohibit water uses listed above:

Administrative citations and civil fines

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models. no

b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. no

ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. no

c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.	no
4. Does your agency include water softener checks in home water audit programs?	no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models?	no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Napa City Council declaration of a Moderate or Severe Water Shortage is required to reactivate these water waste prohibitions.

Reported as of 12/3

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2003**

A. Implementation

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2. Rebate	102	18
3. Direct Install	560	99
4. CBO Distribution	0	0
5. Other	0	0
Total	**662**	**117**

6. Describe your agency's ULFT program for single-family residences.

City of Napa residential water customers may choose between two different incentive programs for ULFT installation. For a self-install, a customer may participate in the Napa Sanitation District Rebate Program, receiving $100 for each new ULFT that replaces an existing model using 3.5 gallons or more per flush. Rebate costs are borne by the Sanitation District, but the City does provide some administrative assistance. Alternatively, a customer may choose to participate in the City of Napa Toilet Retrofit Program. This larger direct-install program has been in place since January 16, 1991. It is driven by the permanent water conservation regulations in Napa Municipal Code Chapter 13.09. The Toilet Retrofit Program requires developers to offset the projected water demand of their new projects (e.g., hotels, housing subdivisions) by reducing demand elsewhere in the system. This water offset is achieved by replacing older high-water-use toilets with ULFTs. Participating local plumbers generate "Certificates of Completion" for each site where they replace older toilets with ULFTs. Developers must purchase a specified number of these Certificates and turn them in to the City Water Division in order to obtain final sign-off on their new projects. The plumbers do not charge the volunteer customers for the ULFTs or the installation, except in cases where the customer wants an upgrade (e.g., ADA, special color). The plumbers are compensated by selling the Certificates to developers. The bulk of program costs are therefore borne by developers. City costs are minimal, primarily administration and marketing.

7. Describe your agency's ULFT program for multi-family residences.

Multi-Family residential water customers are also eligible for the two programs described in A.6.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	19600	22900
2. Actual Expenditures	21650	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Commercial, Industrial, and Institutional (CII) customers are also eligible to volunteer for the Toilet Retrofit Program. Prior to 2002, only residential sites could receive the free ULFT installations. CII ULFT data are included in BMP 9a. The Toilet Retrofit Program also contains provisions for low-flow showerhead and faucet aerator installation. These data are included in BMP 2.

Reported as of 12/3

CITY OF NAPA
BMP REPORTS SUBMITTED TO THE
CALIFORNIA URBAN WATER CONSERVATION COUNCIL
FOR CALENDAR YEAR 2004

Water Supply & Reuse

Reporting Unit:
City of Napa

Year:
2004

Water Supply Source Information

Supply Source Name	Quantity (AF) Supplied	Supply Type
Lake Hennessey	10185	Local Watershed
Lake Milliken	713	Local Watershed
North Bay Aqueduct (State Water Project)	4317	Imported
Napa Sanitation District	272	Recycled

Total AF: 15487

Reported as of 12/3

Accounts & Water Use

Reporting Unit Name:	Submitted to	Year:
City of Napa	CUWCC **10/26/2005**	**2004**

A. Service Area Population Information:

1. Total service area population 82935

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	20904	7914	0	0
2. Multi-Family	1379	1934	0	0
3. Commercial	1430	2002	0	0
4. Industrial	2	1	0	0
5. Institutional	240	731	0	0
6. Dedicated Irrigation	252	770	0	0
7. Recycled Water	5	272	0	0
8. Other	54	767	0	0
9. Unaccounted	NA	1051	NA	0
Total	24266	15442	0	0
	Metered		**Unmetered**	

Reported as of 12/3

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Based on your signed MOU date, 12/11/2002, your Agency STRATEGY DUE DATE is:	12/10/2004
2. Has your agency developed and implemented a targeting/ marketing strategy for SINGLE-FAMILY residential water use surveys?	yes
a. If YES, when was it implemented?	12/01/2003
3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys?	yes
a. If YES, when was it implemented?	12/01/2003

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	20900	6500
2. Number of surveys completed:	113	1
Indoor Survey:		
3. Check for leaks, including toilets, faucets and meter checks	yes	yes
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	yes	yes
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as neccesary; replace leaking toilet flapper, as necessary	yes	yes
Outdoor Survey:		
6. Check irrigation system and timers	yes	yes
7. Review or develop customer irrigation schedule	yes	yes
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	yes	yes
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	yes	yes
a. If yes, in what form are surveys tracked?		database

b. Describe how your agency tracks this information.

Surveyor retains carbon copy of completed survey checklist after leaving original checklist and information packet with customer. Data on checklist are entered into MS Access database. Data include number of toilet flappers, showerheads, and aerators replaced, toilet replacement program eligibility, and results of irrigation assessment.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	20400	21800
2. Actual Expenditures	17950	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Water-Wise Home Surveys meeting the requirements of BMP 1 were offered to ALL City of Napa single-family and multi-family residential water customers beginning December 1, 2003. Program promotion continued in 2004 with messages on each water bill, a front-page feature article in the local newspaper in May, and survey sign-up sheets at public events. Atypical high water users are offered the survey in a direct targeted letter. Escalated high water bill complaints are also encouraged to receive the free survey.

Reported as of 12/3

BMP 02: Residential Plumbing Retrofit

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts?	no
a. If YES, list local jurisdictions in your service area and code or ordinance in each:	
2. Has your agency satisfied the 75% saturation requirement for single-family housing units?	no
3. Estimated percent of single-family households with low-flow showerheads:	%
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units?	no
5. Estimated percent of multi-family households with low-flow showerheads:	%
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.	

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices?	yes
a. If YES, when did your agency begin implementing this strategy?	01/16/1991

b. Describe your targeting/ marketing strategy.

Toilet Retrofit Program records are stored in an Access database. An assumed percentage of these retrofitted residences have low-flow showerheads and faucet aerators installed at the same time (showerhead and aerator provisions of the program are not enforced as strictly as toilet replacement since old toilets must be turned in to the City). These assumed showerhead and aerator statistics from the Toilet Retrofit Program are transferred to a spreadsheet and represent the devices supplied by the program's participating plumbers. Separately, the devices supplied directly by the City are tracked in an inventory spreadsheet.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	665	215
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	76	24
5. Number of faucet aerators distributed:	726	234

6. Does your agency track the distribution and cost of low-flow devices?	yes
a. If YES, in what format are low-flow devices tracked?	Spreadsheet

b. If yes, describe your tracking and distribution system :

Toilet Retrofit Program records are stored in an Access database. An assumed percentage of these retrofitted residences have low-flow showerheads and faucet aerators installed at the same time. While the showerhead and aerator provisions of the program are not enforced as strictly as toilet replacement (old toilets must be turned in to the City), a special effort was initiated in 2003 to provide greater compliance. The assumed showerhead and aerator statistics from the Toilet Retrofit Program are transferred to a spreadsheet and represent the devices supplied by the program's participating plumbers. Separately, the devices supplied directly by the City are tracked in an inventory spreadsheet.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	3540	3500
2. Actual Expenditures	3008	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Reported as of 12/3

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year?	yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:	
a. Determine metered sales (AF)	14119
b. Determine other system verifiable uses (AF)	45
c. Determine total supply into the system (AF)	15215
d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required.	0.93
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production?	yes
4. Did your agency complete a full-scale audit during this report year?	no
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit?	no
6. Does your agency operate a system leak detection program?	no
a. If yes, describe the leak detection program:	

B. Survey Data

1. Total number of miles of distribution system line.	360
2. Number of miles of distribution system line surveyed.	0

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

The ratio of Metered Sales plus Other Verifiable Uses to Total Supply exceeded 0.9, so no full-scale system audit or leak detection survey was conducted. Aggressive meter replacement, main replacement, and plastic service replacement programs contributed to this highest ratio (0.93) since 1994. 2,200 meters were replaced in 2003-2004, including 30-50 large meters each year. From 2001 to 2004, more than 20,000 feet of aging water mains and approximately 600 plastic service lines were replaced, drastically reducing system leaks. The City of course responds promptly to all emergencies, repairing visible water main and service line leaks to minimize losses. In addition, the City provides financial incentives for customers to repair underground leaks on their

side of the meter.

Reported as of 12/3

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use?	yes
2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use?	no
a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?	
b. Describe the program:	
3. Number of previously unmetered accounts fitted with meters during report year.	0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	no
a. If YES, when was the feasibility study conducted? (mm/dd/yy)	
b. Describe the feasibility study:	
2. Number of CII accounts with mixed-use meters.	1420
3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.	10

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

E. Comments

Excluding standby fire service accounts, the system is fully metered and all customers are billed by volume of use. The City of Napa mandates that projects with 5,000 square feet or more of landscaping have dedicated irrigation meters.

Reported as of 12/3

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Water Use Budgets

1. Number of Dedicated Irrigation Meter Accounts:	252
2. Number of Dedicated Irrigation Meter Accounts with Water Budgets:	0
3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF):	0
4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF):	0
5. Does your agency provide water use notices to accounts with budgets each billing cycle?	no

B. Landscape Surveys

1. Has your agency developed a marketing / targeting strategy for landscape surveys?	no
a. If YES, when did your agency begin implementing this strategy?	
b. Description of marketing / targeting strategy:	
2. Number of Surveys Offered.	0
3. Number of Surveys Completed.	0
4. Indicate which of the following Landscape Elements are part of your survey:	
a. Irrigation System Check	no
b. Distribution Uniformity Analysis	no
c. Review / Develop Irrigation Schedules	no
d. Measure Landscape Area	no
e. Measure Total Irrigable Area	no
f. Provide Customer Report / Information	no
5. Do you track survey offers and results?	no
6. Does your agency provide follow-up surveys for previously completed surveys?	no
a. If YES, describe below:	

C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets?	yes
2. Number of CII mixed-use accounts with landscape budgets.	23
3. Do you offer landscape irrigation training?	yes
4. Does your agency offer financial incentives to improve landscape water use efficiency?	yes

Type of Financial Incentive:	Budget (Dollars/	Number Awarded to Customers	Total Amount Awarded

	Year)		
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	300000	1	299441

5. Do you provide landscape water use efficiency information to new customers and customers changing services? No

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities? yes

a. If yes, is it water-efficient? yes

b. If yes, does it have dedicated irrigation metering? yes

7. Do you provide customer notices at the start of the irrigation season? yes

8. Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	304000	7500
2. Actual Expenditures	303441	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

CENTRAL CONTROL IRRIGATION: The City of Napa Water Division has directly funded the installation of computer-based central irrigation systems controlling 25 City parks and 21 Napa Valley Unified School District fields. Affected sites include more than 200 acres of turfgrass. Full implementation took two years. The 2004 funding amount is listed above in section C.4.c (Grants), concluding the Water Division investment. When fully implemented by 2005, central control irrigation is expected to reduce annual water usage at these sites by 25%-45%, for a total of 130-230 AF per year. Central control employs a weather station, evapotranspiration (ET) controllers, flow sensing equipment, and a central computer. From a single PC using specialized irrigation management software, an operator can communicate with satellite controllers via radio, ethernet, or telephone lines to precisely monitor and control multiple sites. With input from a locally-installed weather station, precision irrigation schedules are automatically adjusted to provide only the water needed by the plant material. The project originated within the City of Napa Community Resources Department. Parks irrigation personnel realized the potential of the technology to reduce labor costs by eliminating manual adjustments in the field. They were also attracted by the improved system diagnostics, leak detection, and reduced water usage. After evaluating three vendors, Parks personnel chose United GreenTech's Rain Master equipment. They purchased and installed a central computer, software, base radio, and radio repeaters, along with irrigation controllers for a few park sites. Due to limited Parks funding, addition of new sites to the central control system proceeded very slowly. The City of Napa Water Division then analyzed the overall water savings that could result from a larger, accelerated implementation, finding that

130-230 AF could be saved annually by adding more parks and including the local school district ball fields. The Water Division budgeted $550,000 toward equipment purchase and installation for 46 sites and may recoup its investment in as little as 7 years due to reduced water supply and treatment costs. Through this cooperative project, the City of Napa will not only reduce institutional water use and address provisions of BMP 5, it will effectively demonstrate this innovative ET-based irrigation control for other CII large landscape customers. Significant water savings from the project are expected beginning in 2005.

F. Comments

New commercial development with more than 1,000 square feet of landscape must meet the City's Water Efficient Landscape Guidelines which are based upon the state's AB 325 model ordinance. C.2. The City sets maximum annual water budgets for 23 public schools as part of an agreement that trades irrigation water for the right to use school facilities for City-sponsored recreation programs. C.3. In cooperation with other local agencies, the City presented the "Water-Wise Landscaping Workshop Series", six sessions open to residential and CII customers. The City also introduced its new CD-ROM "Water-Wise Gardening in the Napa Valley" which includes an extensive landscape photo and plant information database, along with a gardening and irrigation guide appropriate for the local climate. 700 copies of the CD were distributed in 2004, primarily to residential customers. C.6. Customers were invited to visit two Water-Wise Demonstration Gardens at the City's Water Division Building and Fire Station No. 2.

Reported as of 12/3

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? yes

   a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

   PG&E rebates $75 to $125 for certain Energy Star-rated residential clothes washers.

2. Does your agency offer rebates for high-efficiency washers? yes
3. What is the level of the rebate? 150
4. Number of rebates awarded. 365

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	47500	52500
2. Actual Expenditures	46650	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

   a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City of Napa Residential High-Efficiency Clothes Washer Rebate Program began April 1, 2004. The High-Efficiency Washer (HEW) rebate level listed in item 3 is the City's maximum. The City of Napa has three rebate levels: $50, $100, or $150 depending on the model's Water Factor (WF). Rebate amounts are tiered to match the three Coverage Point Levels in the revised BMP 6 adopted March 10, 2004 and effective July 1, 2004. In 2004, the City awarded 365 rebates worth a total of $41,650. Breakdown by Coverage Point Level is as follows: 1-Point HEWs with WF greater than 8.5 but not exceeding 9.5 = 40 rebates worth $2000 ($50 each); 2-Point HEWs with WF greater than 6.0 but not exceeding 8.5 = 182 rebates worth $18,200 ($100 each); 3-Point HEWs with WF of 6.0 or less = 143 rebates worth $21,450 ($150 each).

Reported as of 12/3

BMP 07: Public Information Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

The City of Napa publicizes its water conservation offerings through bimonthly water bill messages, a semi-annual newsletter, and appearances at annual public events such as Earth Day, the Napa-Solano Home & Garden Show, the Napa Town & Country Fair, and the River Festival. The Water Conservation Representative staffs a booth at the weekly Napa Downtown Farmers Market May through October. The Water Resources Specialist is available to speak to community and business groups and the media. Press releases regarding water conservation programs often garner free media mentions on local radio, public access television, and in the local newspapers. The public is encouraged to visit the Water Division Building to pick up free conservation brochures and indoor and outdoor water-saving devices. Two Water-Wise Demonstration Demonstration Gardens are open to the public.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	0
b. Public Service Announcement	yes	3
c. Bill Inserts / Newsletters / Brochures	yes	7
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	yes	3
f. Special Events, Media Events	yes	18
g. Speaker's Bureau	yes	3
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	28200	29050
2. Actual Expenditures	26141	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

A.2.h. The City spearheaded the formation of the Countywide Water

Conservation Group in early 2004, with representatives from all major water supply agencies in Napa County. The group sponsored the "Water-Wise Landscaping Workshop Series", six sessions open to residential and CII customers. The City devloped the CD-ROM "Water-Wise Gardening in the Napa Valley" which includes an extensive landscape photo and plant information database, along with a gardening and irrigation guide appropriate for the local climate. 700 copies of the CD were distributed in 2004, primarily to residential customers. Other agencies in the Countywide Water Conservation Group also distributed the new CD to their customers.

Reported as of 12/3

BMP 08: School Education Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1.Has your agency implemented a school information program to promote water conservation? yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	5	148	1
Grades 4th-6th	yes	4	120	1
Grades 7th-8th	yes	2	49	1
High School	yes	1	20	1

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 09/01/1990

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	7200	7700
2. Actual Expenditures	5832	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City helped fund the printing and distribution of the third, expanded edition of the EECNC Environmental Education Guide. Water Division offerings in the Guide include a Water Conservation Classroom Presentation, a Water Treatment Plant Field Trip, and a "Water Week" Kit. Classroom presentation and field trip statistics are both counted in A.2. Six "Water Week" Kits including Teacher's Guide and Student Workbooks from the Channing Bete Company were provided to grade 6-8 teachers. The City helped fund and promote the Watershed Project's "Kids in Gardens" Workshop for K-12 teachers in October 2004.

Reported as of 12/3

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Has your agency identified and ranked COMMERCIAL customers according to use?	yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use?	yes
3. Has your agency identified and ranked INSTITUTIONAL customers according to use?	yes

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option?	yes

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0

CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no

Agency CII Customer Incentives	Budget ($/Year)	No. Awarded to Customers	Total $ Amount Awarded
h. Rebates	9000	54	9000
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	no
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	no
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	10500	12500
2. Actual Expenditures	10200	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

A.4.h. On March 22, 2004, the City of Napa began participating in the Lightwash Program, offering two levels of High-Efficiency Commercial Clothes Washer Rebates to CII customers. Level 1 washers receive a $200 combined energy/water rebate ($150 is City portion). Level 2 washers receive a $400 combined energy/water rebate ($250 is City portion). In 2004, rebates were issued on 54 washers (45 Level 1, 9 Level 2). Plans are being developed for a Water-Wise Business Survey, analogous to the Water-Wise Home Survey described in BMP 1. 2005 funds are budgeted for participating in the CUWCC Rinse & Save Pre-Rinse Spray Valve Installation Program and continued participation in the Lightwash Program.

Reported as of 12/3

BMP 09a: CII ULFT Water Savings

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

1. Did your agency implement a CII ULFT replacement program in the reporting year? If No, please explain why on Line B. 10. — Yes

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply. — CII Sector or subsector

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Effective December 2001, all CII customers of the City of Napa water system became eligible to volunteer for the City's Toilet Retrofit Program. Prior to that, only residential customers had been eligible since the program's inception in 1991. The program requires that developers fund the replacement of older toilets and urinals throughout the City to offset the projected water requirements of their new projects (e.g., hotels, housing subdivisions). Existing facilities benefit by having their older fixtures replaced for free. The program's participating plumbers do most of the marketing, seeking out toilet/urinal replacement volunteers among local residents, businesses, and other institutions. When the program opened up to CII customers, the City primarily targeted commercial businesses. The outreach was most effective in 2002 when free mentions in the local newspaper and inserts in business newsletters generated volunteers at minimal cost to the City.

2. How does your agency advertise this program? Check all that apply.

Bill message
Newsletter
Web page
Newspapers
Trade publications
Other print media
Trade shows and events

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

By far the most effective method was direct solicitation by the participating plumbers who perform the actual toilet replacement. This method involves no expenditure of City dollars. The incentive for plumbers to obtain CII volunteers is built into the Toilet Retrofit Program. Of the City advertising methods, inserts in trade publications such as the Chamber of Commerce Hot Sheet and the Napa Valley Business Times

generated the most response.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.)	Yes
2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?	Yes
3. What is the total number of customer accounts participating in the program during the last year ?	11

CII Subsector	Number of Toilets Replaced				
4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount	Type Not Specified
a. Offices	0	0	0	0	3
b. Retail / Wholesale	0	0	0	0	0
c. Hotels	0	0	0	0	120
d. Health	0	0	0	0	7
e. Industrial	0	0	0	0	1
f. Schools: K to 12	0	0	0	0	0
g. Eating	0	0	0	0	2
h. Govern-ment	0	0	0	0	0
i. Churches	0	0	0	0	12
j. Other	0	0	0	0	8

5. Program design.	Direct installation with customer co-payment
6. Does your agency use outside services to implement this program?	Yes
a. If yes, check all that apply.	Plumbing contractors/subcontracts
7. Participant tracking and follow-up.	Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business	4
b. Inadequate payback	1
c. Inadequate ULFT performance	5
d. Lack of funding	2
e. American's with Disabilities Act	3

f. Permitting 1

g. Other. Please describe in B. 9.

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other isues affecting program implementation or effectiveness.

Opening up the City's long-running Toilet Retrofit Program to CII customers was eagerly anticipated by numerous businesses and institutions, with hundreds of them taking advantage of the free toilet and urinal replacement immediately in 2002. The City is not privy to all of the communication between soliciting plumbers and prospective CII volunteers, so the ranking of non-participation reasons in question #8 is anecdotal. Some restaurants did have qualms about ULFT flush performance.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Targeted participation exceeded as large number of office, retail, and health facilities took advantage of CII eligibility.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	400	220
c. Marketing & Advertising	300	450
d. Administration & Overhead	7000	4248
e. Outside Services	0	0
f. Total	7700	4918

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

The City of Napa CII ULFT program is unique in that the bulk of costs are borne by developers. Our agency costs are minimal, simply administration and marketing. This makes the program very cost effective from the agency perspective. Calculating cost effectiveness from society's perspective would have to include the developer costs which are not

quantified here. The City of Napa Toilet Retrofit Program requires developers to offset the projected water demand of their projects by reducing demand elsewhere in the system. Since 1991, this water offset has been achieved by replaced older high-water-use toilets and urinals with ULFTs and 1 gallon-per-flush urinals. Participating local plumbers generate "Certificates of Completion" for each site where they replace toilets. Developers must purchase a specified amount of these Certificates and turn them in to the City Water Division in order to obtain final sign-off on their new projects. The plumbers do not charge the volunteer customer for the replacement toilets or the installation, except in cases where the customer wants an upgrade. The plumbers are compensated by selling the Certificates to developers.

Reported as of 12/3

BMP 11: Conservation Pricing

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$10500000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$1300000

2. Commercial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$2200000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$120000

3. Industrial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$1000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$0

4. Institutional / Government

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$385000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$0

5. Irrigation

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$850000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$75000

6. Other

a. Water Rate Structure	Uniform

b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$850000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$0

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

All City of Napa customers are billed for water usage using uniform volumetric rates only: $3.23 per 1,000 gallons for Inside City Limits, $4.32 per 1,000 gallons for Outside City Limits. These rates are the same regardless of account type; however, internal City accounts are often billed at discounted rates or not at all. There are no flat fees or service charges in the bimonthly water bills. Non-volumetric revenue comes primarily from new account connection fees and service pipe/meter installation fees. Revenue totals by account type in Section A are estimates. Effective October 1, 2004, following a comrehensive rate study, the City approved increases in the uniform volumetric rates to: $3.40 per 1,000 gallons for Inside City Limits, $4.63 per 1,000 gallons for Outside City Limits.

Reported as of 12/3

BMP 12: Conservation Coordinator

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

1. Does your Agency have a conservation coordinator?	yes
2. Is this a full-time position?	yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ?	
4. Partner agency's name:	
5. If your agency supplies the conservation coordinator:	
a. What percent is this conservation coordinator's position?	100%
b. Coordinator's Name	Patrick Costello
c. Coordinator's Title	Water Resources Specialist
d. Coordinator's Experience and Number of Years	10 years Research and Environmental Consulting, 4 years Water Conservation
e. Date Coordinator's position was created (mm/dd/yyyy)	09/25/2002
6. Number of conservation staff, including Conservation Coordinator.	2

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	97000	102000
2. Actual Expenditures	83300	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City of Napa was approved as a Group 1 member of the CUWCC on December 11, 2002. The City has designated its Water Resources Specialist as official Water Conservation Coordinator and contact to the CUWCC. The Water Resources Specialist position is full-time, but does involve other duties in addition to Water Conservation Coordinator. The share of the position's time devoted to conservation activities is increasing as the City addresses the BMPs. The Water Resources Specialist has a Level 1 Water Conservation Practitioner Certification from the CA-NV-AWWA. The Water Resources Specialist is assisted by a 24-hour per week temporary employee, the Water Conservation Representative. Other City staff assist as needed during community events and other public information programs.

Reported as of 12/3

BMP 13: Water Waste Prohibition

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? yes

a. If YES, describe the ordinance:

Originally established with Urgency Ordinance 4305 in 1992, Napa Municipal Code Chapters 13.10 and 13.12 address prohibitions and limitations on water use during Moderate and Severe Water Shortages as declared by Napa City Council. Since the end of the last declared water shortage in 1993, these chapters have been inoperative.

2. Is a copy of the most current ordinance(s) on file with CUWCC? yes

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Napa	Urgency Ordinance 4305; Municipal Code Chapters (inoperative) 13.10, 13.12

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding	yes
b. Single-pass cooling systems for new connections	no
c. Non-recirculating systems in all new conveyor or car wash systems	no
d. Non-recirculating systems in all new commercial laundry systems	no
e. Non-recirculating systems in all new decorative fountains	yes
f. Other, please name Washing streets, sidewalks, walkways, driveways, patios, parking lots or other hard-surfaced areas with water, except as required for health and safety	yes

2. Describe measures that prohibit water uses listed above:

Washing streets, sidewalks, walkways, driveways, patios, parking lots or other hard-surfaced areas with water, except as required for health and safety

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models.	no
b. Develop minimum appliance efficiency standards that:	
i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.	no
ii.) Implement an identified maximum number of	

gallons discharged per gallon of soft water produced.	no
c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.	no
4. Does your agency include water softener checks in home water audit programs?	no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models?	no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	2500
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Napa City Council declaration of a Moderate or Severe Water Shortage is required to reactivate these water waste prohibitions. In 2005-06, the City will examine the feasibility of a new, permanent Water Waste Ordinance that addresses all aspects of BMP 13. The City will use other cities' existing ordinances as a model.

Reported as of 12/3

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:	BMP Form Status:	Year:
City of Napa	**100% Complete**	**2004**

A. Implementation

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2. Rebate	61	11
3. Direct Install	503	89
4. CBO Distribution	0	0
5. Other	0	0
Total	**564**	**100**

6. Describe your agency's ULFT program for single-family residences.

City of Napa residential water customers may choose between two different incentive programs for ULFT installation. For a self-install, a customer may participate in the Napa Sanitation District Rebate Program, receiving $100 for each new ULFT that replaces an existing model using 3.5 gallons or more per flush. Rebate costs are borne by the Sanitation District, but the City does provide some administrative assistance. Alternatively, a customer may choose to participate in the City of Napa Toilet Retrofit Program. This larger direct-install program has been in place since January 16, 1991. It is driven by the permanent water conservation regulations in Napa Municipal Code Chapter 13.09. The Toilet Retrofit Program requires developers to offset the projected water demand of their new projects (e.g., hotels, housing subdivisions) by reducing demand elsewhere in the system. This water offset is achieved by replacing older high-water-use toilets with ULFTs. Participating local plumbers generate "Certificates of Completion" for each site where they replace older toilets with ULFTs. Developers must purchase a specified number of these Certificates and turn them in to the City Water Division in order to obtain final sign-off on their new projects. The plumbers do not charge the volunteer customers for the ULFTs or the installation, except in cases where the customer wants an upgrade (e.g., ADA, special color). The plumbers are compensated by selling the Certificates to developers. The bulk of program costs are therefore borne by developers. City costs are minimal, primarily administration and marketing.

7. Describe your agency's ULFT program for multi-family residences.

Multi-Family residential water customers are also eligible for the two programs described in A.6.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	22900	24200
2. Actual Expenditures	21510	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Commercial, Industrial, and Institutional (CII) customers are also eligible to volunteer for the Toilet Retrofit Program. Prior to 2002, only residential sites could receive the free ULFT installations. CII ULFT data are included in BMP 9a. The Toilet Retrofit Program also contains provisions for low-flow showerhead and faucet aerator installation. These data are included in BMP 2.

Reported as of 12/3