



YEAR-FOUR WATER CONSERVATION REPORT

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WATER FORM

YEAR-FOUR WATER CONSERVATION REPORT

WATER FORUM AGREEMENT

In April 2000 representatives of over 40 business, environmental, public and water interests in the Sacramento region signed a Memorandum of Understanding to implement the *Water Forum Agreement (WFA)*. The stakeholders agreed to a series of actions, or elements, to achieve the Water Forum's two co-equal objectives:

- Provide a reliable and safe water supply for the region's economic health and planned development to the year 2030; and
 - Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.
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WATER CONSERVATION ELEMENT

The Water Conservation Element of the *Agreement* is essential to meeting both of the co-equal objectives of the Water Forum. It helps meet the region's water supply needs, and minimizes the need for increased groundwater pumping and increased use of surface water, including diversions from the American River. Each water supplier in the region committed to implementing a comprehensive water conservation plan.

ANNUAL REPORTS

The *Water Forum Agreement* requires water purveyors to prepare annual reports on the implementation of their negotiated Water Forum Water Conservation Plans and share these reports with the Water Forum Successor Effort.

The Water Conservation Negotiation Team (WCNT), consisting of members from each caucus (business, environmental, water, public) provides oversight for water conservation plan implementation.

The Water Conservation Element focuses on municipal and industrial water conservation programs. Water suppliers and customers must implement active water conservation programs to demonstrate that water is being used efficiently. Efficient water use is a requirement for contracts for federal surface water diversions and water conservation programs are also often a requirement for participation in grant and loan programs.

Agricultural water conservation is projected to increase over the life of the WFA. The federal Central Valley Project (CVP) provides a portion of the surface water used by agriculture in the Sacramento region. Its use is subject to conservation requirements of the CVP Improvement Act. The Water Forum will negotiate other specifics on agricultural water conservation at a later time. This report does not cover agricultural water conservation.

Each purveyor negotiated a water conservation plan consisting of Best Management Practices (BMPs) and implementation criteria. A "Best Management Practice" (BMP) is a policy, rule, regulation or ordinance of the use of devices, equipment or facilities that is an established and generally accepted practice that results in more efficient use or conservation of water, or a practice that has been proven to indicate that significant conservation benefits can be achieved.

The Water Forum BMPs were adapted from the California Urban Water Conservation Council's *Statewide Memorandum of Understanding Regarding Urban Water Conservation Best Management Practices* (1994). While some purveyors accepted the standard recommended BMP implementation criteria, others chose to negotiate "functionally equivalent" criteria that better met the needs and conditions in their service area. (For the full water conservation plans, see Appendix J of the Water Forum Agreement.)

Several of the BMPs have a calculated number of interventions or targets to be completed annually. These targets are based on the number of customers in that category. For example, in BMP 1, many purveyors agreed to annually

identify the top 20 percent of water users in each customer type who have not been previously audited and offer them an audit or water wise house call. Further, they agreed to attempt to achieve 12 percent annual participation in the audit program of this targeted 20 percent. The Water Forum BMPs are listed below.

Water Forum Best Management Practices	
BMP	Title
1	Interior & Exterior Water Audits & Incentive Programs for Single Family Residential, Multi-Family Residential, and Institutional Customers
2	Plumbing Retrofit of Existing Residential Accounts
3	Distribution System Water Audits, Leak Detection and Repair
4	Non-Residential Meter Retrofit
4	Residential Meter Retrofit
5	Large Landscape Water Audits and Incentives for Commercial, Industrial, and Institutional (CII), and Irrigation Accounts
6	Landscape Water Conservation Requirements for New and Existing Commercial, Industrial, Institutional and Multi-Family Developments
7	Public Information
8	School Education
9	Commercial and Industrial (CII) Water Conservation
11	Conservation Pricing for Metered Accounts
12	Landscape Water Conservation for New/Existing Single Family Homes
13	Water Waste Prohibition
14	Water Conservation Coordinator
16	Ultra-Low Flush Toilet Replacement Program for Non-Residential Customers
- -	Citizens Involvement Program

GENERAL ASSESSMENT OF YEAR FOUR

This report covers the fourth calendar year of implementation, January 1 through December 31, 2004. This year marked the first year in which purveyors were expected to be fully implementing their water conservation plans following three years of “ramp up” that began when the Water Forum Agreement was signed in 2000.

Fourteen of the 16 water purveyors submitted Water Conservation Program Annual Reports for 2003. Purveyors that did not submit reports included California-American Water Company and Florin County Water District.

Of the 14 reporting agencies only one, Placer County Water Agency, reached all of its targets in every category.

Again in 2004, several BMPs proved challenging to achieve targeted interventions. Generally, these BMPs were those that are dependent upon meters and metered rates. Many water conservation coordinators reported that they experienced difficulty getting customer participation in programs where customers did not perceive a cost – benefit for their participation. These BMPs include water audits for residential customers, large landscape audits, commercial and industrial water audits and toilet rebate programs.

Under the Agreement, programs for replacement of residential toilets are voluntary while nonresidential programs are required as part of water conservation plans. Last year the combined number of targeted CII toilet replacements for all purveyors was 10,978. Water Forum signatories reported only 600 CII toilets were installed. Nonresidential toilets are more expensive to retrofit and rebates offered usually do not cover the entire cost of the toilet. In addition, many jurisdictions require the issuance of a building permit for a commercial toilet replacement, which complicates the project and adds to its expense. This can often trigger issues with regards to compliance with the American Disabilities Act; therefore, turning a simple toilet replacement project into a remodeling project costing several thousand dollars. Water purveyors have no control over these complications and are working to find ways to increase incentives and participation in their non-residential toilet replacement programs.

Water purveyors also sponsored voluntary residential programs, providing rebates for the installation of 1,392 residential ultra-low flush toilets through a joint Regional Water Authority (RWA), Sacramento Regional County Sanitation District program.

Most reporting agencies received credit for implementation of BMPs 6 and 12, which are landscape-related BMPs, through a combination of RWA programs, their own efforts, and participation in a regional landscape task force. The task force was convened by the Water Forum as called for in these BMPs. Task force participants reviewed the implementation of water efficient landscape ordinances in the region and their conformance with State law. The goal of the task force was to identify what, if any, obstacles exist in implementation of these ordinances and to recommend solutions to achieve implementation. A draft model ordinance and the task force's recommendations were forwarded to the Water Conservation Negotiation Team in 2005 for consideration. The next step is for the recommendations to be considered by the Water Forum Successor Effort.

In 2004 Water Forum signatory water purveyors continued to implement meter retrofit programs. Under the Water Forum Agreement, purveyors agreed to retrofit at least 85 to 90 percent of their non-residential customers within ten years. Last year, 12 signatories reported that their non-residential meter retrofit programs have been completed.

Residential meter retrofit programs were customized by purveyor under the Agreement. Placer County Water Agency and the Rio Linda/Elverta Community Water District were fully metered and billing customers at a metered rate when they signed the Water Forum Agreement. Since 2000 Orange Vale Water Company and San Juan Water District have completed their residential and non-residential metering programs and are transitioning customers to metered rates.

Water Forum stakeholders began an update of water conservation plans last year as called for in the Water Forum Agreement. This process requires involvement by the Water Conservation Negotiation Team and negotiations between water purveyors and other Water Forum interest groups. The goal of the update process is to ensure that an effective, high-quality water conservation program is adopted that meets the needs of all the Water Forum stakeholders along with the water conservation goals set forth in the Water Forum Agreement.

SUMMARY OF REGIONAL WATER EFFICIENCY PROGRAM

The Regional Water Authority, which was formed in 2001 to provide a formal structure for ongoing regional collaboration on water issues, has developed a Water Efficiency Program to help participating agencies implement their water conservation plans. The program provides services with oversight via an advisory committee comprised of participating water utility members. Through this regional effort, purveyors are better able to manage BMP implementation projects through coordination and training of utility staff, local professionals and regional marketing of services and leveraging resources.

RWA program components include regional public outreach and school education programs, large landscape irrigation efficiency and leak detection programs and partnerships with other agencies and organizations. Key partnerships include RWA's collaboration with the Sacramento County Regional Sanitation District on a toilet replacement rebate program (BMP 16), participation in the California Urban Water Conservation Council's statewide program for distribution of water-efficiency products targeting the restaurant and food service industry (BMP 9), and partnering with the Sacramento County Stormwater Management Program to educate over 15,000 students each year in Placer and Sacramento counties on actions they can take to save water and improve runoff water quality (BMP 8).

In 2004 the RWA program completely satisfied requirements for BMPs 7 and 8 (public information and school education). Many member agencies also supplemented RWA programs with in-house programs. Implementation of BMPs 6 and 12 are assisted, though water agency responsibilities are not completely satisfied, by RWA programs. RWA also offers specifically designed "subscription" programs that assist those participating agencies with certain elements of implementation for leak detection programs; large landscape audits; commercial, industrial and institutional (CII) audit programs; and toilet replacement. In 2004, implementation of the RWA "Rinse and Save" program, which helps satisfy requirements for BMP 9 (CII audits), was delayed due to contract issues. As a result, RWA members were unable to rely on this program to achieve targets for BMP 9. However, targets for this BMP in 2005 are expected to be met or exceeded.

A great deal of the landscape-related outreach to customers in the region is achieved through RWA. RWA and its member agencies operate and maintain an automated weather station to provide evapotranspiration data to the area landscapers. This station is networked into the California Irrigation Management Information System. RWA also conducts landscape workshops for homeowners throughout the year; conducts an annual media campaign to notify residents to make seasonal irrigation schedule changes; develops water efficient landscape materials for member agencies with free distribution at retail outlets and through university extension programs; and participates in home and garden shows.

RWA produces a report each year that summarizes which water purveyors participated in the Regional Water Efficiency Program and provides additional details regarding program efforts. The 2004 Regional Water Efficiency Program Annual Report is available on the RWA web page at <http://www.rwah2o.org/rwa/programs/wep/>.

INDIVIDUAL PURVEYOR ACCOMPLISHMENTS

CALIFORNIA AMERICAN WATER COMPANY

California American Water Company met commitments for public information (BMP 7) and school education (BMP 8) in 2004 through participation in RWA programs.

Non-residential customers are fully metered and use volumetric pricing (BMP 4). During 2004, the Company installed 600 water meters on previously non-metered residential customers (BMP 4).

California American did not complete a 2004 water conservation report; therefore, Water Forum staff has no information on implementation of the following BMPs last year: 1, 2, 3, 5, 9, 11, 13 and 16.

California American is an investor-owned utility and its ability to generate funding for conservation programs is dependent upon the approval of the California Public Utilities Commission. In addition, recent staff changes left the company without designated water conservation staff for a significant portion of 2004.

CARMICHAEL WATER DISTRICT

Carmichael Water District distributed more than three times the required number of plumbing retrofit kits necessary to meet the 2004 commitment for BMP 2. Also in 2004, Carmichael Water District performed five large landscape audits, three more than required. The District fully implemented non-residential and residential landscape ordinances, public information, school education, conservation staff, leak detection, conservation pricing and water waste prohibition BMPs.

Carmichael Water District did not perform any water audits (BMP 1) or commercial and industrial audits (BMP 9) in 2004. As part of its Water Forum Purveyor Specific Agreement, Carmichael negotiated to delay participation in an ultra low flush toilet rebate program (BMP 16) until the District's meter retrofit program is completed.

Carmichael plans to fully meter and use volumetric pricing for all customers by 2013. The District's meter retrofit program is being implemented by customer classification. Commercial and multi-family customers were the first to be retrofitted with meters. In 2004 the District began retrofitting single-family customers under one-half acre with 407 retrofits completed. The District spent \$242,324 on its meter retrofit program last year, which is a cost of \$390.85 per meter. This cost includes materials, labor and equipment costs.

CITRUS HEIGHTS WATER DISTRICT

Citrus Heights Water District (CHWD) met or exceeded the 2004 targets for 10 of the 14 BMPs. CHWD continued public information and school education programs in 2004 through RWA and through the District's own efforts, including a Water Awareness Month poster contest, school presentations and other outreach tools. CHWD also fully implemented conservation pricing, water waste, leak detection and conservation staff BMPs.

In addition to reaching out to customers with landscape water conservation programs and information, CHWD water conservation personnel actively participated in the Water Forum Regional Landscape Task Force in fulfillment of requirements in BMPs 6 and 12. The District also continued to implement conservation pricing for metered accounts, a water waste prohibition, and to maintain conservation staff.

CHWD fully implemented 2004 requirements for BMP 9 (commercial and industrial water conservation); almost doubling the number of required audits. CHWD did fall just short of its goal of 20 large landscape audits (BMP 5) but has established the necessary components of a large landscape audit program and conducted 16 of the required 20 audits. The District did not meet goals for its non-residential toilet retrofit program (BMP 16), reporting no commercial toilet rebates. The District did participate in the joint Regional Water Authority/Sacramento Regional County Sanitation District toilet rebate program, distributing 274 ultra-low flow toilets to residential customers in Citrus Heights. CHWD did not meet its targets for residential water audits or plumbing retrofits.

In 2004, CHWD installed 1,444 residential meters as part of its meter retrofit program, which exceeds the District's original goal of 737 for the year. (Commercial, government, institutional and multi-family residential customers in the District's service area are metered). This program cost the District approximately \$1.4 million, or roughly \$1,000 per meter, including labor, equipment and materials. CHWD plans to meter and use volumetric pricing for all remaining residential customers by 2008. A total of 448 residential customers had voluntarily converted to metered billing by the end of 2004.

DEL PASO MANOR WATER DISTRICT

Del Paso Manor Water District is a small district with a service area of only one square mile. As a result, the District has found implementation of several of the BMPs challenging. These include toilet retrofits and residential water audits. However, the District has made a substantial effort to meter its non residential customers and provide them with water efficiency information. The District has completed metering for its large landscape and institutional customers and has 66 of 75 commercial customers metered. District personnel are also busy installing meter setters on residential customer accounts in preparation for metered rates. The District also has an active water waste program. District personnel continue outreach efforts through the local homeowners association. In addition, the District participates in local landscape shows, education and marketing campaigns and completed a landscape media campaign in 2004 through the Water Education Foundation and California Water Awareness Campaign.

FAIR OAKS WATER DISTRICT

Fair Oaks Water District fully implemented ten BMPs in 2004, concentrating on providing audits and assistance on water use efficiency to multi-family customers. Through its Water Wise House Calls program, District personnel conducted only 28 out of 304 targeted single family audits; however they completed 304 multi family audits when only 59 were required. Fair Oaks participates in RWA programs and is a member of the California Urban Water Conservation Council. These efforts are in addition to the District's own public outreach and school education programs. District personnel participate in a variety of community and school events in its service area and the District has partnered with the University of California, Davis Cooperative Extension and Master Gardeners in support of the established Fair Oaks Horticultural Center. District personnel responded to 459 water waste calls in 2004, providing another opportunity for one-on-one customer contact.

Like other RWA members, Fair Oaks experienced a delay in implementing BMP 9 last year due to contracting delays in the Rinse and Save program. Although the District has a complete program, audits were not performed until 2005. Fair Oaks reported toilet rebates for ten commercial customers and 88 residential customers in 2004. The District participates in the RWA landscape program that administers Proposition 13 grant funds to provide landscape incentives but no large landscape audits were performed during 2004.

Fair Oaks reported installation of 831 residential meters in 2004 at a cost of \$984,563 (\$1,185 per meter), which includes service line replacement, meters and automated radio read equipment. The District plans to complete metering for all customers within five years; allowing improved system leak detection and conservation based rates.

FLORIN COUNTY WATER DISTRICT

Florin County Water District serves an area adjacent to the Sacramento City limits in the Florin area. The District has approximately 2,200 connections and serves an area of 2.5 square miles. The District relies solely on groundwater. Florin County Water District did not submit a 2004 water conservation report as it failed to do so in 2001, 2002 and 2003.

CITY OF FOLSOM

The City of Folsom fully participated in RWA WEP activities in 2004. This participation aided the City in implementation of public outreach, school education and landscape related BMPs. In addition to participating in the RWA school education programs, Folsom instituted a program in conjunction with Folsom High School in which educational videos on water conservation are written and produced by media students.

Folsom performed about 50 percent of the targeted number of residential and commercial audits in 2004 and about 20 percent of its target for large landscape audits. In addition, conservation staff continued to improve irrigation efficiencies on City-owned landscapes. The City will be part of a 2005 large landscape irrigation repair grant program through the Regional Water Authority.

Folsom conservation staff actively responds to water waste calls. In 2004 City staff took action on 162 water waste calls in 2004 and issued 193 water waste notices.

Folsom assisted in regional projects promoting water use efficiency in 2005, including efforts to outreach to landscape professionals. City of Folsom staff also actively participated in the Water Forum Regional Landscape Task Force. Folsom continues to achieve its meter retrofit goals. In 2004, the City performed 887 residential and 70 commercial meter retrofits in its Ashland service area. Folsom did not have a CII toilet rebate program but did participate in the regional residential toilet rebate program, rebating 27 toilets in 2004.

GOLDEN STATE WATER COMPANY - RANCHO CORDOVA CUSTOMER SERVICE AREA

(Formerly Southern California Water Company – Arden Cordova Water Service)

In 2004, Golden State Water Company met requirements for non-residential and residential landscape ordinances, public information, school education, conservation pricing, water waste prohibition, leak detection and conservation staff. All non-residential customers in Golden State's Rancho Cordova service area are metered. Golden State is a member of the Regional Water Authority and therefore benefits from RWA programs. In 2004 no commercial or industrial audits were performed to satisfy requirements under BMP 9, due to contract delays with the RWA Rinse and Save program. The Company also reported no residential or institutional water audits (BMP 1), landscape audits (BMP 5) or CII toilet replacements (BMP 16) in 2004. Golden State staff believes these customers will find more incentive to participate in this program following meter retrofit and the implementation of consumption-based rates. The Company also provided 1,000 efficient showerheads to pre-1992 homes (BMP 2).

Golden State Water Company is a private water company. Over the last several years the company has lost more than half of its water supply wells due to groundwater contamination. It has responded by devoting significant amounts of resources, with both company personnel and capital, in its efforts to keep the water system viable.

ORANGE VALE WATER COMPANY

Orange Vale Water Company identified its top 20 percent of water users in each customer type in 2004 and performed 17 of the 118 targeted single-family water audits (BMP 1). Orange Vale distributed 235 retrofit kits to its customers of the targeted 703 (BMP 2). The Company has completed residential and non-residential meter retrofits in fulfillment of BMP 4 and transitioned entirely to metered rate billing in January 2005 (BMP 11). Requirements for BMPs 5 and 6, large landscape audits and CII audits were fully implemented. The Company completed six targeted large landscape audits and three CII audits. Requirements for landscape ordinance development, public outreach and school education were met through Regional Water Authority programs and by participation in the regional landscape task force.

Orange Vale Water Company does not have a CII toilet replacement program (BMP 16) but did distribute 29 rebates for residential customer toilet replacement.

PLACER COUNTY WATER AGENCY

Placer County Water Agency (PCWA) fully implemented its water conservation plan in 2004 to meet the objectives and terms of the Water Forum Agreement commitment. The Agency exceeded the targets for residential water audits last year, including follow-up surveys, which were conducted to determine audit recommendations status. PCWA estimates 20 percent of the past participants have been revisited or contacted. The Agency also exceeded the target for multi family water audits, completing 87 audits. PCWA distributed 2,091 plumbing retrofit kits (BMP 2) and has a complete commercial/industrial conservation program in place, performing 353 commercial/industrial audits in 2004 (BMP 9). The Agency continued to offer toilet rebates last year and reported that 493 ultra low flow toilets were

installed by commercial accounts, which was determined by a site-to-site survey conducted in the Agency's service area. PCWA continues to fully implement its leak detection program (BMP 3). In 2004, the Agency distributed 312 toilet rebates to residential customers, which is twice what was rebated in 2003. The Agency surpassed its target of 11 large landscape audits by completing 13 (BMP 5).

PCWA participates in Regional Water Authority programs such as the Rinse and Save Program, the Water Education Foundation WET Program, and is a member of the California Urban Water Conservation Council. Participation in these programs enhanced the Agency's own efforts to fulfill obligations toward public outreach, school education, and commercial/industrial audits. PCWA has developed a K-6 school educational program and focused on community outreach by participating in various community events.

PCWA has also partnered with U C Davis Cooperative Extension and Master Gardeners to educate and inform Placer County homeowners of water efficient landscape and garden practices. PCWA staff works directly with private sector landscapers, hardware and plumbing stores, nurseries and gardening service companies. In September 2004 the Agency installed and maintains Placer County's first California Irrigation Management Information System station to provide data for many agricultural and landscape water users, farm advisors, and other irrigation specialists.

In addition, PCWA provides water efficiency articles to customers through a bi-monthly newsletter, maintains a water efficiency page on its web site, and produces periodic newspaper releases throughout the Agency's service area. PCWA has been fully metered since 1968 with an ascending tier rate structure, in fulfillment of BMPs 4 and 11. PCWA also has an active meter replacement program on meters installed prior to 1992.

PCWA has an on-going canal gunite program to reduce unaccounted-for water in the its canal system. Further, the Agency is performing a multi-year feasibility study (East Loomis Basin Canal Efficiency Study) to evaluate additional options to reduce unaccounted for water in the canal system, including piping significant portions of the canal. PCWA is developing an Integrated Water Resources Plan that will be incorporated into the 2005 update of its Urban Water Management Plan (UWMP). The UWMP will incorporate the planned use of available recycled water, and groundwater in dry years, to supplement the Agency's available surface water entitlements and implementation of the Agency's water conservation plan.

RIO LINDA /ELVERTA COMMUNITY WATER DISTRICT

Rio Linda / Elverta Community Water District participated in RWA programs in 2004, benefiting from regional efforts in school education, public outreach and landscape ordinance development.

Rio Linda partners with SMUD on a high efficiency washing machine rebate program for its customers. Although not required under current Water Forum BMPs, the program is similar to others around the state. The Rio Linda program pays customers \$50 each to replace less efficient washing machines with those that qualify for the SMUD rebate. Qualifying machines are estimated to use 35 to 50 percent less water. The water district rebate is in addition to a SMUD rebate. In 2004 Rio Linda/Elverta Community Water District paid 15 rebates to District customers who qualified for this program.

In addition to these programs, Rio Linda continues to be fully metered and use volumetric pricing in fulfillment of BMPs 4 and 11 and has also implemented a leak detection program.

Rio Linda did not meet goals for residential audits or non-residential toilet rebates, although it has worked to provide the program elements necessary to achieve customer participation in these projects.

CITY OF ROSEVILLE

City of Roseville staff conducted 213 single-family audits as defined under BMP 1 in 2004, out of a target of 688. In addition, Roseville residents completed 323 self-audits through the City's web site. City staff distributed 829 complete plumbing retrofit kits (target of 2,435) to customers and over 100 specific kit components. Kits are distributed only when a need is identified, making sure the resources are not wasted. The City uses extensive marketing efforts to promote its programs. Bi-monthly, season specific messages and information about rebates and programs are advertised in the "EU Today" newsletter that is mailed to all residential customers. Programs and services are also advertised on the City's website; the local government access channel (Channel 14); and "Roseville Reflections" (a publication mailed quarterly to all Roseville residents). Water conservation programs and messages are regularly covered by local newspapers and messages are added to utility bills. City conservation staff also work with local nurseries to distribute program information on efficient landscape practices.

As part of the Meter Retrofit Program established in 2001, the City continues to transition 12,000 homes with meters to a consumption-based water bill by sending comparison bills showing the difference between the flat rate they were currently paying and a bill based on actual water usage. Those homes began receiving bills based on actual water usage in May 2004. As a contractor of Central Valley Project water, Roseville is also working within the Central Valley Project Improvement Act timeframe to retrofit homes that were built prior to 1992, when state law mandated meters on new homes.

In addition to participating in RWA public outreach and school education efforts, Roseville has its own programs in these areas. In 2004, 560 students participated in the City's LivingWise Program, which is a turn-key set of classroom activities and hands-on home projects. Students work on subjects required by State standards to learn the value of natural resources in everyday life. Roseville offered an educational concert experience to 1,000 students who listened to songs about ecology and water conservation. In addition the City held a student art contest wherein winning entries touting water and energy conservation were distributed in a calendar that went to 10,000 city residents. City water conservation staff attended many community events distributing information on conservation programs and rebates.

Roseville completed one large landscape audit and one CII audit in 2004, about 3 percent of the requirements of these BMPs in 2004. Roseville has also experienced difficulty in getting non-residential customers to participate in a rebate program for toilet replacement. The City's target for non-residential rebates in 2004 was 908 and no rebates were reported. Although commercial customers are not taking advantage of the rebate, most commercial facilities inspected already had a ULFT toilet installed. The City had better success in its voluntary residential program, giving out 124 rebates in 2004. In addition, the City has full time water conservation staff (BMP 14) and is fully implementing its water waste prohibition program (BMP 13), responding to almost 500 water waste calls last year.

Although not covered by the current Water Forum water conservation plan, the City of Roseville provides recycled water for landscape irrigation through its wastewater treatment facilities. The City recycles water to create a more reliable water supply for Roseville by offsetting the use of potable water. In 2004 the City recycled 1,624 acre-feet of water. Of this, 1,137 acre-feet were delivered within the city and 487 acre-feet were delivered outside of the city.

Also not covered by the current water conservation plan is the City's washing machine rebate program. In 2004, 335 Roseville residents received rebates for replacing their old washing machines with new water and energy efficient models.

CITY OF SACRAMENTO

The City of Sacramento completed 998 single-family water audits last year out of a target of 2,571. The City also completed 41 institutional audits exceeding its annual target of 16. Additionally, its staff provided 3,170 plumbing retrofits kits to residents, exceeding its target of 2,443. The City also completed 73 non-residential meter retrofits in 2004. Approximately 811 unmetered non-residential accounts remain to be completed in next 4 years.

In 2004, Sacramento increased the number of large landscape audits completed. Out of a target of 53 large landscape audits, the City reported completing 72, which was up from 39 reported large landscape audits reported the prior year.

The City of Sacramento completed 55 commercial water audits last year. Like other RWA members, the City of Sacramento experienced a delay in implementation of its targets for BMP 9 due to contract delays in the Rinse and Save Program, although the City did meet all other obligations under this BMP. Additionally, the City continued to offer non-residential ultra-low flush toilet rebates but the participation is slow due to permitting issues, however, the response has been increasing in the residential sector. The City has reported a large increase in the number of residential toilet rebates, which is a voluntary program under its water conservation plan. Almost 200 residential toilets were rebated.

Also in 2004, the City provided 50 rebates for water efficient commercial washing machines, something not currently covered under Water Forum BMPs. Qualifying machines are estimated to use 35 to 50 percent less water. This program has developed into a regional partnership that includes participation from local electric and gas utilities, Sacramento Municipal Utility District and Pacific Gas and Electric.

City staff continued to implement leak detection, landscape water conservation, public information, school education, conservation pricing for metered accounts, water waste prohibition, and water conservation coordinator BMPs in 2004. The City's water conservation staff market programs through various venues including billing inserts, newsletters, public events and presentations, publications and direct mail. Incentives to participate in conservation programs are offered to residential and non-residential customers. City conservation staff contacted and communicated with approximately 28,000 residents at community events in 2004 in effort to promote residential water conservation programs, including audits. The City's conservation program spent \$50,000 in 2004 on outreach to customers marketing its programs. In addition, City staff responded to over 300 water waste calls, which does not include those calls that resulted in residential water audits. City staff also responded to approximately 2,000 leak repairs calls to residential and commercial customers.

The City of Sacramento has notified the Water Forum Successor Effort that it has complied with and met the targeted interventions for BMPs 1 and 9 as per its interpretation of the agreement, which is that only those customers who volunteer to receive a meter are targeted.

SACRAMENTO COUNTY WATER AGENCY

During 2004 Sacramento County Water Agency (SCWA) exceeded its goals for plumbing retrofits (BMP 2), distributing 1,157 kits while the target was 1,128. The Agency also completed more large landscape water audits (BMP 5) than required under its plan. These audits were provided to 45 large landscape customers when the goal was 14. This was accomplished in part through participation in the RWA landscape program that provides incentives to large landscape customers through grant funds. The Agency also completed 417 of 721 targeted residential water audits (BMP 1).

Last year, the Agency participated in local home and garden shows and other community events and continued to publish its "Water Spouts" newsletter, as part of its efforts to offer water conservation information to customers in fulfillment of BMP 7. The Agency's public outreach efforts are enhanced and its school education requirements are met through participation in the RWA Water Efficiency Program. SCWA is also fully implementing its water waste prohibitions and is educating customers regarding quantity-based water billing. Last year SCWA staff responded to 393 water waste complaints as part of its efforts to educate its customers on water conservation practices.

Sacramento County's implementation of BMP 9 in 2004 was at 90 percent of target, completing 20 of the targeted 26 commercial audits. The Agency requires water intensive commercial and industrial building permit applicants to conduct a water use efficiency review and submit findings in any required environmental documentation for the project. In addition the Agency requires efficient cooling systems, re-circulating pumps for fountains and ponds and water recycling systems for vehicle washing as a condition of service.

Sacramento County provided two non-residential toilet retrofit rebates in 2004 and 142 voluntary residential rebates through the joint RWA/Sacramento Regional County Sanitation District program. In addition, Sacramento County provides recycled water for landscape irrigation in the Laguna West area of the County. In 2004, the County produced and delivered 805 acre-feet of recycled water.

Sacramento County water agency transitioned 2,115 customers to metered billing in 2004 in fulfillment of BMP 11.

SACRAMENTO SUBURBAN WATER DISTRICT

Sacramento Suburban Water District (SSWD) made significant improvements on implementation of its water conservation plan in 2004, thanks in large part to the addition of a fully qualified water conservation coordinator to District staff. The American Water Works Association recently recognized the District for its 2004 customer outreach program. One of the goals of this outreach program has been to educate SSWD customers through the District's newsletter on the Water Forum Agreement and the District's commitment to BMP implementation. Sacramento Suburban also participates in the RWA Water Efficiency Program and benefits from that participation.

In 2004 SSWD reported 215 single family and 30 multi family residential water audits. This falls short of District goals but when compared to prior years, it demonstrates an increased recognition by the District to meet its Water Forum commitments. SSWD also reported 3,148 plumbing retrofits, whereas the goal was 2,807. In large landscape audits, the District exceeded its goal of three audits by completing 14. For the first time since beginning its conservation program, SSWD performed CII audits, reporting 19 completed out of a target of 87.

SSWD has instituted an aggressive meter retrofit program, completing 1,166 retrofits last year, which was over its target of 865. Labor to retrofit the service in landscaping is \$585 per meter and labor to retrofit the service in a concrete area is \$842 per meter. Supplies are \$417 per meter, which includes the meter, meter setter and box. In 2004 District personnel estimate that water savings resulting from its meter retrofit program were approximately 900 acre-feet more than if the District had just met its agreed targets.

SAN JUAN WATER DISTRICT

San Juan Water District has a longstanding water conservation program that began in 1990. In 2004, SJWD continued its commitment to water conservation. SJWD performed 159 residential water audits (target 218), and distributed 256 (target 254) plumbing retrofit kits to customers. In addition, the District mailed welcome packets to new customers on a monthly basis. The District is also a member of the Regional Water Authority and takes part in RWA programs.

Landscape water conservation is a priority for SJWD. The District exceeded its target of 44 large landscape water audits, completing 64 last year. In addition the District has a water efficient landscape (WEL) garden that is open to the public. In 2004 the District conducted 56 tours of its WEL garden and District staff participated in a variety of events to distribute landscape water use efficiency information to customers. These include two District-sponsored irrigation classes and two pond workshops.

The District markets its CII toilet rebate program (BMP 16) to commercial customers but has received no interest. Therefore, the target of 47 rebates was not met. However, the District does have a voluntary residential toilet rebate program that distributed rebates for 91 toilets last year. The District exceeded its targets for CII audits, performing seven audits when three were required. San Juan continues to have full time water conservation staff in fulfillment of BMP 14 and is fully implementing its water waste prohibition program (BMP 13).

San Juan has an active school education program. This includes the Water Bucks Program where students perform monthly patrols of their school site and earn rebates for the school on its water bill. SJWD also conducts an annual student art calendar contest. All of the local agencies who contract with SJWD for wholesale water participate in the calendar contest. Students draw pictures depicting different methods to conserve water. Winners receive a United States savings bond. About 600 calendars are distributed in the SJWD retail service area. San Juan also participates in an annual science fair for local students. District staff judge entries with a water theme and winners receive a savings bond. Under San Juan's New Oaks Program students visit the District to learn about trees and their water tolerance. The students plant an acorn and return the following year to pick up their growing tree.

San Juan Water District has completed meter retrofits of both its non-residential and residential customers (BMP 4) and is on track for transitioning all flat-rate residential customers to a metered rate in 2005 (BMP 11). Non-Residential customers are already paying a metered rate. All new residential construction has been required to pay a metered rate since June 1997 and the district has a number of residential customers who have volunteered to pay a metered rate. San Juan is reading all meters and showing a comparative metered rate on the bills of all flat rate customers. Beginning April 2005 all customers began receiving bills based on actual water use.

REPORTING TARGETED INTERVENTIONS

Water Forum best management practices can be divided into two categories: those whose components include a target number of interventions to be performed annually, and those that are programs whose implementation does not include a targeted number of customer interventions. The following BMPs do not include a target number of interventions:

- BMP 3 – Leak Detection
- BMP 6 – Landscape Water Conservation Requirements for New and Existing Commercial, Industrial, Institutional and Irrigation Accounts
- BMP 7 – Public Information
- BMP 8 – School Education
- BMP 11 – Conservation Pricing for Metered Accounts
- BMP 12 – Landscape Water Conservation for New/Existing Single Family Homes
- BMP 13 – Water Waste Prohibition
- BMP 14 – Water Conservation Coordinator
- Citizens Involvement Program

The BMPs that do have a targeted number of interventions each year that water purveyors agreed to reach as part of their water conservation plan include:

- BMP 1 – Interior and Exterior Water Audits & Incentive Programs for Single Family Residential, Multi-Family Residential, and Institutional Customers
- BMP 2 – Plumbing Retrofits of Existing Residential Accounts
- BMP 4 – Residential and Non-residential Meter Retrofit
- BMP 5 – Large Landscape Water Audits
- BMP 9 – Commercial and Institutional (CI) Water Conservation
- BMP 16 – Ultra Low Flush Toilet Replacement Program for Non-Residential Customers

The following table provides information on the number of interventions reported by each water purveyor for those BMPs with targeted interventions associated with implementation. The top row in the table identifies each BMP while the first column on the left identifies each purveyor. Each box contains two numbers for each BMP, the number on the top is the targeted number or interventions for 2004, or the number of interventions that purveyor agreed to reach as part of its water conservation plan. The figure on the bottom represents the actual number of interventions achieved.

2004 Targeted Interventions and Actual Interventions Reported

Purveyor Target / Actual	SF Audits	MF Audits	Inst. Audits	Plumbing Retrofits	Non-Res Meter Retrofit	Large Landscape Audits	Comm/Ind Cons.	Comm ULF Toilet Rebates	Ind ULF Toilet Rebates	Inst ULF Toilet Rebates	Res Toilets (Voluntary)	Res Meters Retrofits
California- American	1,229 ~	59 ~	0 ~	5,190 ~	Done	55 ~	48 ~	1,151 ~	38 ~	17 ~		~ 600
Carmichael	259 0	14 0	0 0	1,166 3,500	Done	2 5	9 0	Negotiated to delay toilet program until completion of meter retrofit				1,078 407
Citrus Heights	419 87	16 7	2 0	1,711 831	Done	20 16	14 26	350 0	0 0	97 0	274	737 1,444
Del Paso Manor	39 20	2 0	0 0	166 2	Done	1 0	2 0	41 0	0 0	5 0		17 setters
Fair Oaks	304 28	59 304	1 0	1,274 471	Done	8 0	7 0	180 10	0 0	12 0	88	1,407 831
City of Folsom	342 171	12 5	1 0	1,387 280	Done	18 3	26 0	621 96	19 0	49 0	27	791 877
Golden State Water Co.	269 0	34 0	1 0	1,487 1,000	8 0	58 0	26 5	625 0	18 0	30 0	19	363 9
Orange Vale Water Co.	116 17	2 0	0 0	703 235	Done	6 6	3 3	83 0	0 0	17 0	29	Done
Placer County Water Agency	619 631	217 233	3 25	1,800 2,091	Done	11 13	28 353	280 452	1 2	20 39	100 312	Done
Rio Linda / Elverta	98 31	4 0	1 0	411 178	Done	1 1	2 5	44 1	1 0	31 0	2	Done
City of Roseville	688 213	0 4	0 0	2,435 829	Done	35 1	39 1	908 0	0 0	0 0	124	1,660 1,633
City of Sacramento	2,571 998	262 24	16 41	2,443 3,170	908 73	53 72	169 55	3,600 0	0 0	0 0	18	*
County of Sacramento	721 417	4 0	2 0	1,128 1,157	40 42	14 45	26 20	178 2	17 0	9 0	142	728 **
Sacramento Suburban	777 215	78 30	1 0	3,861 3,148	Done	11 14	87 19	2,040 0	145 0	59 0	296	865 1,166
San Juan Water Dist.	218 159	6 0	0 7	254 256	Done	44 64	3 7	35 0	0 0	12 0	91	Done

*The City of Sacramento's Water Forum Agreement recognizes the City Charter prohibition against meters; however California legislation signed in 2004 will require a meter retrofit program to be completed by 2025.

**The County of Sacramento reported 2,162 customers were transitioned to a metered rate in 2004.

~ Indicates report was incomplete.