

APPENDIX D

City of Fresno Water Conservation Plan (May 2005)

Section 4: BMPs for Urban Water Suppliers

City of Fresno Water Conservation Plan (May 2005)

Section 4: BMPs for Urban Water Suppliers

(This section is taken verbatim from the California Urban Water Conservation Council's (CUWCC) Memorandum of Understanding (MOU), March 14, 2003.)

1. Water Survey Programs for Single-Family and Multi-Family Residential Customers

The program includes the following actions:

- a. Contact via letter or telephone single-family and multi-family residential customers.
- b. Provide surveys to single-family and multi-family unit residential customers.
- c. Instruct customers in meter reading.
- d. Check for leaks, including toilets/faucets and, if necessary, provide toilet flappers/faucet washers.
- e. Check showerhead and aerator flow rates, and provide low-flow models, as necessary.
- f. Check toilet flow rates, and when appropriate, recommend a ultra-low flow toilet (ULFT) replacement.
- g. Check irrigation system for leaks/overlap and determine timer functioning and current schedule.
- h. Measure landscaped area and develop irrigation schedule.
- i. Provide customer with evaluation results, water saving recommendations, and other information.

The City will annually collect and submit the following information:

- a. Number of single-family and multi-family residential accounts in service area.
- b. Number of single-family residential surveys offered during reporting period.
- c. Number of single-family residential surveys completed during reporting period.
- d. Number of multi-family residential surveys offered during reporting period.
- e. Number of multi-family residential surveys completed during reporting period.
- f. Monitor annual water-use changes in consumption at surveyed accounts, individually and as a group.

The City currently performs few single-family or multi-family *interior* water surveys. However, if a request for interior survey is received, staff is available to respond. There has been little interest in this service by single-family consumers probably because of low, flat-rate water charges. Multi-family also has shown little interest.

The City has not aggressively marketed single-family or multi-family *interior* water surveys. It does, however, aggressively market and perform single-family and multi-family *exterior* water surveys which has the highest water usage. The program is marketed through media, billing inserts, promotional materials, public outreach events, speaker's bureau and the City's web site.

The City will develop a program and train staff to provide interior water survey to customers as part of a pilot program to begin by July 1, 2006. Results will be monitored by recording and reporting number of audits completed. The City will target 25 percent of the annual target for multi-family accounts in this first pilot study. A single-family pilot study will start in 2008. Upon implementation of the pilot program, the City will notify customers of its water survey program by enhancing its present marketing approach to include both interior and exterior water surveys.

The City has begun discussion and investigations on how it will plan and conduct the pilot program. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

The City does, however, perform a number of *exterior* landscape surveys, and collects information about the surveys. Improvement is needed to better format this material for reporting purposes. This program is staffed with two permanent Landscape Water Conservation Representatives. Surveys are offered and cost-effective measures recommended. The City primarily reaches its customers through advertising in billing inserts, conservation literature, speakers bureau, tours, web site, public outreach events.

During the exterior survey, City staff provides the following services:

- Landscape water-use surveys include consultation, irrigation system efficiency rating using catch can distribution uniformity method, measurement of turf and other landscape area.
- Controller setting and water budgeting recommendations. Landscape consultations to include controller settings and operation, landscape design assistance, irrigation system upgrade and design advice, plant selection and cost estimates.

To further enhance the exterior landscape program, staff has proposed in the FY'06 budget that the City begin a pilot program in offering rebates to rate payers to purchase updated and more efficient automatic irrigation timers.

The program is marketed through media, billing inserts, promotional materials, public outreach events, speaker's bureau, and the City's web site. Upon implementation of the pilot program, the City will notify customers of its water survey program by including both interior and exterior water surveys.

[See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP's.](#)

The City has begun discussions and investigations on how it will plan and conduct the pilot program to cover both interior and exterior surveys. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

[See Attachment 2 – Pilot Project Implementation Schedule and Budget Estimates.](#)

2. Residential Plumbing Retrofit

The program includes the following actions:

- a. Retrofit kits will consist of high-quality, 2.5 gpm or less showerheads and 2.2 gpm or less faucet aerators.
- b. Distribution to not less than 10 percent of single-family and 10 percent of multi-family units each year, until 75 percent of single-family and 75 percent of multi-family units are retrofitted.
- c. Track the location, type and number of retrofits completed, devices distributed, and program costs.

The City will annually collect and submit the following information:

- a. The total number of non-retrofitted pre-1992 single-family residences and multi-family units.
- b. The number of retrofit kits distributed and installed during previous reporting period.
- c. The estimated percentage of pre-1992 single-family residences and multi-family units in service area fitted with low-flow showerheads and faucet aerators.

Free low flow shower heads and faucet aerators are available to City rate payers. These items are distributed based on consumer request and also during public outreach events. Recently, fewer requests for showerheads are being received from customers. This is due to the efficiency standards requiring that only low flow showerheads be sold in this country. Since 1993 the City has provided more than 120,000 showerheads to pre-1992 homes and currently more than 75% of pre-1992 homes have efficient showerheads. This BMP is complete.

The City will continue distributing free low flow shower heads and faucet aerators.

3. System Water Audits, Leak Detection, and Repair

The program includes the following actions:

- a. Annually complete a prescreening system audit to determine the need for a full-scale system audit. The prescreening system audit is calculated as follows:
 - 1) Determine metered sales.
 - 2) Determine other system verifiable uses.
 - 3) Determine total supply into system.
 - 4) Divide metered sales plus other verifiable uses by total supply into the system. If this quantity is less than 0.9, a full-scale system audit is indicated.
- b. When indicated, the City will complete a water audit of its distribution system using methodology consistent with that described in the American Water Works Association's (AWWA) Water Audit and Leak Detection Guidebook.
- c. The City also advises customers whenever it appears possible that leaks exist on the customer's side of the meter, performs distribution system leak detection when warranted and cost effective, and repairs leaks when found.

The City will annually collect and submit the following information:

- a. Prescreening audit results and supporting documentation.
- b. Maintain in-house records of audit results, or the completed AWWA audit worksheets for each completed audit period.

Water distribution data is compiled and compared. In 1998, approximately 60 miles of water mains were tested through a pilot detection program. At that time, few leaks were found. Staff is available to timely repair all reported leaks.

The City is currently reviewing new leak detection technology. A limited study was conducted in 2004 in a small area of an older section of Fresno with Permalog. No leaks were detected at that time. A full system audit will be conducted as soon as the City is fully metered. Older neighbors will be a priority. Increase in the priority of leak detection will be prioritized with the onset of the meter installation program begins 2008 and will be completed by 2013.

4. Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections (NOT EXEMPTIBLE)

The program includes the following actions:

- a. Install meters at new connections before those connections receive water.
- b. Install meters at existing unmetered connections at a consistent rate so all unmetered connections will be metered within the specified time stated in your contract.
- c. Bill all metered connections based on commodity rates.
- d. Conduct a study to identify any barriers or disincentives to retrofitting mixed-use commercial, industrial, and institutional (CII) accounts with dedicated landscape meters and assess the merits of a program to provide incentives to switch mixed-use CII accounts to dedicated landscape meters.

The City will annually collect and submit the following information:

- a. Confirmation that all new connections are metered and are being billed by volume of use.
- b. Total number of unmetered connections and number of previously unmetered connections which were metered during 1998 and 1999.
- c. Number of CII accounts with mixed-use meters.
- d. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.
- e. Impact of subsidized rates on water use.

The City currently installs, reads and bills commercial, industrial, institutional and multi-family meters. Regulations required all new houses have meters beginning Jan 1, 1992. The City has installed meters on all homes built since that time.

In compliance with AB2572, the city has an installation program and schedule in place to install meters on all existing customer properties currently without meters, and meter rates charged on or before 2013. Meter retrofit installations will begin about 2008.

See Attachment 3 City Meter Installation Plan
Metering Plan referred to as Exhibit C in the Long-Term Renewal Contract Between the United States and City of Fresno (Contract No. 14-06-200-8901-LTR1).

5. Large Landscape Conservation Programs and Incentives

The program includes the following components:

Customer Support, Education, and Assistance

Provide non-residential customers with support and incentives to improve their landscape water-use efficiency. This program will provide:

Accounts with Dedicated Irrigation Meters

- a. The landscaped area at accounts with dedicated irrigation meters will be measured and ETo-based water-use budgets equal to no more than 100 percent of reference ET per square foot of landscape area will be assigned to each account.
- b. Notices will be provided each billing cycle to accounts with water-use budgets showing the relationship between the budget and the actual consumption.

Mixed-Use Meters or Not Metered

- a. Mixed-use CII accounts with landscaping will be identified.
- b. A strategy targeting and marketing large landscape water-use surveys to accounts with mixed-use meters will be developed.
- c. Cost-effective measures will be identified and offered, such as:
 - 1) Landscape water-use analysis/survey.
 - 2) Voluntary water-use budgets.
 - 3) Installation of dedicated landscape meters.
 - 4) Training (multi-lingual, where appropriate) in landscape maintenance, irrigation system maintenance, and irrigation system design.
 - 5) Financial incentives to improve irrigation system efficiency such as loans, rebates, and grants for the purchase and/or installation of water-efficient irrigation systems.
 - 6) Follow up water-use analyses/surveys with a letter, phone call, or site visit, where appropriate.
- d. Survey elements will include: Measurement of landscape area; measurement of total irrigable area; irrigation system check and distribution uniformity analysis; review or develop irrigation schedules, as appropriate; and provision of a customer survey report and information packet.

New or Change of Service Accounts

New customers and change-of-service CII customer accounts will be provided information on climate-appropriate landscape design and efficient irrigation equipment/-management.

The City will annually collect and submit the following information:

Dedicated Landscape Irrigation Accounts

- a. Number of dedicated irrigation meter accounts.
- b. Number of dedicated irrigation meter accounts with water budgets.
- c. Aggregate water use for dedicated landscape accounts with budgets.
- d. Aggregate budgeted water use for dedicated landscape accounts with budgets.

Mixed-Use Accounts

- a. Number of mixed-use accounts.
- b. Number, type, and dollar value of incentives, rebates, and no- or low-interest loans offered to, and received by, customers.

- c. Number of surveys offered.
- d. Number of surveys accepted.
- e. Estimated annual water savings by customers receiving surveys and implementing recommendations.

The City has a Large Landscape Conservation Program which is staffed with two permanent Landscape Water Conservation Representatives, and available to the consumer. Surveys are offered and cost-effective measures recommended. The City primarily reaches its customers through advertising in billing inserts, conservation literature, speakers bureau, tours, web site, public outreach events. The City does have the ability to collect survey information for large landscapes. The City is currently survey landscape meter accounts to identify which serve one acre or more of landscape. The identified large accounts will receive water budgets over four years, beginning 2006.

Mixed Use Meters

- a. Identify mixed-use CII accounts with landscaping (Commercial Industrial survey records)
- b. Mixed –use water-use surveys are targeted and monitored primarily through the City’s customer water use database system. Large turf areas account for higher water use in most of the City’s mixed use accounts.
Marketing includes personal contact with prospective property owners after visual survey of the grounds. In the case of commercial properties with landscape features an interior survey is also offered.
- c. Cost-effective measures offered:
 1. Landscape water-use surveys include consultation, irrigation system efficiency rating using catch can distribution uniformity method, measurement of turf and other landscape area.
 2. Controller setting and water budgeting recommendations.
 3. Follow-up contact annually.
 4. Offer of sub-meter installation for landscape (property owner expense)
 5. Landscape consultations to include controller settings and operation, landscape design assistance, irrigation system upgrade and design advice, plant selection and cost estimates.

To further enhance the exterior landscape program, staff has proposed in the FY’06 budget that the City begin a pilot program in offering rebates to rate payers to purchase updated and more efficient automatic irrigation timers.

The program is marketed through media, billing inserts, promotional materials, public outreach events, speaker’s bureau, and the City’s web site. Upon implementation of the pilot program, the City will notify customers of its water survey program by including both interior and exterior water surveys.

See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP’s.

6. High-Efficiency Washing Machine Rebate Programs

The program includes the following components:

- a. Determination of whether local energy providers have a high-efficiency washing machine rebate program. Determination of cost-effective rebate amount.
- b. If cost-effective rebate is \$50 or more, establishment of a cooperative rebate program with energy providers.
- c. If cost-effective rebate is less than \$50, or local energy providers do not have a high-efficiency washing machine rebate program, information on high-efficiency washing machines (and, if appropriate, local energy provider rebate program) will be provided to customers
- d. Support for local, State, and Federal legislation to improve efficiency standards for washing machines.

The City will annually collect and submit the following information:

- a. Customer incentives to purchase high-efficiency washing machines being offered by local energy service providers, if any.
- b. Data to determine the amount of a high-efficiency washing machine incentive that would be cost effective for the City to provide its customers.

The Water Division does not currently have a formal high-efficiency washing Machine rebate program. The City has contacted PG&E and they do have a 2005 rebate program of \$35 to \$75. For a \$35 rebate (Level 1), the clothes washer must have a Modified Energy Factor (MEF) of 1.42-1.59 and a Water Factor (WF) of 9.5 or lower. For a \$75 rebate (Level 2), the clothes washer must have a MEF of 1.60 or greater and a WF of 8.5 or lower.

The City's current meter water rates are \$.616 per 1000 gallons of water used. An individual rate payer washing two loads per week in a 50 gallon per load standard top loading washing machine, will use approximately 5,200 gallons per year at a cost of approximately \$3.20 per year for water used. Incentives to purchase high-efficiency washing machines based on water cost savings may not be effective at this time. Water rates are currently under study by the City.

The City also participates in the Flex Your Power (FYP) program. A letter of support for the FYP program was sent by the City at the request of the California Urban Water Council. In April 2004, the California Water Awareness Campaign and the Flex Your Power energy efficiency program joined together to promote water and energy efficient appliances. Centered around Earth Day, over 40 water agencies, including the City of Fresno, participated in the project by choosing local non-profit organizations to receive new ENERGY STAR clothes washers and dryers

The City has begun discussions and investigations on how it will plan and conduct the pilot program. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

[See Attachment 4 – Exempt Analysis. Spreadsheet showing high-efficiency savings under current City rate structure.](#)

7. Public Information Programs

The program includes the following components:

Providing speakers to employees, community groups, and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote water conservation practices; and coordinating with other government agencies, industry groups, public interest groups, and the media.

The City will annually collect and submit the following information:

- a. Number of public speaking events relating to conservation during reporting period.
- b. Number of media events relating to conservation during reporting period.
- c. Number of paid or public service announcements relating to conservation produced or sponsored during reporting period.
- d. Types of information relating to conservation provided to customers.
- e. Annual budget for public information programs directly related to conservation.

The Water Division's public information program is managed in-house with the assistance of a contracted public relations firm. The firm's services include strategic planning, creative concepts, public relations, marketing, promotion, research, advertising, media placement, production and design, copy writing, event production and marketing and online services.

The City's public information program has many components including multi-media campaigns (paid and public service advertising); customer billing inserts; literature; public outreach activities, speakers bureau and inter-agency partnerships. Hmong and Spanish language is also utilized as is possible.

The City participates in *Water Awareness Month* activities through its affiliation with the Central Valley Water Awareness Committee, comprised of a number of public agencies and private companies.

The Water Division has informally kept records of these related activities. Beginning in the Year 2005, the Division will keep formal and accurate records of these activities for submittal. The annual budget for public information and education program budget is approximately \$200,000.

See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP's.

8. *School Education Programs*

The program includes the following components:

Working with public and private schools in the water suppliers' service area to provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. Education materials shall meet the State education framework requirements and grade-appropriate materials shall be distributed to grade levels K-3, 4-6, 7-8, and high school.

The City will annually collect and submit the following information:

- a. Number of school presentations made during reporting period.
- b. Number and type of curriculum materials developed and/or provided by water supplier, including confirmation that curriculum materials meet State education framework requirements and are grade-level appropriate.
- c. Number of students reached.
- d. Number of in-service presentations or teacher's workshops conducted during reporting period.
- e. Annual budget for school education programs related to conservation.

The City works with schools in the Fresno customer service area through its School Education Program. The Water Education Education Coordinator is a certified teacher on contract, who has developed the program and is available for presentations to students, teachers and community groups. Some education data is recorded.

Information for 2003-2004 follows:

- Number of school presentations made during reporting period: 23 Presentations
- Number and type of curriculum materials developed and/or provided by water supplier, including confirmation that curriculum materials meet State education framework requirements and are grade-level appropriate.

[See Attachment 5 – School Education Curriculum and Materials FY 2004.](#)

- Number of students reached: 659 Students
- Number of in-service presentations or teacher's workshops conducted during reporting period: One teacher workshop
- Annual budget for school education programs related to conservation: Contract salary plus other program expenses, \$50,546.81.

The program is marketed through media, billing inserts, promotional materials, public outreach events, speaker's bureau, and the City's web site. Upon implementation of the pilot program, the City will notify customers of its water survey program by including both interior and exterior water surveys.

[See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP's.](#)

9. Conservation Programs for CII Accounts

The program includes the following components:

- a. Identify CII customers by standard industrial classification (SIC) codes.
- b. Rank CII customers according to annual water use.
- c. Provide audits to the targeted number of CII accounts.
- d. Replace the targeted number of high-water-using toilets with ULFTs.
- e. Monitor the effectiveness of implemented audit recommendations.
- f. Identify incentives programs, which would encourage the implementation of cost-effective audit recommendations that were not implemented.

The City will annually collect and submit the following information:

- a. The number of customers and amount of water use within the CII customer classes.
- b. Number of CII customers offered a survey during the year.
- c. Number of CII surveys completed during the year.
- d. Number of follow-up audits completed during the year
- e. The type and number of water saving recommendations implemented.
- f. Incentive program budget and customer outlays.

The City currently has an Industrial/Commercial Water Conservation Representative Position, but it is vacant.

While the City does not aggressively market this service to its customers, should a request for survey be received, alternate staff is available to respond. Customers are notified of the availability of this program public outreach events, literature, speaker's bureau, and the City's web site. The City does identify customers according to classification and does rank the highest water users. A pilot program to determine the best implementation design for this BMP will be conducted in 2006.

[See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP's.](#)

The City has begun discussions and investigations on how it will plan and conduct the pilot program. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

[See Attachment 6 – Pilot Project Implementation Schedule and Budget Estimates, CII Accounts.](#)

10. Wholesale Agency Assistance Programs

The City is a retail water provider and exempt from BMP#10.

11. Conservation Pricing

The program includes the following components:

- a. Eliminating non-conserving pricing.
- b. Adopting conserving pricing.
- c. If City supplies both water and sewer service, this BMP applies to pricing of both water and sewer service.
- d. If City does not provide sewer service, it shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.
- e. The City's next rate study will include consideration of incentive-rate structures for all customer types: Seasonal rates; increasing block rates; connection fee discounts; grant or loan programs to help finance conservation projects; financial incentives to change landscapes; variable hook-up fees tied to landscaping; and interruptible water service to large industrial, commercial, or public customers.

The City will annually collect and submit the following information:

- a. Report annual revenue generated by customer class for the reporting period.
- b. Report annual revenue derived from commodity charges by customer class for the reporting period.
- c. Report rate structure by customer class for water service and sewer service, if provided.

Metered water customers (Multi-family, Commercial, Industrial, Municipal, Schools, and Irrigation), are billed a stand-by fee and water consumption per thousand gallons. The City converted from a declining block rate to a uniform rate for metered customers in the mid 1980's. Fixed costs for currently metered customers are included in standby charges.

Single Family Residential water users are billed bi-monthly on a flat rate by property size. Quantity based pricing for singly family residential accounts will be developed by 2007 per the USBR Water Contract.

[See Appendix G: Master Fee Schedule, Public Utilities Department – Water Rates pages 132 through 137.](#)

With City Council authorization, the City will conduct a rate study to provide a meter rate structure for all customers, including residential services.

The City has begun discussions and investigations on how it will plan and conduct the pilot program. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

[See Attachment 7 – BMP#11 Pilot Project Implementation Schedule and Budget Estimates for Conservation Pricing.](#)

12. Conservation Coordinator

The program includes the following components:

- a. Designation of a water conservation coordinator and support staff (if necessary), whose duties shall include the following:
 - 1) Coordination and oversight of conservation programs and BMP implementation.
 - 2) Preparation and submittal of Reclamation's Annual Update (CUWCC BMP Implementation Report).
 - 3) Communication and promotion of water conservation issues to agency senior management; coordination of agency conservation programs with operations and planning staff; and preparation of annual conservation budget.

The City will annually collect and submit the following information:

- a. Water conservation coordinator name, staff position, and years on job.
- b. Number of water conservation coordinator staff.
- c. Duties of water conservation coordinator and staff.

The City has a full-time position of Water Conservation Supervisor and eight permanent support staff. The water conservation coordinator and conservation staff address the water conservation needs for the City of Fresno. Results will be monitored by recording and reporting the preparation, implementation and evaluation of the conservation plan.

Water Conservation Supervisor: Nora Laikam, hired 3-22-04.

Position was created: 8/1/88

Support Staff:

Staff Assistant (1)

Water Conservation Representatives (2)

Landscape Conservation Representatives (2)

Administrative Clerk (1)

Education Coordinator - contracted (1)

Industrial Commercial Water Conservation Representative (1)

Seasonal temporary employees are hired from April to November (3)

Water Conservation budget FY'04: \$578,362.17

Water Conservation staffing budget FY'04: \$373,416.56

[See Attachment 8 – BMP #12 Water Conservation Job Position Specifications.](#)

13. Water Waste Prohibition

The program includes the following components:

Enactment and enforcement of a water waste ordinance prohibiting gutter flooding, single-pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

The City will annually collect and submit the following information:

- a. Number of customers contacted about water waste violations.
- b. Number of customers cited for repeat water waste violations.

The City prohibits water waste through ordinances found in Article 1, Water Regulations, Section 14-119 of the Municipal Code. The City keeps records of water waste violations. This ordinance prohibits gutter flooding and single-pass cooling systems in new connections.

Two Water Conservation Representatives monitor customer water waste through field operations. Communication to Fresno's diverse customer base is always taken into consideration, so our representatives are bilingual and also speak either Hmong or Spanish. During the hot season, two to four temporary Water Conservation Representatives are hired to monitor late night and early morning over watering. A seasonal temporary Administrative Clerk is also hired to keep up with the additional paperwork generated.

[See Appendix A – City Municipal Code, Article 1, Water Regulations, Section 14-119.](#)

The program is marketed through media, billing inserts, promotional materials, public outreach events, speaker's bureau, and the City's web site. Upon implementation of the pilot program, the City will notify customers of its water survey program by including both interior and exterior water surveys.

[See Attachment 1 – Customer Communication: Examples of communication opportunities and promotional materials currently used or available marketing programs for all BMP's.](#)

14. Residential ULFT Replacement Programs

The program includes the following components:

- a. Implementation of programs for replacing existing high-water-using toilets with ULFT (1.6 gallons or less) in single-family and multi-family residences.
- b. Programs shall be at least as effective as requiring toilet replacement at time of resale.

The City will annually collect and submit the following information:

- a. The average number of toilets per single-family and multi-family unit.
- b. The average persons per household for single-family residences and for multi-family residences.
- c. The housing resale rate for single-family and multi-family residences in service area.
- d. The number of ULFT installations credited to the agency's replacement program, by year.
- e. Estimated cost per ULFT replacement.
- f. Estimated water savings per ULFT replacement.

The City does not currently have a residential ULFT Replacement Program in place. Staff is proposing that the City begin a pilot program in 2006 offering rebates to rate payers to purchase ULFTs. The City will develop a more extensive program concurrent with its meter installation Program. The City anticipates that as meter installations begin in 2008, and the rate structure is reviewed, it will be easier to market this service to rate payers.

The City has begun discussions and investigations on how it will plan and conduct the pilot program. The City will contact the California Urban Water Council for assistance to help set up the pilot program. The City will also ask USBR to review its pilot study plan.

See Attachment 9 – BMP#14, Pilot Project Implementation Schedule and Budget Estimates. for Residential ULFT Replacement Program.

Actual Current Year Budget and Staff Time Summary

Year <u>2005</u>		Actual
<u>BMP #</u>	<u>BMP Name</u>	<u>Budget</u>
1	Residential Water Audits	\$0
2	Residential Retrofit	Complete
3	System Water Audit and Leak Detection	Not WC budget
4	Metering w/Commodity Rates	\$0
5	Landscape Water Audits	\$70,205
6	Washing Machine Rebates	\$0
7	Public Information	\$200,000
8	School Education Program	\$45,811
9	CII Conservation Programs	\$16,384
10	Wholesale Agency Programs	\$0
11	Conservation Pricing	\$0
12	Conservation Coordinator	\$63,000
13	Water Waste Prohibition	\$145,039
14	ULFT Program	\$0
	Total	\$540,465

Projected Budget and Staff Time Summary

Year <u>2006</u>		Proposed
<u>BMP #</u>	<u>BMP Name</u>	<u>Budget</u>
1	Residential Water Audits	\$6,000
2	Residential Retrofit	Complete
3	System Water Audit and Leak Detection	Not WC budget
4	Metering w/Commodity Rates	\$0
5	Landscape Water Audits	\$50,000
6	Washing Machine Rebates	\$0
7	Public Information	\$200,000
8	School Education Program	\$46,000
9	CII Conservation Programs	\$8,000
10	Wholesale Agency Programs	\$0
11	Conservation Pricing	\$0
12	Conservation Coordinator	\$63,000
13	Water Waste Prohibition	\$145,000
14	ULFT Program	\$17,400
	Total	\$535,400

Projected Budget and Staff Time Summary

Year <u>2007</u>		Proposed
<u>BMP #</u>	<u>BMP Name</u>	<u>Budget</u>
1	Residential Water Audits	\$24,000
2	Residential Retrofit	Complete
3	System Water Audit and Leak Detection	Not WC budget
4	Metering w/Commodity Rates	\$0
5	Landscape Water Audits	\$70,000
6	Washing Machine Rebates	\$0
7	Public Information	\$200,000
8	School Education Program	\$46,000
9	CII Conservation Programs	\$15,000
10	Wholesale Agency Programs	\$0
11	Conservation Pricing	\$0
12	Conservation Coordinator	\$63,000
13	Water Waste Prohibition	\$145,000
14	ULFT Program	\$87,000
	Total	\$600,000

Projected Budget and Staff Time Summary

Year <u>2008</u>		Proposed
<u>BMP #</u>	<u>BMP Name</u>	<u>Budget</u>
1	Residential Water Audits	\$43,000
2	Residential Retrofit	Complete
3	System Water Audit and Leak Detection	Not WC budget
4	Metering w/Commodity Rates	\$0
5	Landscape Water Audits	\$70,000
6	Washing Machine Rebates	\$0
7	Public Information	\$200,000
8	School Education Program	\$46,000
9	CII Conservation Programs	\$15,000
10	Wholesale Agency Programs	\$0
11	Conservation Pricing	\$0
12	Conservation Coordinator	\$50,000
13	Water Waste Prohibition	\$145,000
14	ULFT Program	\$180,000
	Total	\$606,000

See Attachment 10 – City of Fresno
 2003 Connection and Water Use Data
 2004 CUWCC BMP Actual Implementation
 2005 CUWCC BMP Implementation Plan
 2006 CUWCC BMP Implementation Plan
 2007 CUWCC BMP Implementation Plan