California Public Utilities Commission

Report to Legislature

Progress and Achievements Towards Water Conservation Goals Public Utilities Code § 2714.5

June 2008

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I. Executive Summary

Public Utilities Code (Pub. Code) Section 2714.5 requires that the California Public Utilities Commission (Commission) report to the Legislature, by June 30, 2008, on progress toward the development and implementation of select water conservation policy objectives contained in the Water Action Plan, adopted in December 2005. Section 2714.5 requires a report on the:

1. The progress achieved towards the development and implementation of ratemaking mechanism and rate design that encourages conservation and efficient water use;
2. The progress achieved toward development and implementation of rates that remove the financial disincentive for water corporations to conserve water that exists in the current rate structure, while preserving continued revenue stability for water corporations as new rate structures are implemented; and
3. The impacts of water conservation and efficiency programs on future water, energy, and wastewater treatment costs to customers of water corporations.

The Commission has made progress towards instituting pricing structures (rate designs) to encourage water conservation. In addition, the Commission has adopted financial mechanisms to decouple water sales from revenues in order to remove the financial disincentives for water utilities to implement water conservation rates. This helps to preserve revenue neutrality for the water utilities.[1] A more detailed discussion of the recently adopted water conservation rates and the financial mechanisms is provided in Section II of this report.

The effect of water conservation programs on water, energy, and wastewater costs to ratepayers is currently being addressed in two Commission proceedings:

1. Order Instituting Investigation (I.) 07-01-022 (Water Conservation OII), and
2. Order Instituting Rulemaking (R.) 06-04-010.

Commission Decision (D.) 08-02-036 in I.07-01-022 authorized modified cost balancing accounts (MCBA), in which the utility records the increase or decrease of purchased water, purchased power, and pump tax, since the utility's last general rate case. The MCBA makes the

[1] Commission D.08-02-036 authorized conservation rates and revenue adjustment mechanisms for California Water Service, Park Water, and Suburban Water (rate design only). A decision is expected shortly for Golden State Water and San Jose Water. See http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/79434.htm

utility whole if costs go up and allows for any reduction in these costs to be passed on to the ratepayers. In R.06-04-010[2] and associated applications,[3] pilot programs currently in progress between Commission regulated energy utilities and municipal water providers, will provide measures of water-related energy savings not currently undertaken by either water or energy utilities, as well as the associated costs of these endeavors. The Commission is also working closely with other state agencies to achieve these vital conservation goals.

II. Conservation Rate Design and Financial Incentive to Conserve

A. Overview

On January 11, 2007, the Commission opened I.07-01-022 to consider rate designs, recovery mechanisms, and policies to achieve the Commission's conservation objectives for Class A water utilities.[4] Class A utilities deliver 95% of the water distributed by utilities regulated by the Commission. The Water Conservation OII was specifically opened to study and address policy issues related to the implementation of increasing block rate designs, Water Revenue Adjustment Mechanisms (WRAM), rebates and customer education, conservation cost memorandum accounts, and water rationing programs. The Water Conservation OII is divided into two phases - Phase I is focused on addressing water conservation rates and cost recovery mechanisms for residential customers,[5] and Phase II will address non-rate related conservation measures.

B. Water Conservation Rate Designs Authorized – Class A Water Utilities

In February 2008, the Commission adopted water conservation rate design programs for California Water Service Company (Cal Water), Park Water Company (Park), and Suburban Water Systems (Suburban), and is currently reviewing similar programs for San Jose Water Company (San Jose) and Golden State Water Company (Golden State).[6] As part of a separate proceeding, in June 2008, the Commission adopted a water conservation rate design program for

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[2] Per Assigned Commissioners Ruling and Scoping Memo dated May 24, 2006. http://docs.cpuc.ca.gov/published/proceedings/R0604010.htm

3 A. 07-01-024, -026, -029, and -030. For example, http://docs.cpuc.ca.gov/published/proceedings/A0701024.htm

4 Class A water utilities are utilities that serve 10,000 customers or more.

5 Increasing block rates for non-residential customers will be addressed in the investor-owned class A water utilities' next General Rate Cases. Non-residential conservation rates were adopted for California Water Service Company.

6 D.08-02-036 in I.07-01-022.

California American's Los Angeles District (Cal Am LA).[7]

This summer, Cal Water anticipates rolling-out the adopted water conservation rates for most of its 460,000 residential and non-residential customers throughout its service territory[8]. Suburban anticipates implementing its residential water conservation rates late this summer in the service areas of San Jose Hills and Whittier/La Mirada, serving approximately 75,000 customers. Park, which serves approximately 27,000 customers, anticipates implementing its water conservation rates this Fall in its Central Basin Division area which includes portions of Norwalk, Bellflower, Compton, Lynwood, Artesia, Santa Fe Springs, and some unincorporated Los Angeles County areas. A Commission decision on the conservation rate design settlement agreements for San Jose and Golden State water companies is expected by Fall of 2008. Approximately 27, 200 customers are served in Cal Am's LA district, which includes the San Marino, Duarte, and Baldwin Hills service areas.

The adopted water conservation rate design programs will be re-evaluated in the next General Rate Case (GRC) for each water utility. The Commission also plans to address the following water conservation related issues in each of the above referenced water utilities' next GRC:

1. Expanding the conservation rate designs to non-residential customer classes;
2. Providing financial incentives for utilities that meet the conservation targets;
3. Developing plans to transition from flat to metered rates;
4. Increasing the break points between tiers; and
5. Setting the first tier break point closer to average winter consumption.

1. Block and Tier Rate Design

The conservation rates adopted in D.08-02-036 were negotiated in multi-party settlement agreements. Parties involved in the OII and settlement agreements included many of the Class A water utilities, the Division of Ratepayer Advocates (DRA), The Utility Reform Network (TURN), Latino Issues Forum (LIF), Disability Rights Advocates, Consumer Federation of California(CFC), National Consumer Law Center (NCLC) and other interested parties.

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7 D.08-06-002 in A.06-01-005.

[8] Conservation rates will not be implemented in Kern River Valley, Redwood Valley, and the Fremont Valley sub-district in Antelope Valley. Districts in which conservation rates will be implemented include Antelope Valley (partial), Bakersfield, Bayshore, Bear Gulch, Chico, Dixon, East Los Angeles, Livermore, Los Altos, Marysville, Oroville, Ranch Dominguez, Salinas, Stockton, Visalia, Westlake, and Willows.

The Commission approved increasing block or tier rate structures that are intended to provide economic incentives for customers to conserve. In the adopted block or tier rate structure, the cost per unit of water increases to a second or third tier price that is set at specific level(s) of water usage.[9] The second and third tiers equate to higher consumption of water. The basic economic principle is to provide customers with an economic incentive to reduce their water consumption by charging them a lower rate in the first tier, and an increased rate (e.g. 10% to 15% higher) at the upper tiers. The Commission did not prescribe the specific tier levels or price differentials; instead it allowed the parties to negotiate the tier levels and rate differentials. Given the revenue neutrality of the negotiated rates, the adopted rates in general provide a reduced rate for water (per unit cost) in the first tier and/or reduced fixed charge and an increased price in the upper tiers.

The conservation rate design adopted for Cal Am LA district was also reached via a settlement between the DRA, the City of Duarte, and California American. The Commission approved an increasing block or tier rate structures, in which the cost per unit of water increases to a second and third tier price that is set at specific level(s) of water usage.[10] The second and third tiers equate to higher consumption of water. As with the tiered rate design of the other Class A water utilities discussed above, this tiered rate design, as well as a seasonal adder during the summer months, provides customers with an economic incentive to reduce their water consumption by charging them a lower rate in the first tier, and an increased rate (e.g. 10% to 25% higher) at the upper tiers

More detailed information about the adopted conservation rates, tier levels, implementation areas and dates is provided in Attachment A.

2. Financial Mechanisms Decouple Sales from Revenues

The Commission adopted financial mechanisms for Cal Water, Park, Suburban, and Cal Am's LA district, which include the Water Revenue Adjustment Mechanism (WRAM) and Modified Cost Balancing Account (MCBA), to decouple water sales from revenues and remove the financial disincentives for investor-owned water utilities to institute the water conservation rates. Under the authorized WRAM, utilities are made whole for any revenue shortfalls from

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[9] The tier levels are set by specific regions and customer consumption patterns in those regions.
10 D.08-06-002, p.9.

authorized revenues that result from water conservation by their customers. More specifically, the WRAM allows for recovery or crediting of differences between actual and adopted quantity charge revenues. The MCBA financial mechanism provides for recovery or crediting of differences between actual and variable costs associated with purchased power, purchased water, and pump tax.

C. Interim Water Conservation Targets Adopted - 3%-6% Reductions

The Commission's Water Action Plan recommended means to achieve the stated objective of strengthening water conservation programs to a level comparable to those of energy utilities, and the OII expanded upon this principle. The Commission's 3%-6% water conservation interim target was set after reviewing the water conservation goals of a number of California municipal utilities,[11] and comparing their objectives with those of Utah's and Southern Nevada's Water Authorities. The Commission focused on urban water programs that express a non-drought conservation objective as a percentage reduction in water consumption, either per capita or overall objective. The Commission found that conservation goals generally ranged from 12.5% to 25.0% over a varying number of years, and that the range was consistent with published literature that indicates that a 10%-20% reduction can be achieved over 10 to 20 years from carefully designed conservation programs.[12] The Commission plans to examine water conservation targets in Phase II of the I.07-01-022, as well as application of the conservation targets to all customer classes.

On February 29, 2008, Governor Schwarzenegger proposed a water conservation plan to achieve a 20% reduction in per capita water use statewide by 2020. The Commission will continue to monitor, respond to, and incorporate the Governors proposals into Commission policies and proceedings, in order to meet these vital water conservation goals.

III. Water Conservation Program Costs

D. Introduction

The effect of water conservation programs on water, energy, and wastewater costs to ratepayers is currently being addressed in both water and energy utility proceedings. These proceedings, as well as the Commissions coordinated effort with other state agencies, have

[11] Santa Clara Valley Water District, Eastern Municipal Water District, and East Bay Municipal Utility District.
12 William Maddaus, Gwendolyn Gleason, and John Darmody, Integrating Conservation into Water Supply Planning, p.1.

resulted in significant progress towards improving water conservation and efficiency by private water utilities in California, thereby reducing water, energy, and wastewater consumption as well as reducing greenhouse gas emissions, through the implementation of: 1) pilot water conservation programs within energy utility efficiency programs; 2) Water Conservation OII; 3) participation in Water Energy Team (WET) and Climate Action Team (CAT); and 4) participation in Delta Vision Initiative.

E. Energy Utility Proceedings

In R.06-04-010[13] and associated applications,[14] the Commission is evaluating pilot programs, currently in progress between Commission regulated energy utilities and municipal water providers that provide water-related energy savings. These types of energy saving efforts have not been generally undertaken by either water or energy utilities.

In D.07-12-050, "Order Approving Pilot Water Conservation Programs within the Energy Utilities' Energy Efficiency Programs", issued in December 2005,[15] the Commission authorized approximately $6.4 million to fund programs, evaluations, and studies to be undertaken by the energy investor owned utilities (energy IOUs).[16] The purpose of these studies is to determine the most cost-effective means for achieving energy savings from water conservation and efficiency, and will be used by the Commission in the development of optimal policies for reducing water, energy, and wastewater costs for the regulated utility customers of California.

These studies, which will run from July 2008 to July 2009, are currently in the initial stages, with a Final Evaluation Report in January 2010. The pilot studies will include but not limited to an assessment of - recycled water, high-efficiency toilets, managed landscape, large industrial customer audits, and gas pump testing. The studies will address statewide/regional water-energy relationships and a water agency/function component.[17]

An additional outcome of this proceeding has been the coordinated effort of regulated energy and water utilities in the development and demonstration of energy efficiency projects in

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[13] Per ACRSM dated May 24, 2006.

14 A. 07-01-024, -026, -029, and -030.

15 D. 07-12-050 in A.07-01-024, -026, -029, and -030, COMMISSION, "Order Approving Pilot Water Conservation Programs Within The Energy Utilities' Energy Efficiency Programs". http://docs.Commission.ca.gov/PUBLISHED/FINAL_DECISION/76926.htm

16 The energy IOUs are Pacific Gas & Electric, San Diego Gas & Electric, Southern California Gas, and Southern California Edison.

17 Study will include a redefined Load Profile Study designed to establish annual and daily load profiles for energy as a function of water delivery requirements in California.

water distribution systems across the state. For example, the regulated energy and water utilities have discussed the deployment of variable frequency drive motors for water pumps, in order to determine possible energy efficiency gains. As a result, a request is pending in this proceeding for additional funding to support eight such pilot programs at six regulated water utilities.

F. Water Utility Proceedings

As stated earlier, in Phase I of the water conservation OII, the Commission authorized a MCBA, in which the utility records the increase or decrease of purchased water, purchased power, and pump tax, since the utility's last general rate case. The MCBA makes the utility whole if costs go up and allows for any reduction in these costs to be passed on to the ratepayers.

In February 2008, the Assigned Commissioner issued a scoping memo for Phase II of the water conservation OII, outlining a number of the non-rate design issues that the Commission is interested in addressing, including issues identified by parties to the proceeding.[18] The scope of Phase II will include but not be limited to the following water conservation related issues: 1) implementation of Best Management Practices (BMPs);[19] 2) water conservation goals for Class A water utilities; 3) establishing performance metrics and reporting requirements for price and non-price conservation programs; 4) integrated water resource management; 5) advanced metering programs and billing; and 6) water shortage event planning.

Since the Commission is currently receiving comments from parties regarding the proposed issues to be addressed in Phase II and the issues have not been finalized, further detail is not available at this time.

G. Coordination with Other State Agencies

The Commission is an active member of the WET CAT Team (WET CAT), one of about a dozen Climate Action Teams (CAT) working towards the common goal of reducing energy consumption from fossil fuels, thereby reducing greenhouse gas emissions (GHG).[20] The WET CAT is proposing five strategies for private and public water systems: 1) Water Recycling;

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18 Division of Ratepayer Advocates (DRA), The Consumer Federation of America, Disability Rights Advocates, Latino Issues Forum, National Consumer Law Center, and The Utility Reform Network.

19 The Commission is considering whether to require Class A water utilities to implement the California Urban Water Conservation Council recommended BMPs.

20 The Climate Actions Teams, including WET CAT, are comprised of various state agency representatives, with an objective of recommending policies for the California Air Resources Board (CARB) to implement for achieving the goals of AB 32, the California Global Warming Solutions Act of 2006. The primary goal of AB 32 is a 25 percent GHG emission reduction by 2020, and an 80 percent GHG emission reduction by 2050.

2) Urban Water Reuse; 3) End Use Water Conservation and Efficiency; 4) Reducing Energy Intensity of Water Systems; and 5) Increasing Renewable Energy Production.

The California Air Resources Board (CARB) will issue the public scoping plan containing the strategies of the various CAT groups, including WET CAT, in late June 2008. The Commission will ensure that California's privately-owned water utilities implement the strategies identified above, as well as all other strategies ultimately adopted by CARB. These strategies are also expected to reduce water, energy, and wastewater costs.

The Commission is also active in the Delta Vision Initiative, [21] working with other state agencies to address policies and programs which can prevent and mitigate a catastrophic event in the Delta[22].

The Commission also co-sponsored[23] a symposium entitled "Improving the Efficiency of California Water and Energy Systems" in March 2006, in which public and private sector experts discussed policies and technologies which could achieve energy savings with water conservation and efficiency.[24] In January 2007, the Commission and the Low-Income Oversight Board (LIOB) co-hosted a panel discussion addressing the synergies between water and energy conservation.[25] The panels consisted of representatives from both regulated and municipal water and energy utilities.

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[21] Commission President, Michael Peevey, is a member of the Delta Vision Committee.
22 Located between Sacramento and Stockton that includes approximately 1,000 miles of waterways.
23 The co-sponsors were the California Energy Commission, Department of Water Resources, and California Independent System Operator.
24 Commission's , "Improving the Efficiency of California Water and Energy Systems", http://www.Commission.ca.gov/PUC/Water/WaterEvents/mtgdocs/060328SymposiumPresentations.htm, 3/28/06.
25 "The Synergies of Water and Energy Conservation: A Panel Discussion", Low Income Oversight Board Meeting of January 2007. ftp://ftp.Commission.ca.gov/puc/water/waterevents/Commission_liob_panel_discussion_notice.pdf or http://www.liob.org/resultsmt.cfm?meetingtype=Board%20Meeting (see January 17, 2007 Meeting, Agenda Items #10 for Presentations).

IV. Summary & Conclusions

The Commission has achieved material progress in instituting pricing structures to encourage water conservation through its authorization of water conservation rate design programs for several Class A water utilities which will be implemented this year. The Commission has also approved mechanisms that remove the financial disincentives for water utilities to implement water conservation rates and preserve revenue neutrality.

The Commission has adopted an interim water conservation target for Class A water utilities of 3%-6% reduction per customer or service connection every three years. This target will help achieve significant water use reductions and it is in alignment with Governor Schwarzenegger's proposed water conservation plan to achieve a 20% reduction in per capita water use statewide by 2020.

In Phase II of the Commission's Water Conservation OII, the Commission will continue developing and advancing water conservation policies. The Commission will address non-rate design water conservation measures, such as implementing Best Management Practices (BMPs), establishing performance metrics and reporting requirements for price and non-price conservation programs, integrated water resource management, advanced metering programs and billing, and water shortage event planning.

Attachment A

Summary of Water Conservation Rate Design Programs
Class A Water Utilities

Description	California Water Service	Park Water	Suburban Water	California American Los Angeles	San Jose Water*	Golden State Water*
Residential Conservation Rates	✓	✓	✓	✓	✓	✓
Two-Tier	✓	✓	✓		✓	✓
Three-Tier	✓			✓		
Non-Residential Conservation Rates	✓	✓			✓	✓
Water Rate Adjustment Mechanism	✓	✓	✓	✓	✓	✓
Modified Cost Balancing Account	✓	✓		✓		✓
Customer Education & Outreach Programs	✓	✓	✓	✓	✓	✓
Program Reporting	✓	✓		✓	✓	✓

Notes: ✓ Signifies the program components that are included in the water utility's conservation program.
* The water conservation rate design programs for Golden State Water and San Jose Water are currently under review by the Commission.

Attachment A

California Water Service Company
Adopted Conservation Rate Design Program[1]

<table>
<tr><th colspan="2">Residential Conservation Rates</th><th>Non-Residential Conservation Rates</th></tr>
<tr><td colspan="2">1) Two and three tier rate pricing structure;
2) Tier rates are revenue neutral;
3) Cal Water divided its 24 districts into 3 groups.
4) Group 1 and 2 have two and three tiered rates based on consumption patterns and seasonality for each district.</td><td>Non-residential customers are categorized into two groups:
1) customers with meters 6” diameter and under;
2) customers with meters 8” diameter and over;</td></tr>
<tr><th>Three-tiered rate design & districts</th><th>Two-tiered rate design & districts</th><th>Single Quantity conservation Rate</th></tr>
<tr><td>✓ Districts that have significant seasonal differences--the average summer use is twice the average winter use;

✓ Tier 1 consumption level is set from zero to the midpoint between average and median winter consumption;

✓ Tier 1 rate is a discounted single quantity rate;

✓ Tier 2 consumption level is set from the top of Tier 1 to the mid-point between weather adjusted average monthly annual consumption and average summer consumption;

✓ The Tier 2 rate is set by adjusting the single quantity charge up or down to achieve revenue neutrality;

✓ Tier 3 consumption level is from the top of Tier 2;

✓ Tier 3 rate is 20% above the tier 2 rate.</td><td>✓ Districts with less significant seasonal differences—the average summer use is less than twice the average winter use;

✓ Tier 1 consumption level is set from zero to the winter average use;

✓ Tier 1 rate is a discounted single quantity rate and varies by district ranging from 89.75% and 92.1% of the single quantity rate;

✓ Tier 2 all consumption above Tier 1;

✓ The Tier 2 rate is approximately 18% to 20% greater than the first tier rate;</td><td>✓ The Tier rate structure was not feasible for non-residential customers because it requires reclassification of customer classes and customer water consumption data not available;

✓ Single quantity conservation rate with reduced service charge and increased quantity charge for revenue neutrality

✓ Service charges were reduced by approximately 10% to 25%;

✓ Service charge reductions were calculated by reducing the meter charge to a point where no more than a 15% increase in the quantity rate;</td></tr>
</table>

[1] Source of information: June 15, 2007 amended settlement agreement between The Utility Reform Network (TURN), Division of Ratepayer Advocates (DRA), and California Water Service Company.

Attachment A

California Water Service Company
Ratemaking Grouping

Cal-Water provides water service to 24 districts. For the water conservation rate design, districts were separated into 3 groups.

Group 1		Group 2A		Group 2B		Group 3
Residential	**Non-Residential**[2]	**Residential**	**Non-Residential**	**Residential**	**Non-Residential**	**Residential**
Districts with reduced meter charge and 2 or 3 tier quantity rates	Single quantity conservation rate with reduced service charge and increased quantity charge for revenue neutrality	Districts with 2 or 3 tier quantity rates, flat and metered customers	Single quantity conservation rate with reduced service charge and increased quantity charge for revenue neutrality	Districts with 2 or 3 tier quantity rates, all metered customers	Single quantity conservation rate with reduced service charge and increased quantity charge for revenue neutrality	Districts with no tier rates due to: 1)small number of customers with low consumption levels; 2)Existing single quantity rate is high; 3)Commission adopted Rate Support Fund (RFS);
Bakersfield	Bakersfield	Chico	Chico	Antelope Valley		Antelope Valley
Bear Gulch	Bear Gulch	Marysville	Marysville	Lancaster		Fremont
East Los Angeles	East Los Angeles			Leona		Kern River
Los Altos	Los Altos			Dixon	Dixon	Redwood
Palo Verdes	Palo Verdes			Dominguez		Coast Springs
Salinas	Salinas	Willows	Willows	Hermosa		Lucerne
Stockton	Stockton			King City	King City	United
	Oroville	Oroville		Livermore		
	Selma	Selma		Mid Peninsula		
	Visalia	Visalia		So. San Francisco		
	Lancaster			West Lake		
	Leona					
	Dominguez					
	Hermosa					
	Livermore					
	Mid Peninsula					
	So. San Francisco					
	West Lake					

[2] Non-residential Group 1 districts consists of districts where more than 70% of the revenue comes from the quantity charge and non-residential group 2 where less than 70%.

Attachment A

California Water Service Company

Financial Mechanisms	
Water Revenue Adjustment Mechanism (WRAM)	**Modified Cost Balancing Account (MCBA)**
✓ Each ratemaking area has a separate WRAM; ✓ WRAM tracks the difference between adopted revenue and actual revenue excluding: fire service revenue; un-metered service revenue; and other non-general metered service revenue. ✓ WRAM ensures recovery of fixed costs that are recovered through the quantity charge and variable costs not included in the MCBAs. ✓ WRAM includes variable costs other than purchased power, purchased water, and pump tax. ✓ Fixed costs excluded from WRAM are recovered through the meter charge, which are monthly charges that customers pay regardless of consumption.	✓ MCBAs capture cost savings and increases associated with purchased water, purchased power, and pump taxes. ✓ MCBAs track the difference between actual and adopted variable costs for costs that are recovered via the quantity charge for purchased water, purchased power, and pump tax. ✓ MCBAs will replace the Cal-Water's Incremental Cost Balancing Accounts (ICBAs)

Attachment A

California Water Service Company

Customer Education	Program Reporting
✓ Conservation rate information notices will be provided in English, Spanish, and in other languages prominently used by its customers on its website in the same languages. ✓ Cal Water agrees to use accessible means of communication to meet the needs of hearing and/or vision-impaired customers while meeting with disability rights advocates to determine the best way to make this information accessible to customers with disabilities. ✓ Cal Water will provide a notice to Community Based Organizations (including organizations representing the interests of persons with disabilities) within its service areas so that they can publicize the conservation rate design. ✓ Cal Water will submit copies of the customer notices to the Division of Ratepayer Advocates for comment prior to distribution. ✓ Customer education and outreach program will be memorialized in a Memorandum of Understanding.	✓ Cal Water will report to the Commission regularly on changes in consumption after the effective date of the conservation rates. ✓ The reporting details the changes by class and by meter size.

Attachment A

Park Water Company
Pilot Conservation Rate Design Program

Residential Conservation Rates	Non-Residential Conservation Rates
✓ Two tiered increasing block pricing structure for quantity/volumetric rates; ✓ Tier rates are revenue neutral; ✓ Tier 1 consumption level is set from zero units to the median and the average winter consumptions (proxy for indoor water use); ✓ Tier 2 – All consumption above Tier 1. ✓ Tier 1 rate is approximately 96.5% of the single quantity rate structure; ✓ Tie2 rate is approximately 10% higher than tier 1.	✓ Single quantity rate structure; ✓ Revenue neutral; ✓ Service charge was reduced by approximately 18% and the single quantity charge by approximately 8%. ✓ 75% of total revenues (excluding revenues from fees, fire protection service and temporary service) are recovered from the quantity charge.

Attachment A

Park Water Company
Financial Mechanisms

Financial Mechanisms	
Water Revenue Adjustment Mechanism (WRAM)	**Modified Cost Balancing Account (MCBA)**
✓ Each ratemaking area has a separate WRAM; ✓ WRAM tracks the difference between adopted revenue and actual revenue excluding: fire service revenue; un-metered service revenue; and other non-general metered service revenue. ✓ WRAM ensures recovery of fixed costs that are recovered through the quantity charge and variable costs not included in the MCBAs. ✓ The revenue tracked in the WRAM associated with the variable costs of purchased power, purchased water, and pump tax is offset by the MCBAs. ✓ Fixed costs excluded from WRAM are recovered through the meter charge, which are monthly charges that customers pay regardless of consumption. ✓ More specifically, the WRAM will track the difference between Adopted Revenue and Actual Revenue, excluding revenue from: Fire service; Un-metered Service; Reclaimed Water metered service; and Fees (reconnection fees, late fees, etc.)	✓ MCBAs capture cost savings and increases associated with purchased water, purchased power, and pump taxes. ✓ In particular, the MCBAs will track the difference between Actual Variable Costs and Adopted Variable Costs for the following variable costs (which are recovered through the quantity charge under both the current and proposed rate designs): purchased water, purchased power, and pump tax. ✓ An MCBA will replace each of the current balancing accounts, now referred to as Incremental Cost Balancing Accounts (ICBAs), which is better because MCBAs track cost changes attributable to all changes in consumption (including changes in unit price).

Attachment A

Park Water Company

Customer Education	Program Reporting
✓ Park agrees to work with DRA and other consumer organizations to develop a customer education and outreach program associated with implementing the new conservation rate design. ✓ The program will include notices in English, Spanish, and in other languages prominently used by Park customers along with conservation rate information available on its website in the same languages. ✓ Park agrees to use accessible means of communication to meet the needs of hearing and/or vision-impaired customers while meeting with disability rights advocates to determine the best way to make this information accessible to customers with disabilities. ✓ Park will provide a notice to Community Based Organizations (including organizations representing the interests of persons with disabilities) within its service areas so that they can publicize the conservation rate design. ✓ Park will submit copies of the customer notices to the Division of Ratepayer Advocates for comment prior to distribution.	✓ Park reached a settlement on Data collection, Monitoring, and Reporting which was adopted by the Commission. It calls for annual reporting to the Commission through a supplement to the Annual Report. ✓ The consumption will be tracked but, because Park is implementing other conservation programs to comply with the BMPs and our membership in the CUWCC, it will be difficult to impossible to determine precisely how much of the conservation response is due to the rate design and how much to other programs, including the customer information/outreach.

Attachment A

Suburban Water Systems
Adopted Pilot Conservation Rate Design Program[3]

Residential Conservation Rates	Service Area
✓ Two tiered increasing block pricing structure for quantity rates with tier breakpoints set by meter size; ✓ Suburban's rate design maintains the existing 3 zone rate differential in its service area to reflect variances in pumping costs associated with providing service to higher elevations; ✓ Block rates are revenue neutral based on 2006 revenue requirement; ✓ Block rates are based on seasonality (winter and summer) and consumption in each ratemaking area using 2006 calendar year customer consumption usage data; ✓ Service charges remain unchanged for all customer classes; ✓ Block 1 consumption level is set from zero units to the mid-point between average monthly consumption over an entire year and the average summer consumption. ✓ Block 2 – All consumption above Block 1, which is set at consumption greater than the summer average consumption. ✓ Block 1 rate is decreased approximately 2.0% for San Jose Hills and 2.5% for Whittier/La Mirada; ✓ Block2 rate for the various elevation zones are 8.0% to 14.0% higher than Block 1 rates based on consumption patterns and meter size.	✓ Suburban serves approximately 75,000 customers in the service areas of Whittier/La Mirada, and San Jose Hills; ✓ Water conservation rates are applicable to residential customers only; ✓ Suburban will propose conservation rates for other customer classes in their next General Rate Case;

[3] Source of information: April 24, 2007 motion of Division of Ratepayer Advocates and Suburban Water Systems to approve the settlement agreements.

Attachment A

Suburban Water Systems

Water Revenue Adjustment Mechanism (WRAM)	Customer Education & Outreach
✓ Each ratemaking area (Whittier/La Mirada and San Jose Hills) will have a separate WRAM; ✓ WRAM will track the differences between the revenues for actual metered sales at the block volumetric rate, and the uniform single quantity rates on a monthly basis; ✓ WRAM under-collections or over-collection will be passed on to ratepayers through surcharge or surcredit; ✓ Suburban's WRAM does not completely de-couple water revenues from sales;	✓ Suburban will provide customers with conservation rate customer notices ✓ Notices will include written information on conservation rates explaining why their rates are being change, and the estimated impact on customer's monthly bill. ✓ Suburban will provide a short summary in Spanish of the conservation rate customer notice on the bill, with a number to call to request a copy of the notice in Spanish. ✓ Suburban will provide key information in the notice in large type while including contact information using the Suburban website. ✓ Suburban will submit notices to the Commission's Public Advisor's Office for review.

Attachment A

California American Water – Los Angeles District
Adopted Pilot Conservation Rate Design Program[4]

Residential Conservation Rates	Non-Residential Conservation Rates
✓ Three tiered increasing block pricing structure for quantity rates with tier breakpoints set by meter size; ✓ Cal Am serves approximately 27,200 customers in its Los Angeles District; ✓ Block rates are revenue neutral based on 2006 and 2007 consumption data; ✓ A seasonal adder is applied to volumetric rates of Tier 2 and Tier 3 during the summer months; ✓ The portion of fixed cost recovered in the service charge is reduced to 50% of what was recovered under the traditional rate design; ✓ Winter – November 1 – April 30' ✓ Winter Tier 1 is approximately 15-20% higher than current single volumetric rate; ✓ Winter Tier 2 is approximately 10% higher than Tier 1; ✓ Winter Tier 3 is approximately 20% higher than Tier 1; ✓ Summer – May 1 – October 31 ✓ Summer Tier 1 is approximately 15-21% higher than the current single volumetric rate; ✓ Summer Tier 2 is approximately 15% greater than Tier 1; ✓ Tier 3 is approximately 25% greater than Tier 1..	✓ Non-Residential Customers include the commercial, industrial, public authority, gravity irrigation, and pressure irrigation customer classes; ✓ Conservation rate design consists of a reduced service charge and a single (uniform) quantity charge ✓ The single quantity charge will recover a greater percentage of fixed cost than the single quantity charge that would result from the standard rate design currently in place ✓ Service charges will be reduced by approximately 50%, with corresponding increases in the quantity rate to achieve revenue recovery neutrality. ✓ Seasonal Adder will increase quantity rates during the summer months to reduce peak demand. ✓ There will be a 10% differential between winter and summer rates..

[4] Source of information: April 24, 2007 motion of Division of Ratepayer Advocates and Suburban Water Systems to approve the settlement agreements.

Attachment A

California American – Los Angeles District

Water Revenue Adjustment Mechanism (WRAM)	Modified Cost Balancing Account (MCBA)
✓ Each ratemaking area in the Los Angeles District (San Marino, Duarte, and Baldwin Hills) will have a separate WRAM; ✓ The WRAM will track the difference between the total quantity charge revenues authorized by the Commission, and the total revenues actually recovered through the quantity charge based on actual sales, excluding revenue from Private Fire Protection Service and from the "Other" class of general metered customers; ✓ Recovery of under-collections and refunds of over-collections will be passed on to ratepayers through volumetric surcharges and surcredits.	✓ The MCBAs will capture the cost savings and cost increases associated with purchased water, purchased power, and pump taxes (all of which are recovered through the quantity charge under both the current and proposed rate designs). ✓ The MCBA will replace any "incremental cost balancing accounts" California American currently has in its Los Angeles District.
Program Reporting	
✓ California-American Water will track data, such as billing and usage data by meter size, by month, and by class of customer, for use in analyzing customer response to the proposed conservation rates so that it is readily available to the Commission and the Parties to evaluate results of the Pilot Program.	

Attachment A

San Jose Water Company
Proposed Pilot Conservation Rate Design Program[5]

Proposed Residential Conservation Rates	**Proposed Non-Residential Conservation Rates**	**Service Area**
✓ Two tiered increasing block pricing structure for quantity or volumetric rates with tier breakpoints set by meter size; ✓ Tier rates are revenue neutral based on 2006 revenue requirement; ✓ Tier rates are based on seasonality (winter and summer) and consumption in each ratemaking area using 2006 calendar year customer consumption usage data; ✓ Meter charges remain unchanged for all customer classes; ✓ Tier 1 consumption level is set from zero units to the mid-point between average monthly consumption over an entire year and the average consumption during the winter months. ✓ Tier 2 – All consumption above Tier 1. ✓ Tier 1 rate is approximately 3.23% lower from the single quantity rate structure; ✓ Tie2 rate is approximately 10% higher than tier 1.	✓ No change to existing rate structure for the business, industrial, public authority, resale, private fire, and reclaimed/recycled customer classes. ✓ No change to rates because approximately 81% of the total revenue is already allocated to volume rates.	✓ San Jose Water Company (SJWC) provides water service to approximately 199,000 residential customers and 16,000 non-residential customers located in San Jose, Cupertino, Campbell, Los Gatos, Monte Sereno, Saratoga and contiguous territory in the County of Santa Clara. ✓ All of SJWC's customers are metered and are provided bills on a two-month cycle. ✓ The proposed conservation rates will be applicable to all of SJWC's service area.

[5] Source of information: November 14, 2007 Settlement Agreement between DRA and San Jose Water Company on conservation rate design issues.

Attachment A

San Jose Water Company
Financial Mechanism

Proposed Water Revenue Adjustment Mechanism (WRAM)	Proposed Balancing Account for Water Production Costs
✓ SJWC withdrew its request for the full decoupling Water Revenue Adjustment Mechanism (WRAM); ✓ Parties agree to a price-based WRAM consistent with the price-based "water revenue adjustment mechanism" adopted for California- American Water Company's Monterey District in D.96-12-005. ✓ Each ratemaking area has a separate price-based WRAM; ✓ The price-based WRAM tracks the differences between the revenues for actual metered sales at the tiered volumetric rate, and the uniform single quantity rates on a monthly basis; ✓ The price-based WRAM does not fully decouple revenue from sales as a "full" water revenue adjustment mechanism (or "full WRAM") would. ✓ Recovery of under-collections or over-collection will be passed on to ratepayers through volumetric charges and surcredits.	✓ SJWC withdrew its request to convert its incremental cost balancing account into a full cost balancing account. ✓ SJWC has a Supply Offset Account that adjusts for changes in unit price of purchased water, purchased power, and pump taxes; ✓ Parties agree that SJWC will not pursue a full cost balancing account for water production costs.

Attachment A

San Jose Water Company

Proposed Customer Education	Proposed Program Reporting
✓ The proposed agreement between San Jose, DRA and other consumer organizations is to develop a customer education and outreach program for the implementation of the new conservation rates. ✓ The customer education initiatives and the program monitoring ds developed will be documented in a memorandum of understanding or a separate settlement agreement.	✓ In a settlement agreement between SJWC and four intervener groups is to provide an annual report on the conservation rates and its price-based revenue adjustment mechanism as a supplement to its Annual Report that is filed with the Commission. ✓ San Jose agreed to work with DRA and other consumer groups to determine how to evaluate and report the effectiveness of conservation rates.

Attachment A

Golden State Water Company
Proposed Pilot Conservation Rate Design Program[6]

Residential Conservation Rates

- ✓ Two tiered increasing block pricing structure;
- ✓ Tier rates are revenue neutral;
- ✓ Tier rates vary by district and are based on 2006 calendar year customer consumption usage data for each service area;
- ✓ Tier 1 consumption level is set from zero units to the average winter usage.
- ✓ Tier 2 – All consumption above Tier 1.
- ✓ Tier 2 rate is 15% higher than the Tier 1 rate.
- ✓ A greater percentage of the fixed cost will be recovered from the volumetric rate component- The amount of fixed cost recovered in the service charge was reduced by the following percentages:

Areas	% Reduced
Bay Point	12%
Los Osos	37%
Santa Maria	31%
Simi Valley	10%
Region II	
-Residential	20%
-Non-Residential	5%
Region III	
-Residential	21%
-Non-Residential	6%

Non-Residential Conservation Rates

- ✓ Non-residential customers include all other metered customers with classification code greater than "1".
- ✓ The residential conservation rate structure was not feasible for non-residential customers because it requires reclassification of customer classes and customer water consumption data currently not available;
- ✓ The non-residential interim conservation rate design for Regions II & III consists of a reduced service charge and a single quantity/volumetric rate that recovers a greater percentage of fixed cost:
- ✓ The amount of fixed cost moved to the quantity charge is based on the bill impact for each service area.
- ✓ Service charges were reduced by approximately 5% to 10%, with corresponding increases in the quantity rate to achieve revenue neutrality.
- ✓ Service charge reduction was calculated to achieve no more than a 10% increase in the quantity rate for either of the two non-residential customer quantity rate groupings.

[6] Source of information: October 19, 2007 Settlement Agreement between DRA and Golden State Water Company on WRAM & Conservation Rate Design Issues.

Attachment A

Golden State Water Company
Proposed Conservation Rate Design Program

GSWC provides service to approximately 250,000 customers in three regions comprised of nine ratemaking areas. The conservation rate designs were group by the ratemaking areas listed below.

	Region I: Cities	**Targeted and excluded areas**		**Region II**	**Region III**
Ratemaking Areas	***Arden Cordova***	Excluded because the majority of customers (72%) are on flat rates; GSWC has a plan to transition customers to metered service		Region-wide, one ratemaking area; ***Wrightwood, Apple Valley, and Morongo areas*** are excluded because the Commission has restricted rate increases due to existing high rates (D.00-06-075);	Region-wide, one ratemaking area
	Bay Point	Included			
	Clearlake	Excluded due to low average consumption			
	Los Osos	Included			
	Ojai	Excluded due to existing 3-tier rate structure which was determined to be sufficient			
	Santa Maria	Included			
	Simi Valley	Included			

Attachment A

Golden State Water Company
Proposed Financial Mechanisms

Water Revenue Adjustment Mechanism (WRAM)	Modified Cost Balancing Account (MCBA)
✓ Each ratemaking area has a separate WRAM; ✓ WRAM tracks the difference between Adopted Revenue and Actual Revenue excluding: Fire service revenue; un-metered service revenue; and other non-general metered service revenue. ✓ Fixed costs not included in the WRAM are recovered via the service monthly charge which customers pay regardless of consumption; ✓ WRAM includes variable costs other than purchased power, purchased water, and pump tax.	✓ MCBAs capture cost savings and increases associated with purchased water, purchased power, and pump taxes. ✓ MCBAs track the difference between actual and adopted variable costs for costs that are recovered via the quantity charge for purchased water, purchased power, and pump tax. ✓ MCBAs will replace the Supply Costs Balancing Accounts.

Attachment A

Golden State Water Company
Proposed Conservation Rate Design Program

Customer Education	Program Reporting
✓ GSWC agrees to work with DRA and other consumer organizations to develop a customer education and outreach program associated with implementing the new conservation rate design. ✓ GSWC has initiated discussion with many of the interveners interested in those programs. GSWC will continue to work with parties to develop a data collection and customer education plan.	✓ The proposed settlement agreement between GSWC and four intervener groups is to provide an annual report on the conservation rates and the price-based revenue adjustment mechanism as a supplement to its Annual Report filed with the Commission.