

RECLAMATION

Managing Water in the West

Barriers and Incentives Analysis

Water and Energy Efficiency Program for Commercial, Industrial, and Institutional Customer Classes in Southern California

Volume 5 of 5



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Contents

	Page
1.0 Introduction.....	1
1.1 Purpose and Approach	1
1.2 Organization of Volume	2
2.0 Integrated Water and Energy Efficiency Program Barriers.....	3
2.1 Limited Program Coordination to Implement Integrated Water and Energy Efficiency Programs	3
2.1.1 Customer Classifications	3
2.1.2 Methodologies for Quantifying Benefits	4
2.1.3 Rebate Management.....	4
2.2 Gaps in Customer Knowledge	4
2.2.1 Incentives and Rebate Information	4
2.2.2 Technical Knowledge	5
2.2.3 Metering Data	5
2.3 Limited Availability of Engineering and Administrative Support.....	6
2.4 Capital and Financial Limitations	6
2.4.1 Rebate, Loan, and Grant Registration Requirements.....	6
2.4.2 Value of Rebates	7
2.4.3 Low Margin Operations	7
2.5 Institutional Challenges	7
2.5.1 Management Approvals	7
2.5.2 Regulatory Requirements.....	7
2.6 Limited Availability of Recognition Programs.....	8
2.7 Identifying Water and Energy Efficiency Program Funding Sources	8
3.0 Proposed Set of Integrated Incentives and Recommendations.....	10
3.1 Evaluation of Proposed Incentives.....	10
3.2 Integrated Set of Incentives and Recommendations.....	14
3.2.1 Create a Partnership Framework for Program Implementation	14
3.2.2 Build CII Customer Expertise.....	15
3.2.3 Provide Technical Support to CII Customers	17
3.2.4 Selectively Enhance Financial Incentives for CII Customers	17
3.2.5 Facilitate Participation in Water and Energy Efficiency Programs	18
3.2.6. Recognize CII Customer Efficiency Measures.....	19
3.2.7 Explore Existing Mechanisms to Fund Water and Energy Efficiency Programs	19
3.3 Summary of Barriers and Incentives.....	20

Appendices.....	22
Appendix A	Water Districts, Cities, and Towns in Southern California with Tiered Water Rate Structures and Recycled Water Provisions..... 23
A.1	Purpose of Table A.1 23
A.2	Organization of Table A.1 23
A.3	Purpose of Table A.2 24
A.4	Summary Conclusions 24
Appendix B	List of Equipment Eligible for Water and Energy Rebates and Incentives in Southern California..... 54
Appendix C	Examples of Incentive Feedback Documents Provided to PAC Members and CII Customers 54
Appendix D	Examples of Integrated Water and Energy Efficiency Incentive Programs 55
D.1	PG&E, EBMUD, SCVWD, and SCWA Program..... 62
D.2	Washington State Program 63
Appendix E	Example of Customized Incentive Program - UC, CSU and Investor Owned Utility (IOU) Energy Efficiency Partnership 67
E.1	Overview of Program..... 67
E.2	Key Aspects of the UC, CSU, and IOU Customized Incentive Program..... 68
Appendix F	Example Recognition Programs for GHG Reductions and Efficient Water Use..... 69
F.1	Context for Recognition Program..... 69
F.2	GHG Reductions Recognition Program..... 69
F.3	Efficient Water Use Recognition Program 70
Appendix G	Example of Modified Tiered Rate Incentive Structure 71
G.1	Traditional Incentive Reward Program..... 71
G.2	Example of a Modified Incentive Reward Program 71
Appendix H	Acronyms 74
Appendix I	Bibliography 76

Tables

Table 3.1: Incentives Identified to Address Gaps in Customer Knowledge..... 11

Table 3.2: Incentives Identified to Address Limited Availability of Engineering and Administrative Support 11

Table 3.3: Incentives Identified to Address Capital and Financial Limitations ... 12

Table 3.4: Incentives Identified to Address Limited Availability of Recognition Programs 13

Table 3.5: Incentives and Recommendations Identified to Address Water and Energy Efficiency Program Funding Sources..... 13

Table 3.6: Summary of Barriers, Proposed Incentive Goals and Recommended Actions for Overcoming Barriers to Integrated Water and Energy Efficiency Programs..... 21

Table A.1: Southern California Water Districts/Cities/Towns with Tiered Water Rate Structures for CII and Recycled – Reclaimed Water Provisions..... 25

Table A.2: Cities and Towns with Tiered Water Rate Structures for Residential Customers..... 53

Table D.1: Combined Rebate Program in Washington State 64

Table D.2: Combined Water and Energy Efficiency Rebate Form 65

Figures

Figure 3.1: Proposed Set of Incentives and Recommended Actions to Advance Integrated Water and Energy Efficiency Programs 14

1.0 Introduction

For many years, water districts and energy utilities in southern California have independently promoted water efficiency or energy efficiency within the broad categories of commercial, industrial, and institutional (CII) customers. Although these programs have been relatively successful, current regional water and energy projections indicate there is an urgent need to address water and energy efficiency in an integrated manner. Such an approach would allow water districts and energy utilities to take advantage of opportunities to leverage their limited resources, and coordinate resource management efforts to meet future needs.

The Bureau of Reclamation, in partnership with the California Energy Commission and the Metropolitan Water District of Southern California (MWD), commissioned an innovative project in 2007 to study the potential for integrated water and energy efficiency programs. The results of the study are presented in a five volume report called the *Water and Energy Efficiency Program (WEEP) for Commercial, Industrial, and Institutional Customer Classes in Southern California*.

1.1 Purpose and Approach

According to Project Advisory Committee (PAC) members¹ and CII customers,² many of the incentive programs established to promote water or energy efficiency in southern California have not consistently “pulled”³ customers to take action and implement efficiency improvements.

To understand this issue, information was obtained from PAC members about the types of barriers that exist and may impede implementation of integrated water and energy efficiency programs. Specifically PAC members were asked about the types of administrative and technical issues they encounter in overseeing and implementing water or energy efficiency programs. Based on the feedback received, the data were used to develop a proposed set of incentives for consideration by both PAC members and CII customers.

¹ PAC members are representatives from water districts, energy utilities, and wastewater sanitation districts in southern California, an academic institution, and federal, state, and local agencies who provided input throughout the duration of the WEEP Study.

² PAC members invited technical and operational staff members from several CII customer classes to participate in a meeting and provide feedback on integrated water and energy efficiency programs. Specifically, these stakeholders were asked to provide information about barriers and evaluate a proposed set of incentives to address the barriers.

³ “Pulled” refers to actions and incentives that motivate a customer to implement water and energy efficiency improvements to reduce overall demand.

Volume 5 of WEEP Study summarizes the barriers identified and the incentives recommended by PAC members and CII customers that are needed to successfully implement integrated water and energy efficiency programs.⁴

1.2 Organization of Volume

The remainder of this Volume is organized as follows:

- Section 2.0 summarizes potential barriers to integrated water and energy efficiency programs.
- Section 3.0 outlines proposed incentives and recommended actions to address the barriers.
- The Appendices include information regarding:
 - Equipment eligible for currently available water and energy incentives.
 - Water districts, cities and towns with tiered water rate structures and recycled water policy for CII and residential customers.
 - Examples of combined incentive, recognition and customized incentive programs.
 - An example incentive feedback document.
 - Acronyms.
 - A bibliography.

⁴ See the 2004 “Urban Water Conservation Implementation Challenges and Opportunities” Report. This report identifies a number of barriers to conservation programs including customer education/outreach, initial capital outlay for retrofit installation and rebate levels. The similarity of these barriers validates the range of barrier identified in the WEEP Study. The report also concludes that barriers must be overcome to facilitate successful implementation of water conservation programs.

2.0 Integrated Water and Energy Efficiency Program Barriers

PAC members and CII customers identified a number of barriers to implementing integrated water and energy efficiency programs in southern California. These barriers occur at the customer, water district, and energy utility levels and include administrative, organizational, financial, legal and technical issues.

To identify a proposed set of incentives and recommendations to overcome the barriers, they were further grouped into the following categories:

- 2.1 Limited Program Coordination to Implement Integrated Water and Energy Efficiency Programs
- 2.2 Gaps in Customer Knowledge
- 2.3 Limited Availability of Engineering and Administrative Support
- 2.4 Capital and Financial Limitations
- 2.5 Institutional Challenges
- 2.6 Limited Availability of Recognition Programs
- 2.7 Identifying Water and Energy Efficiency Program Funding Sources

Descriptions of these categories are provided below.

2.1 Limited Program Coordination to Implement Integrated Water and Energy Efficiency Programs

Water districts, energy utilities, and wastewater sanitation districts have engaged in a limited number of partnerships to coordinate integrated water and energy efficiency programs. Although these partnerships have been successful, in the absence of a region-wide coordinated approach to implement integrated water and energy efficiency programs, a number of barriers emerge. These barriers include differences in customer classifications, methodologies for quantifying benefits, and rebate management.

2.1.1 Customer Classifications

Water districts, energy utilities, and wastewater sanitation districts define customers differently. Some are defined on the basis of end uses, while others on the basis of efficiency measures. Evaluating water, wastewater, and energy savings as part of an integrated water and energy efficiency program requires a common approach for defining customers. Based on the data processing efforts undertaken during this study, an approach was developed for consideration. This approach identifies CII customer classes on the three-digit North American

Industry Classification System (NAICS) codes and aligns customer categories with usage or metering data.⁵

2.1.2 Methodologies for Quantifying Benefits

Water districts and energy utilities quantify customer savings differently. Some “bundle” water and energy savings and incentives, and others do not. These methodological differences influence the outcome of net present value calculations, and in particular, payback periods. PAC members and CII customers stated that the payback periods reported in audit reports can range from less than one year to 20 years.⁶ When payback periods are longer than three years, CII customers expressed difficulty in obtaining management approval to implement upgrades, since water and energy efficiency projects compete with other facility-level projects that have payback periods of three years or less.⁷

2.1.3 Rebate Management

In the absence of an integrated approach to rebate management, CII customers stated it is too time consuming to submit separate rebate forms to water districts and energy utilities for the same piece of equipment. As a consequence, purchasing decisions were delayed or rebate forms were not submitted. CII customers and PAC members stated a preference for implementing a “one-stop shop” approach to issue rebates.

2.2 Gaps in Customer Knowledge

2.2.1 Incentives and Rebate Information

CII customers report that they lack information about the full range of water and energy efficiency incentives available to offset the costs of upgrades and the process for submitting forms to obtain rebates. This barrier exists because:

- Marketing and outreach programs, for the most part, have been focused on residential customers and not on CII customers.⁸
- Regional water districts, which fund many incentives, are typically wholesalers and do not directly engage with CII customers.

Gaps in knowledge about incentives and rebates make it harder for customers to obtain approval from management to purchase, install or implement water and energy efficiency equipment and process improvements.

⁵ See Cataloguing Commercial, Industrial, and Institutional Customer Classes – Volume 2 of the WEEP Study.

⁶ Based on information obtained from PAC members, CII customers, and audit reports.

⁷ Anecdotal information obtained from PAC members and CII customers. Also see page 110 of the McKinsey & Company report *Pathways to a Low Carbon Economy*. This report states that under the current business climate, efficiency projects should have payback periods of two years or less to receive management attention.

⁸ See the Marketing and Outreach Practices Review – Volume 4 of the WEEP Study.

2.2.2 Technical Knowledge

CII customers state that they do not have information about the potential gains in water and energy efficiency that are associated with the installation of process water recirculation systems, reuse of treated water, upgrading heating, ventilation, and air conditioning (HVAC) systems, or other equipment installations or process upgrades. As a consequence, CII customers many times do not have the technical information necessary to justify implementation of water and energy efficiency improvements.

The reasons contributing to gaps in technical knowledge vary, but include the following:

- Most of the audits undertaken by PAC members over the past two years have focused on water or energy improvements, but not both subject areas. Although the audits have been helpful sources of information, they have not been designed to provide CII customers with comprehensive information about the range of opportunities for improving water and energy efficiency.
- Water districts, energy utilities, and wastewater sanitation districts do not routinely offer seminars to CII customers to transfer knowledge about industry-specific water and energy efficiency improvements.
- Staff turnover at CII customer sites limits the transfer of knowledge to technical staff members who are assigned the responsibility of undertaking engineering studies and applying for rebates related to water and energy efficiency projects.
- Regional water districts are typically wholesalers. They usually do not have staff resources to provide specialized technical efficiency recommendations and information regarding unique CII customer processes.
- Water districts may not have the technical staff necessary to provide support to CII customers who decide to implement complex water efficiency improvements.

2.2.3 Metering Data

CII customers report that they lack information about specific operational water and energy usage, as well as the types of upgrades that could be implemented for improving water and energy efficiency. This situation occurs because:

- Not all CII customers have energy meters installed throughout their facilities to obtain specific information about the energy demands associated with high energy use equipment such as cooling towers or HVAC systems.

- Very few CII customers have water meters installed to record water usage for different activities throughout their facility such as process rinsing.

2.3 Limited Availability of Engineering and Administrative Support

According to CII customers, implementing water and energy efficiency projects often requires a substantial time commitment. They must undertake engineering studies, access vendors, install the new equipment, learn about the operation and maintenance for new equipment, complete rebate applications, and demonstrate resource savings to receive certain types of rebates. Moreover, an integrated water and energy efficiency program requires that decisions be made that rationally weigh the tradeoffs between water and energy use. In some cases energy saving activities increase water use, or water saving activities increase energy use.

In the opinion of CII customers, they need technical assistance from energy utilities and water districts as the time required to undertake engineering and administrative activities to evaluate water and energy efficiency improvements is extensive. Therefore, they contend that the cost-of-labor associated with the analyses is too high relative to the financial returns associated with water and energy efficiency improvements.

In addition, staff members who are responsible for implementing water and energy efficiency improvements often do not receive credit for these activities. Thus, they have little incentive to increase their workload with projects that are peripheral to day-to-day responsibilities.

2.4 Capital and Financial Limitations

2.4.1 Rebate, Loan, and Grant Registration Requirements

CII customers report that rebate, loan, and grant requirements incorporate provisions that decrease the attractiveness of these mechanisms for financing efficiency upgrades. These requirements include:

- Notifying water districts or energy utilities of their intent to implement water or energy efficiency improvements to reserve funds for equipment purchases or process improvements.⁹ This requirement is viewed by CII customers as cumbersome and may not align with internal processes for scoping projects and undertaking engineering feasibility studies.

⁹ MWD and many of the energy utilities require that customers notify them of their intent to implement water or energy efficiency improvements to reserve the funds prior to purchasing equipment or installing process changes. A confirmation number is required to ensure issuance of the rebate.

- Addressing terms and conditions which are time-consuming and sometimes difficult to implement. For example, grants may require that certain labor or other standards are met, and low-interest loans may require that the customer have a good credit history of paying bills on-time.

PAC members state that in order to issue rebates to CII customers, the procedures for notifying a water district or energy utility must be followed prior to purchasing equipment.

2.4.2 Value of Rebates

CII customers report that in many instances the dollar value of rebates is insufficient to help offset the costs for installing water or energy efficient equipment. This concern was validated by PAC members who state that they frequently have to combine equipment rebates with low-interest loans or other forms of assistance to enhance the financial attractiveness of projects designed to improve water and energy efficiency.

2.4.3 Low Margin Operations

According to PAC members and CII customers, certain types of operations, such as food services and drinking places, dry cleaning and laundry services, real estate, and educational services operate low-margin businesses and therefore have limited funds available to pay for efficiency improvements. In the absence of incentive programs that specifically address these issues, the barriers to implementing water and energy efficiency improvements within these specific types of CII customer classes are difficult to overcome.

2.5 Institutional Challenges

2.5.1 Management Approvals

CII customers frequently require approval from multiple levels of management before water and energy improvements can be implemented. For example, PAC members report that educational services, hospitals, and utilities require three or four signatures to obtain approval before facility changes can be made. This process can take months to complete. As a consequence, PAC members report that momentum is often lost within these CII customer classes for implementing water and energy efficiency improvements identified during an assessment.

2.5.2 Regulatory Requirements

PAC members claim that regulatory approvals may be needed before water and energy efficiency improvements can be implemented within CII customer classes such as hospitals, food manufacturing, food services and drinking places, and chemical manufacturing. For example, hospitals need to maintain prescribed air flow standards that may be affected when equipment modifications are made.

PAC members noted that the need to assess regulatory implications prevents or delays implementation of actions to enhance water and energy efficiency within these types of customer classes. In some cases the regulatory constraints may explicitly prohibit the changes needed to improve water and energy efficiency.

2.6 Limited Availability of Recognition Programs

Programs such as the International Organization for Standardization (ISO) Environmental Management System Certification or the Leadership in Energy and Environmental Design are in place to recognize CII customers for implementing environmental management systems or facility design standards that meet industry standards of performance. However, there are few programs in place to recognize CII customer accomplishments relative to enhancing water and energy efficiency or reducing greenhouse gas (GHG) emissions. In addition, CII staff members responsible for conducting the engineering analyses and implementing upgrade projects frequently do not receive credit for these efforts and are therefore reluctant to engage in activities that go beyond their job descriptions.

2.7 Identifying Water and Energy Efficiency Program Funding Sources

To successfully implement water and energy efficiency programs in southern California, a number of activities need funding. Currently, mechanisms exist to help finance efficiency improvements, but they have not been targeted to fund activities such as the development of customer training programs, integrated marketing and outreach activities, conduct of water and energy audits at customer sites, or targeted rebates and other incentives.

Potential funding mechanisms for consideration for combined water and energy efficiency programs include:

- Adopting tiered water rate structures for CII customers to increase revenue.¹⁰
- Increasing the cost of water.¹¹

¹⁰ Appendix A provides information regarding the use of tiered water rate structures in southern California. As noted, many cities and towns in the region have tiered water rate structures in place for residential customers; few have tiered rate structures for CII customers.

¹¹ Some customers noted that the price of water most likely will increase over the next several years. In addition, Olmstead and Stavins concluded in a 2008 economic research paper that price signals are more cost-effective in promoting conservation than implementing non-price conservation programs.

- Applying for grants from state and federal agencies.
- Co-funding activities within partnerships.
- Furthering discussions about including water in energy cost-effectiveness calculations.
 - Incorporating water in cost effectiveness calculations to satisfy energy efficiency portfolio goals has been discussed; however, state mandate to do so does not currently exist.
 - The October 18, 2007 California Public Utilities Commission (CPUC) Decision 07-10-032 entitled “Interim Opinion on Issues Relating to Future Savings Goals and Programs and Program Planning for 2009-2011 Energy Efficiency and Beyond” creates a framework that emphasizes a broader view of the energy efficiency landscape.
 - The Phase II scoping memo and ruling stated that it should be determined whether certain activity areas should be counted toward satisfying 2009-2011 portfolio goals – building codes and standards, water conservation programs, timing of credit for impacts that occur in a future period, non-utility energy efficiency strategies initiated by local communities, and low-income energy efficiency programs. As a consequence, energy utilities are not authorized to allocate their rebate funds for water efficiency measures, even though they have direct contact with CII customers and work with them to improve efficiency.
 - The absence of water as an input to cost-effectiveness calculations reduces the potential pool of money that can be tapped to fund water efficiency measures.

3.0 Proposed Set of Integrated Incentives and Recommendations

Water districts and energy utilities in southern California have indicated that many of the incentive programs established to promote water or energy efficiency in southern California have not been consistently used. The reasons vary but reflect the barriers summarized in Section 2.0.

PAC members and CII customers were asked about the types of incentives that are needed to motivate the customer to take action and implement changes to improve water and energy efficiency. This section summarizes the types of incentives that are needed to foster greater gains in water and energy savings among CII customer classes targeted for integrated water and energy efficiency programs.

3.1 Evaluation of Proposed Incentives

PAC members and CII customers were asked to evaluate a set of incentives to address or overcome the barriers described in Section 2.0. These incentives are grouped by the seven categories of barriers and are in addition to existing incentive programs offered by water districts and energy utilities.¹² Two of the seven categories of barriers were discussed during meetings with CII customers and PAC members. The remaining five categories of barriers were addressed through a facilitated discussion with PAC members and CII customers, and are outlined in the tables below.

The proposed incentives were organized into three categories – financial, technical assistance, and recognition. PAC members and CII customers were asked to evaluate the proposed categories of incentives and rate them as follows:¹³

- Essential for implementing additional water and energy efficiency improvements.
- Helpful, but not significant enough to motivate the respondent to take action.
- Not desirable (i.e., the incentive does not assist the respondent in convincing management to implement efficiency improvements).

¹² See Appendix B for a list of equipment eligible for existing rebates and incentives.

¹³ See Appendix C for an example of a document used to obtain feedback from PAC members and CII customers about incentives.

Tables 3.1 through 3.5 include a list of incentives that were considered essential or helpful by more than 70% of the PAC members and CII customers providing feedback. For example, Table 3.1 summarizes the five incentives considered by PAC members and CII customers as essential or helpful to address gaps in customer knowledge. The similar selection of incentives considered essential or helpful by PAC members and CII customers indicates a consistent viewpoint about needed water and energy efficiency programs in southern California.

Table 3.1: Incentives Identified to Address Gaps in Customer Knowledge

Incentives Viewed as Essential or Helpful by CII Customers
1. Offer training sessions focused on water recycling programs.
2. Offer training courses on best water and energy efficiency practices.
3. Offer installation of meters to obtain more detailed information about water and energy usage on-site.
4. Arrange for water and energy audits to be conducted.
5. Establish a resource directory with information about vendors and water and energy efficiency practices.
Incentives Viewed as Essential or Helpful by PAC Members
1. Offer training programs covering best practices in water and energy efficiency and the scope of rebates.
2. Facilitate exchange programs among customers to learn about water and energy efficiency upgrades.
3. Install meters to obtain more detailed information about water and energy usage on-site.
4. Conduct audits to help customers identify water and energy efficiency improvements.
5. Provide customers with an estimate of carbon savings associated with upgraded equipment.

Table 3.2: Incentives Identified to Address Limited Availability of Engineering and Administrative Support

Incentives Viewed as Essential or Helpful by CII Customers
1. Provide information about firms that offer engineering and administrative support for water and energy upgrades.
2. Provide the option for completing a single form, instead of multiple forms, to obtain rebates for water and energy efficiency improvements.
Incentives Viewed as Essential or Helpful by PAC Members
1. Provide customers with information about vendors or energy services companies who engage in water and energy efficiency projects.
2. Provide CII customers with the option of completing a single form to obtain rebates for water and energy efficiency improvements.

Table 3.3: Incentives Identified to Address Capital and Financial Limitations

Incentives Viewed as Essential or Helpful by CII Customers
1. Offer the opportunity to receive monthly credits on water bills for reductions in water usage.
2. Offer grants to finance the research and development of new technologies for low-impact or non-structural solutions to reduce wastewater generation (e.g., reuse of water for cooling towers or washing vehicles).
3. Receive \$1,000 or more for the purchase and installation of water and energy efficiency equipment.
4. Offer a rebate program for process water recirculation upgrades. ¹⁴
5. Offer financial incentives, beyond the existing programs, for large water and energy efficiency upgrades.
6. Develop customized incentive programs for selected CII customer classes, such as educational institutions, to reduce delays in project approval and increase the likelihood of project implementation. ¹⁵
Incentives Viewed as Essential or Helpful by PAC Members
1. Offer CII customers low-interest loans to finance water and energy efficiency upgrade projects.
2. Offer CII customers financial incentives for reductions in water and energy use achieved in accordance with annual or monthly targets established with energy utilities or water districts.
3. Offer CII customers an on-bill financing scheme to finance water and energy efficiency upgrades. ¹⁶
4. Offer CII customers grants to finance on-site research and development of new technologies for low-impact or non-structural solutions to reduce wastewater generation (e.g., reuse of water for cooling towers or washing vehicles).
5. Receive \$1,000 or more for the purchase or installation of water and energy efficiency equipment as part of an assessment.
6. Offer the CII customer additional rebates for large water and energy efficiency projects (> \$25,000).

¹⁴ Recommendation endorsed by PAC members attending stakeholder meeting. A similar program currently exists at MWD.

¹⁵ This was a recommendation offered by CII customers during a stakeholder meeting.

¹⁶ Similar to programs offered by the Southern California Gas Company (SoCalGas) and the San Diego Gas & Electric Company (SDG&E).

Table 3.4: Incentives Identified to Address Limited Availability of Recognition Programs

Incentives Viewed as Essential or Helpful by CII Customers
1. Offer the opportunity to participate in a GHG emissions reduction recognition program.
Incentives Viewed as Essential or Helpful by PAC Members
1. Offer CII customers the opportunity to participate in a recognition program focused on GHG emission reductions through water and energy efficiency upgrades.
2. Offer CII customers the opportunity to participate in a recognition program for water and energy efficiency improvements.

Table 3.5: Incentives and Recommendations Identified to Address Water and Energy Efficiency Program Funding Sources

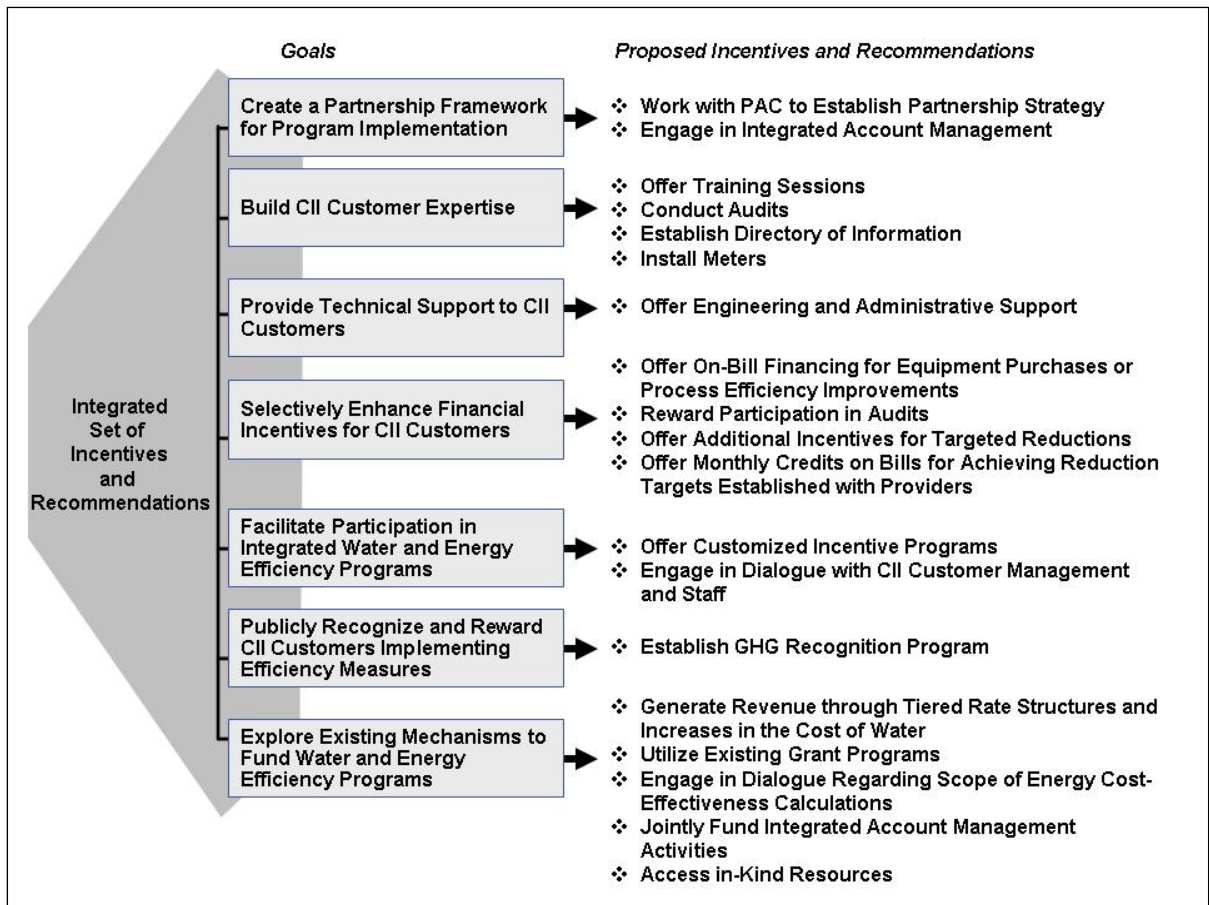
Incentives or Recommendations Offered by CII Customers
1. Incentive: Offer a tiered rate structure to encourage water conservation.
2. Recommendation: Consider incorporating water efficiency in energy cost-effectiveness calculations. ¹⁷
Incentives or Recommendations Offered by PAC Members
1. Incentive: Offer CII customers a tiered rate structure to encourage water conservation.
2. Recommendation: Obtain funding from existing grant programs administered by Reclamation or other regional or state agencies.

¹⁷ This recommendation was acknowledged by PAC members attending the meeting.

3.2 Integrated Set of Incentives and Recommendations

Figure 3.1 depicts a proposed set of incentives and recommended actions for implementing integrated water and energy efficiency programs. It summarizes input provided by PAC members and CII customers from Tables 3.1 to 3.5 and offers goals for water and energy efficiency programs in southern California.

Figure 3.1: Proposed Set of Incentives and Recommended Actions to Advance Integrated Water and Energy Efficiency Programs



These categories of incentives are described in greater detail below.

3.2.1 Create a Partnership Framework for Program Implementation

It is recommended that water districts, energy utilities, and wastewater sanitation districts create a partnership framework to coordinate implementation of integrated water and energy efficiency programs. The activities that should be undertaken within the partnership framework are listed below:

- Determine the organization, leadership, funding, and scope for collaboration on water and energy efficiency partnerships.

- Establish common customer definitions to facilitate gathering comparable usage data to record estimated and realized gains in water and energy efficiency.¹⁸
- Conduct combined water and energy audits and report the costs and benefits in a consistent manner.¹⁹
- Collaborate on funding and coordination of retrofits.
- Engage in joint marketing and outreach activities targeted at CII customer classes to get more customer participation in audits and retrofits.²⁰
- Coordinate administration of rebates with CII customers to make it easier for them to participate in integrated water and energy efficiency programs. For example, if an energy utility was administering a rebate, the CII customer would notify the energy utility about reserving rebates and submit completed rebate forms. The energy utility would be responsible for issuing the rebates after the equipment has been purchased or demonstrated reductions in water or energy use have been achieved.

3.2.2 Build CII Customer Expertise

CII customer expertise is needed on how to design and implement changes at the facility level to achieve gains in water and energy efficiency. To address this need for expertise, training seminars, audits, meter installation, and a directory of information are recommended. These incentives focus on transferring information to CII customers to increase their awareness and understanding of the technical issues associated with the management of water and energy resources.

3.2.2.1 Offer Training Seminars

CII customers and PAC members view training seminars as an essential tool to building customer expertise in the technical aspects of implementing an integrated approach to water and energy efficiency and undertaking upgrade projects. Based on comments received, the following topics should be addressed during training seminars:²¹

- How to design and implement an on-site water recycling program in conformance with state and local regulations.²²

¹⁸ See Cataloging Commercial, Industrial, and Institutional Customer Classes – WEEP Study Volume 2 for a proposed customer classification methodology.

¹⁹ See Water and Energy Efficiency Audit Field Guidance Document – WEEP Study Volume 3 for guidance and tools for conducting audits.

²⁰ See Water and Energy Efficiency Marketing and Outreach Practices Review – WEEP Study Volume 4 for a list of recommended activities.

²¹ Training sessions, if offered at no cost to the CII customer, are viewed as an important marketing and outreach practice as well as an incentive. See WEEP Study Volume 4.

²² See Appendix A, Table A.1 for water districts with water recycling and reclaimed provisions in place.

- Financial incentives or rebates available to offset investments in water and energy efficiency and the procedures which need to be followed to obtain them.
- Best practices in implementing water and energy efficiency programs, including industry-specific standards of performance.
- GHG reductions associated with the installation of water and energy efficiency equipment or changes in manufacturing activities.

3.2.2.2 Conduct Audits

Water and energy efficiency audits were viewed by PAC members and CII customers as an important mechanism to identify opportunities for improving facility operations, and as a vehicle to transfer information about incentives and payback periods. Therefore, the following is recommended:

- Offer audits to CII customers at no cost.
- Use audit tools and guidance documents detailed in Volume 3.
- Incorporate audit marketing and outreach activities, summarized in Volume 4, related to “maximizing the transaction point” into the audit process.
- Use the cost-benefit tool, modeled according to the WEEP analytical framework, to assess the full range of potential costs and benefits to the CII customer as well as how these might influence or reduce payback periods.²³
- Include GHG reduction information related to proposed water and energy efficiency improvements in audit reports delivered to CII customers.

3.2.2.3 Establish Directory of Information

PAC members and CII customers indicated the need for readily accessible industry best practices information through a clearinghouse or an exchange program. Additionally, they expressed interest in obtaining information about vendors and their technical qualifications that would assist CII customers in the purchase and installation of water and energy efficient equipment.

It is recommended that a technical directory of information be established for CII customers. At a minimum, this directory should include information about best water and energy efficiency practices, vendors, and rebate information. Water

²³ See Volume 2 of the WEEP Study and Appendix D of this volume. This Appendix provides two examples of water districts and energy utilities offering combined incentive programs. The first example highlights the financial benefits associated with a combined set of water and energy efficiency incentives. The second example highlights a coordinated approach across water districts and energy utilities to combine incentives for specific types of equipment purchases and offers the use of a single form to be completed and submitted by the customer.

districts, energy utilities, and wastewater sanitation districts should consider expanding the South Bay Environmental Services Center (SBESC) Web site with this information, or establish a new Web site managed by another entity such as a local, state or federal agency.

3.2.2.4 Install Meters

PAC members and CII customers stated that installing water and energy meters at CII customer sites should be offered as an incentive because meters:

- Enable customers to obtain usage data.
- Help expand customers' understanding of the types of processes or equipment that can be modified to reduce overall water and energy use.
- Provide the usage data necessary for incentives that require demonstrated savings.

Installing meters has the secondary benefit of providing data to help water districts and energy utilities target CII customer classes to participate in integrated water and energy efficiency programs.²⁴

3.2.3 Provide Technical Support to CII Customers

Due to the limited availability of CII customer engineering or administrative support, it is recommended that technical support be provided to customers. Needed support includes:

- Preparation of rebate forms.
- Assistance with engineering studies to assess impacts associated with water and energy efficiency changes.
- Finding vendors to install equipment.

This support can be provided by staff resources from water districts or energy utilities.

3.2.4 Selectively Enhance Financial Incentives for CII Customers

PAC members and CII customers clearly stated that additional financial incentives were needed to help develop the business case for implementing equipment or process changes to improve water and energy efficiency. The current range of incentives does not provide sufficient financial support to reduce payback periods. To address CII capital and financial limitations, the following incentives are recommended.

²⁴ See Volume 2 of the WEEP Study for information about identifying CII customers based on metering data, common names, and NAICS codes.

3.2.4.1 Offer On-Bill Financing

PAC members and CII customers agreed that offering low-interest loans or on-bill financing is an attractive incentive needed to implement water and energy efficiency improvements.²⁵ On-bill financing is a recommended incentive to provide CII customers with access to low interest capital to finance water and energy efficiency projects.

3.2.4.2 Reward Participation in Audits

PAC members and CII customers agreed that receiving \$1,000 dollars or more for the purchase and installation of a water and energy efficient device, following the completion of an audit, should be offered as an incentive. This type of financial assistance helps CII customers convince management to consider additional water and energy efficiency improvements.

PAC members and CII customers commented that \$500 or less for this type of incentive was not sufficient to promote improvement opportunities. Some PAC members and CII customers suggested that the rebate should be a negotiated percentage of the total costs for upgrades identified during an audit.

3.2.4.3 Offer Additional Incentives for Targeted Reductions

PAC members and CII customers indicated that other financial incentives should be offered for achieving volume reductions in water and energy use based on agreements established with water districts or energy utilities. The purpose of this incentive would be to create a more competitive financial business case for implementing measures that would help achieve established reduction targets. PAC members and CII customers differed on the dollar amount, but the overwhelming feedback indicated a range of \$10,000 - \$25,000 or more would be appropriate.

3.2.4.4 Offer Monthly Credits on Water Bills

To incent CII customers to reduce water usage, PAC members suggested that CII customers be offered the opportunity to receive credits on water bills for every month reductions are made that equal or exceed established targets.

3.2.5 Facilitate Participation in Water and Energy Efficiency Programs

A need exists to facilitate CII customer participation in water and energy efficiency programs. Recommendations include offering customized incentive programs and engaging in dialogue with CII customer management and staff.

3.2.5.1 Offer Customized Incentive Programs

PAC members and several CII customers stated that customized incentive programs are needed to help promote participation in an integrated water and

²⁵ Similar to the programs offered by SoCalGas, SDG&E, and Irvine Ranch Water District (IRWD) for some customers. On-bill financing programs feature: No up-front out-of-pocket costs and zero percent financing, sometimes in combination with a modest rebate. Once improvements are paid off, all savings are reflected in lower monthly bills.

energy efficiency program for CII customer classes such as hospitals, educational services, food services and drinking places, laundry services, and real estate.

Using the University of California (UC) and California State University (CSU) example²⁶ of a customized incentive program, these types of programs should be structured to address the following:

- Installation of equipment or implementation of process changes in conformance with health code rules and regulations.
- Changes to equipment or processes subject to approval by the Food and Drug Administration.
- Institutional policies or procedures that require approval from several layers of management, possibly in headquarters or other locations.
- Financial constraints that limit customers with low-margin businesses from allocating funds for efficiency improvements.

3.2.5.2 Engage in Dialogue with CII Customer Management and Staff

Dialogue with CII management and staff should be incorporated into the design and implementation of integrated water and energy efficiency programs. To be successful in enrolling targeted CII customer classes in customized incentive programs, PAC members suggest that account managers engage in dialogue with management to explain how the incentive program addresses their specific needs. This will help raise awareness and obtain approval for implementing water and energy efficiency improvements.

3.2.6. Recognize CII Customer Efficiency Measures

Although other types of recognition programs might be useful, PAC members and CII customers both agreed that it was essential to create a recognition program for reducing GHG emissions to foster a continued focus on conserving water and energy. Therefore, a program should be developed and offered to CII customers to publicly recognize them for GHG reductions achieved through water and energy efficiency upgrades.

3.2.7 Explore Existing Mechanisms to Fund Water and Energy Efficiency Programs

To successfully implement water and energy efficiency programs in southern California, a number of activities will need to be funded, including the development of training programs, marketing and outreach activities, audits, and rebates and other financial incentives. To fund these activities, the WEEP Study recommends the following for consideration:

²⁶ See Appendix F for a detailed explanation of the UC/CSU/IOU example of a customized incentive program.

- Adopt tiered water rate structures or increase the cost of water to generate revenue for financial incentives and rebates.²⁷
- Apply for grants from MWD, Reclamation, and others to finance the research and development of new technologies for low-impact or non-structural solutions to reduce wastewater generation (e.g., reuse of water for cooling towers or washing vehicles).
- Apply for grants to fund the development of training materials and the establishment of a directory of information.
- Jointly fund activities to distribute the direct costs among partners.²⁸
- Engage in further discussions about including water in energy cost-effectiveness.

3.3 Summary of Barriers and Incentives

A summary of the barriers to an integrated water and energy efficiency program for CII customers, and proposed incentives to overcome those barriers, can be found in Table 3.6. The recommendations are structured to facilitate and fund implementation of integrated water and energy efficiency programs. They also encourage CII customers to participate in these programs by building their knowledge, providing additional financial and administrative incentives, and recognizing them for their accomplishments.

As integrated water and energy efficiency programs are implemented in southern California, the scope of the incentives may need to expand to include the outcomes of the CPUC’s “Embedded Energy in Water” pilots. For example, training seminars and incentives offered to CII customers may need to be modified to include embedded energy.

²⁷ See Appendix G for an example of how a tiered water rate structure can be designed to generate revenue.

²⁸ An example of joint funding is the SBESC’s Web site, which includes contributions from SoCalGas, SCE, Sanitation Districts of Los Angeles County, and West Basin Municipal Water District.

Table 3.6: Summary of Proposed Incentive Goals and Recommended Actions for Overcoming Barriers to Integrated Water and Energy Efficiency Programs

Barriers	Proposed Incentives and Recommendations
<i>Limited Program Coordination Between Water Districts, Energy Utilities, and Wastewater Sanitation Districts</i> to implement integrated water and energy efficiency activities.	Create a Partnership Framework for Program Implementation among water districts, energy utilities, and wastewater sanitation districts. Specifically, focus the partnerships on providing CII customers with comprehensive information about the benefits for engaging in water and energy efficiency programs, and obtaining comparable data to measure water and energy reductions within CII.
<i>Gaps in CII Customer Knowledge</i> about rebates, incentives, and the technical aspects associated with designing and implementing water and energy efficiency improvements.	Build CII Customer Expertise by offering training sessions, conducting audits, establishing a directory of information, and installing meters.
<i>Limited Availability of CII Engineering and Administrative Support</i> to evaluate the technical feasibility of implementing water and energy efficiency opportunities.	Provide Technical Support to CII Customers in undertaking water and energy efficiency project planning and implementation activities.
<i>CII Capital and Financial Limitations</i> that impact the availability of funds to finance efficiency improvements.	Selectively Enhance Financial Incentives for CII Customers by offering on-bill financing, rewarding participation in audits, and offering additional financial incentives and credits on water bills to help encourage implementation of water and energy efficiency projects.
<i>CII Institutional Issues</i> related to management approvals, regulatory requirements, and availability of funds to finance projects, all of which create delays in implementing efficiency projects.	Facilitate Participation in Water and Energy Efficiency Programs by offering customized incentive programs to address institutional issues characteristic of selected CII customer classes, and engage in dialogue with CII management to explain the benefits associated with water and energy efficiency projects.
<i>Limited Availability of CII Recognition Programs</i> for customers implementing water and energy efficiency activities.	Publicly Recognize and Reward CII Customers Implementing Efficiency Measures by establishing a program for CII customers that reflects reductions in GHG emissions based on the implementation of water and energy efficiency improvements.
<i>Identifying Water and Energy Efficiency Program Funding Sources</i> to support the development and implementation of integrated programs.	Explore Existing Mechanisms to Fund Water and Energy Efficiency Programs such as adopting tiered rate structures for CII, increasing the cost of water, applying for grants, accessing in-kind resources, and engaging in discussions about the scope of cost-effectiveness calculations.

Appendices

Appendix A

Water Districts, Cities, and Towns in Southern California with Tiered Water Rate Structures and Recycled Water Provisions

A.1 Purpose of Table A.1

The purpose of Table A.1 is to:

- Reference water districts, cities and towns with tiered water rate structures for CII customers (*does not include references for residential tiered rate structures*).
- Highlight water districts, cities, and towns with specific recycling and reclaimed water rules and regulations in place so that as training sessions are developed to address the incentives proposed to build CII customer expertise, local ordinances are taken into consideration.

A.2 Organization of Table A.1

Table A.1 is structured as follows:

- The table is organized according to cities and towns in southern California, grouped by the regional water districts delineated in MWD’s member agency listing.²⁹
- A brief description for each regional water district is provided.
- The information contained in the column entitled “Tiered Water Rate Structure for CII”³⁰ customers indicates whether the water district, city or town has a tiered rate structure for CII.
 - If yes, a brief description of the tiered rate structure is provided. If the water district, city or town also has a tiered rate structure for drought periods, this information is recorded as well.
 - Tiered rate structures for residential customers only are *not* included in the table. Communities with tiered rate structures for residential customers are listed on Table A.2.
 - If the city or town is provided water by a local private or public water district other than the regional district, and those local water districts have a tiered rate structure in place for CII customers, “yes” is recorded.

²⁹ See MWD’s member agency listing at <http://www.mwdh2o.com/mwdh2o/pages/memberag/member02.html>.

³⁰ For the purposes of this Appendix, tiered refers to a rate scheme for CII that encourages conservation by increasing the cost of water as a function of increased consumption.

- Web links are provided to indicate the source(s) of information used to determine if tiered rate structures are in place at the district or municipal level.
- The column entitled “Information on City/Town Recycled – Reclaimed Water Ordinances:”
 - Provides a specific reference to local rules governing the use of recycled or reclaimed water, and provides the name of the rule and the Web site address; or
 - Provides the Web site address to obtain information about water recycling activities in the city or town.

A.3 Purpose of Table A.2

Table A.2 highlights the water districts, cities and towns that have tiered rate structures in place for the residential customers.

A.4 Summary Conclusions

The information summarized in Tables A.1 and A.2 show the following:

- Very few water districts, cities or towns in southern California have tiered rate structures in place for CII, in contrast to the communities with tiered rate structures for residential. However, the number of areas with residential tiered rate structures suggests its potential value as a vehicle to encourage conservation and raise revenue.
- The regional water districts primarily sell water at the wholesale level to cities and towns, private water companies, and/or investor-owned utilities. Some of these cities or towns are supplied water from several water districts. Several regional water districts sell supplemental water³¹ and do not sell water at the retail level directly to consumers.
- Several water districts, cities and towns have adopted specific rules for recycled - reclaimed water, although in many instances these local regulatory provisions are quite limited in scope. Regardless, as integrated water and energy efficiency programs are implemented in southern California, these rules will need to be considered in addition to state rules.

³¹Several of the MWD regional member water districts refer to providing water to providing “supplemental water” to supplement and enhance the local water supplies. See for example, Three Valleys Municipal Water District (http://www.threevalleys.com/asp/fs_AboutThreeValleys.asp); Foothill Municipal Water District (<http://www.fmwd.com/About-Us.aspx>); and Western Municipal Water District of Riverside County (<http://www.wmwd.com/general.htm>).

Table A.1: Southern California Water Districts/Cities/Towns with Tiered Water Rate Structures for CII and Recycled – Reclaimed Water Provisions

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Anaheim	No specific city/town level tiered rate structure for CII. http://www.anaheim.net/article.asp?id=1013 .	See: http://www.anaheim.net/section.asp?id=148 .
Beverly Hills	No specific city/town level tiered rate structure for CII. http://www.beverlyhills.org/civica/filebank/blobdload.asp?BlobID=2820 .	See: http://www.beverlyhills.org/services/utilities/water/default.asp .
Burbank	No specific city/town level tiered rate structure for CII Burbank’s recycled water rates are higher than the General Service rates. http://www.burbankwaterandpower.com/water-conservation/rates-and-charges .	Yes BWP Rules and Regulations – Part 5: Rules and Regulations Governing Use of Reclaimed Water. http://www.burbankwaterandpower.com/water/rules-and-regulations-water .
Compton	No specific city/town level tiered rate structure for CII. http://www.comptoncity.org/water/wSolWaste2.html .	Yes Chapter XXIII Sewer and Water, Water Code, 23-1. http://70.168.205.112/compton_ca/lpext.dll?f=templates&fn=main-hit-h.htm&2.0 .
Fullerton	No specific city/town level tiered rate structure for CII. http://www.cityoffullerton.com/civica/filebank/blobdload.asp?BlobID=5500 .	See: http://www.cityoffullerton.com/depts/engineering/water_system_management_n_supply/default.asp .
Glendale	No specific city/town level tiered rate structure for CII. The rate for recycled water service is approximately 75% of the standard water service rate. http://www.glendalewaterandpower.com/rates/water.aspx .	Yes Glendale Municipal Code, Chapter 13.28 Recycled Water Service. http://www.ci.glendale.ca.us/gmc/13.28.asp .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Long Beach	<p>Yes</p> <p>Six categories: Single-family; Duplex Residential; Multi-family; Commercial; Industrial; and Irrigation and Volumetric Rates.</p> <p>http://www.lbwater.org/paying_for_water/wr.html.</p>	<p>Yes</p> <p>See Rules, Regulations And Charges Governing Potable Water, Reclaimed Water, Sewer Service, and The Water Conservation and Water Supply Shortage Plan, Part 9 Reclaimed Water Service.</p> <p>http://www.lbwater.org/pdf/rules_regs.pdf.</p>
Los Angeles	<p>Yes</p> <p>Los Angeles Department of Water and Power (LADWP) has an increasing block rate structure with two tiers that applies to all customer classes. The first tier rate includes pass-through adjustment factors. The second tier rate is based on the cost for new water supplies (marginal cost) and has a seasonal component for excess usage.</p> <p>http://www.ladwp.com/ladwp/cms/ladwp001155.jsp.</p>	<p>See:</p> <p>http://www.ladwp.com/ladwp/cms/ladwp001620.jsp.</p>
Pasadena	<p>Yes</p> <p>Three-tiered rate structure. First and second tiers reflect water allocated to a customer based on the customer’s meter size. Third tier water is all water used by a customer in excess of the customer’s first and second block allocations.</p> <p>http://ci.pasadena.ca.us/waterandpower/pdf/WaterRates062007.pdf.</p>	<p>See:</p> <p>http://ordlink.com/codes/pasadena/index.htm?SearchCode=Begin+Searching+Municipal+Code.</p>
San Fernando	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.ci.san-fernando.ca.us/.</p>	<p>Yes, limited</p> <p>Code of Ordinances: City of San Fernando, CA - Article III: Water - Sec. 94-298.</p> <p>http://www.municode.com/resources/gateway.asp?pid=11299&sid=5.</p>
San Marino	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.cityofsanmarino.org/.</p>	<p>See:</p> <p>http://www.ci.san-marino.ca.us/city_ordinances.htm.</p>
Santa Ana	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.municode.com/Resources/gateway.asp?pid=14452&sid=5.</p> <p>http://www.ci.santa-ana.ca.us/pwa/documents/FY06-07FeeSchedule.pdf.</p>	<p>Yes, limited</p> <p>Santa Ana Municipal Code, Article XVI. Water Efficient Landscape Standards, Sec. 41-1503.</p> <p>http://www.municode.com/Resources/gateway.asp?pid=14452&sid=5.</p>

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Santa Monica	Yes Two-tier rate structure based on use. http://www01.smgov.net/epwm/utilities/wat/rate/s0.htm .	Yes Santa Monica Municipal Code, Article 7 - Public Works, 7.16.020 Water Conservation Requirements. http://www.qcode.us/codes/santamonica/ .
Torrance	No specific city/town level tiered rate structure for CII. http://www.ci.torrance.ca.us/PDF/WaterRates3-1-08-Sewers7-1-08.pdf .	Yes Torrance Municipal Code, Article 5 - Reclaimed Water (Added by O-3392). http://municipalcodes.lexisnexis.com/codes/torrance/ .
Calleguas Municipal Water District (Calleguas) ³²	Calleguas provides supplemental water to its service area in Ventura County. The water district does not deliver water directly to consumers. http://www.calleguas.com/index.html .	See: http://www.calleguas.com/index.html .
Camarillo	No specific city/town level tiered rate structure for CII. http://www.ci.camarillo.ca.us/docs/60201.pdf .	Yes, limited Camarillo Municipal Code, Chapter 14.12 Water Conservation Measures, 14.12.010. http://municipalcodes.lexisnexis.com/codes/camarillo/index.htm .
Moorpark	No specific city/town level tiered rate structure for CII. http://ci.moorpark.ca.us/cgi-bin/html0s.exe/0429.1.8811071199600027199 .	Yes, limited Moorpark Municipal Code, Title 8 Health and Safety, Chapter 8.52 Stormwater Quality Management, 8.52.020 Definitions. http://qcode.us/codes/moorpark/ .
Oxnard	Yes Three tiers for commercial and industrial, with increasing rates based on use. http://publicworks.cityofoxnard.org/Uploads/Water/O-2750.pdf .	Yes City of Oxnard Ordinance No. 2728 - Requirements for Use of Recycled Water. http://publicworks.cityofoxnard.org/Uploads/Water/O rd 2728.pdf .
Port Hueneme	No specific city/town level tiered rate structure for CII. http://www.ci.port-hueneme.ca.us/watermeters/index.html .	See: http://www.ci.port-hueneme.ca.us/Public_Works/WaterDivision.htm .

³² Websites and/or specific retail water information were not found for the following entities within the Calleguas region: Camarillo Heights, Fairview, Lake Sherwood Valley, Las Posas, Oak Park, Naval Air Weapons Station Point Mugu, Naval Construction Battalion Center Port Hueneme, Santa Rosa Valley, and Somis.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Simi Valley	No specific city/town level tiered rate. http://www.simivalley.org/index.aspx?page=165 .	See: http://www.gswater.com/index.html .
Thousand Oaks	No specific city/town level tiered rate structure for CII. http://ci.thousand-oaks.ca.us/civica/filebank/blobdload.asp?BlobID=11588 . http://ci.thousand-oaks.ca.us/civica/filebank/blobdload.asp?BlobID=12905 .	Yes, limited The City of Thousand Oaks, CA Municipal Code, Title 10-Utilities, Chapter 2-Water, Article 11-Water Conservation, Sec. 10-2.1108 – Exceptions. http://www.amlegal.com/nxt/gateway.dll/California/thousandoaks_ca/thecityofthousandoakscaliforniamunicipal?f=templates\$fn=default.htm\$3.0\$vid=amlegal:thousandoaks_ca .
Central Basin Municipal Water District (Central Basin) ³³	Central Basin wholesales imported water to cities, mutual water companies, and investor-owned utilities and private companies. http://www.centralbasin.org/ .	See: http://www.centralbasin.org/ .
Artesia	No specific city/town level tiered rate structure for CII. http://www.cityofartesia.us/faqs.html#moving .	Yes, limited Artesia Municipal Code, Title 6 Sanitation and Health, Chapter 7; 6-7.03 Definitions. http://qcode.us/codes/artesia/ .
Bell	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.cityofbell.org/index.php .
Bellflower	No specific city/town level tiered rate structure for CII. http://www.bellflower.org/docs/summary_of_water_rates_fees_-_june_16_2007.pdf .	See: http://www.bellflower.org/docs/summary_of_water_rates_fees_-_june_16_2007.pdf .
Bell Gardens	No specific city/town level tiered rate structure for CII. http://www.gswater.com/rates.html .	See: http://www.gswater.com/index.html .
Cerritos	No specific city/town level tiered rate structure for CII. http://www.ci.cerritos.ca.us/atoz/rtoz.html#W .	Yes Cerritos Municipal Code, Chapter 13.04-Water & Chapter 22.72 -Water Conservation in Landscaping, Sec. 140-Water features. http://www.codepublishing.com/ca/cerritos.html .

³³ Websites and/or specific retail water information were not found for the following entities within the Central Basin region: Florence and South Whittier.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Commerce	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.ci.commerce.ca.us/waterservice.htm .
Cudahy	No specific city/town level tiered rate structure for CII. http://www.cudahy.ca.us/srv/utilities.asp .	See: http://www.cudahy.ca.us/srv/utilities.asp .
Downey	No specific city/town level tiered rate structure for CII. http://www.downeygis.org/pw3/Water.htm .	Yes Downey Municipal Code, Article VII – Streets And Public Works, Chapter 3.5–Water Conservation Regulations And Restriction, section 7358-Water Conservation. http://qcode.us/codes/downey/ .
East Los Angeles	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.calwater.com/ .
Hawaiian Gardens	No specific city/town level tiered rate structure for CII. http://hgcity.org/community.php#publicutilities . http://www.gswater.com/rates.html .	Yes, limited Hawaiian Gardens Municipal Code, Title 13 Utilities Chapter 13.18 Water Conservation In Landscaping, Sec. 13.18.090 Water Features. http://qcode.us/codes/hawaiiangardens/ .
Huntington Park	No specific city/town level tiered rate structure for CII. http://www.huntingtonpark.org/index.asp?NID=76 . http://ca-huntingtonpark.civicplus.com/documents/Finance/water%20deposit%20&rates.PDF .	Yes, limited Huntington Park Municipal Code, Title 9-Zoning, Chapter 3 General Regulations, Article 4. Landscaping Standards, Sec. 9-3.407 Landscape documentation package. http://qcode.us/codes/huntingtonpark/ .
La Habra Heights	No specific city/town level tiered rate structure for CII. http://la-habra-heights.org/index.php?option=com_content&task=view&id=21&Itemid=38 .	See: http://www.la-habra-heights.org/index.php?option=com_content&task=view&id=21&Itemid=38 .
Lakewood	No specific city/town level tiered rate structure for CII. http://www.lakewoodcity.org/services/water/default.asp .	Yes, limited City of Lakewood Municipal Code, Article VIII, Building Reg. 8600 - Water Conservation & 7500 - Water Works System. http://weblink.lakewoodcity.org/weblink7/Search.aspx .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
La Mirada	No specific city/town level tiered rate structure for CII. http://www.cityoflamirada.org/index.aspx?page=111 .	Yes, limited La Mirada, CA Code of Ordinances, Title 21 Zoning, Article VII: Site Planning And General Development Provisions, Sec. 21.66.060 Water-Efficient Landscaping. http://www.amlegal.com/nxt/gateway.dll/California/la_mirada_ca/cityoflamiradacaliforniacodeofordinances?f=templates\$fn=default.htm\$3.0\$vid=amlegal:lamirada_ca .
Lynwood	No specific city/town level tiered rate structure for CII. http://lynwood.ca.us/citySvc/cityServices_items.htm#water_distribution .	Yes, limited Lynwood, CA City Code, Chapter 25: Zoning, Article 45-Landscaping And Irrigation Systems, Sec. 25-45-3: Definitions. http://www.sterlingcodifiers.com/CA/Lynwood/index.htm .
Maywood	No specific city/town level tiered rate structure for CII. http://www.cityofmaywood.com/home/directory.cfm?sec=home&subSec=directory .	See: http://www.cityofmaywood.com/home/directory.cfm?sec=home&subSec=directory .
Montebello	No specific city/town level tiered rate structure for CII. http://www.cityofmontebello.com/depts/finance/accounts_receivable/water_services.asp .	Yes, limited Montebello Municipal Code, Title 8 Health and Safety, Chapter 8.28 - Mandatory Water Conservation. http://municipalcodes.lexisnexis.com/codes/montebello/ .
Norwalk	No specific city/town level tiered rate structure for CII. http://www.ci.norwalk.ca.us/generalservices.asp#watersystem . http://www.ci.norwalk.ca.us/pdf/agendas/15%20-%20RES%2008-47%20-%20Water%20Rate%20Increase.pdf .	Yes, limited Norwalk Municipal Code: 13.08.030 Cross-connection protection requirements. 13.08.020 Definitions. 17.03.020 Water efficient landscape provisions. 18.04.040. http://www.qcode.us/codes/norwalk/ .
Paramount	Yes Water - Resolution 08:023 features a two tier rate structure for CII. http://www.paramountcity.com/ps.services.cfm?ID=23 .	See: http://www.paramountcity.com/download.cfm?ID=476 .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Pico Rivera	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.ci.pico-rivera.ca.us/government/citydepartments/publicworks.html#WATERDIV.</p>	<p>Yes, limited</p> <p>Pico Rivera CA Municipal Code: Chapter 16.04 Storm Water And Urban Runoff Pollution Prevention Chapter 13.70 Prohibitions On Wasteful Use Of Water Chapter 18.45 Water Efficient Landscape Provisions Chapter 13.60 Backflow Prevention And Cross-Connection Control.</p> <p>http://municipalcodes.lexisnexis.com/codes/picorivera/.</p>
Santa Fe Springs	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.santafesprings.org/depts/public_works/default.asp.</p>	<p>Yes, limited</p> <p>Santa Fe Springs Code of Ordinances, Chapter 53: Water & Chapter 52: Storm Water Runoff.</p> <p>http://www.amlegal.com/nxt/gateway.dll/California/santa/cityofsantafespringscaliforniacodeoford?f=templates\$fn=default.htm\$3.0\$vid=amlegal:santafesprings-ca\$anc.</p>
Signal Hill	<p>No specific city/town level tiered rate structure for CII.</p> <p>www.cityofsignalhill.org.</p>	<p>Yes, limited</p> <p>Signal Hill Municipal Code, Title 13 Public Utilities, Chapter 13.10-Water Conservation In Landscaping, Sec. 13.10.080 Water Features.</p> <p>http://www.amlegal.com/nxt/gateway.dll/California/signal_hill_ca/cityofsignalhillcaliforniamunicipalcode?f=templates\$fn=default.htm\$3.0\$vid=amlegal:signalhill_ca.</p>
South Gate	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.sogate.org/index.cfm/fuseaction/nav/navid/71/.</p>	<p>Yes, limited.</p> <p>South Gate Municipal Code, Title 6 Health And Sanitation, Chapter 6.64 Water Conservation Ordinance, Sec. 6.64.040 Use of Reclaimed Water.</p> <p>http://codepublishing.com/CA/SouthGate/.</p>
Vernon	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.cityofvernon.org/PDF/depPDF/community_services/PDFs/waterrates.pdf.</p>	<p>See:</p> <p>http://www.cityofvernon.org.</p>
Whittier	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.whittierch.org/ http://www.whittierch.org/pdfs/2008-10-DHSFactSheet.pdf.</p>	<p>Yes, limited</p> <p>Whittier, CA Municipal Code, Title 13-Public Services, Chapter 13.42-Water Conservation In Landscaping, 13.42.080-Water Features.</p> <p>http://municipalcodes.lexisnexis.com/codes/whittier/.</p>

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Eastern Municipal Water District (EMWD) ³⁴	EMWD retails water to more than 82,000 homes and businesses (including 200 agricultural customers) and provides supplemental water to eight cities or other local water agencies. There is no specific district level tiered rate structure for CII. A tiered rate structure exists for residential. http://www.emwd.org/ .	Yes EMWD Ordinance 68.2 http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Nuevo	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Menifee	No specific city/town level tiered rate structure for CII. http://www.cityofmenifee.us/departments.html . http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Good Hope	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Hemet	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Juniper Flats	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Lakeview	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .

³⁴ Websites and/or specific retail water information were not found for the following entities within EMWD region: Homeland, North Canyon Lake, and Perris.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Mead Valley	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Moreno Valley	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes, limited Moreno Valley Municipal Code, Title 9 Planning And Zoning, Chapter 9.17 Landscape Requirements, Sec. 9.17.010. http://qcode.us/codes/morenovalley/ .
Murrieta	No specific city/town level tiered rate structure for CII. http://www.murrieta.org/ .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Murrieta Hot Springs	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Quail Valley	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Romoland	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
San Jacinto	No specific city/town level tiered rate structure for CII. http://www.ci.san-jacinto.ca.us/residents/utilities.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Sun City	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Temecula	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Valle Vista	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Winchester	No specific city/town level tiered rate structure for CII. http://www.emwd.org/water_service/water_rates.html .	Yes EMWD District Ordinance 68.2. http://www.emwd.org/news/ordinances/ord%2068.2.pdf .
Foothill Municipal Water District (FMWD) ³⁵	FMWD delivers water to its member agencies to make up the difference between local groundwater supply and customer demand. http://www.fmwd.com/ .	See: http://www.fmwd.com/ .
La Cañada Flintridge	No specific city/town level tiered rate structure for CII. http://www.lacanadaflintridge.com/index.htm .	See: http://qcode.us/codes/lacanadaflintridge/ .
Inland Empire Utilities Agency (IEUA)	IEUA supplies supplemental water to cities in the Chino Basin region, as well as to the Cucamonga Valley and Monte Vista Water Districts and the Water Facilities Authority. http://www.ieua.org/recycled/recycled.html .	See: http://www.ieua.org/recycled/recycled.html .
Chino Hills	No specific city/town level tiered rate structure for CII. http://www.chinohills.org/index.asp?NID=655 .	See: http://www.chinohills.org/FAQ.ASP?TID=32 .
Fontana	No specific city/town level tiered rate structure for CII. http://www.fontanawater.com/tariff/1868-W.pdf . http://www.fontanawater.com/tariff/1869-W.pdf .	Yes The Code of The City of Fontana, CA, Chapter 28 - Vegetation, Article IV - Landscaping and Water Conservation, Sec. 28-109 - Recycled water. http://www.municode.com/resources/gateway.asp?pid=12233&sid=5 .

³⁵ Websites and/or specific retail water information were not found for the following entities within the FMWD region: Altadena, La Crescenta, and Montrose.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Montclair	No specific city/town level tiered rate structure for CII. http://www.ci.montclair.ca.us/depts/utility_services/default.asp .	See: http://www.mvwd.org/ .
Ontario	Yes Water rates are a combination of a Readiness-to-Serve Charge, which is based on the size of the meter, and a Usage Charge, which is based on the amount of water used. The Usage Charge is greater for water used over 15 hundred cubic feet (hcf). There is a Readiness-to-Serve Charge for Recycled Water, which is lower than the charge for potable water. http://www.ci.ontario.ca.us/index.cfm/33516#WaterRates .	Yes City of Ontario, CA Municipal Code, Title 6- Sanitation and Health, Chapter 8C: Recycled Water Use. http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm .
Rancho Cucamonga	No specific city/town level tiered rate structure for CII. http://www.ccwdwater.com/index.aspx?page=166#89 .	See: http://www.ccwdwater.com/index.aspx?page=60 .
Upland	No specific city/town level tiered rate structure for CII. http://www.ci.upland.ca.us/asp/Site/PublicWorks/Introduction/index.asp .	See: http://www.ci.upland.ca.us/asp/Site/PublicWorks/Introduction/index.asp .
Las Virgenes Municipal Water District (LVMWD) ³⁶	LVMWD provides potable and recycled water to more than 65,000 residents in the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and unincorporated areas of western Los Angeles County. Tiered rate structure for CII. http://www.lvmwd.com/ .	See: http://www.lvmwd.com/ .
Agoura Hills	Yes http://www.lvmwd.com/index.aspx?page=5 .	Yes, limited Municipal Code City of Agoura Hills, CA, Chapter 6, Part 2. Special Regulations, Division 8. Guidelines For Landscaping, Planting And Irrigation Plans, 9658.6-Water efficient landscaping. http://www.lvmwd.com/index.aspx?page=39 .

³⁶ Websites and/or specific retail water information were not found for the following entities within LVMWD region: Agoura, Chatsworth, Lake Manor, Malibu Lake, Monte Nido, and West Hills.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Calabasas	Yes http://www.lvmwd.com/index.aspx?page=5 . http://www.lvmwd.com/index.aspx?page=39 .	Yes, limited Calabasas, CA Municipal Code, Title 17 Land Use And Development, Chapter 17.26 Landscaping, 17.26.050 Landscape Standards. http://www.bpcnet.com/codes/calabasas/ .
Hidden Hills	Yes http://www.lvmwd.com/index.aspx?page=5 . http://www.lvmwd.com/index.aspx?page=39 .	Yes, limited Hidden Hills Municipal Code, Title 5-Land Use And Development, Chapter 10-Water Efficient Landscaping. http://www.hiddenhillscity.org/docs/landuse.pdf .
Westlake Village	Yes http://www.lvmwd.com/index.aspx?page=5 . http://www.lvmwd.com/index.aspx?page=39 .	Yes, limited Westlake Village Municipal Code, Article 9. Zoning Regulations, Chapter 9.15. Design Standards, Section 9.16.050. Irrigation Design Criteria. http://ordlink.com/codes/wlakevillage/index.htm .
Municipal Water District of Orange County (MWDOC) ³⁷	MWDOC provides imported water to 28 retail water agencies and cities. http://www.mwdoc.com/ .	See: http://www.mwdoc.com/ .
Brea	No specific city/town level tiered rate structure for CII. http://www.ci.brea.ca.us/page.cfm?name=waterquality .	Yes, limited Brea City Code, Part I-Municipal Code, Title 13-Utilities, Chapter 13.20-Water Management Program, Sec.13.20.040-Water Conservation Stages. http://www.amlegal.com/nxt/gateway.dll/California/brea/partimunicipalcode/title13utilities/chapter1320watermanagementprogram?fn=altmain-nf.htm\$f=templates\$3.0#LPTOC4 .
Buena Park	No specific city/town level tiered rate structure for CII. http://www.buenapark.com/Index.aspx?page=59 .	See: http://qcode.us/codes/buenapark/ .
Capistrano Beach	No specific city/town level tiered rate structure for CII. http://www.capistranobeach.com/local_resources/ .	See: http://www.scwd.org .

³⁷ Websites and/or specific retail water information were not found for the following entities within the MWDOC region: Leisure World, Monarch Beach, and Tustin Foothills.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Corona Del Mar	No specific city/town level tiered rate structure for CII. http://www.cdmchamber.com/resources/default.asp .	See: http://www.cdmchamber.com/resources/default.asp .
Costa Mesa	No specific city/town level tiered rate structure for CII. http://www.ci.costa-mesa.ca.us/departments/water_quality.htm . http://www.mesawater.org/pdf/Water_Rates.pdf .	See: http://www.mesawater.org .
Coto De Caza	No specific city/town level tiered rate structure for CII. http://www.smwd.com/ .	See: http://www.smwd.com/ .
Cypress	No specific city/town level tiered rate structure for CII. https://www.quickbase.com/db/bcd2a94m8?a=dr&r=fm&rl=8rc .	Yes, limited Code City of Cypress, CA, Appendix I-Zoning, Article 3-Performance and Development Standards. http://www.municode.com/Resources/gateway.asp?pid=10126&sid=5 .
Dana Point	No specific city/town level tiered rate structure for CII. http://www.scwd.org/ .	Yes, limited Dana Point Municipal Code, Title 9 Zoning, Chapter 9.55 Landscaping Standards and Requirements. http://qcode.us/codes/danapoint/ .
Fountain Valley	Changed to a block rate in 2008. Effective July 1, 2008, the City of Fountain Valley converted from the existing two-tiered rate structure to a single block rate. http://www.fountainvalley.org/government/departments/publicworks/waterinfo.html .	Yes, limited Fountain Valley Municipal Code, Title 14 Water and Sewers, Chapter 14.18 Water Conservation, Sec. 14.18.040 Water Conservation Stages. http://qcode.us/codes/fountainvalley/ .
Garden Grove	No specific city/town level tiered rate structure for CII. http://www.ci.garden-grove.ca.us/?q=pw/water . http://www.ci.garden-grove.ca.us/?q=finance/waterrates .	See: http://www.ci.garden-grove.ca.us/cgi-bin/municode_public/code.cgi .
Huntington Beach	No specific city/town level tiered rate structure for CII. http://www.ci.huntington-beach.ca.us/government/elected_officials/city_treasurer/municipal_services_payment/index.cfm .	See: http://www.ci.huntington-beach.ca.us/government/elected_officials/city_treasurer/municipal_services_payment/index.cfm .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Irvine	<p>Yes</p> <p>Irvine is under IRWD, which has a tiered rate structure for both potable and reclaimed water. These categories reward conservation and include base rate, inefficient, excessive, and wasteful.</p> <p>http://www.irwd.com/.</p> <p>http://www.ci.irvine.ca.us/depts/pw/waterquality/default.asp.</p>	<p>Yes</p> <p>Municipal Code of Irvine, CA Title V – Planning, Division 7 – Sustainability in Landscaping, Chapter 1.</p> <p>http://www.irwd.com/reclaimed/index.php.</p>
Laguna Beach	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.scd.org/.</p>	<p>See:</p> <p>http://qcode.us/codes/lagunabeach/view.php.</p>
Laguna Hills	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.ci.laguna-hills.ca.us/services_directory/#utilities.</p>	<p>See:</p> <p>http://www.ci.laguna-hills.ca.us/services_directory/#utilities.</p>
Laguna Niguel	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://ca-lagunaniguel2.civicplus.com/index.aspx?NID=154.</p> <p>http://mnwd.com/customer-service/water-rates.aspx.</p>	<p>See:</p> <p>http://ca-lagunaniguel2.civicplus.com/index.aspx?NID=154.</p>
Laguna Woods	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.lagunawoodscity.org/section.cfm?id=83.</p>	<p>See:</p> <p>http://www.municode.com/Resources/gateway.asp?pid=13829&sid=5.</p>
La Habra	<p>Yes, by surcharge during the period May 1 to September 30.</p> <p>http://www.ci.la-habra.ca.us/article.cfm?id=108.</p>	<p>Yes, limited</p> <p>La Habra, CA Municipal Code, Title 18 Zoning, Chapter 18.57 Landscaping and Water Conservation, Sec. 18.57.040 General Requirements, et. al.</p> <p>http://lahabracity.org/images/Site08/City%20Manager/Part%208.00%20Public%20Works%20Fees.pdf.</p>
Lake Forest	<p>Yes, see IRWD</p> <p>http://www.city-lakeforest.com/services/residents/water_and_sewer_services/default.asp.</p>	<p>See:</p> <p>http://ordlink.com/codes/lkforest/index.htm.</p>

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
La Palma	No specific city/town level tiered rate structure for CII. http://www.cityoflapalma.org/index.asp?nid=205	Yes, limited La Palma Municipal Code, Chapter 25-Water, Article X. Emergency Water Management, Chapter 25-Water, Sec. 25-70. Water Conservation Stages. http://municipalcodes.lexisnexis.com/codes/lapalma/ .
Los Alamitos	No specific city/town level tiered rate structure for CII. http://www.ci.los-alamitos.ca.us/links/index.html .	Yes, limited Los Alamitos Municipal Code, Title 17 Zoning, Division 3. Site Planning and General Development Standards, Chapter 17.20 Landscaping. Sec.17.20.050 Xeriscape Principles. http://qcode.us/codes/losalamitos/ .
Mission Viejo	No specific district level tiered rate structure for CII. http://cityofmissionviejo.org/CityPage.aspx?id=180 .	Yes, limited Code Of Ordinances, City of Mission Viejo, CA, Title 8-Buildings and Construction, Chapter 8.12-Water Efficient Landscape Regulations, Sec. 8.12.014-Use of Reclaimed Water, et. al. http://www.municode.com/resources/gateway.asp?pid=12487 .
Newport Beach	No specific city/town level tiered rate structure for CII. http://www.city.newport-beach.ca.us/utilitiesweb/waterdivision.asp .	Yes, limited Newport Beach Municipal Code, Title 14 Water and Sewers, Chapter 14.17 Water-Efficient Landscaping, Sec. 14.17.030 Landscape And Irrigation Design Standards. http://municipalcodes.lexisnexis.com/codes/newport/index.htm .
Orange	Yes Tiered rates for increasing blocks of 0 – 20 hcf; 21 – 70 hcf; and 70 hcf and over, as well as elevation pumping charges. http://www.cityoforange.org/depts/publicworks/water_services/default.asp .	See: http://www.municode.com/resources/gateway.asp?pid=16539&sid=5 .
Placentia	No specific city/town level tiered rate structure for CII. http://www.placentia.org/?section=4&type=FAQ&crumbs1=4&crumbs2=29#A23 .	Yes, limited. Placentia, CA Municipal Code, Title 23 Zoning, Chapter 23.77 Xeriscape, Sec. 23.77.050 Xeriscape Criteria. http://municipalcodes.lexisnexis.com/codes/placentia/

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Rancho Santa Margarita	No specific city/town level tiered rate structure for CII. http://www.cityofrsm.org/faqs/answers.asp?id=596 .	See: http://www.municode.com/resources/gateway.asp?pid=13912&sid=5 .
San Clemente	No specific city/town level tiered rate structure for CII. http://www.scwd.org/ .	Yes, limited San Clemente Municipal Code, Title 13 Public Services, Chapter 13.04 Water Service System. http://www.municode.com/resources/gateway.asp?pid=13912&sid=5 .
San Juan Capistrano	No specific city/town level tiered rate structure for CII. http://www.sanjuancapistrano.org/Index.aspx?page=894 .	Yes, limited. Municipal Code City of San Juan Capistrano, CA, Title 9-Land Use, Chapter 3-Zoning Districts And Standards, Sec. 9-3.527-Landscape (Water Conservation Standards). http://www.municode.com/Resources/gateway.asp?pid=16607&sid=5 .
Seal Beach	No specific city/town level tiered rate structure for CII. http://www.ci.seal-beach.ca.us/publicworks/water1.htm .	See: http://www.ci.seal-beach.ca.us/publicworks/water1.htm .
Stanton	No specific city/town level tiered rate structure for CII. http://www.ci.stanton.ca.us/faqs/ .	See: http://www.ci.stanton.ca.us/faqs/ .
Tustin	See IRWD. Four-tier rate structure based on consumption http://www.tustinca.org/departments/finance/documents/AnnualReport08.pdf .	See: http://www.municode.com/resources/gateway.asp?pid=11307&sid=5 .
Villa Park	Yes Surcharge on water delivered in excess of 5 billing units. http://www.villapark.org/# http://www.serranowater.org/html/Rates.htm .	Yes, limited City Of Seal Beach Municipal Code, Title 9, Public Property, Public Works And Building Regulations. http://www.ci.seal-beach.ca.us/pdf/Title%209%20Code%20Revision%20Comparison.pdf .
Westminster	No specific city/town level tiered rate structure for CII. http://www.ci.westminster.ca.us/civica/filebank/blobdload.asp?BlobID=4583 .	Yes, limited Municipal Code City of Yorba Linda, CA, Title 18-Zoning, Chapter 18.28-Landscaping Standards, Sec. 18.28.030-General Provisions. http://www.qcode.us/codes/westminster/ .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Yorba Linda	No specific city/town level tiered rate structure for CII. http://www.ylwd.com/service/rates-fees.html .	Yes, limited Municipal Code City of Yorba Linda, CA, Title 18-Zoning, Chapter 18.28-Landscaping Standards, Sec. 18.28.030-General Provisions. http://www.municode.com/resources/gateway.asp?pid=13406&sid=5 .
San Diego County Water Authority (SDCWA) ³⁸	SDCWA is a water wholesaler who supplies water to its 24 member agencies in the San Diego region. http://www.sdcwa.org/ .	See: http://www.sdcwa.org/manage/sources-recycling.phtml .
Alpine	No specific information about CII rates listed. http://www.padredam.org .	See: http://www.padredam.org .
Bonita	Yes Tiered rate structure for water and recycled water based on use. http://www.otaywater.gov/owd/pages/about/documents/RateSheet.pdf . http://www.sweetwater.org .	See: http://www.otaywater.gov/owd/pages/about/about/home.aspx .
Bonsall	No specific city/town level tiered rate structure for CII. http://www.rainbowmwd.com/ .	See: http://www.rainbowmwd.com/ .
Carlsbad	Flat rate with a conservation rate. The water rate structure is a flat rate of \$2.12 per unit (one unit equals 748 gallons). A conservation rate of \$1.91 is applied based on meter size and usage. http://www.carlsbadca.gov/finance/wdrate.html .	See: http://www.carlsbadca.gov/water/index.html .
Chula Vista	Yes Three-tiered rate structure for potable water and recycled water based on use. http://www.chulavistaca.gov/City_Services/Other_Services/Default.asp . http://www.otaywater.gov/owd/pages/about/documents/RateSheet.pdf .	See: http://www.otaywater.gov/owd/pages/about/about/home.aspx .

³⁸ Websites and/or specific retail water information were not found for the following entities within the SDCWA region: Camp Pendleton.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Del Mar	No specific city/town level tiered rate structure for CII. http://www.delmar.ca.us/NR/rdonlyres/AA871706-9B96-41E7-95FA-536768B7DF05/0/BiMonthlyUtilityRates7108.pdf .	See: http://www.delmar.ca.us/Government/Pages/title21-watersupply.aspx .
El Cajon	Yes Three-tiered rate structure for potable water and recycled water based on use. http://www.otaywater.gov/owd/pages/about/documents/RateSheet.pdf .	See: http://www.otaywater.gov/owd/pages/about/about/home.aspx .
Encinitas	No specific city/town level tiered rate structure for CII. http://www.ci.encinitas.ca.us/Government/CityD/SanDWD/ .	See: http://www.ci.encinitas.ca.us/Government/CityD/SanDWD/ .
Escondido	No specific city/town level tiered rate structure for CII. http://www.ci.escondido.ca.us/depts/ut/Water_Rates_and_Fees.pdf .	See: http://www.qcode.us/codes/escondido/ .
Fallbrook	Yes Two-tiered rate system based on use. http://www.fpud.com/Service_Rates.aspx http://www.rainbowmwd.com/ .	See: http://www.fpud.com/ .
Lakeside	No specific city/town level tiered rate structure for CII. http://www.lakesidewaterdistrict.com/ .	See: http://www.lakesidewaterdistrict.com/ .
La Mesa	Yes Three-tiered rate structure for water and recycled water based on use. http://www.otaywater.gov/owd/pages/about/documents/RateSheet.pdf .	See: http://www.otaywater.gov/owd/pages/about/about/home.aspx .
Lemon Grove	No specific city/town level tiered rate structure for CII. http://www.hwd.com/about/rates.htm http://www.ci.lemon-grove.ca.us/BusinessDirectoryII.asp?BID=7	See: http://www.hwd.com/about/index.htm .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
National City	No specific city/town level tiered rate structure for CII. http://www.ci.national-city.ca.us/ .	See: http://municipalcodes.lexisnexis.com/codes/national/ .
Oceanside	No specific city/town level tiered rate structure for CII. http://www.rainbowmwd.com/ .	See: http://www.rainbowmwd.com/ .
Pauma Valley	No specific city/town level tiered rate structure for CII. http://www.yuimamwd.com .	See: http://www.yuimamwd.com .
Poway	No specific city/town level tiered rate structure for CII. http://www.ci.poway.ca.us/Index.aspx?page=326	See: http://www.poway.org/Index.aspx?page=470 .
Rainbow	No specific city/town level tiered rate structure for CII. http://www.rainbowmwd.com/ .	See: http://www.rainbowmwd.com/ .
Ramona	No specific city/town level tiered rate structure for CII. http://www.rmwd.org/rates/Fee%20schedule%202009.pdf .	See: http://www.rmwd.org/about/about.htm .
Rancho Santa Fe	No specific city/town level tiered rate structure for CII. http://www.santafeirrigationdistrict.org/rates.htm	See: http://www.santafeirrigationdistrict.org/water.htm .
San Diego	No specific city/town level tiered rate structure for CII. http://www.sandiego.gov/water/rates/rates.shtml . http://www.sandiego.gov/water/pdf/rulesandregs.pdf .	See: http://www.sdcwa.org/manage/sources-recycling.phtml .
San Marcos	No specific city/town level tiered rate structure for CII. http://www.ci.san-marcos.ca.us/index.aspx?page=360 .	See: http://www.ci.san-marcos.ca.us/Modules/ShowDocument.aspx?documentid=243 .
Santee	No specific city/town level tiered rate structure for CII. http://www.ci.santee.ca.us/Index.aspx?page=106 http://www.padredam.org/PDFs/AllAboutRates.pdf .	See: http://www.padredam.org/PDFs/FactSheet.pdf .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Solana Beach	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.ci.solana-beach.ca.us/ContentPage.asp?ContentID=108.</p> <p>http://www.olivenhain.com/content.php?content=service_area_map&layout=Layout_1_column&columns=1.</p>	<p>See:</p> <p>http://www.olivenhain.com/content.php?content=service_area_map&layout=Layout_1_column&columns=1.</p>
Spring Valley	<p>Yes</p> <p>Three-tiered rate structure for potable water and recycled water based on use.</p> <p>http://www.otaywater.gov/owd/pages/about/documents/RateSheet.pdf.</p> <p>http://www.hwd.com/about/rates.htm.</p>	<p>See:</p> <p>http://www.otaywater.gov/owd/pages/about/about/home.aspx.</p> <p>http://www.hwd.com/about.</p>
Valley Center	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.vcmwd.org/Services/Water%20and%20Customer%20Service/~media/Files/Finance/Schedule%20of%20Rates.ashx.</p>	<p>See:</p> <p>http://www.vcmwd.org/.</p>
Vista	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.cityofvista.com/residents/liveinvista.cfm.</p> <p>http://www.vid-h2o.org/customer/rate.asp.</p>	<p>See:</p> <p>http://www.vid-h2o.org/home/index.asp.</p>
Three Valleys Municipal Water District (Three Valleys) ³⁹	<p>Three Valleys supplements and enhances the local water supplies to cities, water companies, and water districts within its service area.</p> <p>http://www.threevalleys.com/.</p>	<p>See:</p> <p>http://www.threevalleys.com/.</p>
Azusa	<p>Yes</p> <p>Two-tier rate structure for different meter sizes.</p> <p>http://www.azusalw.com/DocumentView.asp?DIID=573.</p>	<p>See:</p> <p>http://www.municode.com/resources/gateway.asp?pid=10418&sid=5.</p>

³⁹ Websites and/or specific retail water information were not found for the following entities within the Three Valleys region: Charter Oak, Covina Knolls, and South San Jose Hills.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Claremont	No specific city/town level tiered rate structure for CII. http://www.gswater.com/rates.html .	See: http://www.ci.claremont.ca.us/municipalcode.cfm . http://www.gswater.com/csa_homepages/claremont.html .
Covina	Yes Tiers are by non-drought year; moderate drought; and severe drought, all per hcf. http://www.ci.covina.ca.us/pw/waterrates1-2009.pdf .	See: http://www.codepublishing.com/ca/Covina/ .
Diamond Bar	No specific city/town level tiered rate structure for CII. http://www.ci.diamond-bar.ca.us/Index.aspx?page=95#water . http://www.wvwd.com/Forms/Rates_Commercial.pdf .	See: http://www.wvwd.com/RecycledWater/ .
Glendora	Yes Consumption above baseline is charged at a higher rate. http://www.ci.glendora.ca.us/public_works/samplewaterbill.pdf .	Yes, limited Glendora Municipal Code, Title 21 Zoning, Chapter 21.03 General Regulations, Sec. 21.03.060 Water-Efficient Landscaping. http://qcode.us/codes/glendora/ .
Industry	No specific city/town level tiered rate structure for CII. http://www.cityofindustry.org/services/serv_2.html .	See: http://www.cityofindustry.org/ .
La Verne	No specific city/town level tiered rate structure for CII. http://www.ci.laverne.ca.us/index.php?option=com_content&task=view&id=57&Itemid=99 .	Yes, limited La Verne Municipal Code, Title 13 Public Services, Division I. Water, Chapter 13.15 Water Conservation, Use and Restrictions, Sec. 13.15.040 Water Use Restrictions Established. http://qcode.us/codes/laverne/ .
Pomona	Yes Two-tiered rate structure. http://www.ci.pomona.ca.us/city_departments/utility_services/water_rates.php .	Yes, limited Code City of Pomona, CA, Chapter 62-Utilities http://www.municode.com/resources/gateway.asp?pid=13712&sid=5 .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Rowland Heights	No specific city/town level tiered rate structure for CII. http://www.wvwd.com/CustomerInfo/rate_schedule.asp . http://www.wvwd.com/Forms/Rates_Commercial.pdf .	See: http://www.wvwd.com/RecycledWater/ .
San Dimas	No specific city/town level tiered rate structure for CII. http://www.cityofsandimas.com/directory.cfm?task=detail&ID=5887 .	See: http://www.gswater.com/rates.html .
Walnut	No specific city/town level tiered rate structure for CII. http://www.wvwd.com/Forms/Rates_Commercial.pdf .	See: http://www.wvwd.com/RecycledWater/ .
West Covina	No specific city/town level tiered rate structure for CII. http://www.westcov.org/cityhall/depts/pubsvcs.html .	Yes, limited Code of Ordinances City of West Covina, CA, Chapter 23-Utilities, Article VII-Emergency Water Conservation Measures, Sec. 23-323-Phase I Shortage http://www.municode.com/resources/gateway.asp?pid=11504&sid=5 .
Upper San Gabriel Valley Municipal Water District (USGVMWD) ⁴⁰	USGVMWD provides wholesale water service to local water suppliers. http://www.usgvmwd.org/ .	See: http://www.usgvmwd.org/ .
Arcadia	No specific city/town level tiered rate structure for CII. http://www.ci.arcadia.ca.us/docs/water_and_sewer_rates_2006-07.pdf .	See: http://www.municode.com/Resources/gateway.asp?pid=16197&sid=5 .
Baldwin Park	No specific city/town level tiered rate structure for CII. http://www.baldwinpark.com/index.php?option=content&task=view&id=190 . http://www.sgvwater.com/tariff/1823-W.pdf .	See: http://www.amlegal.com/nxt/gateway.dll/California/baldwin/cityofbaldwinparkcaliforniacodeofordinance?f=templates\$fn=default.htm\$3.0\$vid=amlegal:baldwinpark_ca .

⁴⁰ Websites and/or specific retail water information were not found for the following entities within the USGVMWD region: Avocado Heights, Citrus, Hacienda Heights, Mayflower Village, South San Gabriel, Valinda, and West Puente Valley.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Bradbury	No specific city/town level tiered rate structure for CII. http://www.cityofbradbury.org/index.php?option=com_content&view=article&id=79&Itemid=90	See: http://www.cityofbradbury.org/images/stories/bradbury_municipal_code.pdf .
Covina	Yes Have tiered rates for drought levels: non-drought year, moderate drought, and severe drought. http://www.ci.covina.ca.us/pw/waterrates1-2009.pdf .	See: http://www.codepublishing.com/ca/Covina/ .
Duarte	No specific city/town level tiered rate structure for CII. http://www.accessduarte.com/CommunityServices/utilities.asp .	Yes, limited Duarte Municipal Code, Title 19 Planning and Zoning, Chapter 19.85-Water Efficient Landscaping http://municipalcodes.lexisnexis.com/codes/duarte/ .
El Monte	No specific city/town level tiered rate structure for CII. http://www.ci.el-monte.ca.us/Citygov/pwmaint/water/watermain.html#customer .	Yes, limited City of El Monte Municipal Code, Title 17-Zoning, Chapter 17.10-Landscaping Requirements http://municipalcodes.lexisnexis.com/codes/elmonte/ .
Glendora	No specific city/town level tiered rate structure for CII. http://www.ci.glendora.ca.us/public_works/samplewaterbill.pdf .	See: http://www.ci.glendora.ca.us/public_works/samplewaterbill.pdf .
Industry	No specific city/town level tiered rate structure for CII. http://www.cityofindustry.org/dex_14.html .	See: http://www.cityofindustry.org/dex_14.html .
Irwindale	No specific city/town level tiered rate structure for CII. http://irwindale.ca.us/utilities.html .	See: http://irwindale.ca.us/utilities.html .
La Puente	No specific city/town level tiered rate structure for CII. http://www.lapuente.org/alp_weblinks.htm http://www.lapuentewater.com/ .	See: http://www.amlegal.com/nxt/gateway.dll/California/lapuente/cityoflapuentemunicipalcode?f=templates\$fn=default.htm\$3.0\$vid=amlegal:lapuente_ca .
Monrovia	No specific city/town level tiered rate structure for CII. http://www.cityofmonrovia.org/index.cfm?page=page&id=1599485&pageid=262 .	See: http://www.amlegal.com/nxt/gateway.dll/California/monrovia/monroviacaliforniacodeofordinances?f=templates\$fn=default.htm\$3.0\$vid=amlegal:monrovia_ca

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Rosemead	No specific city/town level tiered rate structure for CII. http://www.cityofrosemead.org/index.aspx?page=292 .	See: http://www.cityofrosemead.org/ftp/muni/maintoc.htm
San Gabriel	No specific city/town level tiered rate structure for CII. http://www.sangabrielcity.com/contact/contactutilities.shtml .	See: http://www.amlegal.com/nxt/gateway.dll/California/sangab/sangabrielcaliforniamunicipalcode?f=templates\$fn=default.htm\$3.0\$vid=amlegal:sangabriel_ca .
South El Monte	No specific city/town level tiered rate structure for CII. http://www.sgvwater.com/tariff/1823-W.pdf .	See: http://www.sgvwater.com/ .
South Pasadena	No specific city/town level tiered rate structure for CII. http://www.ci.south-pasadena.ca.us/whatsnew/PDFs/RateIncrease/Presentation on Water and Sewer Rates %20(01-07-08).pdf .	Yes, limited South Pasadena Municipal Code, Chapter 35-Water, Article III-Water Conservation in Landscaping, Sec. 35.57-Water Features. http://www.qcode.us/codes/southpasadena/ .
Temple City	No specific city/town level tiered rate structure for CII. http://www.ci.temple-city.ca.us/Utility%20Co/Utilities.asp .	See: http://www.sterlingcodifiers.com/CA/Temple%20City/index.htm .
West Covina	No specific city/town level tiered rate structure for CII. http://www.westcov.org/cityhall/depts/pubsvcs.html .	Yes, limited Code of Ordinances City of West Covina, CA, Chapter 23-Utilities, Article VII-Emergency Water Conservation Measures, Sec. 23-323-Phase I Shortage http://www.municode.com/resources/gateway.asp?pid=11504&sid=5 .
West Basin Municipal Water District (West Basin) ⁴¹	West Basin wholesales imported water to cities, investor-owned utilities, and private companies in southwest Los Angeles County. http://www.westbasin.org/ .	See: http://www.westbasin.org/WaterReliability2020/RecycledWater/RecycledWaterConversionProcess/RecycledWaterUsersManual/tabid/226/Default.aspx .
Carson	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential Metered Service.pdf .	See: http://ci.carson.ca.us/content/department/utilities.asp .

⁴¹ Websites and/or specific retail water information were not found for the following entities within the West Basin region: Alondra Park, Marina Del Rey, Ross-Sexton, Topanga Canyon, and West Athens.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Culver City	No specific city/town level tiered rate structure for CII. http://www.culvercity.org/pw/utilities.asp?sec=gov .	See: http://www.amlegal.com/nxt/gateway.dll/California/culver/themunicipalcodeofthecityofculvercitycal?f=templates\$fn=default.htm\$3.0\$vid=amlegal:culvercity-ca .
El Segundo	Yes Four-tiered rate structure based on consumption. http://www.elsegundo.org/depts/works/water/new_water_rates.asp .	See: http://www.elsegundo.org/depts/works/water/default.asp .
Gardena	No specific city/town level tiered rate structure for CII. http://www.ci.gardena.ca.us/government/Public%20Works/utilities.asp .	See: http://www.sterlingcodifiers.com/codebook/index.php?book_id=587 .
Hawthorne	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.qcode.us/codes/hawthorne/ .
Hermosa Beach	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.hermosabch.org/departments/cityclerk/code/844.html .
Inglewood	No specific city/town level tiered rate structure for CII. http://www.cityofinglewood.org/depts/pw/divisions/water_works/ .	Yes, limited Inglewood Municipal Code, Chapter 5 Offenses, Miscellaneous, Article 7. Water Conservation, Section 5-113.3. Landscape Plan Content. http://www.qcode.us/codes/inglewood/ .
Ladera Heights	No specific city/town level tiered rate structure for CII. http://www.laderaheights.info/utilities.php .	Yes Los Angeles, CA County Code, Title 28 Plumbing Code, Appendix J Reclaimed Water Systems for Non-Residential Buildings, et. al. http://ordlink.com/codes/lacounty/index.htm .
Lawndale	No specific city/town level tiered rate structure for CII. http://www.lawndalecity.org/ .	See: http://qcode.us/codes/lawndale/ .

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Lomita	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.lomita.com/cityhall/citygov/water/index.html.</p>	<p>Yes, limited</p> <p>Municipal Code City of Lomita, CA, Title IV Public Welfare, Morals And Conduct, Chapter 11 - Water Conservation, Sec. 4-11.04 - Washing of Vehicles.</p> <p>http://www.municode.com/Resources/gateway.asp?pid=11174&sid=5.</p>
Malibu ⁴²	<p>Yes</p> <p>Tiered-rate structure for use of water by domestic, commercial, industrial and agricultural users for Waterworks District No. 29 – Malibu: The quantity charge for District No. 29 is separated into three tiers, namely the Conservation Use Charge, Normal Use Charge, and Excessive Use Charge.</p> <p>http://www.ci.malibu.ca.us/.</p> <p>http://www.ladpw.org/wwd/web/docs/rules_regulations/part2.pdf.</p>	<p>Yes, limited</p> <p>Malibu, CA Municipal Code, Title 17 Zoning, Chapter 17.44 Water Conservation Landscaping.</p> <p>http://municipalcodes.lexisnexis.com/codes/malibu/.</p>
Manhattan Beach	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.citymb.info/Index.aspx?page=1516.</p> <p>http://www.ci.manhattan-beach.ca.us/Index.aspx?page=312.</p>	<p>Yes</p> <p>Manhattan Beach, CA Municipal Code, Title 7 Public Works, Chapter 7.44 - Water Conservation.</p> <p>http://municipalcodes.lexisnexis.com/codes/manhattan/.</p>
Palos Verdes Estates	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://palosverdes.com/pve/departments_services/index.cfm.</p> <p>http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf.</p>	<p>Yes, limited</p> <p>Palos Verdes Estates Municipal Code, Title 18- Zoning Regulations, Chapter 18.50-Water Efficient Landscaping</p> <p>http://www.codepublishing.com/ca/palosverdesestates/.</p>
Rancho Palos Verdes	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf.</p>	<p>Yes, limited</p> <p>Rancho Palos Verdes Municipal Code, Title 15, Chapter 34, Section 060-15.34.060-Water features.</p> <p>http://www.palosverdes.com/rpv/cityclerk/munidatabase/detail.cfm?this_title=15&this_section=060&this_chapter=34&title=&section=&chapter=&key=reclaimed%20water&search_on=tcs_1.</p>

⁴² Malibu is dependent on the LAPWD’s District 29 potable water. District 29 operates and maintains the potable water distribution system, which obtains water from West Basin.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Redondo Beach	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://www.qcode.us/codes/redondobeach/ .
Rolling Hills	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	See: http://ca-rollinghills.civicplus.com/index.asp?NID=66 .
Rolling Hills Estates	No specific city/town level tiered rate structure for CII. http://www.calwater.com/rates/rates_tariffs/ela/Non-residential_Metered_Service.pdf .	Yes, limited Rolling Hills Estates, CA Municipal Code, Title 17- Zoning, Chapter 17.59 Landscaping and Irrigation, Sec. 17.59.045-Water Features. http://municipalcodes.lexisnexis.com/codes/rollhillsestates/ .
Torrance	No specific city/town level tiered rate structure for CII. http://www.ci.torrance.ca.us/2202.htm . http://www.ci.torrance.ca.us/PDF/WATERRAT-ES3-1-08-SEWERS7-1-07.pdf .	Yes Torrance Municipal Code, Division 7 - Public Works And Property, Chapter 6 - Water, Article 5 - Reclaimed Water. http://municipalcodes.lexisnexis.com/codes/torrance/ .
West Hollywood	No specific city/town level tiered rate structure for CII. http://www.weho.org/ .	Yes, limited West Hollywood Municipal Code, Title 15- Environmental Protection, Pollution and Solid Waste, Article 3 – Environment, Chapter 15.52 -Water Conservation Plan, Section 15.52.020 Regulation of Exterior Washing Practices. http://www.weho.org/ . http://qcode.us/codes/westhollywood/ .
Western Municipal Water District of Riverside County (WMWD)⁴³	WMWD provides supplemental water to Riverside County and has approximately 24,000 retail customers and eight wholesale customers. No specific district level tiered rate structure for CII. http://www.wmwd.com/ .	See: http://www.wmwd.com/ .
Canyon Lakes	No specific city/town level tiered rate structure for CII. http://www.cityofcanyonlake.com/water.asp	See: http://www.evmwd.com/default.asp .

⁴³ Websites and specific retail water information were not found for the following entities within the WMWD region: Bedford Heights, Eagle Valley, El Sobrante, Florence, March Air Reserve Base, Rubidoux, Temescal Canyon, and Woodcrest.

District, City or Town	Tiered Water Rate Structure for CII	Information on City/Town Recycled – Reclaimed Water Provisions
Corona	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.ci.corona.ca.us/index.cfm?section=City%20Departments&page=Dept%2E%20of%20Water%20%26%20Power&viewpost=2&ContentId=863.</p>	<p>Yes</p> <p>Corona Municipal Code, Title 13 Public Services, Chapter 13.28-Recycled Water</p> <p>http://www.amlegal.com/nxt/gateway.dll/California/corona/coronacaliforniamunicipalcode?f=templates\$fn=default.htm\$3.0\$vid=amlegal:corona_ca.</p>
Jurupa	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.jcsd.us/aboutus.asp.</p>	<p>See:</p> <p>http://www.jcsd.us/index.asp.</p>
Lake Elsinore	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.lake-elsinore.org/index.aspx?page=401.</p> <p>http://www.evmwd.com/depts/finance/customer_service/rates_n_fees.asp.</p>	<p>Yes</p> <p>Lake Elsinore Municipal Code, Title 19 - Development, Chapter 19.08-Water Efficient Landscaping.</p> <p>http://www.codepublishing.com/CA/lakeelsinore/.</p>
Murrieta	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.murrieta.org/index.asp.</p> <p>https://www.ranchowater.com/cs.aspx.</p>	<p>See:</p> <p>http://www.murrieta.org/index.asp.</p> <p>https://www.ranchowater.com/cs.aspx.</p>
Norco	<p>No specific city/town level tiered rate structure for CII.</p> <p>http://www.norco.ca.us/depts/fiscal_n_support_services/utility_billing.asp.</p>	<p>See:</p> <p>http://www.norco.ca.us/about/default.asp.</p>
Riverside	<p>Yes</p> <p>Tiered rates for consumption per season.</p> <p>http://www.riversideca.gov/utilities/water-rulesandrates.asp.</p>	<p>Yes</p> <p>Riverside Municipal Code, Chapter 14.28-Mandatory Use of Recycled Water</p> <p>http://www.riversideca.gov/municode/pdf/14/14-28.pdf.</p>
Temecula	<p>Yes</p> <p>There is a Tier 2 rate charged per billing unit. Charges for water use in this tier are in addition to the normal base water rate. This rate applies to all commercial, landscape, residential and non-discount agricultural customers that exceed their annual water use allocation.</p> <p>http://www.cityoftemecula.org/temecula/.</p>	<p>Yes, limited</p> <p>Temecula Municipal Code, Title 17-Zoning, Chapter 17.32-Water-Efficient Landscape Design, Sec. 17.32.070-Irrigation System Design Requirements.</p> <p>http://www.qcode.us/codes/temecula/.</p>

Table A.2: Cities and Towns with Tiered Water Rate Structures for Residential Customers⁴⁴

Customers in all or portions of:

Arcadia	La Palma
Artesia	Lawndale
Athens	Lennox
Barstow	Long Beach
Bell	Los Alamitos
Bell Gardens	Los Angeles County
Calipatria	Montclair
Charter Oak	Moneta
Claremont,	Monrovia
Carson	Monterey Park
Cerritos	Niland
Compton	Norwalk
Cowan Heights	Orange County
Cudahy	Paramount
Culver City	Peacock Hills
Cypress	Placentia
Del Aire	Pomona
Downey	Rosemead
El Monte	San Bernardino County
El Segundo	San Gabriel
Florence-Graham	San Dimas
Gardena	Santa Fe Springs
Hawaiian Gardens	Seal Beach
Hawthorne	South Gate
Huntington Park	Stanton
Imperial County	Temple City
Inglewood	Upland
Irwindale	Victorville
Lakewood	Yorba Linda
La Mirada	Willowbrook

⁴⁴ Conservation tiered rates for Golden State Water Company residential customers in Regions II and III service territories in southern California. The company has also filed for tiered rates in Region I and expects a decision from CPUC in the fall of 2009. This area includes Arden Cordova, Bay Point, Clearlake, Los Osos, Ojai, Santa Maria and Simi Valley.

Appendix B

List of Equipment Eligible for Water and Energy Rebates and Incentives in Southern California

<p>Cooling Towers</p> <ul style="list-style-type: none"> • Cooling tower controllers • pH cooling tower controllers • Cooling tower retrofits <p>HVAC</p> <ul style="list-style-type: none"> • Advanced evaporative cooler • Natural gas furnaces • Adjustable frequency drives • Reflective window film • Packaged terminal air conditioners • Thermal energy storage • Chillers for space air conditioning • Air cooled versus water cooled equipment • Ceiling fans • Cool roofs <p>Hospitals</p> <ul style="list-style-type: none"> • X-ray processors • Dialysis machines • Dry vacuum pumps • Steam sterilizer retrofits <p>Large Scale or Long Term Retrofit Incentive Programs</p> <ul style="list-style-type: none"> • Standard Performance Contracts • Business Energy/Water Efficiency Programs • Savings by Design • California Solar Initiative • Self Generation Program • Grants Program • Energy Net Metering Program <p>Irrigation and Landscaping Activities</p> <ul style="list-style-type: none"> • Synthetic turf • Low water consuming plants • Weather based irrigation scheduling • Smart irrigation controllers • High efficiency nozzles • Rotating nozzles <p>Lavatories</p> <ul style="list-style-type: none"> • High efficiency toilets • Ultra low flush toilets • Zero water urinals • High efficiency urinals <p>Laundry Operations</p> <ul style="list-style-type: none"> • High efficiency commercial washers • ENERGY STAR clothes washers <p>Motors and Pumps</p> <ul style="list-style-type: none"> • High efficiency motors <p>Office Equipment/Plug Load</p> <ul style="list-style-type: none"> • Sleep mode for computer software • Plug load occupancy sensors 	<p>Kitchen Services</p> <ul style="list-style-type: none"> • Connectionless steam cookers • Pre-rinse spray valves • Energy efficient dishwashers • High efficiency ventilation systems • ENERGY STAR commercial dishwashers • High efficiency commercial fryers • High efficiency commercial griddles • High efficiency commercial electric combination ovens • High efficiency commercial gas combination ovens • High efficiency commercial electric convection ovens • High efficiency commercial gas convection ovens • ENERGY STAR commercial ice machines • ENERGY STAR commercial pressureless steam cookers • ENERGY STAR solid door refrigerators and freezers • Double rack/single rack ovens • Commercial insulated hot food holding cabinets • Night covers for open vertical and horizontal display cases • High efficiency refrigeration display case with special doors • High efficiency vending machine controllers • High efficiency evaporative fan motors • Refrigerator door gaskets and anti-sweat devices • Auto-closers for main cooler or freezer doors • Ice machines (air and water cooled) <p>Lighting</p> <ul style="list-style-type: none"> • Fluorescent lamps • Fluorescent tubes and magnetic ballasts • High intensity discharge (HID) lamps and high-bay fluorescent fixtures • Occupancy sensors • Light emitting diodes (LED) <p>Process Heating</p> <ul style="list-style-type: none"> • Insulation <p>Site-Wide Water and Energy Use Activities and Equipment</p> <ul style="list-style-type: none"> • Car washing • Fire suppression systems • Laboratories • Conveyor systems • Battery charging operations • Pool covers • Commercial pool heaters • Storage water heaters • Instantaneous hot water heaters • Pressurized waterbrooms • Backup generators • Plumbing fixtures <p>Steam Equipment</p> <ul style="list-style-type: none"> • Steam traps • High efficiency boilers
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Appendix C

Example of Incentive Feedback Document Used

C.1 Introduction

Appendix C provides the text from a discussion document provided to PAC members and CII customers. This document asked for feedback on proposed incentives.

C.1.1 Context for Discussion

Water districts and energy utilities in southern California have indicated that many of the incentive programs established to promote water or energy efficiency in southern California have not been consistently used. One of the potential reasons for the inconsistent use is that the incentives may not motivate or “pull” the customer to take action.

To address this issue, we are seeking information about the types of incentives that may be needed to foster greater gains in water and energy savings among the CII customer classes. This document is designed to obtain feedback about the types of incentives that would be most useful in prompting a water and energy efficiency program.

C.1.2 Categories of Proposed Incentives

The proposed incentives outlined in this Discussion Document fall into three categories – financial, technical assistance, and recognition.

- All of the proposed incentives outlined in this Discussion Document are in addition to the existing incentives being offered by energy utilities and water districts (see Attachment A for a summary listing of equipment and activities for which rebates and other incentives are available from energy utilities and water districts).
- Some of the proposed incentives expand upon rebates or other financial tools currently being used within certain energy service areas or water districts but are not currently available throughout southern California (e.g., low interest loans, on-bill financing).
- The proposed demand side water management financial incentives are intended to complement the energy demand side management incentives.
- The dollar values of the financial incentives cited in this document are for discussion purposes only to obtain feedback as to the level of financial support potentially needed to promote greater implementation of water and energy efficiency upgrades.

C.1.3 Instructions for Evaluating and Rating Incentives

To obtain feedback on the proposed set of incentives, you are being asked to evaluate the incentives and rate them using a simple three-part scheme:

- **Essential** for implementing additional water and energy efficiency improvements.
- **Helpful** but not significant enough to motivate you to take action.
- **Not desirable** (i.e., the incentive does not assist you convince management to implement efficiency improvements).

Please review the list of proposed incentives per section and place a (√) in the column that represents your preliminary assessment, or draft other incentives for consideration.

In addition, comments should be recorded in the space provided to further define the incentive (e.g., providing a dollar value or percentage reduction) or explain why a particular incentive may be essential, helpful, or not desirable.

C.2. Financial Incentives

Incentive	Evaluation (√)		
	<i>Essential</i>	<i>Helpful</i>	<i>Not Desirable</i>
1. An on-bill financing scheme ⁴⁵ for water <i>and</i> energy efficiency improvements whereby the combined costs for implementing these improvements is added to monthly bills based on an established low interest loan (2-4%) agreement. Comments:			
2. A water rate structure featuring a tiered approach with lower rates for customers implementing efficiency measures that result in reduced water consumption. ⁴⁶ Comments:			

⁴⁵ Similar to programs offered by the SoCalGas and the SDG&E.

⁴⁶ IRWD offers a rate structure to customers, which encourages conservation.

Incentive	Evaluation (√)		
	<i>Essential</i>	<i>Helpful</i>	<i>Not Desirable</i>
<p>3. A monthly credit on the water bill for reducing consumption to specified amounts.⁴⁷</p> <p>Comments:</p>			
<p>4. Low interest loans (2-4%)⁴⁸ to finance water and energy efficiency upgrades.</p> <p>Comments:</p>			
<p>5. Low interest loans (2-4%) to finance on-site wastewater treatment improvements which result in the reuse of water for on-site purposes such as irrigation, car/truck washing, and cooling towers.</p> <p>Comments:</p>			
<p>6. Low interest loans (2-4%) to finance green infrastructure improvements⁴⁹ (e.g., planting trees) to reduce the use of energy and water associated with on-site irrigation.</p> <p>Comments:</p>			
<p>7. Grants up to \$25,000 or more to finance the research and development of new technologies for low-impact or non-structural solutions to reduce wastewater generation (e.g., reuse of water for cooling towers or washing vehicles).</p> <p>Comments (please specify the dollar value that is most appropriate):</p>			
<p>8. Receive up to \$500 (free of charge) for the purchase and installation of a water and energy efficiency device to help motivate management to implement water and energy efficiency improvements.</p> <p>Comments (if appropriate, specify a different dollar value for the incentive _____):</p>			

⁴⁷ Similar incentive is offered by energy utilities in California.

⁴⁸ Some water districts offer low interest loans to customers as an added incentive to promote efficiency.

⁴⁹ This incentive builds on the existing MWD incentive focused on installing synthetic turf to reduce water consumption.

Incentive	Evaluation (√)		
	<i>Essential</i>	<i>Helpful</i>	<i>Not Desirable</i>
<p>9. A rebate program equal to approximately 10% of the costs for implementing water and energy efficiency improvements. That is for every \$10,000 in improvements, a \$1,000 rebate is available.</p> <p>Comments (if appropriate, specify a different percentage_____):</p>			
<p>10. A rebate program for implementing process water recirculation systems. Please specify the dollar incentive that would be needed to encourage this type of activity _____.</p> <p>Comments:</p>			
<p>11. Suggestions for other types of financial incentives.</p>			

C.3 Technical Assistance Incentives

Incentive	Evaluation (√)		
	<i>Essential</i>	<i>Helpful</i>	<i>Not Desirable</i>
<p>12. Participate in training sessions sponsored by water districts or energy utilities focused on designing and implementing an on-site water recycling program in conformance with state and local regulations.</p> <p>Comments:</p>			
<p>13. Receive information about:</p> <ul style="list-style-type: none"> Companies (i.e., ESCOs) offering water and energy improvements. ESCOs develop, design, and finance water and energy efficiency projects. A core part of their business is to assume performance risk—that is, link their compensation and profits to actual energy and water efficiency improvements obtained by the client. <p>Comments:</p>			

<ul style="list-style-type: none"> • How rebates for water and energy efficiency can be combined to potentially offset the costs for upgrading equipment or processes. <p>Comments:</p>			
<ul style="list-style-type: none"> • Businesses/technicians “certified” in water and energy efficiency practices. <p>Comments:</p>			
<ul style="list-style-type: none"> • Greenhouse gas reductions associated with installed water and energy efficient equipment. <p>Comments:</p>			
<ul style="list-style-type: none"> • Best water and energy efficiency management practices. <p>Comments:</p>			
<ul style="list-style-type: none"> • Typical water and energy standards of performance per square foot within office buildings. <p>Comments:</p>			
<p>14. <i>Have meters installed</i> by water districts or energy utilities to obtain detailed information about water and energy use associated with key processes on-site.</p> <p>Comments:</p>			
<p>15. <i>Have an audit conducted</i> to assess water and energy efficiency opportunities including a listing of actions that can save money, and receive assistance in preparing rebate forms and information about vendors who can assist in implementing the upgrades.</p> <p>Comments:</p>			
<p>16. <i>Arrange for vendors to meet with site personnel</i> to discuss water and energy efficiency opportunities and financial incentives.</p> <p>Comments:</p>			

17. Have access to a clearinghouse of information to learn about best practices in implementing an integrated approach to water and energy efficiency. Comments:			
18. Complete a single form (instead of several forms) to obtain rebates for water and energy efficiency upgrades. Comments:			
19. Suggestions for other types of technical assistance incentives:			

C.4 Recognition Incentives

Incentive	Evaluation (√)		
	<i>Essential</i>	<i>Helpful</i>	<i>Not Desirable</i>
20. A program that recognizes various levels of energy and water savings performance such as gold, silver, and bronze levels. In addition, the results of this recognition program are broadly communicated throughout the state. Comments:			
21. A program that recognizes the site for the GHG reductions associated with the water and energy efficiency improvements. In addition, the results of this recognition program are broadly communicated throughout the state. Comments:			
22. Other suggestions for recognition/award incentives:			

Attachment A Listing of Equipment and Activities for Which Rebates and other Financial Incentives are Available

<p>Cooling Towers</p> <ul style="list-style-type: none"> • Cooling tower controllers • pH cooling tower controllers • Cooling tower retrofits <p>HVAC</p> <ul style="list-style-type: none"> • Advanced evaporative cooler • Natural gas furnaces • Adjustable frequency drives • Reflective window film • Packaged terminal air conditioners • Thermal energy storage • Chillers for space air conditioning • Air cooled versus water cooled equipment • Ceiling fans • Cool roofs <p>Hospitals</p> <ul style="list-style-type: none"> • X-ray processors • Dialysis machines • Dry vacuum pumps • Steam sterilizer retrofits <p>Large Scale or Long Term Retrofit Incentive Programs</p> <ul style="list-style-type: none"> • Standard Performance Contracts • Business Energy/Water Efficiency Programs • Savings by Design • California Solar Initiative • Self Generation Program • Grants Program • Energy Net Metering Program <p>Irrigation and Landscaping Activities</p> <ul style="list-style-type: none"> • Synthetic turf • Low water consuming plants • Weather based irrigation scheduling • Smart irrigation controllers • High efficiency nozzles • Rotating nozzles <p>Lavatories</p> <ul style="list-style-type: none"> • High efficiency toilets • Ultra low flush toilets • Zero water urinals • High efficiency urinals <p>Laundry Operations</p> <ul style="list-style-type: none"> • High efficiency commercial washers • ENERGY STAR clothes washers <p>Motors and Pumps</p> <ul style="list-style-type: none"> • High efficiency motors <p>Office Equipment/Plug Load</p> <ul style="list-style-type: none"> • Sleep mode for computer software • Plug load occupancy sensors 	<p>Kitchen Services</p> <ul style="list-style-type: none"> • Connectionless steam cookers • Pre-rinse spray valves • Energy efficient dishwashers • High efficiency ventilation systems • ENERGY STAR commercial dishwashers • High efficiency commercial fryers • High efficiency commercial griddles • High efficiency commercial electric combination ovens • High efficiency commercial gas combination ovens • High efficiency commercial electric convection ovens • High efficiency commercial gas convection ovens • ENERGY STAR commercial ice machines • ENERGY STAR commercial pressureless steam cookers • ENERGY STAR solid door refrigerators and freezers • Double rack/single rack ovens • Commercial insulated hot food holding cabinets • Night covers for open vertical and horizontal display cases • High efficiency refrigeration display case with special doors • High efficiency vending machine controllers • High efficiency evaporative fan motors • Refrigerator door gaskets and anti-sweat devices • Auto-closers for main cooler or freezer doors • Ice machines (air and water cooled) <p>Lighting</p> <ul style="list-style-type: none"> • Fluorescent lamps • Fluorescent tubes and magnetic ballasts • High intensity discharge (HID) lamps and high-bay fluorescent fixtures • Occupancy sensors • Light emitting diodes (LED) <p>Process Heating</p> <ul style="list-style-type: none"> • Insulation <p>Site-Wide Water and Energy Use Activities and Equipment</p> <ul style="list-style-type: none"> • Car washing • Fire suppression systems • Laboratories • Conveyor systems • Battery charging operations • Pool covers • Commercial pool heaters • Storage water heaters • Instantaneous hot water heaters • Pressurized waterbrooms • Backup generators • Plumbing fixtures <p>Steam Equipment</p> <ul style="list-style-type: none"> • Steam traps • High efficiency boilers
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Appendix D

Examples of Integrated Water and Energy Efficiency Incentive Programs⁵⁰

Appendix D provides two examples of integrated water and energy efficiency incentive programs. The first program is offered by the Pacific Gas and Electric Company (PG&E), East Bay Municipal Utility District (EBMUD), Santa Clara Valley Water District (SCVWD) and the Sonoma County Water Agency (SCWA). The second program is offered in Washington state among a number of water and energy utilities and features the use of a single rebate form for equipment with both water and energy savings.

D.1 PG&E, EBMUD, SCVWD, and SCWA Program

D.1.1 Reported Savings

PG&E has partnered with EBMUD, SCVWD, and the water districts receiving wholesale water from the SCWA on an Embedded Energy in Water Pilot. Under the program, CII customers of PG&E and the participating water districts that implement water efficiency technologies are eligible for combined incentives for the water, energy, and water-embedded energy savings resulting from the efficiency project.

The one-year pilot, which began in July 2008, targets customers in the hospitality, winery, and food processing industries. Once a customer is selected for participation, a water audit is performed (in collaboration with PG&E if there are direct energy savings). PG&E and the water district then jointly present the potential savings, available incentives, and payback periods for the available efficiency options. After installation is completed and the savings are verified, the water district provides a rebate based on the water savings, while PG&E provides rebates for the embedded energy⁵¹ as well as any direct energy savings. The total of the three incentives is limited to the full cost of the retrofit.

D.1.2 Key Aspects Applicable to Integrated Water and Energy Efficiency Programs

By combining incentives, the payback increases for projects that were not deemed economically feasible when only the costs and incentives associated with water or energy savings were considered. One of the completed projects provided nearly \$9,000 in combined incentives for the project which cost \$12,000 to complete and will save nearly 300,000 gallons of water per year. The water incentive provided was \$5,800, the embedded energy incentive was \$416, and the direct energy incentive totaled \$2,700.

⁵⁰ See data references – Business Environmental Alliance, Green Business, Galal, Horak, Pizza, and Pollard.

⁵¹ PG&E uses a formula provided by the CPUC to determine the embedded energy (measured in kilowatt hour [kWh] of electricity) saved through reduced water consumption.

Water districts are also able to use the customer relationships, technical expertise, and other resources provided through PG&E's participation. One participating water district indicated that many customers were not interested in discussing water efficiency efforts until PG&E reached out to customer contacts. PG&E's outreach efforts to other key players such as vendors, has also helped contribute to program success. Most of the projects to be implemented through the pilot program are for the installation of ozone laundry technologies by the hospitality industry.

D.2 Washington Program⁵²

D.2.1. Program Overview

A number of water and energy utilities serving the Seattle, Washington region have created a partnership to provide water and energy efficiency incentives to the food service industry. The partnership includes Cascade Water Alliance, Saving Water Partnership, Cascade Natural Gas, Puget Sound Energy, Snohomish Public Utilities District (SnoPUD), Puget Sound Energy (PSE), Seattle City Light, and Tacoma Power. Under the program, which is just getting underway, any commercial kitchen that receives its water and energy from utilities in the partnership is eligible for rebates for the installation of a variety of water and energy efficient technologies. Combined water and energy incentives are available for steam cookers and dishwashers. The rebate amounts are indicated in Table D.1. Table D.2 is the rebate form.

⁵² References include Paschke 2009, Seattle Public Utilities Rebate Form, and Seattle Public Utilities Commercial Water Conservation.

Table D.1: Combined Rebate Program in Washington State

Commercial Kitchen Equipment	PSE \$/Unit	SnoPUD \$/Unit	Tacoma Power \$/Unit	Seattle City Lights \$/Unit	Saving Water \$/Unit	Cascade Water \$/Unit
ENERGY STAR® Electric Steam Cooker – 3 Pan	\$750	\$750	\$750	\$750	\$750	\$500
ENERGY STAR® Electric Steam Cooker – 4 Pan	\$750	\$750	\$750	\$750	\$750	\$500
ENERGY STAR® Electric Steam Cooker – 5 Pan	\$750	\$750	\$750	\$750	\$750	\$500
ENERGY STAR® Electric Steam Cooker – 6 Pan	\$750	\$750	\$750	\$750	\$750	\$500
ENERGY STAR® Natural Gas Steam Cooker – 3 Pan	\$750				\$750	\$500
ENERGY STAR® Natural Gas Steam Cooker – 4 Pan	\$750				\$750	\$500
ENERGY STAR® Natural Gas Steam Cooker – 5 Pan	\$750				\$750	\$500
ENERGY STAR® Natural Gas Steam Cooker – 6 Pan	\$750				\$750	\$500
ENERGY STAR® Dishwasher, Under Counter, Low Temp	\$250	\$250	\$250		\$100	
ENERGY STAR® Dishwasher, Under Counter, Hi Temp *	\$500	\$500	\$400		\$500	
ENERGY STAR® Dishwasher, Door Type, Low Temp	\$1,000	\$1,000	\$650		\$1,000	
ENERGY STAR® Dishwasher, Door Type, Hi Temp*	\$1,000	\$1,000	\$1,000		\$1,000	
ENERGY STAR® Dishwasher, Single-Tank Conveyor, Low Temp	\$1,000	\$1,000	\$1,000		\$1,500	
ENERGY STAR® Dishwasher, Single-Tank Conveyor, Hi Temp*	\$1,500	\$1,500	\$1,500		\$1,500	
ENERGY STAR® Dishwasher, Multi-Tank Conveyor, Low Temp	\$1,500	\$1,500	\$1,500		\$2,500	
ENERGY STAR® Dishwasher, Multi-Tank Conveyor, Hi Temp*	\$2,000	\$2,000	\$2,000		\$2,500	

Seattle Public Utilities, a member of the Saving Water Partnership, has also worked with PSE and Seattle City Light on direct install pre-rinse spray head programs for a number of years.

D.2.2 Key Aspects Applicable to Integrated Water and Energy Efficiency Programs

One potential barrier to water and energy partnerships is the fact that the service territories of individual water districts and energy utilities often do not align. This affects customer eligibility and the complexity of implementing an efficiency program. The Washington incentive partnership demonstrates that coordination between a large number of districts and utilities is possible. This type of partnership is likely to increase customer participation. The process is simplified for the customer who is only required to submit a single application for the combined rebates. The partnership also allows for joint marketing and outreach efforts.

Table D.2: Combined Water and Energy Efficiency Rebate Form

Page 1 of Rebate Form



BUSINESS/FACILITY INFORMATION

BUSINESS NAME:			CONTACT PERSON/TITLE:	
SERVICE ADDRESS:		CITY:	STATE:	ZIP CODE:
MAILING ADDRESS:		CITY:	STATE:	ZIP CODE:
PHONE NUMBER:	FAX NUMBER:	EMAIL ADDRESS:		
HOW DID YOU HEAR ABOUT THE PROGRAM? <input type="checkbox"/> EQUIPMENT DEALER <input type="checkbox"/> UTILITY <input type="checkbox"/> EMAIL <input type="checkbox"/> LETTER / MAIL <input type="checkbox"/> NEWSPAPER <input type="checkbox"/> INTERNET <input type="checkbox"/> SALES CALL <input type="checkbox"/> FRIEND / COLLEAGUE				

WHO ARE YOUR UTILITY PROVIDERS?

NATURAL GAS: (Name of Utility) <input type="checkbox"/> CASCADE NATURAL GAS <input type="checkbox"/> PUGET SOUND ENERGY	ACCOUNT NUMBER:
ELECTRICITY: (Name of Utility) <input type="checkbox"/> PUGET SOUND ENERGY <input type="checkbox"/> SNOHOMISH PUD <input type="checkbox"/> SEATTLE CITY LIGHT <input type="checkbox"/> TACOMA POWER	ACCOUNT NUMBER:
WATER: (Name of Utility) <input type="checkbox"/> CASCADE WATER ALLIANCE <input type="checkbox"/> SAVING WATER PARTNERSHIP	ACCOUNT NUMBER:
I USE THE FOLLOWING TO HEAT THIS FACILITY: <input type="checkbox"/> NATURAL GAS <input type="checkbox"/> ELECTRICITY <input type="checkbox"/> PROPANE <input type="checkbox"/> OTHER	I USE THE FOLLOWING TO HEAT WATER IN THIS FACILITY: <input type="checkbox"/> NATURAL GAS <input type="checkbox"/> ELECTRICITY <input type="checkbox"/> PROPANE <input type="checkbox"/> OTHER
To be eligible for a rebate: 1. Use Equipment from the eligible lists available from your foodservice equipment supplier. 2. Equipment must be using energy purchased from your utility 3. Equipment must be installed and operating correctly	

STEP 2: INSTALLATION

DISTRIBUTOR NAME	PHONE NUMBER:
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Equipment must be installed and in proper working order before this form is submitted for rebate payment.

STEP 3: TO OBTAIN REBATE

1. Obtain list of eligible products from your equipment supplier. 2. Review your utility's Terms and Conditions as they vary. 3. Purchase and install eligible efficient machines. 4. Enclose completed and signed rebate request with a copy of invoice (separate labor, parts charges, and taxes).		MAIL TO: Commercial Kitchen Rebates PO Box 90868 EST-10W Bellevue, WA 98009-0868 OR FAX TO: 425.456.2731
MAIL CHECK PAYABLE TO	CUSTOMER FEDERAL TAX ID#:	
CUSTOMER SIGNATURE:	DATE:	
FOR UTILITY USE ONLY – SCHEDULE 262		
REBATE AMOUNT:	THERM SAVINGS:	ELECTRIC SAVINGS:

SELECT EQUIPMENT / REBATES on the opposite side of this page. Please note:

- Terms & Conditions (Ts & Cs) of the rebate offers vary with each utility. Your utility(ies) will provide you with a copy(ies) of their Ts & Cs upon receipt of your rebate request.
- PSE and PUD electric customers who are not PSE gas customers may not be eligible for the full rebate amount. Please see www.pse.com or call 1-800-562-1482 for details.

Page 2 of Rebate Form

Commercial Kitchen Equipment	PSE \$/Unit	SnoPUD \$/Unit	Tacoma Power \$/Unit	Seattle City Lights \$/Unit	Cascade Natural \$/Unit	Saving Water \$/Unit	Cascade Water \$/Unit	Qty.	Rebate \$/Unit x Qty
Glass Door Refrigerator < 19 ft ³	\$125	\$125	\$125						
Glass Door Refrigerator 19—30 ft ³	\$150	\$150	\$150						
Glass Door Refrigerator 30.1—60 ft ³	\$175	\$175	\$175						
Glass Door Refrigerator >60 ft ³	\$200	\$200	\$200						
CEE [®] Tier 2 Refrigerator - 1 Door	\$125	\$125	\$125	\$125					
CEE [®] Tier 2 Refrigerator - 2 Door	\$150	\$150	\$150	\$150					
CEE [®] Tier 2 Refrigerator - 3 Door	\$175	\$175	\$175	\$175					
CEE [®] Tier 2 Freezer - 1 Door	\$150	\$150	\$150	\$150					
CEE [®] Tier 2 Freezer - 2 Door	\$175	\$175	\$175	\$175					
CEE [®] Tier 2 Freezer - 3 Door	\$200	\$200	\$200	\$200					
ENERGY STAR [®] Hot Food Holding Cabinet 18 to 22 ft ³	\$500	\$500	\$500	\$500					
ENERGY STAR [®] Hot Food Holding Cabinet >12 to <18 ft ³	\$500	\$500	\$500	\$500					
ENERGY STAR [®] Hot Food Holding Cabinet 7 to 12 ft ³	\$250	\$250	\$250	\$250					
ENERGY STAR [®] Electric Steam Cooker – 3 Pan	\$750	\$750	\$750	\$750		\$750	\$500		
ENERGY STAR [®] Electric Steam Cooker – 4 Pan	\$750	\$750	\$750	\$750		\$750	\$500		
ENERGY STAR [®] Electric Steam Cooker – 5 Pan	\$750	\$750	\$750	\$750		\$750	\$500		
ENERGY STAR [®] Electric Steam Cooker – 6 Pan	\$750	\$750	\$750	\$750		\$750	\$500		
ENERGY STAR [®] Natural Gas Steam Cooker – 3 Pan	\$750					\$750	\$500		
ENERGY STAR [®] Natural Gas Steam Cooker – 4 Pan	\$750					\$750	\$500		
ENERGY STAR [®] Natural Gas Steam Cooker – 5 Pan	\$750					\$750	\$500		
ENERGY STAR [®] Natural Gas Steam Cooker – 6 Pan	\$750					\$750	\$500		
ENERGY STAR [®] Natural Gas Commercial Fryers	\$750				\$600				
ENERGY STAR [®] Electric Commercial Fryers	\$250	\$250							
Qualified Infrared Natural Gas Griddle					\$500				
ENERGY STAR [®] Dishwasher, Under Counter, Low Temp	\$250	\$250	\$250			\$100			
ENERGY STAR [®] Dishwasher, Under Counter, Hi Temp *	\$500	\$500	\$400			\$500			
ENERGY STAR [®] Dishwasher, Door Type, Low Temp	\$1,000	\$1,000	\$650			\$1,000			
ENERGY STAR [®] Dishwasher, Door Type, Hi Temp*	\$1,000	\$1,000	\$1,000			\$1,000			
ENERGY STAR [®] Dishwasher, Single-Tank Conveyor, Low Temp	\$1,000	\$1,000	\$1,000			\$1,500			
ENERGY STAR [®] Dishwasher, Single-Tank Conveyor, Hi Temp*	\$1,500	\$1,500	\$1,500			\$1,500			
ENERGY STAR [®] Dishwasher, Multi-Tank Conveyor, Low Temp	\$1,500	\$1,500	\$1,500			\$2,500			
ENERGY STAR [®] Dishwasher, Multi-Tank Conveyor, Hi Temp*	\$2,000	\$2,000	\$2,000			\$2,500			
Qualified ≥92% Condensing Water Heater >75,000 btu/hr	\$4.71/MBH				\$2.50/MBH				
Qualified ≥92% Condensing Boiler w/storage >75,000 btu/hr	\$6.11/MBH				\$2.50/MBH				
CEE [®] Tier 2 Ice Maker <500 lbs ice per day	\$300	\$300	\$300						
CEE [®] Tier 2 Ice Maker >500 lbs ice per day	\$600	\$600	\$600						
Qualified Electric Convection Oven (single unit)	\$1,000	\$500		\$300					
Qualified Electric Convection Oven (double unit)	\$2,000	\$1,000		\$600					
Qualified Electric Combi-Oven	\$2,000	\$2,000	\$2,000	\$2,000					
Qualified Natural Gas Convection Oven	\$1,000				\$600				
Qualified Natural Gas Rack Oven	\$2,000								

Total Rebate Amount

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SUBMIT REBATE REQUEST:

MAIL: P.O. Box 90868 EST-10W, Bellevue WA 98009-0868
 FAX: 425.456.2731

Appendix E

Example of Customized Incentive Program – UC, CSU, and Investor Owned Utility (IOU) Energy Efficiency Partnership

E.1 Overview of Program

The UC/CSU/IOU Energy Efficiency Partnership was established in 2004, funded by the Public Goods Charge, and administered by the IOUs under the auspices of the CPUC. To date the partnership has saved 32 million kWh and 1.5 million therms⁵³ from 2004 - 2005, exceeding CPUC targets by 30%. The program was renewed for 2006 - 2008 and again for 2009 - 2011.

The UC, CSU, and IOU Energy Efficiency Partnership:

- Targets 33 UC and CSU campuses in IOU service areas, as well as the University of California Los Angeles (UCLA) and UC Riverside, which are serviced by municipal utilities, to participate in the program.
- Includes:
 - PG&E, SoCalGas, SCE, and SDG&E.
 - Municipalities were added for the years 2009 - 2011, and include LADWP to accommodate UCLA, and the City of Riverside to accommodate UC Riverside.
- Provides the same incentives to all targeted participants:
 - 24 cents per kWh saved.
 - \$1 per therm saved.
 - Incentives for lighting projects capped at 50% of project cost.
 - Incentives for all other projects capped at 80% of project cost.

The program consists of the four components described below.

- Retrofits:
 - Through an initial review of campus facilities, an extensive list of pre-approved cost-effective energy-saving measures was developed with the help of a consultant. The list was reviewed and finalized during the initial stages of the program, and an implementation plan and schedule were developed. All the projects are available in an online database, and a master schedule for all the campuses was developed. The previous steps were paid for by the utilities.

⁵³ A unit of heat equal to 100,000 British thermal units (1.054×10^8 joules).

- Monitoring-Based Commissioning:
 - The campuses hire and pay for a consultant to inspect their facilities and install permanent central monitoring and data acquisition systems, giving campus facilities management staff the tools to reduce energy consumption and peak demand through access to consolidated energy information at the building system level.
 - Monitoring data are collected for up to 12 months, and then potential projects are identified for implementation. A UC bond program has been developed to help pay for project costs. The staff members are trained in this process in the Training & Education (T&E) component of the program.
 - Campus facilities staff members will continue to monitor building performance using the installed meter systems in order to identify new efficiency improvements.
- Emerging Technology Demonstrations
 - Testing new energy savings equipment.
- T&E:
 - A series of training sessions are held throughout the state to instruct campus staff on how to use the program.
 - Best practices reports are developed to share information across campuses and facilities.

E.2 Key Aspects of the UC, CSU, and IOU Energy Efficiency Partnership Customized Incentive Program

- The program is relatively easy to use for UC and CSU. A Web site specific to the program includes all necessary information, forms, personnel contacts, and provides access to the preapproved project databases for 2006 - 2008 and 2009 - 2011 (<http://www.uccsuioeee.org/index.html>).
 - A single point of contact, or “clearinghouse” for processing applications and administering incentives was established through a competitive bid process.
 - Simple and standardized incentive rates are used across all the involved utilities.
- After extensive negotiations, the partnership now includes LADWP and the City of Riverside. The ability of this program coordinate across water and energy service areas in order to create beneficial partnerships with fundamentally different organizations is an example of how water districts could partner with energy utilities. A representative from UC Irvine noted that it seemed like a logical next step to involve water districts in this partnership.

Appendix F

Example Recognition Programs for GHG Reductions and Efficient Water Use

F.1 Context for Recognition Program

Recognition programs in which a company or organization can display and show off an accomplishment or best practice have proven to be valuable in the marketplace. Take for example the Occupational Safety and Health Administration's Voluntary Protection Program or the ISO Quality and Environmental Management accreditations. These programs come with, among other things, recognition that holds weight with customers, suppliers, employees, shareholders, and the communities in which the participating companies are located.

F.2 GHG Reductions Recognition Program

A similarly structured program to recognize and reward GHG reductions associated with energy efficiency improvements would be valuable to the CII community. Such a program would be systems or process based, but would include certain minimum requirements, including GHG inventory, meaningful GHG reduction goals, documentation of actions taken, and verification of results.

- ***Conducting a GHG Inventory.*** Any entity seeking recognition for GHG reductions needs to fully understand its GHG inventory and carbon footprint. While universal standards for conducting GHG inventories are evolving, various official and unofficial bodies have promulgated standards in this area. Until standards become universal, this proposed GHG recognition program should simply state that the inventory must follow one of the current frameworks, such as the Climate Registry, ISO, Regional Greenhouse Gas Initiative, a state-level framework (i.e., AB32), or even a proposed standard that is expected to have more universality, such as EPA's Proposed Rules for GHG Inventory.⁵⁴
- ***Setting Meaningful Goals for Ongoing GHG Reductions.*** After the inventory is complete, the entity would need to set reduction goals that are meaningful, achievable, and practical. While setting any prescriptive goals would be very difficult, this proposed recognition program should require some standard as a lowest common denominator. For instance, to be recognized in the program, an entity could be required to set a reduction goal of at least 5% or 10%.
- ***Documenting the GHG Actions.*** A condition of recognition should be documentation of the measurement and verification actions taken. This

⁵⁴ See

http://www.all4inc.biz/content_mgt/resource_pdf/4TR_Extra_GHG_Reporting_Cement_Mar09.pdf.

condition would include, at a minimum, documentation of the GHG inventory and carbon footprint, the reduction goals and how they will be achieved, and the results.

- **Verifying Results.** This requirement is often controversial in any proposed GHG legislation or regional framework and, not surprising, would likely be the most controversial requirement of the program proposed here. The debate typically centers on who should do the verifying and how rigorous the verification should be. The verification requirement for this recognition program should not be perceived as a disincentive. To ensure some structure and credibility to the recognition program; however, a basic framework that follows an accepted standard should be outlined. More universal standards and requirements can be incorporated as they evolve.

Recognition for successful participation would, at a minimum, include the right to prominently display an officially approved GHG reduction endorsement at a company's facility and on its stationary and promotional materials. The recognition emblem should be distinctive and trademarked in order to prevent any unauthorized display. The program could even be structured to have different levels of recognition, such as a Gold and Silver, commensurate with the level of effort and resources that the entity wants to invest.

At the lower Silver level, the recognition requirements would be the most basic standards, such as a minimum 5% annual GHG reduction and a statement of self-certification for verification. At the higher Gold level, the requirements could include greater annual GHG reductions and some type of third-party verification such as a state-level review. In addition to the standard recognition described above, the Gold level could include recognition by the county or state through a publication or Web site, as well as a plaque.

F.3 Efficient Water Use Recognition Program

A corresponding program to recognize Efficient Water Use would be analogous to the GHG Recognition Program described above. Thus, an efficient water use recognition program would also be based on prescribed minimum systems or process based requirements, including:

- A water usage inventory,
- Meaningful water reduction goals,
- Documentation of actions taken, and
- Verification of results.

Appendix G

Example of Modified Tiered Rate Incentive Structure

G.1 Traditional Incentive Reward

Under a typical tiered water rate scheme, the more water a customer uses, the greater the cost per unit of that water. There does not appear to be one set model that water districts in southern California use as a tiered rate structure. Some districts use a multifaceted scheme, such as the IRWD's four-tier hierarchy of rates of Base Rate, Inefficient, Excessive, and Wasteful. However, a two- or three-tiered hierarchy seems to be the most common, with the lowest cost set as the base level.

G.2 Example of a Modified Incentive Reward Program

The first step in this modified incentive reward program would be to conduct a water usage assessment of the participating CII customer to effectively understand the customer's current water usage and to establish its optimum water allocation. Such an assessment would review all aspects of the participant's water use, including, but not limited to, any industrial or institutional operations, domestic water use, irrigation and landscaping, and general facility water use, such as HVAC. The assessment would consider those areas that the CII customer has direct control over, items requiring capital expenditure, and areas related to a change in practice or behavior, as well as identifying practical and cost-effective water efficiency recommendations. These actions would range from steps that can be taken at minimal cost to those that require some capital expenditure on the part of the customer. Moreover, the assessment would not be performed as a traditional audit, but more like a consultation and negotiation.

To see how this modified incentive reward program would work to enhance the incentive to use water more efficiently, consider the following example.

The example CII customer is currently using 1,200 hcf of water per billing period. Assume that the water usage assessment determines, in consultation with the customer, that the CII customer's reasonable allocation of water per billing period could be set at 1,000 hcf. This allocation is based on implementation of certain non-capital related practical and cost-effective actions that the customer can take to use water more efficiently, which were identified in the water usage assessment. Additionally, the water usage assessment identified some capital expenditures that the customer could undertake to further reduce its water usage. Now consider the following scenarios to illustrate how this modified program would work.

Scenario 1: The customer implements the non-capital related water efficiency recommendations resulting from the water usage assessment (e.g., improved operation and maintenance practices) to bring its periodic water consumption

down to the agreed to allocation of 1,000 hcf. The customer then pays the commodity base rate of \$2.00 per ccf, which equals \$200,000 ($\$2.00 \text{ per ccf} \times 100 = \$200.00 \text{ per hcf} \times 1,000 \text{ hcf} = \$200,000$).

Scenario 2: The customer implements not only the non-capital related water efficiency recommendations resulting from the water usage assessment, but also some of the cost-effective capital expenditures to reduce its periodic water consumption to 850 hcf. Calculating the customer's periodic water bill starts with the standard allocation of \$200,000, based on the commodity base rate, from which a real-time and continuous rebate of \$14,250 is subtracted to yield a periodic water bill of \$185,750. This bill is based on a \$0.95 per ccf rebate for the efficient use of water. (Real-time rebate: $\$0.95 \text{ per ccf} \times 100 = \$95.00 \text{ per hcf} \times 150 \text{ hcf} = \$14,250$. Final bill: Base rate of \$200,000 minus rebate of \$14,250 equals \$185,750).

Scenario 3: The customer does not implement any of recommendations resulting from the water usage assessment and does nothing to change its historical water usage. Again, calculating the customer's periodic water bill starts with the standard allocation of \$200,000 based on the commodity base rate, to which is added a real-time and continuous penalty of \$42,500 to yield a periodic water bill of \$242,500. This bill is based on a \$1.25 per ccf penalty for the inefficient use of 150 hcf of water plus a \$4.75 per ccf penalty for the wasteful use of 50 hcf of water. (Real-time penalty: $\$1.25 \text{ per ccf} \times 100 = \$125.00 \text{ per hcf} \times 150 \text{ hcf} = \$18,750.00$ plus $\$4.75 \text{ per ccf} \times 100 = \$475.00 \text{ per hcf} \times 50 \text{ hcf} = \$23,750.00$ which equals \$42,500. Final bill: Base rate of \$200,000.00 plus penalty of \$42,500 equals \$242,500.00).

There are potential advantages to employing this modified tiered rate incentive structure as opposed to the traditional tiered rate system and rebate systems. For example:

- By having the base rate as the middle tier in the tiered structure, the water utility can charge more for water to reflect a truer cost of the resource and avoid under-pricing. When the base rate is the lowest tier or starting point, every customer—even the most wasteful water consumers—benefits from this low commodity price. When the base rate is set as the middle tier, however, only those customers who practice water efficiency and conservation benefit from the lower tiered rates.
- Many existing rebate programs require too much effort (paperwork, applications, accounting to see the benefits) and take too long for the customer to recognize the real-time financial benefits. The model proposed above attempts to immediately build the financial incentives into the water bills. Furthermore, this incentive is continuous and not merely looked at as a straight payback period on the accounting ledger.

- The traditional block rate structures simply leave the status quo unchanged, even if a customer is misusing water and failing to implement the simplest (i.e., lowest cost) water efficiency practices. But the modified incentive model described above puts a clear financial penalty on the inefficient and wasteful use of water and provides an unmistakable and instantly recognizable incentive and benefit for implementing water efficiency and conservation.
- Recognition of the benefits of more efficient water use is directly built into each of the periodic water bills, through either a clear and ongoing financial benefit/incentive in water savings and efficiency or, by contrast, a clear and ongoing financial penalty/disincentive for the inefficient and even wasteful use of water. The customer representative, such as a facilities manager, can clearly demonstrate and quantify the value of water efficiency and conservation to his or her superiors.

Appendix H Acronyms

Btu	British Thermal Units
ccf	Cubic feet
CII	Commercial, Industrial, and Institutional
Calleguas	Calleguas Municipal Water District
CPUC	California Public Utilities Commission
CSU	California State University
EBMUD	East Bay Municipal Utilities District
EMWD	Eastern Municipal Water District
FMWD	Foothill Municipal Water District
GHG	Greenhouse Gases
hcf	Hundred cubic feet
HVAC	Heating, Ventilation, and Air Conditioning
IEUA	Inland Empire Utilities Agency
IOU	Investor-Owned Utility
ISO	International Organization for Standardization
IRWD	Irvine Ranch Water District
kWh	Kilowatt Hour
LADWP	Los Angeles Department of Water and Power
LVMWD	Las Virgenes Municipal Water District
NAICS	North American Industry Classification System
MWD	Metropolitan Water District of Southern California

MWDOC	Municipal Water District of Orange County
PAC	Project Advisory Committee
PG&E	Pacific Gas & Electric Company
PSE	Puget Sound Energy
Reclamation	Bureau of Reclamation
T&E	Training & Education
Three Valleys	Three Valleys Municipal Water District
SBESC	South Bay Environmental Services Center
SCE	Southern California Edison
SCVWD	Santa Clara Valley Water District
SCWA	Sonoma Country Water Authority
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas and Electric Company
SnoPUD	Snohomish Public Utilities District
SoCalGas	Southern California Gas Company
UC	University of California
UCLA	University of California Los Angeles
USGVMWD	Upper San Gabriel Valley Municipal Water District
WEED	Water and Energy Efficiency Program
West Basin	West Basin Water District
WMWD	Western Municipal Water District of Riverside County

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