MARINA COAST WATER DISTRICT

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Joint Meeting
Water Conservation Commission
Community Outreach Committee
Marina Coast Water District
11 Reservation Road, Marina, California

Date: October 3, 2013
Time: 5:30 PM
Location: 11 Reservation Road, Marina

Water Conservation Commission Members

Dan Amadeo (Public Member) - Chair
Jim Felton (Public Member) – Vice Chair
Jan Shriner (MCWD Board Representative)
Dave Brown (Marina City Council)
JoAnn Cannon (Public Member)
Grace Silva-Santella (Public Member)
Carroll Meuse (Public Member)

Agenda

This meeting has been noticed according to the Brown Act rules. The Commission will receive information on, discuss and consider making recommendations to the MCWD Board on the items contained in this agenda.

1. Call to Order/Introduction

2. Public Comments on any item not on the Agenda *Anyone wishing to address the Commission on matters not appearing on the Agenda may do so at this time. Please limit your comment to three minutes. The public may comment on any other item(s) listed on the Agenda at the time the item(s) is considered by the Commission.*

3. Approve the Draft Minutes for September 5, 2013

4. Receive Additional Information Regarding Training Opportunities (verbal report)

5. Receive an Update on the Status of MCWD's Budget Process (verbal report)

6. Conduct a Joint Session With MCWD's Public Outreach Committee to Consider Developing Outreach Opportunities Using Water Conservation

7. Receive an Overview of the Water Conservation Best Management Practices (BMPs)

8. Review the Status of MCWD's Progress Towards Meeting the State's 20%-By-2020 Objective

9. Review Proposed and Suggested Agenda Items for the November 7, 2013 WCC Meeting

10. Receive Update on Board/District Activities

11. Receive Comments from Commission Members

12. Adjournment - *Set or Announce Next Meeting(s), date(s), time(s), and location(s):*

    Next Meeting: Thursday, November 7, 2013 @ 5:30 p.m., 11 Reservation Road, Marina

Marina Coast Water District
Water Conservation Commission
Agenda Transmittal

Agenda Item: 3 Meeting Date: October 3, 2013

Submitted By: Brian True Presented By: Brian True

Agenda Title: Approve the Draft Minutes for September 5, 2013

Detailed Description: The Commission is requested to consider approval of the attached draft minutes for September 5, 2013.

Attachment: Draft September 5, 2013 minutes

Marina Coast Water District
Water Conservation Commission
Agenda Transmittal

Agenda Item: 6 Meeting Date: October 3, 2013

Submitted By: Brian True Presented By: Brian True

Agenda Title: Conduct a Joint Session with MCWD's Public Outreach Committee to Consider Developing Outreach Opportunities Using Water Conservation

Detailed Description: The Commission will conduct a joint session with MCWD's Public Outreach Committee. The session intends to explore opportunities for public outreach using Water-Conservation-themed vehicles across any potential media-method or activity.

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 7 Meeting Date: October 3, 2013

Prepared By: Paul Lord / Brian True Presented By: Brian True

Subject: Receive an Overview of the Water Conservation Best Management Practices (BMP's).

Summary: The Water Conservation Commission is requested to receive this staff report summarizing the water conservation Best Management Practices (BMP's) described by the California Urban Water Conservation Council (CUWCC).

There are two state-wide organizations that receive periodic reports on the water conservation activities performed by MCWD staff. The California Urban Water Conservation Council (CUWCC) is a voluntary organization created to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The CUWCC's goal is to integrate urban water conservation BMP's into the planning and management of California's water resources. A report to the CUWCC is provided every two years and uses their BMP descriptions as a basis. The second organization that receives conservation information from MCWD is the State of California's Department of Water Resources (DWR). That agency receives a report and statistics on water conservation activities, essentially the same as that requested by the CUWCC, every five years as part of MCWD's Urban Water Management Plan. Recall from the previous WCC orientation information that the Urban Water Management Plan calls their water conservation practices "Demand Management Measures" (DMMs). Since the CUWCC practices are called BMPs and grouped and described differently, the sets of information will always appear a bit different from each other. In any event, both organizations receive a comprehensive description of the water conservation programs and actions that are currently implemented, and those planned to be implemented, by staff to achieve MCWD's stated urban water use targets.

Also noteworthy is that MCWD is able to recognize an additional benefit from implementing the standardized CUWCC water conservation practices. As of 1 January 2009, State Assembly Bill 1420 made the execution of the BMP's a requirement for those water districts that receive state grants and loans. The rationale put forward by DWR for the legislation is that BMP implementation and statistics reporting is an indicator that the applicant (for a loan or grant) is exercising its responsibilities to the community.

Attached is a document that outlines the activities required of each BMP.

California Urban Water Conservation Council
Recommended Best Management Practices – 2013

1. Utility Operations Programs

1.1 Operations Practices

This practice includes several key actions that utilities shall take to better enable conservation program implementation and support conservation incentives with regulations where appropriate. Implementation and coverage shall consist of at least the following actions:

1) Conservation Coordinator
2) Water waste prevention

1.2 Water Loss Control

The goals of modern water loss control methods include both an increase in water use efficiency in the utility operations and proper economic valuation of water losses to support water loss control activities. Agencies shall apply the new water loss management procedures found in the May 2009 edition of the American Water Works Association's (AWWA) 3rd Edition M36 Manual, *Water Audits and Loss Control Programs*. Agencies are expected to use the AWWA Free Water Audit Software to complete their annual, standard water audit and water balance. Implementation and coverage shall consist of at least the following actions:

1) Validation for Standard Water Audit and Water Balance
2) Economic value of real loss recovery
3) Component analysis to analyze apparent and real losses and their causes by quantity and type
4) Reduce real losses to the extent cost-effective
5) Repair and report leaks

1.3 Metering with Commodity Rates for All New Connections and Retrofitting Existing Connections

For consistency with California Water Code (Section 525b), this BMP refers to potable water systems. A water meter is defined as a devise that measures the actual volume of water delivered to an account in conformance with the guidelines of the American Water Works Association. Implementation and coverage shall consist of at least the following actions:

1) Require meters for all new service connections
2) Establish a program for retrofitting existing unmetered service connections
3) Read meters and bill customers for volume of use
4) Prepare a meter replacement, testing, and repair plan
5) Develop a Feasibility Study for Retrofitting Mixed-use Sites

1.4 Retail Conservation Pricing

Conservation pricing provides economic incentives to customers to use water efficiently. Because conservation pricing requires a volumetric rate, metered water services are a necessary condition of conservation pricing. The goal of this BMP is to recover the maximum amount of water sales revenue from volumetric rates that is consistent with utility costs (which may include in the long run marginal costs), financial stability, revenue sufficiency, and customer equity. Implementation and coverage shall consist of at least the following actions:

1) Conservation pricing for water
2) Conservation pricing for sewer

2. Education Programs

2.1 Public Information Programs

This section addresses opportunities to use public information programs as an effective tool to inform customers about the need for water conservation and ways they can conserve, and to influence customer behavior to conserve. Implementation and coverage shall consist of at least the following actions:

1) Public events
2) Media events
3) Website
4) Conservation education materials
5) Established budget for public outreach program

2.2 School Education Programs

School education programs have been implemented to reach the youngest water users at an early age and enforce the need to engage in water conservation as a life-long behavior. This section provides specifics on how school education programs are to be implemented. Implementation and coverage shall consist of at least the following actions:

1) School education program to promote water conservation and its benefits
2) Provide grade-appropriate educational materials that meet state education framework requirements to schools
3) Distribute to K-6 students (grades 7-12 when possible)
4) Established budget for school education program
5) Description of all other water supplier education programs

3. Residential

Residential water users throughout California depend on a reliable and safe supply of water for their homes. This BMP includes the best and most proven water conservation methods and measures those residents, working in conjunction with water agencies, can implement. By implementing these methods and measures, homeowners, multi-family property owners, and tenants will increase water use efficiency and reliability. Credit for prior activities, as reported through the BMP database, will be given for documented water savings achieved through 2008. Implementation and coverage shall consist of at least the following actions:

1) Residential assistance program for leak detection, water conservation surveys, water efficiency suggestions, and/or inspections
2) Provide water-efficient showerheads and faucet-aerators

3) Perform landscape water surveys
4) High-efficiency clothes washer rebate program
5) Toilet retrofit upon resale
6) Toilets for new development
7) Efficient toilet rebate program

4. Commercial, Industrial, and Institutional

Commercial, industrial, and institutional (CII) water demands make up a large percentage of total demand for California. CII water use varies dramatically between business sectors as well as within a given water agency's territory. The goal of this BMP is to implement comprehensive yet flexible best management practices, allowing each water agency to tailor the implementation of each practice to fit local needs and opportunities. The end result is a practice that is successful and will produce the greatest amount of cost-effective water savings. Agencies are to implement measures to achieve the water savings goal for CII accounts of 10% of the baseline water use over a 10-year period. Baseline water use is defined as the water consumed by CII accounts in the agency's service area in 2008. Credit for prior activities, as reported through the BMP database, will be given for up to 50% of the goal; in this case, coverage will consist of reducing annual water use by CII accounts by an amount equal to the adjusted percentage goal within 10 years. Implementation and coverage shall consist of at least the following actions:

1) Establish measures to reduce use 10% by 2018

5. Landscape

Irrigation accounts for a large portion of urban water use in California. Irrigation water use varies dramatically depending on water pricing and availability, plant choice, geographic locations, seasonal conditions, and the level of commitment to sound water efficiency practices. The goal of this BMP is that irrigators, with assistance from signatories, will achieve a higher level of water use efficiency consistent with the actual irrigation needs of the plant materials. Reaching this goal would reduce overall demands for water, reduce demands during the peak summer months, and still result in a healthy vibrant landscape for California. Implementation and coverage shall consist of at least the following actions:

1) Assign ETO-based Water Budgets
2) Provide budget billing notices showing the relationship between budget and actual consumption
3) Offer site-specific technical assistance to reduce water use
4) Develop and implement a survey program for mixed-use sites
5) Offer financial incentives

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 8 Meeting Date: October 3, 2013

Prepared By: Paul Lord / Brian True Presented By: Brian True

Subject: Receive an Update on the Status of MCWD's Progress Towards Meeting the State's 20%-By-2020 Objective

Summary: The Water Conservation Act of 2009 (SBx7-7) requires each retail urban water supplier to establish baseline daily per capita water demand and water conservation targets, as outlined in California's 20x2020 Water Conservation Plan. The plan establishes a statewide goal of reducing average per capita water demand by twenty percent by the year 2020. The State estimated the average statewide demand, for 2005, to be 192-gallons-per-capita-day (gpcd), with a statewide conservation target of 154-gpcd in 2020. An interim statewide target of 173 gpcd (ten percent reduction) by the year 2015 was also established. In the 20x2020 Plan, regional baselines and targets were also established.

The Marina Coast Water District is in the Central Coast Hydrologic Region. The regional baseline water demand was estimated to be 154-gpcd, the lowest in the state. The regional conservation targets are 139-gpcd by the year 2015, and 123-gpcd by the year 2020. The Department of Water Resources (DWR) published detailed methodologies as to how baselines and targets are to be calculated. These methods are detailed in MCWD's 2010 Urban Water Management Plan (2010 UWMP) which was excerpted for the WCC's use during September's orientation session.

Historic water demand and population tables are shown in Table 1.0 below. Annual population values for 2010 were obtained from the U.S. Census. Years prior to 2010 are estimates based on the 2005 U.S. Census and growth projections. The District's selection of baseline water demand year is detailed in the 2010 UWMP. As can be seen from Table 1.0, the District's average water demand has been at or below the regional target of 123-gpcd since 2009. Also, the calculated 2012 system-wide water demand figure of 119-gpcd is below the 2015 interim target - so this objective has been met. Since the 2012 system-wide figure is slightly higher than the 2020 target, additional water conservation efforts appear warranted.

A comparison of daily per capita water demand between service areas is shown in table 2.0 below – the data is taken from Table 1.0 but the bar graph expresses the information with increased clarity.

Table 1.0

MCWD Daily Per Capita Water Use 2008-2012

		Marina			Ord Community			System-Wide	
		Annual	Daily		Annual	Daily		Annual	Daily
	Marina	Water Use	Per Capita	Ord	Water Use	Per Capita	Total	Water Use	Per Capita
Year	pop.	(gal)	(gal)	pop.	(gal)	(gal)	pop.	(gal)	(gal)
2008	17,706	611,312,769	95	11,827	747,160,050	173	29,533	1,358,472,819	126
2009	17,852	644,671,439	99	11,891	670,984,559	155	29,743	1,315,655,998	121
2010	16,834	565,604,345	92	13,646	781,072,667	156	30,480	1,346,677,013	121
2011	16,935	619,741,263	100	13,728	698,857,169	139	30,663	1,318,598,432	117
2012	17,037	672,030,214	108	13,810	672,030,214	133	30,847	1,344,060,429	119

Notes:

2008-2009 population figures are estimates based on CA Department of Finance estimates multiplied by annual growth projections (2010 Urban Water Management Plan)

2010 population figures are from the 2010 U.S. Census for tracts and block groups determined to be applicable to the service area

2011 - 2012 population figures are estimates based on 2010 U.S. Census figures multiplied by 0.6% Dept. of Finance annual growth projections

Annual water use in the Ord Community is an estimate based on the sum of metered consumption and an estimate of unmetered consumption

Gallons Per Capita Day (GPCD) = Water production/population/365

District Baseline and Conservation Targets

Description	Year	Amount
Baseline GPCD	2008	133 gpcd
Maximum Allowable Target	2020	126 gpcd
Interim GPCD Target	**2015**	**125 gcpd**
2020 GPCD Target	**2020**	**117 gpcd**

Notes:

The Baseline GPCD is the average GPCD for the chosen 10-year period ending December 31, 2008

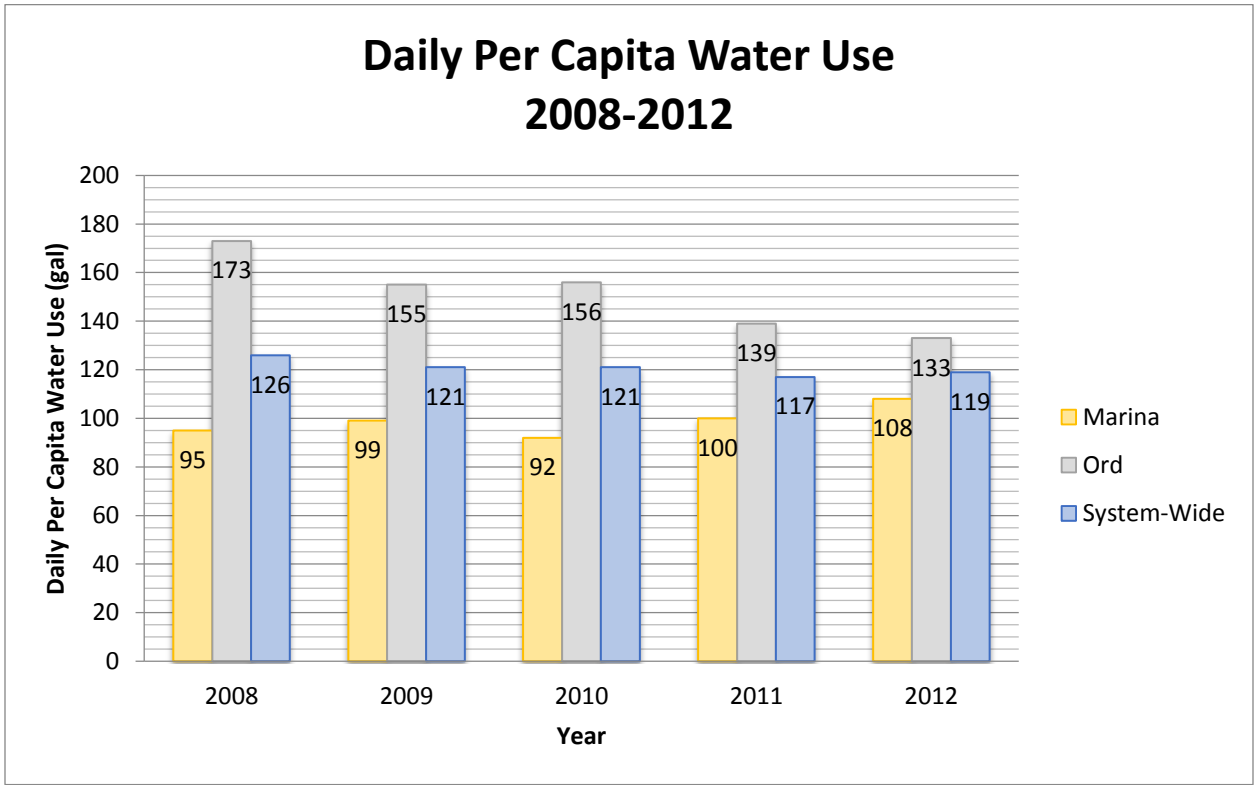
The Maximum Allowable Target equals 95% of a chosen 5-year Baseline GPCD figure ending December 31, 2008

The District's 2020 GPCD Target must be the lower of two figures, the Maximum Allowable Target or a figure derived from one of four methods used to calculate a 2020 target

The 2020 GPCD Target is 95% of the Regional Hydrologic Target (Method 3)

The Interim Target is the average of the 10-year baseline GPCD figure and the 2020 GPC Target

Table 2.0


Daily Per Capita Water Use
2008-2012
Daily Per Capita Water Use (gal)
200
180
160
140
120
100
80
60
40
20
0
95
173
126
99
155
121
92
156
121
100
139
117
108
133
119
2008
2009
2010
2011
2012
Year
Marina
Ord
System-Wide

Marina Coast Water District
Water Conservation Commission
Agenda Transmittal

Agenda Item: 9 Meeting Date: October 3, 2013

Submitted By: Brian True Presented By: Brian True

Agenda Title: Review Proposed and Suggested Agenda Items for November 7, 2013 and Future Dates

Detailed Description: The Commission is to review proposed agenda items for the November 7, 2013 meeting and may suggest new agenda items for future Water Conservation Commission meetings.

Staff-suggested agenda items for the November 7, 2013 Water Conservation Commission Meeting include the following:

- Joint meeting with MCWD Public Outreach Committee to consider developing outreach opportunities using Water Conservation

Potential agenda items for the November 7, 2013 Commission meeting or future meetings include the following:

- Water Supply Augmentation Projects – MCWD desal plant tour; recycled water use; grey water use
- Review BMPs; current water savings for achieving year-2020 per capita consumption goal
- New Water Saving Devices and Technologies – Consider rebates for rainwater catchment and use
- Developing Improved Commodity Rates for Water Connections
- Developing Water-budgets for Large Landscapes
- Address Temporary Landscapes and their source of water (hydrant metering, temp connections)
- Improve/expand the Landscape Incentive Program
- Compliance Inspections of New Developments
- Review State programs/mandates with which MCWD maintains compliance
- Review State mandated science curriculum for elementary school levels K – 3rd grade
- Update Landscape Standards and Forms
- Training Opportunities in conservation-related topics
- Our Water – Sources; Conveyance and distribution; Storage