



# MARINA COAST WATER DISTRICT

11 RESERVATION ROAD, MARINA, CA 93933-2099

Home Page: [www.mcwd.org](http://www.mcwd.org)

TEL: (831) 384-6131 FAX: (831) 883-5995

## Water Conservation Commission

Marina Coast Water District

11 Reservation Road, Marina, California

### DIRECTORS

THOMAS P. MOORE  
*President*

JAN SHRINER  
*Vice President*

HOWARD GUSTAFSON  
WILLIAM Y. LEE  
PETER LE

Date: January 9, 2014  
Time: 5:30 PM  
Location: 11 Reservation Road, Marina

### 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. Receive an Update on the Status of MCWD's Budget Process (verbal report)
4. Consider Developing Outreach Opportunities Using Water Conservation
5. Receive an Update on the Water Conservation Public Information Program
6. Consider the Existing Hot-Water Recirculation Rebate Program and the Prospects for Developing Rebate Programs for Rainwater Catchment and Gray-Water Use
7. Review Proposed and Suggested Agenda Items for the February 6, 2014 WCC Meeting
8. Receive Update on Board/District Activities
9. Receive Comments from Commission Members
10. Adjournment - *Set or Announce Next Meeting(s), date(s), time(s), and location(s):*

*Next Meeting: Thursday, February 6, 2014 @ 5:30 p.m., 11 Reservation Road, Marina*

Marina Coast Water District  
Water Conservation Commission  
Agenda Transmittal

Agenda Item: 4

Meeting Date: January 9, 2014

Submitted By: Brian True

Presented By: Brian True

Agenda Title: Consider Developing Outreach Opportunities Using Water Conservation

Detailed Description: The Commission will consider opportunities for public outreach using Water-Conservation-themed vehicles across any potential media-method or activity. This topic is carried-over from the October, November, and December 2013 meetings.

The objective of this January 9, 2014 will be to continue the discussions by exploring the specific tasks and levels of effort needed to engage with CSUMB in order to become an organization involved with their Service Learning and Cap Stone Project programs. Also, additional specific ideas within the auspices of the CSUMB-focused idea may be broached and discussed. Budget implications and resources for the outreach ideas recommended to the MCWD Board will be discussed.

Please keep in mind that Water Conservation-related themes and topics need to remain the focus of this outreach topic considered by the Water Conservation Commission.

Marina Coast Water District  
Water Conservation Commission  
Staff Report

Agenda Item: 5

Meeting Date: January 9, 2014

Prepared By: Paul Lord

Reviewed by: Brian True

Subject: Receive an Update on the Water Conservation Public Information Program

**Summary:** The Water Conservation Commission is requested to receive this Staff Report summarizing the recent work the CSUMB Student Intern and staff has performed to create bill messages, bill inserts, brochures, and flyers to be distributed during the first few months of 2014. These modes of outreach are one of the four main outreach focus areas designated as priorities by the Commission.

One of the easiest and most cost effective ways to broadcast information promoting water conservation and the District's water conservation programs is through the customers' water bills. Staff has the ability to insert a short bill message onto the front page of the bill each month. The number of text characters used in a bill message is limited to five hundred characters, so this method of information distribution is often used for short reminders or simple notices.

To provide more information about a topic, or to provide images, tables, or charts, a bill insert or brochure can be created and inserted into each customer's monthly water bill. Bill inserts are two-sided and are approximately 3.5" x 8.5" in size. The page size of a larger brochure is the same as a bill insert. However, brochures typically have three to four times as many pages as bill inserts. Typically, several individual bill inserts can be inserted into a customer's water bill without triggering the need for additional postage, while only one brochure can be included and remain below the extra-postage weight limitations.

To provide a large amount of information, 8.5" x 11" two-sided, color flyers are created. These flyers are used for general distribution in the field or are displayed and made available at the Customer Service desk inside the District offices.

Often, one bill message, a bill insert, a brochure, and a flyer are created for each important and timely topic. Then, staff schedules the distribution of the different types of material so that the customer will see a single message-theme several times each year contained on the various material types. For example, the seasonal message about reducing landscape water during the fall would first be seen as a bill message in October, then as a bill insert in November. During the same period, the flyer created would be posted at the District offices and distributed to customers in the field.

Attached are several draft versions of the most recent bill inserts created by the CUMB Student Intern.

During, the first several months of 2014, the following message topics are tentatively planned:

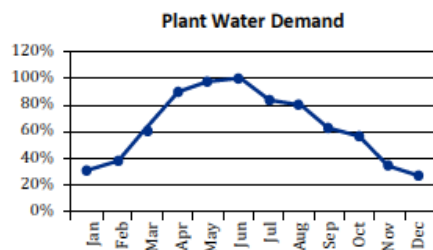
- January – Irrigation season has ended, please turn off automated irrigation systems
- February - Rainwater catchment
- March - Hot water recirculation pumps and the associated rebate
- April - WaterSense fixtures and saving water indoors
- May - Water Quality and steps to preserve water quality
- June - Landscape water use and irrigation scheduling

## The Irrigation Season Has Ended

### Please Turn Off Your Watering System

Experienced gardeners know that as the day length shortens, they must greatly reduce the amount of water applied to their landscape. During the Fall months, peak June watering run times can be reduced by 37% for September, 44% for October, and 66% for November.

Seasonal rains from December through March will often provide all of the water your landscape plants require in those months. It is important to **turn off** your watering systems in these months so that you are not unnecessarily applying water.



If you choose to use an automatic sprinkler system, water only as needed by using the semi-automatic or manual start feature on your irrigation controller. To eliminate unnecessary watering automatically, install a soil-moisture sensor or rain shut-off switch to your existing controller.

## Simple Switches and Sensors Save Water and Money

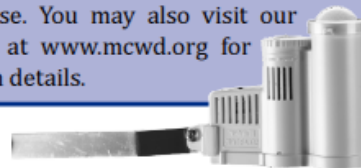
Rain shut-off switches and soil moisture sensors will automatically turn off your irrigation system during periods of rain or when the soil moisture is adequate for plant growth. Once the weather clears, your programmed watering events will resume.

These low cost devices save tremendous amounts of water and have a fast return on investment. Installation is relatively easy and most often can be done without professional help.







### Marina Coast Water District Rebates

Rebates of up to \$50 are provided by the District for the installation of these devices on your existing irrigation controller. Please call our Water Conservation Specialist at (831) 883-5905 to learn more about incentives and assistance available to help you upgrade your existing irrigation system and reduce landscape water use. You may also visit our website at [www.mcwd.org](http://www.mcwd.org) for program details.





**R**ainwater catchment is the act of collecting, storing, and then reusing rainwater for irrigation or other non-potable (non-drinkable) uses. The popularity of rainwater catchment is increasing throughout the region as people look for ways to use our limited water resources in a more sustainable manner. By installing a rainwater catchment system at your home or business, you will:

-  Continue to maintain the beauty and health of your landscape;
-  Reduce the harmful water runoff that can carry toxic chemicals into our waterways;
-  Reduce the volume of drinking water used for non-potable uses, such as irrigation;
-  And save money by reducing the amount of water you have to buy from the water company.



For more information, contact our Water Conservation Specialist at (831) 883-5905.

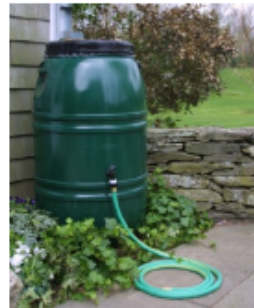
## **Rainwater Catchment Systems**

Most often rainwater is diverted off rooftops and placed in storage tanks. When you start thinking about a catchment system for your home or business, you should first answer the question, "How big?" A catchment system can be as small as a single 50 gallon rain barrel or as large as an underground cistern of 50,000 gallons. From one rain barrel to a linked system of 5 or 10 rain barrels, the thinking is the same: collect the water from a downspout, store it until the dry months, and then use it to water your garden.

## **Rain Barrels**

Rain barrels typically hold from 50 to 300 gallons of water and they are perfect for small scale residential sites. They are inexpensive and easy to install and maintain.

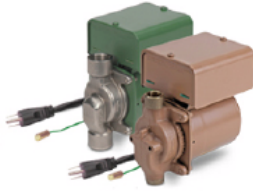
The simplest system is a rain barrel with a watering can to scoop out the water. You may choose to add a spigot to the barrel, then add a hose to that, and then pump the water around the yard or into an irrigation system. If you believe 'simpler the better', then a gravity fed rain barrel that requires no pump or piping is great.



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## Hot Water Recirculation Pumps

*Help To  
Conserve  
Water*



If you have to let the water run for several minutes before it gets hot, there's a solution for your time and water waste. Hot water recirculation pumps are used so that the faucet will provide hot water instantly upon demand. Without the proper system, hot water that is unused in the line cools and must be drained before your hot water heater can reach the desired faucet. Consequently, gallons of unused water are just washed down the drain.

### MCWD Rebate Program

The Marina Coast Water District provides an incentive for retrofitting your home with a hot water recirculation pump to reduce water consumption. The rebate provides an incentive to retrofit a hot water recirculation system to the present system to reduce the wasted water. The rebate provided will be up to \$250 per installation, not to exceed the cost of the pump being installed and materials.



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## Hot Water Recirculation Pumps and Retrofit Kits

In typical one-way plumbing without a recirculation pump, water is simply piped from the water heater through the pipes to the tap. Once the tap is shut off, the water remaining in the pipes cools producing the familiar wait for hot water the next time the tap is opened. By adding a recirculation pump and constantly circulating a small amount of hot water through the pipes from the heater to the farthest fixture and back to the heater, the water in the pipes is always hot, and no water is wasted during the wait.

Retrofit kits are an easy and inexpensive way to save water that requires no return line. Installation for these usually takes an hour or less. These systems are a pump and valve combination that delivers you hot water in an instant. A pump is used at your water heater along with the patented under sink valve beneath the sink that is furthest away from the pump. This patented combination creates a pressure differential that allows the cool water in the hot water supply to bypass, at a very low volume, into the cold supply line through a thermostatically controlled valve that is mounted under the sink furthest from the water heater. The District will also provide an incentive for this kind of kit.







**WaterSense** is a partnership program by the Environmental Protection Agency that seeks to protect the future of our nation's water supply by offering people a simple way to use less water with water-efficient fixtures.

Since the program's beginning in 2006, **WaterSense** has helped consumers save a cumulative 487 billion gallons of water and over \$8.9 billion in water and energy bills.

More than half of your interior household water use flows through your bathroom fixtures. When replacing these fixtures with **WaterSense** labeled high efficiency toilets, showerheads, and faucets, you capture most of your potential water and energy savings. It is not uncommon to find water and energy savings of \$50 - \$100 or more annually! Pick up new **WaterSense** labeled fixtures at your local home retailer or go online and learn more about the available **WaterSense** products at [www.epa.gov/WaterSense](http://www.epa.gov/WaterSense).

## Water-Saving Products

**WaterSense** makes it easy to find water-efficient products that can save you money and help the environment. Just look for products bearing the *WaterSense label* at your local retailer.



**WaterSense** labeled products are backed by independent, third-party testing and certification, and meet the Environmental Protection Agency's specifications for water efficiency and performance. When you install these water-saving fixtures in your home or business, you will be saving money on your water bills and water for future generations. Whether remodeling your home, starting construction of a new home, or simply replacing an old fixture, installing a **WaterSense** labeled fixture is a high-performance, water-efficient option worth considering.



The **Marina Coast Water District** provides rebates when you purchase certain **WaterSense** fixtures for your home. For more information, visit [www.mcwd.org](http://www.mcwd.org) or contact our Water Conservation Specialist at (831) 883-5905.

## Landscape Watering Tips

These **water-wise tips** can help you maximize your irrigation efficiency, save water, produce a healthier landscape, and protect the environment:

- Use drip irrigation
- Utilize automatic, weather or soil moisture-based irrigation controllers
- Utilize automatic rain / moisture shut off devices
- Water early in the morning to minimize the effects of wind and evaporation
- Reduce your irrigation frequency or turn off your controller during the winter months and periods of rain
- Utilize repeat or soak cycles to minimize runoff
- Allow the soil to partially dry between irrigation events
- Design separate zones for turf, trees, shrubs and for different types of application devices
- Avoid turf in long narrow areas that are difficult to irrigate efficiently
- Raise lawn mowing heights to maximize water conservation
- Select low water use grass varieties such as Tall Fescue
- Perform an annual inspection of the irrigation system i.e. unplug nozzles, raise low heads, level heads, adjust sprinkler arcs, repair leaks

**Practice smart water use...  
Every drop counts.**



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## Landscape Watering Guide

This **Landscape Watering Guide** was developed to assist you in managing your irrigation programming throughout the growing season. The guide provides recommended run times and watering frequency for each month of the year. It may be necessary to make minor adjustments to the listed schedule according to your sites unique conditions, such as soil type, sun and wind exposure, as well as the uniformity of your irrigation system. Remember that you must change your programmed frequency and run times each month as the weather and plant water needs change. Our conservation staff is available to assist you in creating a custom irrigation schedule for your site or to assist you in programming your controller. Please call us at (831) 384-6131.

### Minutes of Irrigation Run Time per Week

Month	Lawns		Shrubs	
	Spray heads	Rotors	Spray heads	Drip (2gph emitters)
Jan	(9) or as needed	(26) or as needed	(6) or as needed	(5) or as needed
Feb	(13) or as needed	(39) or as needed	(9) or as needed	(8) or as needed
Mar	(24) or as needed	(70) or as needed	(17) or as needed	(13) or as needed
Apr	32	93	22	18
May	37	112	27	22
Jun	42	126	30	25
Jul	44	131	32	26
Aug	37	112	27	22
Sept	32	93	22	18
Oct	24	70	17	13
Nov	(11) or as needed	(34) or as needed	(8) or as needed	(7) or as needed
Dec	(6) or as needed	(18) or as needed	(4) or as needed	(4) or as needed

### Maximum Run Time Per Application Event

Lawns		Shrubs	
Spray Heads	Rotors	Spray Heads	Drip (2gph emitters)
13 Minutes	42 Minutes	13 Minutes	13 Minutes

### Minimum Days Between Watering Events

Lawns		Shrubs	
Spray Heads	Rotors	Spray Heads	Drip (2gph emitters)
2 Days	2Days	3 Days	3 Days

Marina Coast Water District  
Water Conservation Commission  
Staff Report

Agenda Item: 6

Meeting Date: January 9, 2014

Prepared By: Paul Lord

Reviewed by: Brian True

Subject: Consider the Existing Hot-Water Recirculation Rebate Program and the Prospects for Developing Rebate Programs for Rainwater Catchment and Gray-Water Use

Summary: Marina Coast Water District currently provides an incentive to encourage the retrofitting of existing structures with hot water recirculation systems that reduce water consumption. The rebate is equal to the purchase price of the pump and associated materials, not to exceed \$250. Details about the program eligibility requirements, program application procedures, and terms of agreement are attached.

This Agenda item also provides the Commissioners opportunity to discuss the prospects and merits of expanding the overall Water Conservation incentive program to include programs for Rainwater Catchment and Gray-Water Re-Use. The requirements, conditions, and magnitudes of the prospective new programs need to be developed prior to providing a recommendation to implement such incentives to the MCWD Board of Directors.

## **Hot Water Recirculation Pump Rebate Program**

### **Program Procedures**

- Applicant shall not start any retrofitting or product installation until after receiving written project approval from the District
- Before starting any project, purchasing equipment, applying to, and participating in the program, customers must call (831) 384-6131 to schedule a meeting on site with District staff.
- At the initial meeting, the Applicant shall describe the proposed hot water recirculation conversion to staff. Staff will verify the existing hot water system size and condition, components, and current water use. For large and/or complex projects, staff may request a plumbing plan. The homeowner, responsible party, or a designee who has access to the hot water distribution system must be present for the meeting.
- During the same meeting, a required Water Use Survey, conducted by District staff, must be completed. The Water Use Survey takes about one hour of time on site. Staff will check for leaks, record the type and number of water fixtures at the property, and evaluate landscape water use. Recommendations to participate in the District's high-efficiency clothes washer and toilet rebate programs and to improve water use efficiency will be made if appropriate.
- District staff will also request the Applicant complete a pre-installation questionnaire, outlining the scope of work to be performed and the anticipated improvements to be made in performance and water efficiency.
- Only after the project is initially reviewed, the Water Use Survey completed, and the pre-installation questionnaire is completed, is the Hot Water Recirculation Pump Rebate Application Form filled out and initial project approval given by District staff.
- Once approved, the project may proceed as planned, to completion. District staff must be notified and approve of any design changes made while the project is proceeding. All projects must be completed within 60 days; otherwise the program application will be rejected.
- Once the project is completed, the applicant must schedule a follow-up site inspection with the District. District staff will verify installation and compliance with the Design Criteria, check the hot water distribution system operation, and will assist in scheduling if required.
- Also at this follow-up inspection, the applicant will be asked to provide staff with the original itemized receipts for the recirculation pump and any associated materials.
- If the project is completed as planned in the 60 day time period, the District staff will then sign the application form verifying project completion and forward the application form to the Accounting Department office for rebate payment.
- After 90 days, the District staff will request the Applicant complete a post-installation questionnaire. This questionnaire assists the District in program evaluation.
- To assure compliance, quality, and performance, it is recommended that only a licensed, insured plumbing contractor install components or modify any existing plumbing. Local building officials should be consulted before installing or modifying an existing plumbing system.

## **Hot Water Recirculation Pump Rebate Program**

### **Program Terms of Agreement, and Program Eligibility Requirements**

- Approved applicants are eligible for up to \$250 in District rebates.
- The rebate shall be equal to the taxable/net cost of a hot water recirculation pump and associated plumbing materials when retrofitting a non-recirculation hot water system to a recirculation system. Sales tax, delivery charges and labor costs are not included in the calculation of the rebate amount.
- Program is limited to available funding. Approved applications will be processed on a first-come, first-served basis.
- All projects must be completed within 60 days of initial project approval.
- Incentives are only provided for retrofitting buildings or homes older than two years. New construction projects are not eligible for incentives.
- Only MCWD customers of current record are eligible to participate in, and receive payment from, the rebate program. The customer's account must be in good standing and non-delinquent at the time of initial project approval.
- The Applicant certifies that all necessary permissions have been obtained from the property owner, if the Applicant is not the owner themselves.
- The approved project site must be located within the Marina Coast Water District service area.
- Projects are approved at the discretion of the MCWD staff. Projects that do not meet the program eligibility requirements will be denied.
- MCWD reserves the right to alter this program at any time.
- MCWD does not endorse specific brands, products or dealers; nor does it guarantee materials, workmanship, or results.
- MCWD assumes no responsibility or liability for damages to an Applicant's property as a result of participation in this program.
- The District cannot guarantee that the installation of devices and the retrofitting of plumbing will result in lower utility costs.
- Only original, itemized receipts for pumps and associated materials dated after initial project approval are accepted.
- The water use at the site must be metered by the District.
- To assure efficient operation of any hot water system or components, staff may require adjustments, repairs, and modifications to the existing or newly modified system be made prior to project completion or final project approval by the District.
- If a testable backflow prevention device is present at the meter, there must be evidence that the backflow prevention device has recently been inspected.

Marina Coast Water District  
Water Conservation Commission  
Agenda Transmittal

Agenda Item: 7

Meeting Date: January 9, 2013

Submitted By: Brian True

Presented By: Brian True

Agenda Title: Review Proposed and Suggested Agenda Items for February 6, 2014 and Future Dates

Detailed Description: The Commission is to review proposed agenda items for the February 6, 2014 meeting and may suggest new agenda items for future Water Conservation Commission meetings.

Staff-suggested agenda items for the February 6, 2014 Water Conservation Commission Meeting include the following:

- Consider developing outreach opportunities using Water Conservation
- Receive a verbal report regarding the status of the MCWD budget process
- Review how State drought conditions might impact Water Conservation within MCWD's service areas

Potential agenda items for the February 6, 2014 Commission meeting or future meetings include the following:

- Water Supply Augmentation Projects – MCWD desal plant tour; recycled water use; gray water use
- Review BMPs; current water savings for achieving year-2020 per capita consumption goal
- 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
- New Water Saving Devices and Technologies – Consider rebates for rainwater catchment and use