



MARINA COAST WATER DISTRICT

11 RESERVATION ROAD, MARINA, CA 93933-2099

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Agenda
Regular Meeting
Water Conservation Commission
Thursday, February 4, 2016, 5:30 PM
MCWD Board Room, 11 Reservation Road, Marina, CA

Water Conservation Commission Mission Statement

To provide input to the Board of Directors on matters pertaining to the preservation of the District's water resource through conservation, technological improvements and policy.

Commission Members

Chair - Grace Silva-Santella

Vice Chair - Audie Robinson

Jan Shriner (MCWD Board Representative)

Dave Brown (Marina City Council)

JoAnn Cannon (Public Member)

Jim Felton (Public Member)

Bethany Taylor (Public Member)

Charlie Eskridge (Public Member)

Colleen Courtney (Public Member)

This meeting has been noticed according to the Brown Act rules. The Commission will receive information on, discuss, and may consider taking action or directing staff to return to the Board for action on items contained in this agenda. Some items are informational and are provided as a written report or verbal update and may not require Commission action.

1. Call to Order/Introduction
2. Public Comments on any item not on the Agenda. Any person 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. Action to Approve the January 7, 2016 Meeting Minutes
4. Receive an update on the In-school Water Conservation Education Program
5. Continued Group Discussion about 2016 Commission Objectives and Goals
6. Receive Updated GPCD, Water Production, and Water Consumption Data

7. Overview and Comparison of Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI)
8. Review and Propose Agenda Items for the March 3, 2016 WCC Meeting and Future Meetings
9. Receive Update on Board/District Activities
10. Receive Comments from Commission Members
11. Adjournment

Marina Coast Water District
Water Conservation Commission
Agenda Transmittal

Agenda Item: 3

Meeting Date: February 4, 2016

Prepared By: Paula Riso

Presented By: Paula Riso

Agenda Title: Action to Approve the January 7, 2016 Meeting Minutes

Background: *2014 Strategic Plan, Mission Statement - We Provide high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Discussion/Analysis: The draft minutes of January 7, 2016 are provided for the Commission to consider approval.

Environmental Review Compliance: None required.

Financial Impact: ___ Yes __X__ No Funding Source/Recap: None

Other Considerations: The Commission can suggest changes/corrections to the minutes.

Material Included for Information/Consideration: Draft minutes of January 7, 2015 meeting.

Action Required: ___ Resolution __X__ Motion ___ Review

Board Action

Motion By _____ Seconded By _____ No Action Taken _____

Ayes _____ Abstained _____

Noes _____ Absent _____

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 4

Meeting Date: February 4, 2015

Prepared By: Paul Lord

Presented By: Paul Lord

Reviewed By: James Derbin

Subject: Receive an update on the In-school Water Conservation Education Program

Summary: Until recently, the In-School Water Conservation Education Program has consisted of school assemblies and in-class instruction at five elementary schools within the City of Marina and the former Fort Ord.

Currently, the District is not able to provide the in-class instruction due to the retirement of the Water Science/Conservation Teacher in the spring of 2015. Because of this, in-school instruction did not take place during the fall and winter school trimesters as the teaching position is still vacant.

The search for a new water science/conservation began in the fall of 2015, after the 2015-2016 MOU with the school district was approved. The job posting for the position is currently out, and applications are being received by the school district. As the applications are received, a background check is performed, and the school district verifies the applicants job qualifications. Then, the job applicants are introduced to the District's volunteer Program Coordinator for additional interview(s). Several job applications have been submitted and one applicant interviewed.

To continue the flow of water conservation education into the schools throughout the District service area with the absence of a Water Science/Conservation Teacher, staff is working on the following activities:

- In place of in-class instruction, staff has offered water conservation literature/activities and website links to teachers throughout all the schools.
- All five elementary schools received school assemblies from the musical Group ZunZun during the fall trimester.
- Staff is currently scheduled to meet with the Science Garden Teacher at Los Arboles Middle School to find ways to collaborate on water education classes/workshop for their entire student body.
- Staff will look into providing more instructional materials to local teachers via the Monterey Unified School District Instructional Center.

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 5

Meeting Date: February 4, 2015

Prepared By: Paul Lord

Presented By: Paul Lord

Reviewed By: James Derbin

Subject: Continued Group Discussion about 2016 Commission Objectives and Goals

Summary: Suggested by Commissioner Silva-Santella, the commission is asked to discuss the idea of setting commission goals for 2016, then revisiting the list of goals at subsequent meetings as an ongoing 'report' or agenda item (not an action item). At the end of the year, the commission would review the complete list and evaluate their achievements.

At the January 2016 WCC meeting, for reference and guidance towards setting goals that are most appropriate, staff provided the Commissioners with excerpts from the Board Procedures Manual and the Procedures for Marina Coast Water District's Water Conservation Commission that outline the duties and responsibilities of the commission.

At that meeting, the Commissioners listed some objectives and goals, then were tasked with finding public outreach opportunities/events that staff and the Commissioners could attend during the next year. At the February WCC meeting, the Commissioners would work to compose a final list of objectives and goals.

Following is the list of objectives and goals discussed at the January WCC meeting.

2016 WCC Objectives and Goals

- Work to re-establish the In-school Water Conservation Education Program Activities
- Distribute more promotional items
- Continue support for additional CSUMB Service Learning Projects
- Recognize homeowners for past and continued water conservation efforts
- Develop, send out more e-flyers, bill inserts (campaign to save more)
- Develop, send out a newsletter
- Expand water conservation outreach to the Commercial sector
- Continue strong efforts to promote lawn replacement

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 6

Meeting Date: February 4, 2016

Prepared By: Paul Lord

Presented By: Paul Lord

Reviewed By: James Derbin

Subject: Receive Updated GPCD, Water Production, and Water Consumption Data

Summary: In response to the ongoing drought, the State Water Resources Control Board (SWRCB) approved an emergency regulation that directs water purveyors to electronically report monthly water production and consumption figures. Also to be reported to the SWRCB is an estimate of the amount of water used each day by residential customers. This estimate, called “residential gallons per capita per day”, or R-GPCD, more accurately portrays water use by individuals and allows communities to compare their efforts accurately with others around the state.

In support of the SWRCB actions, Marina Coast Water District staff has increased their efforts to compile and submit the required production, R-GPDC data, and other required monitoring reports each month. If available at the meeting time, staff will provide current tables and charts that show the various water production figures as of the December 2015 billing cycle. Staff will also include tables and charts showing the gallons-per-capita-day (GPCD) and R-GPCD data that has been most currently compiled. The documents are entitled:

- 2008-2015 Total Production vs. Consumption By Year (Acre-Feet)
- 2010 - 2015 Total Production by Month
- Monthly Production Savings and Cumulative Savings, 2013 vs 2015
- Monthly Production Reduction Performance
- 2013 - 2015 Monthly GPCD (Gross Production)
- 2013 – 2015 Residential Gallons-Per-Capita-Day
- 2013 – 2015 Total Consumption
- 2013 – 2015 Single-Family Consumption by Month
- 2013 – 2015 Multi-Family Total Consumption by Month
- 2013 – 2015 Residential Total Consumption by Month
- 2013 – 2015 Commercial/Institutional/ Industrial Consumption by Month
- 2013 – 2015 Landscape Irrigation Consumption by Month
- 2013 – 2015 Total Consumption by Month
- 2015 Consumption by Category Pie Charts
- 2015 Temporary Hydrant Meter Water Use
- 2015 Temporary Hydrant Meter Water Use: Percentage of Total Production

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 7

Meeting Date: February 4, 2016

Prepared By: Dani Walker
Reviewed By: James Derbin

Presented By: Paul Lord

Subject: Overview and Comparison of Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI)

Summary: Automatic Meter Reading (AMR), which is currently used by the District, allows the District to read water meters from a moving vehicle rather than manually. AMR provides our District with greater safety, reduced costs, improved productivity, and misreads become less common because the old meter reading technique consisted of a manual/visual meter reading process.

The District's AMR system is less expensive than a more sophisticated Advanced Metering Infrastructure (AMI) meter reading system. But, the AMR system offers less features and benefits than an AMI system. AMR is often used in small to medium sized water districts due to the higher costs associated with installing an AMI network.

The newer AMI systems are comprised of a long range radio base station, peripheral repeaters to extend the radio range into low population areas, and individual meter endpoint transceivers (meter registers). They consist of a robust Radio Frequency (RF) communication network that interfaces between the water District and the customers. These tower based systems operate in the licensed 450 MHz – 470 MHz frequency spectrum offering superior reliability and extensive geographic reach. Data is transferred two-ways in AMI systems. Water use data is sent by the meter to the District one way, and firmware updates and commands, like remote shut-off, can be sent to the meter the other way. AMI features reduce the need for staff to drive the meter reading routes and perform physical meter reading tasks.

One key difference between AMR and AMI is that, with AMI you can visually see meter readings and consumption trends in almost real time, via cloud-based websites. This allows District staff and customers to get detailed consumption and water use activity every day, or even every hour, rather than once a month. Customers that can visually see their water usage, every day or even every hour, have been shown to decrease their water consumption by 10% or more. Another benefit of AMI is the ability to identify possible leaks quickly, not only at customers' accounts, but within the distribution system. Even though AMI systems cost more initially, in the long run these systems can often pay for themselves rather quickly due to their capability of detecting water losses (leaks) and preventing large distribution system failures from occurring.

Many utilities are concerned that with AMI they will require more IT support, but AMA has been designed to address this need. AMA drives a managed-solution software platform, eliminating the need for utilities to utilize their current IT resources. The AMA software automatically runs reports to help explain what is happening in the water distribution system.

As mentioned previously, the District currently has an AMR system, and it is developed by a company named Master Meter. Master Meter offers a more advanced AMI system and if the District decides to transition to AMI, the process will be fairly smooth because there would be no need to switch vendors and meters. Master Meter's analytic software is called Meter Data Management and Analytics (MDMA) which simplifies the AMI operations while empowering the utility to better manage resources, analyze, and precisely account for system-wide water consumption.

Marina Coast Water District
Water Conservation Commission
Staff Report

Agenda Item: 8

Meeting Date: February 4, 2016

Prepared By: Paul Lord

Presented By: Paul Lord

Reviewed By: James Derbin

Subject: Review and Propose Agenda Items for the March 3, 2016 WCC Meeting and Future Meetings

Summary: The Commission is to review proposed agenda items for the March 2016 meeting and may suggest new agenda items for future Water Conservation Commission meetings.

Suggested agenda items for the February 2016 Water Conservation Commission meeting include the following:

- Receive an update on the proposed extension of urban water use restrictions until October 31, 2016
- Review 2015 rebate and incentive program results
- Review, evaluate, and propose improvements to the High-Efficiency Toilet and Clothes Washer Rebate Programs
- Review draft 2016-17 water conservation budget
- Continued updates on GPCD, Water Production, and Water Consumption Data
- Review proposed changes to the Water Conservation Ordinance and consider recommending that the Board of Directors consider approval