

MARINA COAST WATER DISTRICT

11 RESERVATION ROAD, MARINA, CA 93933-2099 Home Page: www.mcwd.org TEL: (831) 384-6131 FAX: (831) 883-5995 DIRECTORS

THOMAS P. MOORE President

> JAN SHRINER Vice President

HERBERT CORTEZ MATT ZEFFERMAN PETER LE

Agenda Regular Meeting Water Conservation Commission MCWD Board Room, 11 Reservation Road, Marina, CA Thursday, April 4, 2019, 5:30 PM

This meeting has been noticed according to the Brown Act rules. The Water Conservation Commission meets regularly on the first Thursday of each month. The meetings normally begin at 5:30 p.m. and are held at the District Office at 11 Reservation Road, Marina, California.

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

Shawn Storm, P.E., Chair Audra Walton Phil Clark, Vice Chair Sarah Babcock Bill Huynh Jan Shriner (MCWD Board Liaison)

- 1. Call to Order
- 2. Roll Call
- **3.** Pledge of Allegiance
- 4. **Oral Communications** 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.

5. Consent Calendar

A. Approve the March 7, 2019 Meeting Minutes

This agenda is subject to revision and may be amended prior to the scheduled meeting. Pursuant to Government Code section 54954.2(a)(1), the agenda for each meeting of the Commission shall be posted at the District offices at 11 Reservation Road. The agenda shall also be posted at the following locations, but those locations are not official agenda posting locations for purposes of section 54954.2(a)(1): City of Marina City Hall and Marina Library. A complete Commission packet containing all enclosures and staff materials will be available for public review on Thursday, March 28, 2019. Copies will also be available at the Commission meeting. Information about items on this agenda or persons requesting disability related modifications and/or accommodations should contact the Board Clerk 48 hours prior to the meeting at: 831-883-5910.

6. Staff Reports

A. Receive a Report on HE Toilet Rebates

7. Commission Member Requests for Future Agenda Items

8. Commissioner's Comments

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

Regular Meeting: Thursday, May 2, 2019, 5:30 p.m., MCWD Board Room, 11 Reservation Road, Marina, CA

Marina Coast Water District Water Conservation Commission Agenda Transmittal

Agenda Item: 5

Meeting Date: April 4, 2019

Prepared By: Paula Riso

Approved By: Patrick Breen

Agenda Title: Consent Calendar

Staff Recommendation: The Water Conservation Commission approve the Consent Calendar as presented.

Background: 5-Year Strategic Plan Mission Statement – We provide our customers with 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.

Consent calendar consisting of:

A) Approve the March 7, 2019 Meeting Minutes

Discussion/Analysis: See individual transmittals.

Environmental Review Compliance: None required.

Other Considerations: The Commission can approve this item or they can pull the item for discussion.

Material Included for Information/Consideration: Draft minutes of March 7, 2019.

Action Required: _____Resolution _____X Motion _____Review

 Commission Action

 Motion By
 No Action Taken

 Ayes
 Abstained

 Noes
 Absent

Marina Coast Water District Water Conservation Commission Agenda Transmittal

Agenda Item: 5-A	Meeting Date: April 4, 2019
Prepared By: Paula Riso	Approved By: Patrick Breen
Agenda Title: Approve the March 7, 2019 Meeting	Minutes
Background: 5-Year Strategic Plan, Mission Sta wastewater collection and conservation service. management and the development of water resource	s at a reasonable cost, through planning,
Discussion/Analysis: The draft minutes of March review and approval.	7, 2019 are provided for the Commission's
Environmental Review Compliance: None required	l.
Financial Impact: Yes <u>X</u> No	Funding Source/Recap: None
Other Considerations: The Commission can sugges	t changes/corrections to the minutes.
Material Included for Information/Consideration:	Draft minutes of the March 7, 2019 meeting.
Action Required:ResolutionX	MotionReview
Commission	Action
Motion By Seconded By	No Action Taken
Ayes	Abstained
Noes	Absent

Draft Minutes Water Conservation Commission

March 7, 2019

1. Call to Order:

The meeting was called to order at 5:30 p.m.

2. Roll Call:

Commission Members Present:

Shawn Storm, P.E. – Chair Phil Clark – Vice Chair Sarah Babcock Audra Walton Bill Huynh

Commission Members Absent:

None

Staff Members Present:

Patrick Breen, Water Resources Manager Paul Lord, Water Conservation Specialist Paula Riso, Executive Assistant/Clerk to the Board

Audience Members:

Jennifer Grossman, CSUMB Student Lauren Wild, CSUMB Student Emily Tate, CSUMB Student

3. Pledge of Allegiance:

Chair Storm led the Pledge of Allegiance.

4. Oral Communications:

There were no public comments.

- 5. Consent Calendar:
 - A. Approve the February 7, 2019 Meeting Minutes:

Chair Storm made a motion to approve the February 7, 2019 meeting minutes. Commissioner Huynh seconded the motion. With a vote of 4-Ayes, 0-Noes, 1-Abstained (Huynh), 0-Absent, the motion was passed.

Water Conservation Commission March 7, 2019 Page 2 of 3

- 6. Action Item:
 - A. Reconsider Recommending for Approval by the Board of Directors, the 2019 Water Conservation Public Outreach Event Schedule:

Mr. Breen introduced this item. Mr. Lord reviewed the event schedule and noted that one way of determining how effective the outreach programs are, is when customers request rebates, to inquire how they learned about the rebate program.

Commissioner Babcock made a motion to forward the 2019 Water Conservation Public Outreach Event Schedule to the Board of Directors for approval. Commissioner Walton seconded the motion. The motion was passed by the following vote:

Commissioner Babcock	-	Yes	Commissioner Clark	-	Yes
Commissioner Walton	-	Yes	Chair Storm	-	Yes
Commissioner Huynh	-	Yes			

- 7. Staff Reports:
 - A. Receive the Validated 2017 Water Loss Audit Report and Level 1 Validation Document:

Mr. Lord introduced this item. He reviewed the 2017 Water Loss Report and discussed the recommendations made by the third-party validator. There was discussion on meter calibration and reliability, as well as moving to digital meters.

- 8. Commission Member Requests for Future Agenda Items:
 - A. Receive a Listing of Requested Future Agenda Items:

Mr. Breen introduced this item and explained that this list was so that the Commission and staff can keep track of the requested items.

Commissioner Babcock asked if there were certain materials that were more addressed to drought conditions and if they were only handed out at certain times of the year. Mr. Lord answered that they would be looking at the conservation materials later this year. Chair Storm noted that they were to receive an update on Cal Am slant wells. He also said that he would like to see sewage sustainability on the list. Chair Storm asked when they would have a schedule of when these items would be presented. Mr. Breen said that the next time they look at this item, they would provide a five-month outlook of anticipated items.

9. Commissioner's Comments:

Commissioner Walton commented that there was a Marina Planning Commission meeting regarding the Cal Am slant wells later that evening at Marina Council Chambers. Mr. Lord noted that he would be at the Cars in the Park event on March 23rd in case anyone was interested in helping out. Chair Storm suggested getting address information from the booth attendees.

Water Conservation Commission March 7, 2019 Page 3 of 3

Chair Storm said that he had developed a metric to calculate water savings with regards to the rebate program and he would send it to Mr. Breen to look at.

Commissioner Huynh suggested giving out drought tolerant plants at the events instead of other items. Commissioner Babcock agreed that it would be great to change things up and keep it fresh.

Ms. Grossman commented that she had attended an event where they had an area for people to create their own terrarium with succulents. Ms. Wild commented that succulents are very popular right now and by giving those out at events is a non-confrontational way of communicating with people, but also allows them to approach the booth if they have questions or want more information.

Mr. Lord said that he was just reading a landscape study that talked about the importance and value of transforming from lawns to low-water use landscaping. Chair Storm asked that he send it out to everyone.

Vice Chair Clark asked when the Commission was going to get more involved in important topics to go before the Board. He noted that staff has just been bringing them informational and filler items. Mr. Breen answered that staff would be the ones bringing things to the Commission for review or action as need be. Mr. Lord suggested that the Commission can review the Water Shortage Contingency Plan prior to it coming to them later this year.

Chair Storm gave a handout regarding commercial water usage and an excerpt of Commission Responsibilities.

10. Adjournment:

The meeting was adjourned at 7:15 p.m.

Marina Coast Water District Water Conservation Commission Staff Report

Agenda Item:	6-A	Meeting Date: April 4, 2019
Prepared By:	Paul Lord	Approved By: Patrick Breen

Subject: Receive a Report on High-efficiency (HE) Toilet Rebates

Summary: As one of several incentives provided by the District to reduce water demand, HE toilet rebates started in 1994, primarily to support toilet retrofitting in multi-family housing units where water savings per toilet is the highest, and the number of continuously running leaks is the greatest.

Broadcast via a public outreach campaign, the toilet rebates acted as both an incentive and as a reward. Many property owners began retrofitting, and those that were required to retrofit upon resale of a property appreciated the partial reimbursement for their effort and expense. The numerous complaints about the requirement to retrofit upon resale essentially disappeared after the toilet rebate program started.

The objectives of the toilet rebates program is to improve water use efficiency, lower overall water demand, and promote other methods of water conservation. When the program first started, the objective was to replace 3.5-gallon toilets. Now, twenty-five years later, the rebates are provided to encourage residents and business owners to replace 1.6 gallon-per-flush toilets and high-water use urinals with the latest high-efficiency models.

HE Toilet Rebate Program facts:

- All rebates are subject to availability of annual funds.
- Marina Coast Water District provides a rebate amount equal to the net purchase price of the toilet, up to \$125, for the retrofitting of older toilets to new high-efficiency toilets (single and dual-flush) having a lower flush capacity of 1.28 gallons or less.
- A rebate equal to the net purchase price, up to \$125, is also available for conventional urinal conversions to water-free urinals.
- Rebates are paid by check, not as credit towards a water account.
- Original purchase receipts must be sent in with the rebate request.
- Sales receipts older than one year will not be accepted.
- Owners of newer buildings, built after 2004 and required to have HET's originally installed, are not eligible for HET rebates.
- Prior to property transfers, all existing toilets must be retrofitted with complete toilet assemblies (tank and bowl) having a maximum flush capacity of 1.6 gallons per flush or less. No flush devices, partial toilet conversions, or flow restriction devices of any kind will be accepted. Conventional urinals must be retrofitted to water-free urinals. The sellers of these properties are eligible to receive the rebate.

Attached to this report are charts and graphs that show levels of program participation and expenditures over the years.

Water Savings: Several factors go into the calculations of water savings, including the water use factor of the toilet before and after retrofitting. Shown in examples A) and B) below are the water savings estimated for two common toilet retrofits

A) Estimated water savings for retrofitting 1.6 GPF toilets (ULFT's) to 1.28 GPF toilets (HET's):

Estimated water savings (gallons per year) = A x B x C x D x 365 days/year

Where: A = Average household occupancy for that census tract (Seaside = 3.04) B = Average number of toilet flushes per occupant/day = 5.1 (Vickers, 2001) C = Savings per flush = 1.6-1.28 = 0.32 gallons D = Number of Households = 1

Example: savings for a household of three in Seaside = 1,810 gallons per year.

B) Estimated water savings for retrofitting 1.6 GPF toilets (HET's) to 0.8 GPF toilets (UHET's):

Estimated water savings (gallons per year) = A x B x C x D x 365 days/year

Where:

A = Average household occupancy for that census tract (Seaside = 3.04) B = Average number of toilet flushes per occupant/day = 5.1 (Vickers, 2001) C = Savings per flush = 1.6-0.8 = 0.8 gallons D = Number of Households = 1

Example: savings for a household of three in Seaside = 4,527 gallons per year.

For larger projects that request bulk funding to support toilet retrofitting, customers are asked to also retrofit existing showerheads and faucet aerators to further reduce water demand. The retrofitting of showerheads and faucet aerators increases the water savings achieved by 431% (shown for example B above, in the table below)

C) Estimated water savings for retrofitting 1.6 GPF toilets (ULFT's) to 0.8 GPF toilets (UHET's) and reducing flow of showerheads and faucet aerators:

Water Savings When Retrofitting								
	Existing Fixtures Average Water Use	New Fixtures Average Water Use		Persons per House- hold	Minutes Water Used Daily Per Person		Gallons of Water & Waste Water Saved Annually per retrofitted Housing Unit	
0.5 GPM Bathroom Aerator	2.20	0.5	gpm	3.1	2.5	min	4,809	
1.0 GPM Kitchen Aerator	2.20	1.0	gpm	3.1	2.5	min	3,395	
1.5 GPM Showerhead	2.50	1.5	gpm	3.1	10.0	min	11,315	
0.8 GPF Toilet	1.6	0.8	gpf	3.1	5.0	flushes	4,526	
Total Unit Savings							24,045 Gallons/Year	

Following are the budgeted Toilet Rebate Expenditures for the upcoming 2019-2020 fiscal year. Also shown are the estimated water savings for each of several projects.

Ord Service Area - Total 2019-2020 p	proposed expenditures $=$ \$97,500
--------------------------------------	------------------------------------

For miscellaneous toilet rebates in Ord (Seaside Highlands) $1,500 \times (4)$ quarters = 6,000

For Project #1 – CSUMB Student Housing in Frederick Park: \$17,500 140 single-bath housing units retrofitted to HE toilets, showerheads, and kitchen and bath aerators. Estimated water savings: 10.33 Acre-feet.

For Project #2 – CSUMB Student Housing in Abrams Park (Phase 1): \$14,000 56 housing units retrofitted with 112 HE toilets, 84 showerheads, 56 kitchen and 112 bathroom aerators. Estimated water savings: 4.13 Acre-feet.

For Project #3 – CSUMB Student Housing in Abrams Park (Phase 2): \$34,750 138 housing units retrofitted with 278 HE toilets, 208 showerheads, 138 kitchen and 278 bathroom aerators. Estimated water savings: 10.18 Acre-feet.

For Project #4 – Army Housing Phase B: \$25,000 The incentive provided for this project has been limited to \$25,000. This incentive will help support the retrofitting of 200 of the 296 toilets in 102 housing units. New lower flow showerheads and faucet aerators too will be replaced as well. Estimated water savings: 7.53 Acre-feet.

Marina Service Area – Total 2019-2020 proposed expenditures = - \$29,000

For miscellaneous toilet rebates in Marina $3,500 \times (4)$ quarters =	\$14,000
--	----------

For Project #1 – Rutherford Investments – Multi-family housing \$10,000 80 single-bath housing units retrofitted to HE toilets, showerheads, and kitchen and bath aerators. Estimated water savings: 5.90 Acre-feet.

For Project $#2^+$ – For other large project(s) et to be Determined \$5,000

Staff recommends the continuation of the HE Toilet Rebate Program. Refinements to the program and rebate procedures are worth considering. Following are some HET toilet rebate program changes to consider:

- Consider adjusting the rebate amounts to encourage program participation.
- Consider finding ways to encourage more customers to choose Ultra-high efficiency toilets (UHET's), having a flush volume of 1.1 0.8 gpf, over the standard High-efficiency toilets (HET's) having a flush volume of no more than 1.28 gpf.
- Consider limits to participation.
- Develop and receive Board approval of a new HE Toilet Rebate Program Description.

TOILET REBATES 2018-19 YEAR-TO-DATE

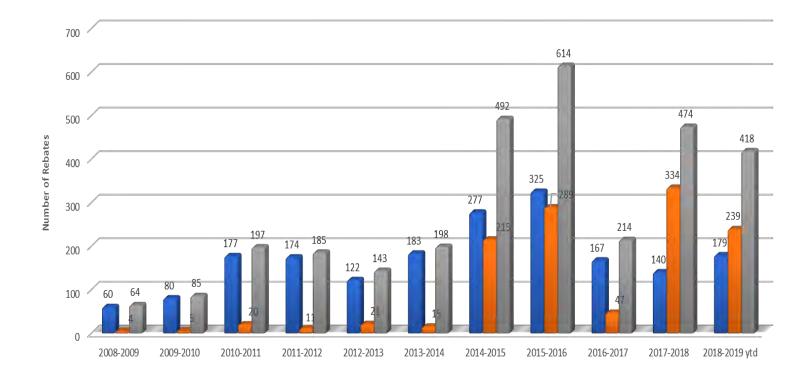
Q1 HE Toilets July 2018 - September 2018									
	Rebates Approved	Toilet Quantity		Budget	,	Rebate Amount \$	Balance		
Marina	19	32	\$	30,000.00	\$	3,748.65	\$26,251.35		
Ord	3	213	\$	50,000.00	\$	26,125.00	\$23,875.00		
Total	22	245	\$	80,000.00	\$	29,873.65	\$50,126.35		

	Q2 HE Toilets October 2018 - December 2018									
	Rebate Requests Approved	Toilet Quantity	Budget Remaining	Rebate Amount \$	Balance					
Marina	57	82	\$26,251.35	\$ 7,686.85	\$18,564.50					
Ord	8	21	\$23,875.00	\$ 2,188.99	\$21,686.01					
Total	65	103	\$ 50,126.35	\$ 9,875.84	\$40,250.51					

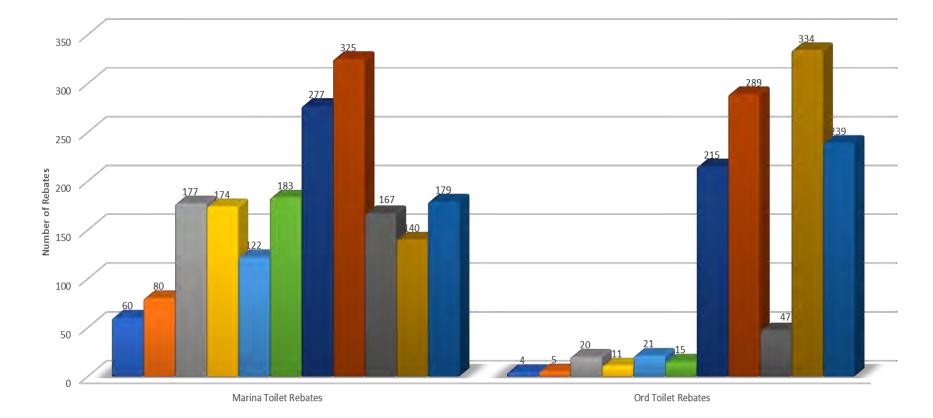
Q3 HE Toilets January 2019 - March 2019								
	Rebate Requests Approved	Toilet Quantity	Budget Remaining	Rebate Amount \$	Balance			
Marina	38	65	\$18,564.50	\$ 6,201.31	\$12,363.19			
Ord	3	5	\$21,686.01	\$ 625.00	\$21,061.01			
Total	41	70	\$ 40,250.51	\$ 6,826.31	\$ 33,424.20			

2018-2019 FYTD HE Toilet									
	Rebate Requests Approved	Toilet Quantity	Budget		Budget Rebate Amount			Balance	
Marina	114	179	\$	30,000.00	\$	17,636.81	\$	12,363.19	
Ord	14	239	\$	50,000.00	\$	28,938.99	\$	21,061.01	
Total	128	418	\$	80,000.00	\$	46,575.80	\$	33,424.20	

Toilet Rebates Marina vs. Ord FY 2008/2009- FY 2018/19 YTD



Marina Toilet Rebates Ord Toilet Rebates Total Toilet Rebates



Toilet Rebates Marina and Ord FY 2008/2009- FY 2018/19 YTD

■ 2008-2009 ■ 2009-2010 ■ 2010-2011 ■ 2011-2012 ■ 2012-2013 ■ 2013-2014 ■ 2014-2015 ■ 2015-2016 ■ 2016-2017 ■ 2017-2018 ■ 2018-2019 ytd