MID-PENINSULA
WATER DISTRICT

REGULAR MEETING
BOARD OF DIRECTORS
THURSDAY, JANUARY 28, 2016 – 6:30PM
3 DAIRY LANE, BELMONT CALIFORNIA

AGENDA

1. OPENING
- A. Call to Order
- B. Establishment of Quorum
- C. Pledge of Allegiance

2. PUBLIC COMMENT

Members of the public may address the Board on the Consent Agenda or any item of interest within the jurisdiction of the Board but not on its agenda today. In compliance with the Brown Act, the Board cannot discuss or act on items not on the agenda. Please complete a speaker's form and give it to the District Secretary. Each speaker is limited to three (3) minutes.

3. AGENDA REVIEW: ADDITIONS/DELETIONS AND PULLED CONSENT ITEMS

4. ACKNOWLEDGEMENTS/PRESENTATIONS
- A. Overview of 2016 MPWD Calendar Contest Program and Distribute Calendar to the Board – Jeanette Kalabolas and Tammy Rudock
- B. Present 2016 MPWD Calendar Contest Awards – Matt Zucca and Jeanette Kalabolas

C. 15-MINUTE REFRESHMENT BREAK

5. CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one motion. If Directors wish to discuss a consent item other than simple clarifying questions, a request for removal may be made. Such items are pulled for separate discussion and action after the Consent Agenda as a whole is acted upon.

A. Approve Minutes for the Regular Board Meeting of December 16, 2015

B. Approve Expenditures from December 3, 2015, through January 19, 2016

6. HEARINGS AND APPEALS
- A. Consider Ordinance No. 115 Adopting MPWD Water Efficient Landscaping Ordinance, effective February 1, 2016

7. DROUGHT AND WATER CONSERVATION
- A. Water Conservation Progress Report

B. Progress Report on 2015 Urban Water Management Plan (UWMP)

8. REGULAR BUSINESS AGENDA

A. Progress Report on Preliminary Design and Construction Schedule for Proposed MPWD Capital Improvement Program for Fiscal Years 2016/2017 through 2020/2021

B. Progress Report on Preliminary Surveys of MPWD Folger Drive Properties

C. BAWSCA Update

9. MANAGER'S AND BOARD REPORTS

A. General Manager's Report
   1. Supplemented by Administrative Services Manager's Report
   2. Supplemented by Operations Manager's Report
   3. Supplemented by District Engineer's Report

B. Financial Reports
   1. Review Process for Monthly Accounts Payable Checks

C. Director Reports

10. FUTURE AGENDA ITEMS

Requests from Board members to receive feedback, direct staff to prepare information, and/or request a formal agenda report be prepared and the item placed on a future agenda. No formal action can be taken.

11. COMMUNICATIONS

12. CLOSED SESSION

PUBLIC EMPLOYEE PERFORMANCE EVALUATION
AND ASSOCIATED NEGOTIATIONS
Government Code §§54957 and 54957.6
Title: General Manager

13. ADJOURNMENT

This agenda was posted at the Mid-Peninsula Water District's office, 3 Dairy Lane, in Belmont, California, and on its website at www.midpeninsulawater.org.

ACCESSIBLE PUBLIC MEETINGS

Upon request, the Mid-Peninsula Water District will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation (including auxiliary aids or services), to enable individuals with disabilities to participate in public meetings. Please contact the District Secretary at (650) 591-8941 to request specific materials and preferred alternative format or auxiliary aid or service at least 48 hours before the meeting.

Next Board Meeting: February 25, 2016, at 6:30PM

REGULAR MEETING
OF THE BOARD OF DIRECTORS
OF THE MID-PENINSULA WATER DISTRICT

December 16, 2015
Belmont, California

1. OPENING

A. Call to Order:
The regular meeting of the Mid-Peninsula Water District Board of Directors was called to order by President Linvill at 6:30 PM.

B. Pledge of Allegiance – The Pledge of Allegiance was led by retired former MPWD Director David Altscher.

C. Receive Certificate from San Mateo County Chief Elections Officer dated November 24, 2015
General Manager Rudock summarized the certified results.

D. Administer Oath of Office: Louis J. Vella and Matthew P. Zucca
Board Secretary Pina administered the Oath of Office for Directors Vella and Zucca.

E. Establishment of Quorum:
PRESENT: Directors Linvill, Stuebing, Vella, Warden, and Zucca.

ABSENT: None

A quorum was present.

ALSO PRESENT: General Manager Tammy Rudock, Administrative Services Manager Candy Pina, Operations Manager Rene Ramirez, District Counsel Julie Sherman, and District Engineer Joubin Pakpour. District Treasurer Jeff Ira arrived at 7:45pm.

F. Election of Officers (Followed by a Reception)
Director Vella moved to nominate Vice President Zucca as President, and Director Stuebing seconded. President Linvill called for other nominations, and hearing none, Vice President Zucca accepted the nomination. Roll call was taken and the motion was unanimously approved. Matthew Zucca was elected Board President.

Director Vella moved to nominate Director Warden as Vice President and Director Zucca seconded. President Zucca called for other nominations, and hearing none, Director Warden accepted the nomination. Roll call was taken and the motion was unanimously approved. Director Warden was elected Board Vice President.

President Zucca then presented the outgoing President Linvill with a gift, and thanked her for her service in leading the District in 2015.

2. PUBLIC COMMENTS

None.

3. AGENDA REVIEW: ADDITIONS/DELETIONS AND PULLED CONSENT ITEMS

None.

4. ACKNOWLEDGEMENTS/PRESENTATIONS

Jon Tscharner, Maintenance Technician: Service Anniversary – 25 Years
Henry Young, Field Operations Supervisor: Service Anniversary – 15 Years
President Zucca presented Jon Tscharner with a 25-Year Service Award plaque and thanked him for his loyalty and service to MPWD. Henry Young was working a water main break and was unable to attend the meeting. The Board thanked him for his continued service to the MPWD.

5. CONSENT AGENDA

A. Approve Minutes for the Regular Board Meeting of November 16, 2015.
B. Approve Expenditures from November 5, 2015, through December 2, 2015.
C. Approve Professional Services Agreement in the amount of $38,860 with Managewater Consulting, Inc., for the 2015 Urban Water Management Plan with an Option Not to Exceed $10,000 to Revise MPWD's Water Shortage Contingency Plan

Vice President Warden was concerned with having only one Board meeting to review and approve the Urban Water Management Plan before it was due. This was based on the proposal presented by Managewater Consulting, Inc., timeline which he noted on page 47 of the agenda packet. He requested that staff work with the consulting firm to push that timeline back one month to allow for more review time. Vice President Warden moved to approve the consent agenda, Director Stuebing seconded, and it was unanimously approved.

6. HEARINGS AND APPEALS

None.

7. DROUGHT AND WATER CONSERVATION

A. Water Conservation Progress Report

General Manager Rudock summarized her report, stating that MPWD is meeting its required water conservation target. MPWD's GPCD is at 61.6%, the lowest it has been since 1964. There was one complaint in November.

B. **Discuss Ordinance No. 115 Regarding the BAWSCA Regional Water Efficient Landscaping Ordinance, effective February 1, 2016**

Following last month's introductory report on this item, General Manager Rudock did some background research and discovered that in December 2010, no action had been taken by the Board to adopt the former BAWSCA ordinance. By default, the State's Model Ordinance became the MPWD's operational ordinance. Although, staff actually followed the BAWSCA standards and checklists because they were much easier for administration with property owners.

General Manager Rudock reported that staff worked the past couple of months with the BAWSCA agency team to develop the proposed BAWSCA WELO, proposed as MPWD Ordinance 115, which implements local standards that are actually more restrictive than the State Model Ordinance. It provides for a continuance of existing MPWD practices.

Vice President Warden asked about the landscape plan check review. General Manager Rudock explained that Jeanette Kalabolas reviews the landscape plans in coordination with MPWD project plan reviews.

A public hearing will be scheduled and properly noticed for next month in order for the Board to timely consider for approval Ordinance 115 by February 1, 2016, and reporting to the State.

8. REGULAR BUSINESS AGENDA

A. **Consider Resolution 2015-21 Authorizing MPWD 5-Year Capital Improvement Program for Fiscal Years 2016/2017 through FY 2020/2021**

General Manager Rudock summarized for the Board that there have been Board discussion items regarding the proposed Capital Improvement Program (CIP) for the past two months. The subject resolution provided for the authorization of a 5-year CIP valued at an estimated $25 million. District Engineer Pakpour added that MPWD is working with the City of Belmont to coordinate projects to minimize duplication of efforts and costs. Vice President Warden mentioned the City of Belmont has a 5-year Capital Improvement Plan for sewers/streets/storm drains in place.

Rather than approve the proposed Resolution 2015-21, the Board provided tentative agreement that the proposed CIP appears appropriate, and further provided direction to staff that it bring back a resolution for formal approval after the financing options are vetted.

B. Consider Resolution 2015-22 Authorizing the Commencement of Proceedings in Connection with the Financing of Water System Improvements and Designating Wulff Hansen & Company as Municipal Financial Advisor, and Quint & Thimmig, LLP as Bond Counsel and Disclosure Counsel

General Manager Rudock summarized the resolution. President Zucca inquired about the $1.5 million estimated cost for the 3 Dairy Lane property rehabilitation and upgrade and requested more details. Director Linvill expressed her concern that the MPWD will no longer be able to fund the existing CIP on a pay-go basis. She further stated that with $42 million in capital projects identified, and very old pipes in the ground, it would not be in the best interest of the rate-payers or the District to spend $1.5 to $2 million yearly to accomplish those projects, especially since more projects will be added as the MPWD works through the CIP. President Zucca suggested an oversight/steering committee to manage these projects. He also added that when there is infrastructure work related to pipe, there needs to be borrowed money used to get this work done. Director Stuebing agreed and stated the CIP needs to get done, and that the MPWD should strive to get back to pay--go when possible. District Treasurer Ira stated that all these years of pay-go have caused the District to be grossly underfunding the CIP; so now is the time to rectify that issue.

General Manager Rudock discussed how Wulff Hansen & Company was selected by former experience working with staff and their qualifications in working in communities that are new to debt financing. They met with the Directors assigned to the annual financial audit and both Vice President Warden and Director Linvill were satisfied that the representatives were qualified as municipal financial advisors.

Director Stuebing moved to approve Resolution 2015-22 Authorizing the Commencement of Proceedings in Connection with the Financing of Water System Improvements and Designating Wulff Hansen & Company as Municipal Financial Advisor, and Quint & Thimmig, LLP as Bond Counsel and Disclosure Counsel, Vice President Warden seconded. Roll call was taken and it was unanimously approved.

C. Schedule MPWD Strategic Planning Special Meeting in January 2016

The date of Thursday, January 21st, at 5:00PM was agreed upon for the Strategic Planning Special Meeting.

D. BAWSCA Update

Director Vella provided a brief BAWSCA updated, mentioning that the Restore Hetch Hetchy litigation is moving along.

9. MANAGER'S AND BOARD REPORTS

A. General Manager's Report

General Manager Rudock highlighted that the personnel manual is scheduled to be completed by Friday, going to ACWA/JPIA and District Counsel for their review.

1. Supplemented by Administrative Services Manager's Report

Administrative Services Manager Pina updated the PARS/OPEB results for October as follows: Beginning balance of $440,908.02; contributions of $40,050.00; earnings of $11,181.61; ending balance of $492,139.63.

2. Supplemented by Operations Manager's Report

Operations Manager Ramirez highlighted staff is working in the early morning hours in some cases to replace meters, which would impact businesses. General Manager Rudock acknowledged that staff is dedicated to maintaining minimal interruption to service levels in order to achieve AMI installation. Staff goes above board to provide that high level of service. She added that Operations staff, including the Operations Manager, walked the Tunnels water main last month, which enabled us to physically inspect the 2+ mile site and clear hazards or obstructions and install new signage accordingly. Operations Manager Ramirez said it was a very good exercise for staff, and some clean-up work was accomplished during that trip.

3. Supplemented by District Engineer's Report

District Engineer Pakpour discussed the Folger property and the survey in process of reconciling the property boundaries. He discussed the Dekoven tank seismic evaluation.

B. Financial Reports

General Manager Rudock noted that total revenues and expenses are on target. Director Linvill asked that the MPWD Reserve Funds report on the Administrative Services Manager report be moved to the financial reporting.

C. Director Reports

Director Linvill reported that at the HIA meeting she attended with General Manager Rudock and Operations Manager Ramirez. Brent Chester made a joint presentation with

San Mateo County on cross-connection, which was well received. In 2015, she will be working on the Board By-Laws project.

Director Vella asked that the Strategic Planning meeting be moved to 5:00PM on the 21st because he has a BAWSCA meeting that evening. He also requested that staff make presentations to the neighborhood associations along with the fire department as a way to have more of a presence in the community.

Vice President Warden would like to see a venue given by staff to disseminate information about the District. He also would like to see the annual employee appreciation dinner put back into the budget.

10. FUTURE AGENDA BUSINESS ITEMS

None.

11. COMMUNICATIONS

There was a communication about the HIA Cross-Connection presentation given by Brent Chester, Field Operations Supervisor.

President Zucca took a 5-minute recess at 9:05PM and adjourned into closed session.

12. CLOSED SESSION
PUBLIC EMPLOYEE PERFORMANCE EVALUATION
AND ASSOCIATED NEGOTIATIONS
Government Code §§54957 and 54957.6
Title: General Manager

Director ___motioned to adjourn at ___PM, Director ___seconded, and it was unanimously approved.

_____
DISTRICT SECRETARY

APPROVED:

_____
BOARD PRESIDENT

Type	Num	Date	Name	Account	Paid Amount
Check		**12/08/2015**	**PITNEY BOWES 371896**	**1030 · Cash- Checking**	
				6706 · Equipment Services/Maintenance	$ (1,000.00)
					$ (1,000.00)
Check		**12/11/2015**	**ADP Payroll Fees**	**1030 · Cash- Checking**	
				7106 · Prof Serv - Accting & Payroll	$ (96.50)
					$ (96.50)
Bill Pmt -Check		**01/12/2016**	**CARQUEST AUTO PARTS**	**1030 · Cash- Checking**	
Bill	8292-454746	12/15/2015	CARQUEST AUTO PARTS	2100 · Accounts Payable	$ -
					$ -
Check	**To Print**	**01/04/2016**	**Bankcard Mtot Disc**	**1030 · Cash- Checking**	
				6201 · Customer Credit Card Svs Fees	$ (5,401.43)
					$ (5,401.43)
Check	**EFT011116-1**	**01/11/2016**	**Health Equity**	**1030 · Cash- Checking**	
				1430 · Payroll Clearing A/C	$ (559.58)
					$ (559.58)
Bill Pmt -Check	**EFT011216-1**	**01/12/2016**	**WELLS FARGO BUSINESS CARD**	**1030 · Cash- Checking**	
Bill		12/21/2015		6701 · Office Supplies	$ (113.72)
				7205 · Meeting Expenses	$ (100.00)
				1440 · Auto/Transprtion Clearing AC	$ (70.00)
				7106 · Prof Serv - Accting & Payroll	$ (6.00)
				7205 · Meeting Expenses	$ (403.30)
					$ (693.02)
Check	**EFT011916-1**	**01/19/2016**	**ICMA contributions**	**1030 · Cash- Checking**	
				1430 · Payroll Clearing A/C	$ (887.98)
					$ (887.98)
Check	**EFT120315-1**	**12/03/2015**	**CALPERS**	**1030 · Cash- Checking**	
				1430 · Payroll Clearing A/C	$ (1,103.86)
				1430 · Payroll Clearing A/C	$ (1,262.03)
					$ (2,365.89)

Bill Pmt -Check	**EFT121415-1**	**12/14/2015**	**WELLS FARGO BUSINESS CARD**	**1030 · Cash- Checking**		
Bill		12/20/2015		6408 · Employee Safety	$	(151.38)
				7204 · Employee Travel/Training	$	(182.02)
				6701 · Office Supplies	$	(71.61)
				7204 · Employee Travel/Training	$	(85.00)
				7205 · Meeting Expenses	$	(11.81)
				7205 · Meeting Expenses	$	(123.97)
				6408 · Employee Safety	$	(239.80)
				1440 · Auto/Transprtion Clearing AC	$	(50.00)
				6701 · Office Supplies	$	(479.76)
				6701 · Office Supplies	$	(481.40)
				6701 · Office Supplies	$	(38.66)
				7106 · Prof Serv - Accting & Payroll	$	(1.00)
					$	(1,916.41)
Check	**EFT121615-1**	**12/16/2015**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(7,448.00)
					$	(7,448.00)
Check	**EFT122115-1**	**12/21/2015**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(1,103.86)
				1430 · Payroll Clearing A/C	$	(1,262.03)
					$	(2,365.89)
Check	**EFT010816-2**	**01/08/2016**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(887.98)
					$	(887.98)
Check	**EFT011116-2**	**01/11/2016**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(666.24)
					$	(666.24)
Bill Pmt -Check	**EFT011216-2**	**01/12/2016**	**WELLS FARGO BUSINESS CARD**	**1030 · Cash- Checking**		
Bill		12/21/2015		7204 · Employee Travel/Training	$	(18.49)
				6402 · Pumping	$	(1,289.32)
				6050 · Employee Service Recognition	$	(612.00)
					$	(1,919.81)

Check	**EFT011916-2**	**01/19/2016**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(250.00)
				7106 · Prof Serv - Accting & Payroll	$	(56.05)
					$	(306.05)
Check	**EFT120315-2**	**12/03/2015**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(250.00)
					$	(250.00)
Check	**EFT121615-2**	**12/16/2015**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(666.24)
					$	(666.24)
Check	**EFT122115-2**	**12/21/2015**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(887.98)
					$	(887.98)
Check	**EFT122815-2**	**12/28/2015**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(759.58)
					$	(759.58)
Check	**EFT010816-3**	**01/08/2016**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(250.00)
					$	(250.00)
Check	**EFT011116-3**	**01/11/2016**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(7,448.00)
					$	(7,448.00)
Check	**EFT011916-3**	**01/19/2016**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(1,103.86)
				1430 · Payroll Clearing A/C	$	(1,262.03)
					$	(2,365.89)
Check	**EFT120315-3**	**12/03/2015**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(250.00)
					$	(250.00)
Check	**EFT121615-3**	**12/16/2015**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(559.58)
				7106 · Prof Serv - Accting & Payroll	$	(56.05)
					$	(615.63)

Check	**EFT122115-3**	**12/21/2015**	**Health Equity**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(250.00)
					$	(250.00)
Check	**EFT122815-3**	**12/28/2015**	**Health Equity**	**1030 · Cash- Checking**		
				1410 · Prepaid Expenses	$	(53,400.00)
					$	(53,400.00)
Check	**EFT011916-4**	**01/11/2016**	**Client Analysis Svs Charge**	**1030 · Cash- Checking**		
				6201 · Customer Credit Card Svs Fees	$	(4,408.45)
					$	(4,408.45)
Check	**EFT121615-4**	**12/16/2015**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(3,565.31)
				1430 · Payroll Clearing A/C	$	(3,118.49)
					$	(6,683.80)
Check	**EFT122815-4**	**12/28/2015**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(3,112.19)
				1430 · Payroll Clearing A/C	$	(3,558.11)
					$	(6,670.30)
Check	**EFT011916-5**	**01/08/2016**	**ADP Payroll Fees**	**1030 · Cash- Checking**		
				7106 · Prof Serv - Accting & Payroll	$	(166.28)
					$	(166.28)
Check	**EFT120315-5**	**12/03/2015**	**Return Item Charge**	**1030 · Cash- Checking**		
				4013 · Returned Water Charges	$	(156.00)
					$	(156.00)
Check	**EFT121615-5**	**12/10/2015**	**ACH Returns**	**1030 · Cash- Checking**		
				4013 · Returned Water Charges	$	(62.00)
					$	(62.00)
Check	**EFT122815-5**	**12/18/2015**	**ADP Payroll Fees**	**1030 · Cash- Checking**		
				7106 · Prof Serv - Accting & Payroll	$	(151.73)
					$	(151.73)
Check	**EFT011916-6**	**01/04/2016**	**ADP Payroll Fees**	**1030 · Cash- Checking**		
				7106 · Prof Serv - Accting & Payroll	$	(96.50)
					$	(96.50)

Check	**EFT120315-6**	**12/04/2015**	**ADP Payroll Fees**	**1030 · Cash- Checking**		
				7106 · Prof Serv - Accting & Payroll	$	(255.50)
					$	(255.50)
Check	**EFT121615-6**	**12/11/2015**	**Client Analysis Svs Charge**	**1030 · Cash- Checking**		
				6201 · Customer Credit Card Svs Fees	$	(4,230.48)
					$	(4,230.48)
Check	**EFT122815-6**	**12/24/2015**	**Return Item Charge**	**1030 · Cash- Checking**		
				4013 · Returned Water Charges	$	(39.50)
					$	(39.50)
Check	**EFT011916-7**	**01/15/2016**	**ADP Payroll Fees**	**1030 · Cash- Checking**		
				7106 · Prof Serv - Accting & Payroll	$	(96.50)
					$	(96.50)
Check	**EFT011916-8**	**01/05/2016**	**Authnet Gateway**	**1030 · Cash- Checking**		
				6201 · Customer Credit Card Svs Fees	$	(20.00)
					$	(20.00)
Check	**EFT010816**	**01/08/2016**	**CALPERS**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(1,103.86)
				1430 · Payroll Clearing A/C	$	(1,262.03)
					$	(2,365.89)
Bill Pmt -Check	**30214**	**12/14/2015**	**ACCELA, INC. #774375**	**1030 · Cash- Checking**		
Bill	inv31754	11/01/2015		1751 · FMS - Prof Svs CY	$	(29,931.30)
					$	(29,931.30)
Bill Pmt -Check	**30215**	**12/14/2015**	**AIRGAS, LLC**	**1030 · Cash- Checking**		
Bill	9045779312	12/01/2015		6501 · M&R - Buildings & Grounds	$	(111.76)
Bill	9932018516	12/01/2015		6501 · M&R - Buildings & Grounds	$	(111.44)
					$	(223.20)
Bill Pmt -Check	**30216**	**12/14/2015**	**AT&T 60197**	**1030 · Cash- Checking**		
Bill	7344107	12/01/2015		7005 · Utilities - Telephones	$	(20.07)
Bill	7341986	12/01/2015		7005 · Utilities - Telephones	$	(2,080.89)
Bill	7352231	12/01/2015		7005 · Utilities - Telephones	$	(20.07)
Bill	7356749	12/01/2015	AT&T 60197	2100 · Accounts Payable	$	-
					$	(2,121.03)

Bill Pmt -Check	**30217**	**12/14/2015**	**BFI of CALIFORNIA INC. - OX MTN. LANDFILL**	**1030 · Cash- Checking**		
Bill	4227-000042611	12/01/2015		6404 · Mains/Distribution	$	(2,825.54)
					$	(2,825.54)
Bill Pmt -Check	**30218**	**12/14/2015**	**CINTAS CORPORATION**	**1030 · Cash- Checking**		
Bill	464524026	12/01/2015		6052 · Uniforms	$	(340.80)
Bill	464526878	12/01/2015		6052 · Uniforms	$	(338.55)
Bill	464529705	12/01/2015		6052 · Uniforms	$	(338.55)
Bill	464532556	12/01/2015		6052 · Uniforms	$	(342.05)
					$	(1,359.95)
Bill Pmt -Check	**30219**	**12/14/2015**	**COMCAST**	**1030 · Cash- Checking**		
Bill		12/08/2015		7001 · Utilities - Internet/Cable	$	(427.56)
					$	(427.56)
Bill Pmt -Check	**30220**	**12/14/2015**	**CONTINENTAL UTILITY SOLUTIONS**	**1030 · Cash- Checking**		
Bill	U19677	12/09/2015		1410 · Prepaid Expenses	$	(1,400.00)
					$	(1,400.00)
Bill Pmt -Check	**30221**	**12/14/2015**	**CSDA**	**1030 · Cash- Checking**		
Bill		12/03/2015		1410 · Prepaid Expenses	$	(6,089.00)
					$	(6,089.00)
Bill Pmt -Check	**30222**	**12/14/2015**	**DESERT DIAMOND INDUSTRIES LLC**	**1030 · Cash- Checking**		
Bill	11375	12/02/2015		6502 · M&R - Equipment & Tools	$	(919.00)
					$	(919.00)
Bill Pmt -Check	**30223**	**12/14/2015**	**ELECTRONIC DATE SOLUTIONS**	**1030 · Cash- Checking**		
Bill	18823	12/01/2015		6701 · Office Supplies	$	(367.45)
					$	(367.45)
Bill Pmt -Check	**30224**	**12/14/2015**	**GRANITE ROCK, INC.**	**1030 · Cash- Checking**		
Bill	930921	12/01/2015		6404 · Mains/Distribution	$	(403.87)
Bill	932113	12/05/2015		6404 · Mains/Distribution	$	(423.00)
					$	(826.87)
Bill Pmt -Check	**30225**	**12/14/2015**	**HANSON, BRIDGETT**	**1030 · Cash- Checking**		
Bill	1156320	12/01/2015		7101 · Prof Serv - District Counsel	$	(715.00)
Bill	1156321	12/01/2015		7101 · Prof Serv - District Counsel	$	(280.00)
Bill	1156322	12/01/2015		7101 · Prof Serv - District Counsel	$	(560.00)
Bill	1156323	12/01/2015		7101 · Prof Serv - District Counsel	$	(1,000.00)
					$	(2,555.00)

Bill Pmt -Check	**30226**	**12/14/2015**	**HOME DEPOT**	**1030 · Cash- Checking**		
Bill		12/02/2015		6701 · Office Supplies	$	(31.59)
Bill	1122055	12/02/2015		6501 · M&R - Buildings & Grounds	$	(24.17)
Bill	7122108	12/02/2015		6502 · M&R - Equipment & Tools	$	(71.89)
				6501 · M&R - Buildings & Grounds	$	(3.15)
					$	(130.80)
Bill Pmt -Check	**30227**	**12/14/2015**	**JAMES MARTA & COMPANY**	**1030 · Cash- Checking**		
Bill	9215	11/30/2015		7104 · Prof Serv - Annual FinanceAudit	$	(1,000.00)
					$	(1,000.00)
Bill Pmt -Check	**30228**	**12/14/2015**	**JULIE M BROWN & ASSOC**	**1030 · Cash- Checking**		
Bill	18051115	12/10/2015		7110 · Prof Serv - Miscellaneous	$	(1,206.33)
					$	(1,206.33)
Bill Pmt -Check	**30229**	**12/14/2015**	**McNAMARA TRANSPORT, INC.**	**1030 · Cash- Checking**		
Bill	9343	12/01/2015		6404 · Mains/Distribution	$	(1,662.50)
					$	(1,662.50)
Bill Pmt -Check	**30230**	**12/14/2015**	**OFFICE DEPOT, INC.**	**1030 · Cash- Checking**		
Bill	808778694001	11/25/2015		6701 · Office Supplies	$	(69.77)
Bill	808872000001	12/01/2015		6701 · Office Supplies	$	(87.84)
Bill	808778648001	12/01/2015		6701 · Office Supplies	$	(20.05)
Bill	808871974001	12/01/2015		6701 · Office Supplies	$	(86.22)
					$	(263.88)
Bill Pmt -Check	**30231**	**12/14/2015**	**OFFICE TEAM**	**1030 · Cash- Checking**		
Bill	44528597	12/01/2015		7110 · Prof Serv - Miscellaneous	$	(554.25)
					$	(554.25)
Bill Pmt -Check	**30232**	**12/14/2015**	**PACIFIC WEST SECURITY, INC.**	**1030 · Cash- Checking**		
Bill	1006974IN-1009447IN	12/07/2015		1410 · Prepaid Expenses	$	(1,398.00)
Bill	1007823IN-1010295IN	12/07/2015		1410 · Prepaid Expenses	$	(321.00)
					$	(1,719.00)

Bill Pmt -Check	**30233**	**12/14/2015**	**PAKPOUR CONSULTING GROUP, INC**	**1030 · Cash- Checking**		
Bill	1824	11/30/2015		7102 · Prof Serv - District Engineer	$	(1,619.63)
				207019 · 1221 Elmer Street - Fire Flow	$	(588.00)
				7102 · Prof Serv - District Engineer	$	(1,200.94)
				7102 · Prof Serv - District Engineer	$	(1,323.00)
				207020 · Hallmark (CC) Cell Twr Improve	$	(366.19)
				1741 · Dekoven - Prof Svs CY	$	(1,424.06)
				1721 · Alameda - Prof Svs CY	$	(2,656.50)
				1726 · Karen Road - Prof Svs CY	$	(1,177.31)
				1746 · Folger Demo - Prof Svs CY	$	(920.06)
					$	(11,275.69)
Bill Pmt -Check	**30234**	**12/14/2015**	**PG&E CFM/PPC DEPT**	**1030 · Cash- Checking**		
Bill	4441-0NOV2015	12/01/2015		7004 · Utilities - Electric-Bldgs&Grnd	$	(9.71)
Bill	3667-2DEC2015	12/07/2015		7003 · Utilities - Electric - Pumping	$	(56.10)
Bill	7816-1DEC2015	12/07/2015		7003 · Utilities - Electric - Pumping	$	(177.62)
Bill	2454-4DEC2015	12/07/2015		7003 · Utilities - Electric - Pumping	$	(26.63)
					$	(270.06)
Bill Pmt -Check	**30235**	**12/14/2015**	**PITNEY BOWES 371896**	**1030 · Cash- Checking**		
Bill	347945	12/03/2015		6706 · Equipment Services/Maintenance	$	(10.35)
					$	(10.35)
Bill Pmt -Check	**30236**	**12/14/2015**	**PRECISE, INC.**	**1030 · Cash- Checking**		
Bill	15738	12/04/2015		7107 · Prof Serv - Customer Billing	$	(628.02)
					$	(628.02)
Bill Pmt -Check	**30237**	**12/14/2015**	**PUMP REPAIR SERVICE CO**	**1030 · Cash- Checking**		
Bill	037119	12/01/2015		6402 · Pumping	$	(575.00)
					$	(575.00)
Bill Pmt -Check	**30238**	**12/14/2015**	**RECOLOGY SAN MATEO**	**1030 · Cash- Checking**		
Bill		11/30/2015		6501 · M&R - Buildings & Grounds	$	(645.24)
					$	(645.24)
Bill Pmt -Check	**30239**	**12/14/2015**	**RESPONSE ENVELOPE**	**1030 · Cash- Checking**		
Bill	0204193-IN	12/01/2015		1410 · Prepaid Expenses	$	(5,422.75)
					$	(5,422.75)

Bill Pmt -Check	**30240**	**12/14/2015**	**ROBERTS & BRUNE CO. INC.**	**1030 · Cash- Checking**		
Bill	S1494569.002	12/01/2015		6405 · Meters & Service	$	(352.69)
Bill	S1525824.001	12/01/2015		6404 · Mains/Distribution	$	(536.12)
				6405 · Meters & Service	$	(1,017.41)
Bill	S1527797.001	12/01/2015		1951 · 2847 San Juan	$	(261.94)
Bill	S1525230.001	12/01/2015		6404 · Mains/Distribution	$	(1,416.66)
					$	(3,584.82)
Bill Pmt -Check	**30241**	**12/14/2015**	**SAN MATEO CO. ENVIRO. HEALTH**	**1030 · Cash- Checking**		
Bill	269865	12/01/2015		1410 · Prepaid Expenses	$	(297.00)
					$	(297.00)
Bill Pmt -Check	**30242**	**12/14/2015**	**STEVENS CREEK QUARRY, INC.**	**1030 · Cash- Checking**		
Bill	624157	12/01/2015		6404 · Mains/Distribution	$	(99.95)
					$	(99.95)
Bill Pmt -Check	**30243**	**12/14/2015**	**SWRCB ACCOUNTING OFFICE**	**1030 · Cash- Checking**		
Bill	LW-1002116	10/15/2015		6802 · Gov't Fees & Licenses	$	(20,395.92)
					$	(20,395.92)
Bill Pmt -Check	**30244**	**12/14/2015**	**VANGUARD CLEANING SYSTEMS, INC.**	**1030 · Cash- Checking**		
Bill	14739	12/01/2015		6501 · M&R - Buildings & Grounds	$	(385.00)
					$	(385.00)
Bill Pmt -Check	**30245**	**12/14/2015**	**VERIZON WIRELESS**	**1030 · Cash- Checking**		
Bill	651207	12/08/2015		6707 · Computer Supplies & Upgrades	$	(14.48)
					$	(14.48)
Bill Pmt -Check	**30246**	**12/14/2015**	**DEBRA STROTHER**	**1030 · Cash- Checking**		
Bill		12/09/2015		6307 · Lawn-Be-Gone Rebates	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30247**	**12/15/2015**	**U.S. Bank PARS Account# 6746019200**	**1030 · Cash- Checking**		
Bill		12/15/2015		1410 · Prepaid Expenses	$	(40,050.00)
					$	(40,050.00)
Bill Pmt -Check	**30248**	**12/16/2015**	**CANDY PINA**	**1030 · Cash- Checking**		
Bill	524626	12/16/2015		6050 · Employee Service Recognition	$	(274.22)
					$	(274.22)
Bill Pmt -Check	**30249**	**12/22/2015**	**ACWA- GROUP INS.**	**1030 · Cash- Checking**		
Bill	0384399	12/07/2015		1410 · Prepaid Expenses	$	(41,079.94)
					$	(41,079.94)

Bill Pmt -Check	**30250**	**12/22/2015**	**ALPINE AWARDS INC**	**1030 · Cash- Checking**		
Bill	293365	12/07/2015		7202 · Director Expenses	$	(28.88)
					$	(28.88)
Bill Pmt -Check	**30251**	**12/22/2015**	**AT&T 60197**	**1030 · Cash- Checking**		
Bill	7398418	12/10/2015		7005 · Utilities - Telephones	$	(30.78)
Bill	9391035663Dec2015	12/22/2015		7005 · Utilities - Telephones	$	(74.65)
					$	(105.43)
Bill Pmt -Check	**30252**	**12/22/2015**	**BABCOCK LABORATORIES, INC.**	**1030 · Cash- Checking**		
Bill	BL51013-8505	12/14/2015		6401 · Water Quality	$	(560.00)
					$	(560.00)
Bill Pmt -Check	**30253**	**12/22/2015**	**BAWSCA**	**1030 · Cash- Checking**		
Bill	2835	12/08/2015		6301 · Water Conservation Program	$	(522.00)
Bill	2849	12/08/2015		6307 · Lawn-Be-Gone Rebates	$	(564.00)
					$	(1,086.00)
Bill Pmt -Check	**30254**	**12/22/2015**	**C G UHLENBERG LLP**	**1030 · Cash- Checking**		
Bill	10930	12/01/2015		7106 · Prof Serv - Accting & Payroll	$	(1,325.00)
					$	(1,325.00)
Bill Pmt -Check	**30255**	**12/22/2015**	**CARLMONT HARDWARE**	**1030 · Cash- Checking**		
Bill	10898	12/07/2015		6403 · Storage Tanks	$	(6.53)
					$	(6.53)
Bill Pmt -Check	**30256**	**12/22/2015**	**COMCAST**	**1030 · Cash- Checking**		
Bill		12/09/2015		7001 · Utilities - Internet/Cable	$	(80.71)
					$	(80.71)
Bill Pmt -Check	**30257**	**12/22/2015**	**CORIX WATER PRODUCTS (US) INC.**	**1030 · Cash- Checking**		
Bill	17513034961	12/09/2015		6407 · Regulator Stations	$	(1,665.31)
					$	(1,665.31)
Bill Pmt -Check	**30258**	**12/22/2015**	**GOLDEN STATE SMOG CENTER**	**1030 · Cash- Checking**		
Bill	41162	12/15/2015		6503 · M&R - Vehicle & Large Equip	$	(49.75)
Bill	41163	12/15/2015		6503 · M&R - Vehicle & Large Equip	$	(49.75)
Bill	41165	12/15/2015		6503 · M&R - Vehicle & Large Equip	$	(49.75)
Bill	41174	12/15/2015		6503 · M&R - Vehicle & Large Equip	$	(49.75)
Bill	41176	12/15/2015		6503 · M&R - Vehicle & Large Equip	$	(49.75)
					$	(248.75)

Bill Pmt -Check	**30259**	**12/22/2015**	**GRANITE ROCK, INC.**	**1030 · Cash- Checking**		
Bill	933315	12/12/2015		6404 · Mains/Distribution	$	(766.11)
					$	(766.11)
Bill Pmt -Check	**30260**	**12/22/2015**	**HACH COMPANY INC**	**1030 · Cash- Checking**		
Bill	9702356	12/08/2015		6401 · Water Quality	$	(309.17)
					$	(309.17)
Bill Pmt -Check	**30261**	**12/22/2015**	**HOME DEPOT**	**1030 · Cash- Checking**		
Bill	3972351	12/01/2015		6501 · M&R - Buildings & Grounds	$	(489.81)
Bill	7100825	12/02/2015		6502 · M&R - Equipment & Tools	$	(162.41)
				6501 · M&R - Buildings & Grounds	$	(223.83)
Bill	FCH-005839673	12/09/2015		6501 · M&R - Buildings & Grounds	$	(20.00)
Bill	03268	12/14/2015		6403 · Storage Tanks	$	(31.45)
					$	(927.50)
Bill Pmt -Check	**30262**	**12/22/2015**	**LINCOLN LIFE**	**1030 · Cash- Checking**		
Bill		12/15/2015		1430 · Payroll Clearing A/C	$	(175.00)
					$	(175.00)
Bill Pmt -Check	**30263**	**12/22/2015**	**MATCO TOOLS**	**1030 · Cash- Checking**		
Bill	239465	12/15/2015		6502 · M&R - Equipment & Tools	$	(626.68)
					$	(626.68)
Bill Pmt -Check	**30264**	**12/22/2015**	**OFFICE DEPOT, INC.**	**1030 · Cash- Checking**		
Bill	811243497001	12/09/2015		6701 · Office Supplies	$	(75.66)
					$	(75.66)
Bill Pmt -Check	**30265**	**12/22/2015**	**OFFICE TEAM**	**1030 · Cash- Checking**		
Bill	44600100	12/10/2015		7110 · Prof Serv - Miscellaneous	$	(1,000.00)
Bill	44635862	12/15/2015		7110 · Prof Serv - Miscellaneous	$	(1,006.38)
					$	(2,006.38)
Bill Pmt -Check	**30266**	**12/22/2015**	**PAKPOUR CONSULTING GROUP, INC**	**1030 · Cash- Checking**		
Bill		12/15/2015		7102 · Prof Serv - District Engineer	$	(500.00)
					$	(500.00)
Bill Pmt -Check	**30267**	**12/22/2015**	**PARS**	**1030 · Cash- Checking**		
Bill	33268	12/10/2015		7110 · Prof Serv - Miscellaneous	$	(300.00)
					$	(300.00)

Bill Pmt -Check	**30268**	**12/22/2015**	**PENINSULA BUILDING MATERIALS**	**1030 · Cash- Checking**		
Bill	309961	12/01/2015		6405 · Meters & Service	$	(6.00)
					$	(6.00)
Bill Pmt -Check	**30269**	**12/22/2015**	**PG&E CFM/PPC DEPT**	**1030 · Cash- Checking**		
Bill	6556-8DEC2015	12/08/2015		7003 · Utilities - Electric - Pumping	$	(69.85)
Bill	7951-5DEC2015	12/08/2015		7003 · Utilities - Electric - Pumping	$	(146.06)
Bill	8936-0DEC2015	12/08/2015		7003 · Utilities - Electric - Pumping	$	(1,661.29)
Bill	9032-7DECF2015	12/14/2015		7003 · Utilities - Electric - Pumping	$	(8,633.03)
Bill		12/14/2015		7003 · Utilities - Electric - Pumping	$	(524.57)
				7004 · Utilities - Electric-Bldgs&Grnd	$	(1,398.57)
					$	(12,433.37)
Bill Pmt -Check	**30270**	**12/22/2015**	**RICOH Philadelphia**	**1030 · Cash- Checking**		
Bill	48201859	12/06/2015		6705 · Printing/Printing Supplies	$	(344.75)
					$	(344.75)
Bill Pmt -Check	**30271**	**12/22/2015**	**ROBERTS & BRUNE CO. INC.**	**1030 · Cash- Checking**		
Bill	S1528929.001	12/03/2015		6405 · Meters & Service	$	(1,327.42)
Bill	S1529186.001	12/03/2015		6404 · Mains/Distribution	$	(492.16)
				6405 · Meters & Service	$	(292.73)
Bill	S15290369.001	12/03/2015		6404 · Mains/Distribution	$	(875.36)
Bill	S1528619.001	12/07/2015		6405 · Meters & Service	$	(346.46)
Bill	S1529000.001	12/09/2015		6405 · Meters & Service	$	(241.14)
Bill	S1530157.001	12/11/2015		6404 · Mains/Distribution	$	(1,439.62)
				6405 · Meters & Service	$	(213.64)
Bill	S1529749.001	12/14/2015		6404 · Mains/Distribution	$	(494.01)
				6405 · Meters & Service	$	(591.49)
Bill	S1530428.001	12/14/2015		6404 · Mains/Distribution	$	(583.56)
Bill	S1528988.001	12/02/2015		1738 · Meter Chg Out - Parts	$	(70.88)
Bill	S1528604.001	12/02/2015		1738 · Meter Chg Out - Parts	$	(3,214.29)
Bill	S1529281.001	12/14/2015		1738 · Meter Chg Out - Parts	$	(218.37)
					$	(10,401.13)
Bill Pmt -Check	**30272**	**12/22/2015**	**SAN MATEO ELECTRIC SUPPLY**	**1030 · Cash- Checking**		
Bill	0000291620	12/07/2015		6404 · Mains/Distribution	$	(2.71)
					$	(2.71)

Bill Pmt -Check	**30273**	**12/22/2015**	**SFPUC WATER QUALITY**	**1030 · Cash- Checking**		
Bill	10000655	12/01/2015		6401 · Water Quality	$	(2,025.00)
					$	(2,025.00)
Bill Pmt -Check	**30274**	**12/22/2015**	**STANDARD INSURANCE COMPANY**	**1030 · Cash- Checking**		
Bill		12/21/2015		1410 · Prepaid Expenses	$	(780.01)
					$	(780.01)
Bill Pmt -Check	**30275**	**12/22/2015**	**TAMMY A. RUDOCK**	**1030 · Cash- Checking**		
Bill		12/17/2015		6050 · Employee Service Recognition	$	(92.92)
					$	(92.92)
Bill Pmt -Check	**30276**	**12/22/2015**	**US AUTO GLASS**	**1030 · Cash- Checking**		
Bill	EAW012300	12/04/2015		6503 · M&R - Vehicle & Large Equip	$	(200.42)
					$	(200.42)
Bill Pmt -Check	**30277**	**12/22/2015**	**VALLEY OIL COMPANY**	**1030 · Cash- Checking**		
Bill	817087	12/04/2015		6504 · M&R - Fuel	$	(762.84)
					$	(762.84)
Bill Pmt -Check	**30278**	**12/22/2015**	**SAN FRANCISCO WATER DEPT**	**1030 · Cash- Checking**		
Bill	8300Dec2015	12/22/2015		6101 · SFPUC Treated Water	$	(250,365.00)
				6102 · BAWSCA (Debt Service Surcharge)	$	(38,438.00)
				6104 · SFPUC Water Service Charge	$	(6,522.00)
					$	(295,325.00)
Bill Pmt -Check	**30279**	**12/22/2015**	**Alfred Wang**	**1030 · Cash- Checking**		
Bill		12/21/2015		6308 · Rain Barrels Rebate	$	(92.77)
					$	(92.77)
Bill Pmt -Check	**30280**	**12/22/2015**	**BRAD STROTHKAMP**	**1030 · Cash- Checking**		
Bill		12/21/2015		6308 · Rain Barrels Rebate	$	(100.00)
Bill		12/21/2015		6308 · Rain Barrels Rebate	$	(100.00)
					$	(200.00)
Bill Pmt -Check	**30281**	**12/22/2015**	**DIANE COSGRAVE**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30282**	**12/22/2015**	**ERNEST DENYS**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(100.00)
					$	(100.00)

Bill Pmt -Check	**30283**	**12/22/2015**	**JAMES KAUFFOLD**	**1030 · Cash- Checking**		
Bill		12/21/2015		6308 · Rain Barrels Rebate	$	(200.00)
					$	(200.00)
Bill Pmt -Check	**30284**	**12/22/2015**	**JENNY YIP**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30285**	**12/22/2015**	**JON CHUNG**	**1030 · Cash- Checking**		
Bill		12/21/2015		6308 · Rain Barrels Rebate	$	(200.00)
					$	(200.00)
Bill Pmt -Check	**30286**	**12/22/2015**	**KEN LEBOVITZ**	**1030 · Cash- Checking**		
Bill		12/16/2015		6307 · Lawn-Be-Gone Rebates	$	(1,342.00)
					$	(1,342.00)
Bill Pmt -Check	**30287**	**12/22/2015**	**LORRAINE KRUCKEWITT**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30288**	**12/22/2015**	**MICHAEL YIP**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(150.00)
					$	(150.00)
Bill Pmt -Check	**30289**	**12/22/2015**	**NICHELE LEE**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30290**	**12/22/2015**	**PHILIP FAGONE**	**1030 · Cash- Checking**		
Bill		12/16/2015		6307 · Lawn-Be-Gone Rebates	$	(2,772.00)
					$	(2,772.00)
Bill Pmt -Check	**30291**	**12/22/2015**	**ROBERT WOOD**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(225.00)
					$	(225.00)
Bill Pmt -Check	**30292**	**12/22/2015**	**RUSSELL WERTENBERG**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(150.00)
					$	(150.00)
Bill Pmt -Check	**30293**	**12/22/2015**	**SERGEY KASHIRSKY**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)

Bill Pmt -Check	**30294**	**12/22/2015**	**SERGEY SERGEEV**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(200.00)
					$	(200.00)
Bill Pmt -Check	**30295**	**12/22/2015**	**SHEN CHEN**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30296**	**12/22/2015**	**VIANEY MUNOZ**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(75.00)
					$	(75.00)
Bill Pmt -Check	**30297**	**12/28/2015**	**CECIL CHENG**	**1030 · Cash- Checking**		
Bill		12/22/2015		6305 · HET (High Efficiency Toilet)	$	(250.00)
					$	(250.00)
Bill Pmt -Check	**30298**	**12/28/2015**	**COMCAST**	**1030 · Cash- Checking**		
Bill		12/10/2015		7001 · Utilities - Internet/Cable	$	(94.02)
Bill		12/10/2015		7001 · Utilities - Internet/Cable	$	(94.02)
Bill		12/10/2015		7001 · Utilities - Internet/Cable	$	(94.02)
Bill		12/14/2015		7001 · Utilities - Internet/Cable	$	(213.78)
					$	(495.84)
Bill Pmt -Check	**30299**	**12/28/2015**	**CORNERSTONE**	**1030 · Cash- Checking**		
Bill	13280	12/01/2015		1731 · Hallmark - Prof Svs CY	$	(3,398.75)
					$	(3,398.75)
Bill Pmt -Check	**30300**	**12/28/2015**	**RGK TECHNICAL SALES**	**1030 · Cash- Checking**		
Bill		12/13/2015		7002 · Utilities - Cell Telephone	$	(43.50)
					$	(43.50)
Bill Pmt -Check	**30301**	**12/28/2015**	**VALLEY OIL COMPANY**	**1030 · Cash- Checking**		
Bill	819200	12/16/2015		6504 · M&R - Fuel	$	(1,094.50)
					$	(1,094.50)
Bill Pmt -Check	**30302**	**01/12/2016**	**ACWA- GROUP INS.**	**1030 · Cash- Checking**		
Bill	0389597	01/07/2016		1410 · Prepaid Expenses	$	(41,079.94)
					$	(41,079.94)
Bill Pmt -Check	**30303**	**01/12/2016**	**ACWA/JPIA**	**1030 · Cash- Checking**		
Bill	WCQtr42015	12/28/2015		1490 · Prepaid Workers Comp Insurance	$	(10,453.00)
					$	(10,453.00)

Bill Pmt -Check	**30304**	**01/12/2016**	**AT&T 60197**	**1030 · Cash- Checking**		
Bill		12/17/2015		7005 · Utilities - Telephones	$	(21.04)
Bill	7443578	12/17/2015		7005 · Utilities - Telephones	$	(19.09)
Bill		12/20/2015		7005 · Utilities - Telephones	$	(987.64)
Bill	7467994	12/24/2015		7005 · Utilities - Telephones	$	(53.86)
Bill	7479650	12/28/2015		7005 · Utilities - Telephones	$	(53.86)
Bill	7487139	01/01/2016		7005 · Utilities - Telephones	$	(148.56)
Bill	7498611	01/01/2016		7005 · Utilities - Telephones	$	(1.11)
					$	(1,285.16)
Bill Pmt -Check	**30305**	**01/12/2016**	**BAY AREA AIR QUALITY MGMT DIST.**	**1030 · Cash- Checking**		
Bill	3RX08	12/31/2015		6402 · Pumping	$	(558.00)
					$	(558.00)
Bill Pmt -Check	**30306**	**01/12/2016**	**BAWSCA**	**1030 · Cash- Checking**		
Bill	2701	01/01/2016		1410 · Prepaid Expenses	$	(16,783.00)
					$	(16,783.00)
Bill Pmt -Check	**30307**	**01/12/2016**	**BAY POINTE LANDSCAPE**	**1030 · Cash- Checking**		
Bill	BPL-0795	12/03/2015		6501 · M&R - Buildings & Grounds	$	(1,050.00)
					$	(1,050.00)
Bill Pmt -Check	**30308**	**01/12/2016**	**BENNETT MARINE UTILITY, LLC.**	**1030 · Cash- Checking**		
Bill	22396	12/21/2015		6401 · Water Quality	$	(1,465.00)
Bill	22397	12/21/2015		6401 · Water Quality	$	(1,465.00)
					$	(2,930.00)
Bill Pmt -Check	**30309**	**01/12/2016**	**BFI of CALIFORNIA INC. - OX MTN. LANDFILL**	**1030 · Cash- Checking**		
Bill	4227-000042863	12/15/2015		6404 · Mains/Distribution	$	(1,105.37)
					$	(1,105.37)
Bill Pmt -Check	**30310**	**01/12/2016**	**CAL CHAMBER**	**1030 · Cash- Checking**		
Bill	10981484	01/04/2016		1410 · Prepaid Expenses	$	(13.14)
Bill	10969405	12/21/2015		7106 · Prof Serv - Accting & Payroll	$	(100.55)
					$	(113.69)
Bill Pmt -Check	**30311**	**01/12/2016**	**D B GAYA**	**1030 · Cash- Checking**		
Bill	201260	12/22/2015		6403 · Storage Tanks	$	(436.00)
					$	(436.00)

Bill Pmt -Check	**30312**	**01/12/2016**	**GOLDEN STATE FLOW MEASUREMENT INC**	**1030 · Cash- Checking**		
Bill	1-049726	12/08/2015		1738 · Meter Chg Out - Parts	$	(42.11)
Bill	1-049725	12/08/2015		1941 · 360/370/380 Industrial Road	$	(1,372.48)
					$	(1,414.59)
Bill Pmt -Check	**30313**	**01/12/2016**	**GOVERNMENT FINANCE OFFICERS ASSOCIATION**	**1030 · Cash- Checking**		
Bill		01/07/2016		1410 · Prepaid Expenses	$	(160.00)
					$	(160.00)
Bill Pmt -Check	**30314**	**01/12/2016**	**GRANITE ROCK, INC.**	**1030 · Cash- Checking**		
Bill	934716	12/19/2015		6404 · Mains/Distribution	$	(645.79)
Bill	936018	12/26/2015		6404 · Mains/Distribution	$	(250.79)
Bill	936660	12/31/2015		6404 · Mains/Distribution	$	(156.80)
					$	(1,053.38)
Bill Pmt -Check	**30315**	**01/12/2016**	**HACH COMPANY INC**	**1030 · Cash- Checking**		
Bill	9721025	12/19/2015		7204 · Employee Travel/Training	$	(700.00)
Bill	9722240 / 9724234	12/21/2015		6401 · Water Quality	$	(829.57)
				6401 · Water Quality	$	(761.13)
					$	(2,290.70)
Bill Pmt -Check	**30316**	**01/12/2016**	**HANSON, BRIDGETT**	**1030 · Cash- Checking**		
Bill	1158083	12/30/2015		7101 · Prof Serv - District Counsel	$	(1,000.00)
Bill	1158081	12/30/2015		7101 · Prof Serv - District Counsel	$	(195.00)
Bill	1158082	12/30/2015		7101 · Prof Serv - District Counsel	$	(997.50)
					$	(2,192.50)
Bill Pmt -Check	**30317**	**01/12/2016**	**HOME DEPOT**	**1030 · Cash- Checking**		
Bill	0628-00002-50415	12/08/2015		6502 · M&R - Equipment & Tools	$	(59.39)
Bill	122218	12/10/2015		6501 · M&R - Buildings & Grounds	$	(35.12)
Bill	2253805	12/18/2015		6501 · M&R - Buildings & Grounds	$	(228.76)
				6502 · M&R - Equipment & Tools	$	(187.51)
Bill	1140023	12/29/2015		6501 · M&R - Buildings & Grounds	$	(67.95)
Bill	0682782	12/30/2015		6501 · M&R - Buildings & Grounds	$	(15.22)
					$	(593.95)
Bill Pmt -Check	**30318**	**01/12/2016**	**JRocket Design77 & Marketing**	**1030 · Cash- Checking**		
Bill	2025	12/01/2015		7110 · Prof Serv - Miscellaneous	$	(2,411.23)
Bill	2028	12/31/2015		7110 · Prof Serv - Miscellaneous	$	(3,974.54)
					$	(6,385.77)

Bill Pmt -Check	**30319**	**01/12/2016**	**LINCOLN LIFE**	**1030 · Cash- Checking**		
Bill		12/31/2015		1430 · Payroll Clearing A/C	$	(175.00)
					$	(175.00)
Bill Pmt -Check	**30320**	**01/12/2016**	**MANAGEWATER CONSULTING,INC**	**1030 · Cash- Checking**		
Bill	1000	12/31/2015		7110 · Prof Serv - Miscellaneous	$	(4,600.00)
					$	(4,600.00)
Bill Pmt -Check	**30321**	**01/12/2016**	**McNAMARA TRANSPORT, INC.**	**1030 · Cash- Checking**		
Bill	9427	12/31/2015		6404 · Mains/Distribution	$	(1,520.00)
					$	(1,520.00)
Bill Pmt -Check	**30322**	**01/12/2016**	**MHN**	**1030 · Cash- Checking**		
Bill	3200075159	12/17/2015		1410 · Prepaid Expenses	$	(45.54)
					$	(45.54)
Bill Pmt -Check	**30323**	**01/12/2016**	**OFFICE DEPOT, INC.**	**1030 · Cash- Checking**		
Bill	813070936001	12/17/2015		6701 · Office Supplies	$	(153.69)
					$	(153.69)
Bill Pmt -Check	**30324**	**01/12/2016**	**OFFICE TEAM**	**1030 · Cash- Checking**		
Bill	44691951	12/22/2015		7110 · Prof Serv - Miscellaneous	$	(868.75)
Bill	44752412	12/30/2015		7110 · Prof Serv - Miscellaneous	$	(600.00)
Bill	44790294	01/05/2016		7110 · Prof Serv - Miscellaneous	$	(591.75)
					$	(2,060.50)
Bill Pmt -Check	**30325**	**01/12/2016**	**PAKPOUR CONSULTING GROUP, INC**	**1030 · Cash- Checking**		
Bill	1850	12/31/2015		1536 · Buckland Tank Project CY	$	(492.19)
				7102 · Prof Serv - District Engineer	$	(3,898.13)
				207002 · 2113 Coronet Fire Flow	$	(328.13)
				207022 · 750 Dartmouth Ave Fire Flow	$	(426.56)
				7102 · Prof Serv - District Engineer	$	(3,615.94)
				1741 · Dekoven - Prof Svs CY	$	(406.88)
				1721 · Alameda - Prof Svs CY	$	(1,493.63)
				1726 · Karen Road - Prof Svs CY	$	(4,723.63)
				1746 · Folger Demo - Prof Svs CY	$	(13,510.25)
					$	(28,895.34)

Bill Pmt -Check	**30326**	**01/12/2016**	**PG&E CFM/PPC DEPT**	**1030 · Cash- Checking**		
Bill	4441-0DEC2015	12/29/2015		7004 · Utilities - Electric-Bldgs&Grnd	$	(8.92)
Bill	3667-2JAN2016	01/06/2016		7003 · Utilities - Electric - Pumping	$	(52.17)
Bill	7816-1JAN2016	01/06/2016		7003 · Utilities - Electric - Pumping	$	(155.02)
Bill	2454-4JAN2016	01/06/2016		7003 · Utilities - Electric - Pumping	$	(25.49)
Bill	6556-8JAN2016	01/07/2016		7003 · Utilities - Electric - Pumping	$	(65.55)
Bill	8936-0JAN2016	01/07/2016		7003 · Utilities - Electric - Pumping	$	(1,531.77)
Bill	7951-5JAN2016	01/07/2016		7003 · Utilities - Electric - Pumping	$	(186.78)
					$	(2,025.70)
Bill Pmt -Check	**30327**	**01/12/2016**	**PRECISE, INC.**	**1030 · Cash- Checking**		
Bill	15843	12/28/2015		7107 · Prof Serv - Customer Billing	$	(628.25)
					$	(628.25)
Bill Pmt -Check	**30328**	**01/12/2016**	**RECOLOGY SAN MATEO**	**1030 · Cash- Checking**		
Bill		12/31/2015		6501 · M&R - Buildings & Grounds	$	(645.24)
					$	(645.24)
Bill Pmt -Check	**30329**	**01/12/2016**	**RICOH Philadelphia**	**1030 · Cash- Checking**		
Bill	48381767	12/20/2015		6705 · Printing/Printing Supplies	$	(133.81)
					$	(133.81)
Bill Pmt -Check	**30330**	**01/12/2016**	**ROBERTS & BRUNE CO. INC.**	**1030 · Cash- Checking**		
Bill	S1528992.001	12/09/2015		6406 · Fire Hydrants	$	(340.42)
Bill	S1533050.001	12/23/2015		1738 · Meter Chg Out - Parts	$	(78.68)
Bill	S1533310.001	12/30/2015		6401 · Water Quality	$	(583.56)
				6404 · Mains/Distribution	$	(129.32)
					$	(1,131.98)
Bill Pmt -Check	**30331**	**01/12/2016**	**SAN MATEO COUNTY TIMES**	**1030 · Cash- Checking**		
Bill		12/16/2015		1410 · Prepaid Expenses	$	(180.00)
					$	(180.00)
Bill Pmt -Check	**30332**	**01/12/2016**	**SERGEY SERGEEV**	**1030 · Cash- Checking**		
Bill		01/12/2016		6305 · HET (High Efficiency Toilet)	$	(50.00)
					$	(50.00)

Bill Pmt -Check	**30333**	**01/12/2016**	**STEPFORD BUSINESS, INC.**	**1030 · Cash- Checking**		
Bill	1502256	12/20/2015		1410 · Prepaid Expenses	$	(1,400.00)
Bill	1502207	12/30/2015		1513 · TELEPHONE SYSTEM UPGRADE CY	$	(10,027.48)
Bill	1502214	12/21/2015		7103 · Prof Serv - IT	$	(40.00)
					$	(11,467.48)
Bill Pmt -Check	**30334**	**01/12/2016**	**STEVENS CREEK QUARRY, INC.**	**1030 · Cash- Checking**		
Bill	628661	12/15/2015		6404 · Mains/Distribution	$	(101.61)
					$	(101.61)
Bill Pmt -Check	**30335**	**01/12/2016**	**UPS**	**1030 · Cash- Checking**		
Bill	0000546F3E016	01/02/2016		6704 · Postage	$	(112.44)
					$	(112.44)
Bill Pmt -Check	**30336**	**01/12/2016**	**VANGUARD CLEANING SYSTEMS, INC.**	**1030 · Cash- Checking**		
Bill	16199	01/02/2016		6501 · M&R - Buildings & Grounds	$	(385.00)
					$	(385.00)
Bill Pmt -Check	**30337**	**01/12/2016**	**VERIZON WIRELESS**	**1030 · Cash- Checking**		
Bill	9757270756	12/15/2015		7002 · Utilities - Cell Telephone	$	(998.26)
					$	(998.26)
Check	**30338**	**01/12/2016**	**VOID**	**1030 · Cash- Checking**		
					$	-
Check	**30339**	**01/12/2016**	**VOID**	**1030 · Cash- Checking**		
					$	-
Bill Pmt -Check	**30340**	**01/19/2016**	**AIRPORT HOME APPLIANCE**	**1030 · Cash- Checking**		
Bill	R90045	01/13/2016		6501 · M&R - Buildings & Grounds	$	(8,221.06)
					$	(8,221.06)
Bill Pmt -Check	**30341**	**01/19/2016**	**AIRGAS, LLC**	**1030 · Cash- Checking**		
Bill	9932743721	01/01/2016		6501 · M&R - Buildings & Grounds	$	(114.95)
					$	(114.95)
Bill Pmt -Check	**30342**	**01/19/2016**	**BAGG Engineers**	**1030 · Cash- Checking**		
Bill	36520	01/13/2016		6403 · Storage Tanks	$	(2,070.00)
					$	(2,070.00)
Bill Pmt -Check	**30343**	**01/19/2016**	**BAY AREA AIR QUALITY MGMT DIST.**	**1030 · Cash- Checking**		
Bill	3RX02	01/13/2016		1410 · Prepaid Expenses	$	(510.00)
					$	(510.00)

Bill Pmt -Check	**30344**	**01/19/2016**	**BAWSCA**	**1030 · Cash- Checking**		
Bill	2869	01/01/2016		6303 · Public Outreach & Education	$	(188.00)
					$	(188.00)
Bill Pmt -Check	**30345**	**01/19/2016**	**BAY POINTE LANDSCAPE**	**1030 · Cash- Checking**		
Bill	BPL-0754	12/01/2015		6501 · M&R - Buildings & Grounds	$	(1,050.00)
Bill	BPL-0818	12/31/2015		6501 · M&R - Buildings & Grounds	$	(1,050.00)
					$	(2,100.00)
Bill Pmt -Check	**30346**	**01/19/2016**	**BELMONT POLICE DEPARTMENT**	**1030 · Cash- Checking**		
Bill	0116-1216	01/13/2016		1410 · Prepaid Expenses	$	(50.00)
					$	(50.00)
Bill Pmt -Check	**30347**	**01/19/2016**	**CINTAS CORPORATION**	**1030 · Cash- Checking**		
Bill	464532556-1	12/01/2015		6052 · Uniforms	$	(11.25)
					$	(11.25)
Bill Pmt -Check	**30348**	**01/19/2016**	**COMCAST**	**1030 · Cash- Checking**		
Bill		01/09/2016		7001 · Utilities - Internet/Cable	$	(80.72)
					$	(80.72)
Bill Pmt -Check	**30349**	**01/19/2016**	**GRANITE ROCK, INC.**	**1030 · Cash- Checking**		
Bill	937539	01/09/2016		6404 · Mains/Distribution	$	(156.80)
					$	(156.80)
Bill Pmt -Check	**30350**	**01/19/2016**	**HOME DEPOT**	**1030 · Cash- Checking**		
Bill	8025805	01/11/2016		6401 · Water Quality	$	(32.66)
					$	(32.66)
Bill Pmt -Check	**30351**	**01/19/2016**	**OFFICE DEPOT, INC.**	**1030 · Cash- Checking**		
Bill	816170382001	01/04/2016		6701 · Office Supplies	$	(88.07)
					$	(88.07)
Bill Pmt -Check	**30352**	**01/19/2016**	**OFFICE TEAM**	**1030 · Cash- Checking**		
Bill	44838774	01/12/2016		7110 · Prof Serv - Miscellaneous	$	(961.25)
					$	(961.25)
Bill Pmt -Check	**30353**	**01/19/2016**	**PG&E CFM/PPC DEPT**	**1030 · Cash- Checking**		
Bill	9032-7JAN2016	01/12/2016		7003 · Utilities - Electric - Pumping	$	(8,886.03)
					$	(8,886.03)
Bill Pmt -Check	**30354**	**01/19/2016**	**PRECISE, INC.**	**1030 · Cash- Checking**		
Bill	15969	01/11/2016		7107 · Prof Serv - Customer Billing	$	(626.53)
					$	(626.53)

Bill Pmt -Check	**30355**	**01/19/2016**	**PROFORMA**	**1030 · Cash- Checking**		
Bill	9063702490	01/01/2016		6303 · Public Outreach & Education	$	(2,606.45)
					$	(2,606.45)
Bill Pmt -Check	**30356**	**01/19/2016**	**RICOH Philadelphia**	**1030 · Cash- Checking**		
Bill	48508569	01/09/2016		6705 · Printing/Printing Supplies	$	(339.12)
					$	(339.12)
Bill Pmt -Check	**30357**	**01/19/2016**	**SAN CARLOS CHAMBER OF COMMERCE**	**1030 · Cash- Checking**		
Bill	101280	01/11/2016		1410 · Prepaid Expenses	$	(173.00)
					$	(173.00)
Bill Pmt -Check	**30358**	**01/19/2016**	**STEPFORD BUSINESS, INC.**	**1030 · Cash- Checking**		
Bill	1502285	01/07/2016		1410 · Prepaid Expenses	$	(69.99)
					$	(69.99)
Check	**55103**	**12/04/2015**	**KHARAMARIA KALAMARAS**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(9.73)
					$	(9.73)
Check	**55104**	**12/04/2015**	**RYAN LYNCH**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(25.00)
					$	(25.00)
Check	**55105**	**12/04/2015**	**ANA CLAYTON**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(2.00)
					$	(2.00)
Check	**55106**	**12/04/2015**	**SEYED MIRSEPASSI**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(4.60)
					$	(4.60)
Check	**55107**	**12/04/2015**	**SCOTT YACKO**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(16.93)
					$	(16.93)
Check	**55108**	**12/04/2015**	**AHMAD DABABO**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(114.01)
					$	(114.01)
Check	**55109**	**12/04/2015**	**MALCOLM DRILLING**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(688.00)
					$	(688.00)

Check	**55110**	**12/04/2015**	**WALMART STORES**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(12.15)
					$	(12.15)
Check	**55111**	**01/06/2016**	**JOHN PAYNE**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(11.80)
					$	(11.80)
Check	**55112**	**01/06/2016**	**WALTERMIRE ST PARTNERS**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(26.87)
					$	(26.87)
Check	**55113**	**01/06/2016**	**DIANE D'AOUST**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(57.26)
					$	(57.26)
Check	**55114**	**01/06/2016**	**RAVINDER AHLUWALIA**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(35.00)
					$	(35.00)
Check	**55115**	**01/06/2016**	**PATRICK WALKER**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(3.00)
					$	(3.00)
Check	**55116**	**01/06/2016**	**WALMART STORES**	**1030 · Cash- Checking**		
				4012 · Water Refunds	$	(16.10)
					$	(16.10)
Check	**EFT122815**	**12/28/2015**	**ICMA contributions**	**1030 · Cash- Checking**		
				1430 · Payroll Clearing A/C	$	(666.24)
					$	(666.24)
			TOTAL:		**$**	**818,503.21**

MID-PENINSULA WATER DISTRICT

AGENDA ITEM NO. 6.A.

DATE: January 28, 2016

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: PUBLIC HEARING TO CONSIDER ORDINANCE NO. 115 ADOPTING MPWD WATER EFFICIENT LANDSCAPING ORDINANCE, EFFECTIVE FEBRUARY 1, 2016

RECOMMENDATION

Adopt Ordinance No. 115: MPWD Water Efficient Landscaping Ordinance (WELO), effective February 1, 2016.

FISCAL IMPACT

None at this time. Staff will work with city representatives in Belmont, San Carlos, and County of San Mateo on enforcement processes and related fees, as needed.

BACKGROUND

Governor Brown's Drought Executive Order of April 1, 2015 (EO-B29-15) directed the Department of Water Resources (DWR) to update the State's Model Water Efficient Landscape Ordinance (MWELO) through expedited regulation. The revised DWR MWELO was approved by the California Water Commission on July 15, 2015, and the new regulations were finalized and published on September 15, 2015. Local agencies are responsible for adopting and reporting on a water efficient landscape ordinance.

The MWELO requires all land-use agencies, such as cities and counties, to adopt a water efficient landscape ordinance that, at a minimum, meets the requirements of the MWELO prepared by DWR. DWR's model ordinance takes effect in those cities and counties that fail to adopt their own. Cities acting on their own are required to adopt their updated WELO by December 1, 2015. However, agencies adopting a regional ordinance have a deadline of February 1, 2016.

Summary of major changes in DWR's MWELO:

- Reduction of the size threshold from 2,500 square feet of landscaping to 500 square feet of landscaping for both commercial and residential property.
- The maximum applied water allowance has been lowered from 70% of the reference evapotranspiration (ETo) to 55% for residential landscape projects,

and to 45% of ETo for non-residential projects. This water allowance reduces the landscape area that can be planted with high water use plants such as cool season turf.

- Allows the irrigation efficiency to be entered for each area of the landscape. The site-wide irrigation efficiency of the previous ordinance (2010) was 0.71; for the purposes of estimating total water use, the revised MWELO defines the irrigation efficiency (IE) of drip irrigation as 0.81 and overhead irrigation and other technologies must meet a minimum IE of 0.75.
- State reporting requirements.
- Changes to the landscape and irrigation design plans.
- Option to irrigate with greywater.
- Expanded definitions section with new terms and concepts.

MPWD WELO

The CA MWELO effective January 1, 2010, became the MPWD's ordinance by default. The previous BAWSCA regional landscape ordinance was discussed during an MPWD public hearing on February 25, 2010, but the Board delayed any action because of enforcement coordination concerns and requested that (previous) staff bring back an ordinance within 60 days, which never occurred. Current staff re-introduced the effort on August 22, 2013, but the issue of enforcement still needed to be resolved and the Plumbing Code was undergoing a major revision for indoor water efficiency standards effective January 1, 2014. Then the SWRCB got more involved and enacted emergency drought regulations and the focus was shifted toward more aggressive water conservation efforts, and an updated ordinance became relevant.

The MPWD utilizes the BAWSCA landscape project checklists because they are simpler to use by residential and commercial customers, contractors, and staff. That means the MPWD also uses the BAWSCA regional standard for the 1,000 sq. ft. threshold for rehabilitated landscapes.

DISCUSSION

As reported on October 22, 2015 and discussed on December 16, 2015, MPWD staff worked for a couple of months with BAWSCA and a team of representatives from member agencies to develop the framework for a regional WELO. Staff recommends adopting Ordinance 115: MPWD Water Efficient Landscaping Ordinance, which includes the 1,000 sq. ft. threshold for rehabilitated landscapes that is the standard currently in use at the MPWD. This also ensures alignment with neighboring BAWSCA agency members, which provides residents, commercial business owners, designers, landscapers, and contractors with generally consistent compliance requirements across regional boundaries.

Staff posted notices of this public hearing at MPWD's Dairy Lane location and website on January 14, 2016.

Attachment: Ordinance No. 115 Adopting MPWD Water Efficient Landscaping Ordinance, effective February 1, 2016

BOARD ACTION: APPROVED:_____ DENIED:_____ POSTPONED:_____ STAFF DIRECTION:_____

UNANIMOUS_____ ZUCCA_____ WARDEN_____ STUEBING_____ VELLA_____ LINVILL_____

ORDINANCE NO. 115

ADOPTING WATER EFFICENT LANDSCAPING ORDINANCE,
EFFECTIVE FEBRUARY 1, 2016

MID-PENINSULA WATER DISTRICT

THIS ORDINANCE is adopted in light of the following facts and circumstances, which are hereby found and declared by the Board of Directors:

WHEREAS, a reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of the municipalities served by the Mid-Peninsula Water District ("MPWD") in California.

WHEREAS, the California Water Conservation in Landscaping Act, also known as the State Landscape Model Ordinance ("Model Ordinance"), has been implemented by a Statewide Landscape Task Force, which was overseen by the California Urban Water Conservation Council. The California Water Conservation in Landscaping Act was amended pursuant to AB 2717 (Chapter 682, Stats. 2004) and AB 1881 (Chapter 559, Stats. 2006).

WHEREAS, AB 1881 required cities and counties, no later than January 1, 2010, to adopt the updated Model Ordinance or an equivalent document which is "at least as effective as" the Model Ordinance in conserving water. In the event cities and counties do not take such action, the State's Model Ordinance was deemed to be automatically adopted by statute.

WHEREAS, the MPWD did not formally adopt a local ordinance and the State's Model Ordinance became effective as the MPWD's regulations on January 1, 2010, to comply with the requirement of AB 1881.

WHEREAS, Governor Brown issued Executive Order B-29 on April 1, 2015 which directed State agencies to implement immediate measures to save water, increase enforcement against water waste, and streamline government response to ongoing drought conditions.

WHEREAS, Executive Order B-29 directed the Department of Water Resources ("DWR") to update the State Model Ordinance through expedited regulation to increase water efficiency standards for new and existing landscapes through more efficient standards, greywater usage, onsite storm water capture, and limitations of the portions of landscape that can be covered in turf.

WHEREAS, the California Water Commission approved the proposed revisions to the State Model Ordinance on July 15, 2015.

WHEREAS, local agencies are required to adopt the revised State Model Ordinance or adopt a local or regional ordinance at least as effective in conserving water.

WHEREAS, the MPWD developed this regional Water Efficient Landscaping Ordinance in conjunction with the Bay Area Water Supply and Conservation Agency and other local agencies to meet the requirements and guidelines of the Model Ordinance and to address the unique physical characteristics, including average landscaped areas, within the MPWD's

jurisdiction in order to ensure that this Ordinance will be “at least as effective as” the Model Ordinance in conserving water.

WHEREAS, although this Water Efficiency Landscaping Ordinance is more streamlined and simplified than the Model Ordinance, the Board of Directors finds that it is “at least as effective as” the Model Ordinance for the following reasons: (1) this Ordinance applies to more accounts than the Model Ordinance does because it lowers the size threshold for applicable rehabilitated landscapes from 2,500 square feet to 1,000 square feet, to better reflect the typical landscaped areas located within the MPWD’s boundaries; (2) this Ordinance includes a default turf restriction of no turf or high water use plants in the irrigated area and requires that at least 80% of the plants in non-turf landscape areas be native plants, low-water using plants, or no-water using plants (unless the applicant elects to perform a water budget); (3) this Ordinance requires covers on newly constructed pools and spas. The Model Ordinance does not contain any such default turf restrictions or specified plant requirements.

WHEREAS, although this Water Efficiency Landscaping Ordinance is more streamlined and simplified than the Model Ordinance, the Board of Directors further finds that it is “at least as effective as” the Model Ordinance because this Ordinance includes water budget parameters and values and landscape parameters that are consistent with the Model Ordinance. By using the same water budget parameters as the Model Ordinance (e.g., plant factors, irrigation efficiency), this Ordinance will be as effective as the Model Ordinance in developing landscape water budgets. By using the same landscape parameters as the Model Ordinance for, among other things, slope restrictions and width restrictions for turf, irrigation times, and minimum mulch requirements, this Ordinance will be at least as effective as the Model Ordinance in achieving water savings.

WHEREAS, Article X, Section 2 of the California Constitution and Section 100 of the California Water Code declare that the general welfare requires water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof.

WHEREAS, the Board of Directors finds and determines that this Ordinance is consistent with the provisions requiring reductions in outdoor water use for landscaping in the California Green Building Standards Code, as such provisions will be implemented in the coming years. Such requirements include the development of a water budget for landscape irrigation in accordance with methodology outlined in either the Model Ordinance or pursuant to a locally adopted ordinance.

WHEREAS, the State Legislature has identified the provision of a more reliable water supply and the protection, restoration and enhancement of the Delta ecosystem as a high priority for the state. Pursuant to this, in November 2009, the State Legislature passed Senate Bill 7 (7th Extraordinary Session) requiring certain urban water suppliers to reduce per capita urban water use by 20% by the year 2020. Accordingly, the [City Council/Board of Directors/Board of Supervisors] finds that implementation of this Ordinance is consistent with the policies and goals established by the State Legislature in enacting SB 7 (7th Extraordinary Session).

WHEREAS, the MPWD has the power to perform all acts necessary to carry out fully the provisions of the County Water District Law (Water Code Section 31001), may establish rules and regulations for the distribution and use of water supplies (Water Code Section 31024), may adopt and enforce a comprehensive water conservation program to reduce potable water consumption and conserve supplies (Water Code Section 375), and may require as a condition of new service, that reasonable water-saving devices and water reclamation devices be installed to reduce water use (Water Code Section 31035).

WHEREAS, the Board of Directors of the MPWD has a long-standing policy of engaging in and encouraging efficient water management measures and practices and desires to adopt this Ordinance in order to provide supportive measures to facilitate the enforcement of landscape conservation ordinances by the municipalities it serves.

WHEREAS, the MPWD has followed the procedures for notice, public participation and adoption set forth in Section 375 of the California Water Code.

WHEREAS, the Board of Directors finds and determines that this Ordinance is not subject to the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) ("CEQA") pursuant to Section 15307 (the activity assures the maintenance, restoration, enhancement, or protection of a natural resource) and Section 15378(b)(2) (the activity is not a project as it involves general policy and procedure making) of the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, since it makes and implements policies and procedures to ensure that water resources are conserved by reducing water consumption through the establishment of a structure for planning, designing, installing, maintaining and managing water-efficient landscapes.

WHEREAS, the adoption and enforcement of this Ordinance is necessary to manage the MPWD's potable water supply in the short and long-term and to avoid or minimize the effects of drought and shortage within the MPWD. This Ordinance is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

NOW, THEREFORE, THE BOARD OF DIRECTORS DOES ORDAIN AS FOLLOWS:

I. Title

THIS ORDINANCE shall be known as the **MPWD Water Efficient Landscaping Ordinance, Effective February 1, 2016**.

II. Applicability

A. The provisions of this Ordinance shall apply to all of the following landscape projects:

i. New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review,

ii. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,000 square feet requiring a building or landscape permit, plan check, or design review;

iii. Existing landscapes limited to Sections 493, 493.1 and 493.2 in Division 2, Title 23 of the California Code of Regulations; all other existing landscapes shall only be subject to the provisions for existing landscapes provided for in Section XIII ”Provisions for Existing Landscapes Over One Acre in Size”.

iv. Cemeteries that are new or rehabilitated cemeteries shall only be subject to the provisions of Section VIII “Water Budget Calculations”, Section XIII “Landscape Audit Report”, and Section XV “Landscape and Irrigation Maintenance Schedule.” Existing cemeteries are limited to Section XXII “Provisions for Existing Landscapes over One Acre in Size”.

B. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix D.

C. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel’s landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D Section (b)(5).

D. This ordinance does not apply to:

i. New construction with irrigated landscape areas less than 500 square feet, rehabilitated landscapes with irrigated landscape areas less than 1,000 square feet, or landscapes that do not require a building or landscape permit, plan check or design review, or new or expanded water service;

ii. Landscapes, or portions of landscapes, that are only irrigated for an establishment period;

iii. Registered local, state or federal historical sites where landscaping establishes a historical landscape style, as determined by a public board or commission responsible for architectural review or historic preservation;

iv. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system; or

v. Community gardens or plant collections, as part of botanical gardens and arboretums open to the public, agricultural uses, commercial nurseries and sod farms.

III. Definitions

(a) “applied water” means the portion of water supplied by the irrigation system to the landscape.

(b) “automatic irrigation controller” means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

(c) “backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

(d) “Certificate of Completion” means the document required under Section 492.9.

(e) “certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation designer certification program and Irrigation Association’s Certified Irrigation Designer program.

(f) “certified landscape irrigation auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation auditor certification program and Irrigation Association’s Certified Landscape Irrigation Auditor program.

(g) “check valve” or “anti-drain valve” means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

(h) “common interest developments” means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

(i) “compost” means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

(j) “conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.

(k) “distribution uniformity” means the measure of the uniformity of irrigation water over a defined area.

(l) “drip irrigation” means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(m) “ecological restoration project” means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

(n) “effective precipitation” or “usable rainfall” (Eppt) means the portion of total precipitation which becomes available for plant growth.

(o) “emitter” means a drip irrigation emission device that delivers water slowly from the system to the soil.

(p) “established landscape” means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.

(q) “establishment period of the plants” means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth. Native habitat mitigation areas and trees may need three to five years for establishment.

(r) “Estimated Total Water Use” (ETWU) means the total water used for the landscape as described in Section VIII.

(s) “ET adjustment factor” (ETAF) means a factor of 0.55 for residential areas and 0.45 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.

(t) “evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

(u) “flow rate” means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

(v) “flow sensor” means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

(w) “friable” means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

(x) “Fuel Modification Plan Guideline” means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

(y) “graywater” means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. “Graywater” includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

(z) “hardscapes” means any durable material (pervious and non-pervious).

(aa) “hydrozone” means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non-irrigated.

(bb) “infiltration rate” means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

(cc) “invasive plant species” means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(dd) “irrigation audit” means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association’s Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency “Watersense” labeled auditing program.

(ee) “irrigation efficiency” (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.

(ff) “irrigation survey” means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

(gg) “irrigation water use analysis” means an analysis of water use data based on meter readings and billing data.

(hh) “landscape architect” means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ii) “landscape area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

(jj) “landscape contractor” means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(kk) “Landscape Documentation Package” means the documents required under Section IV.

(ll) “landscape project” means total area of landscape in a project as defined in “landscape area” for the purposes of this ordinance, meeting requirements under Section II.

(mm) “landscape water meter” means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

(nn) “lateral line” means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

(oo) “local agency” means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

(pp) “local water purveyor” means any entity, including a public agency, city, county, or private water company that provides retail water service.

(qq) “low volume irrigation” means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(rr) “low water use plant” means a plant species whose water needs are compatible with local climate and soil conditions. Species classified as "very low water use" and "low water use" by WUCOLS, having a regionally adjusted plant factor of 0.0 through 0.3, shall be considered low water use plants.

(ss) “main line” means the pressurized pipeline that delivers water from the water source to the valve or outlet.

(tt) “master shut-off valve” is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

(uu) “Maximum Applied Water Allowance” (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section IX. It is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

(vv) “median” is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

(ww) “microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

(xx) “”microspray” means a microirrigation emission device with one or more orifices to convert irrigation water pressure to water discharge with a flow rate not to exceed 30 gallons per hour at the largest area of coverage available for the nozzle series when operated at 30 psi. Microsprays are inclusive of microbubbers, microspinners, and microspray jets.

(yy) “mined-land reclamation projects” means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

(zz) “mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

(aaa) “native plant” means a plant indigenous to a specific area of consideration. For the purposes of these guidelines, the term shall refer to plants indigenous to the coastal ranges of Central and Northern California, and more specifically to such plants that are suited to the ecology of the present or historic natural community(ies) of the project’s vicinity.

(bbb) “new construction” means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

(ccc) “non-residential landscape” means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas and multifamily homes where landscaping is managed by a homeowners association or other common interest development

(ddd) "no-water using plant" means a plant species with water needs that are compatible with local climate and soil conditions such that regular supplemental irrigation is not required to sustain the plant after it has become established.

(eee) “operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

(fff) “overhead sprinkler irrigation systems” or “overhead spray irrigation systems” means systems that deliver water through the air (e.g., spray heads and rotors).

(ggg) “overspray” means the irrigation water which is delivered beyond the target area.

(hhh) “parkway” means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(iii) “permit” means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(jjj) “pervious” means any surface or material that allows the passage of water through the material and into the underlying soil.

(kkk) “plant factor” or “plant water use factor” is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the publication “Water Use Classification of Landscape Species”. Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

(lll) “project applicant” means the individual or entity submitting a Landscape Documentation Package required under Section IV, to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

(mmm) “rain sensor” or “rain sensing shutoff device” means a component which automatically suspends an irrigation event when it rains.

(nnn) “record drawing” or “as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(ooo) “recreational area” means areas, excluding private single family residential areas, designated for active play, recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

(ppp) “recycled water,” “reclaimed water,” or “treated sewage effluent water” means treated or recycled waste water or reused water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(qqq) “reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.

(rrr) “Regional Water Efficient Landscape Ordinance” means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

(sss) “rehabilitated landscape” means any rehabilitated landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet.

(ttt) “residential landscape” means landscapes surrounding single family homes or multifamily homes where landscapes are managed by individual homeowners.

(uuu) “run off” means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

(vvv) “soil moisture sensing device” or “soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(www) “soil texture” means the classification of soil based on its percentage of sand, silt, and clay.

(xxx) “Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

(yyy) “sprinkler head” or “spray head” means a device which delivers water through a nozzle.

(zzz) “static water pressure” means the pipeline or municipal water supply pressure when water is not flowing.

(aaaa) “station” means an area served by one valve or by a set of valves that operate simultaneously.

(bbbb) “swimming pool” means any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above ground, and on-ground pools; hot tubs; spa and fixed in place wading pools

(cccc) “swing joint” means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

(dddd) “submeter” means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

(eeee) “turf” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

(ffff) “valve” means a device used to control the flow of water in the irrigation system.

(gggg) “water conserving plant species” means a plant species identified as having a very low or low plant factor.

(hhhh) “water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

(iiii) “watering window” means the time of day irrigation is allowed.

(jjjj) “WUCOLS” means the current version of the Water Use Classification of Landscape Species current edition published by the University of California Cooperative Extension and the Department of Water Resources, available at:
http://ucanr.edu/sites/WUCOLS/Download_WUCOLS_IV_List/

IV. Water Conservation in Landscaping Ordinance Requirements

A. All owners of new construction and rehabilitated landscapes of applicable sizes shall: (1) complete the Landscape Project Application and Documentation Package (Section VI) and (2) comply with the Landscape and Irrigation Maintenance Schedule (Section XV) requirements of this Ordinance.

B. All owners of existing landscapes over one acre in size, even if installed before enactment of this Ordinance, shall: (1) comply with local agency programs that may be instituted relating to irrigation audits, surveys and

water use analysis, and (2) shall maintain landscape irrigation facilities to prevent water waste and runoff.

V. Compliance with Ordinance.

A. The local agency shall:

i. Provide the project applicant with the Ordinance and Landscape Project Application and Documentation Package requirements and the procedures for permits, plan checks, design reviews, or new or expanded water service;

ii. Review the Landscape Project Application submitted by the project applicant;

iii. Approve or deny the project applicant's Landscape Project Application submittal;

iv. Issue or approve a permit, plan check or design review that complies with the approved Landscape Project Application or approve a new or expanded water service application that complies with the approved Landscape Project Application;

v. Submit a copy of the complete Landscape Project Application to the local water purveyor or land use authority, as the case may be.

B. The project applicant shall:

i. Prior to construction, submit all portions of the Landscape Project Application, except the Landscape Audit Report, to the local agency; and

ii. Upon approval of the Landscape Project Application by the local agency:

a. receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;

b. submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and

c. submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

VI. Landscape Project Application and Documentation Package

A. The elements of a landscape must be designed to achieve water efficiency and will comply with the criteria described in this Ordinance. In completing the Landscape Project Application, project applicants may choose one of two options to demonstrate that the landscape meets the Ordinance's water efficiency goals. Regardless of which option is selected, the applicant must

complete and comply with all other elements of the Ordinance. The options include:

i. Planting restrictions:

a. The landscape areas may include no turf or high-water using plants; and

b. At least 80% of the plants in landscape areas shall be native plants, low-water using plants, or no-water using plants; or the

ii. Water Budget Calculation option (Section VIII).

B. The Landscape Project Application shall include the following elements:

i. Project Information;

1. Date

2. Project Applicant

3. Project address (if available, parcel and/or lot numbers)

4. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)

5. Total landscape area (Square feet)

6. Water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well

7. Checklist of all documents in Landscape Documentation Package

8. Project contacts to include contact information for the project applicant and property owner

9. Applicant signature and date with statement, “I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package”.

ii. Water Budget Calculations, if applicant selects to use a water budget approach rather than comply with the turf area limitations or specified plant type restrictions (Section VIII);

iii. Soil Management Report or Soil Management Survey (Section VII)

iv. Landscape Design Plans (Section IX);

v. Irrigation System Design Plans (Section X); and

vi. Landscape Audit Report (Section XIII).

vii. Grading Design Plan or Grading Design Survey (Section XI)

VII. Soil Management Report

A. In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, or the applicant shall complete a Soil Management Survey (Appendix E). The soil management report shall be completed as follows:

i. Submit soil samples to a laboratory for analysis and recommendations.

1. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

2. The soil analysis shall include:

a. soil texture;

b. infiltration rate determined by laboratory test or soil texture infiltration rate table;

c. pH;

d. total soluble salts;

e. sodium

f. percent organic matter; and

g. recommendations

3. In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots.

ii. The project applicant, or his/her designee, shall comply with one of the following:

1. If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or

2. If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.

iii. The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.

iv. The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

VIII. Water Budget Calculations

Project applicant may elect to complete a water budget calculation for the landscape project using the Water Efficient Landscape Worksheet in Appendix B.

Water budget calculations, if prepared, shall adhere to the following requirements:

A. The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions or professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from from 0 to 0.1 for very low water using plants, 0.1 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

B. All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone..

C. All Special Landscape Areas (SLA) shall be identified and their water use included in the water budget calculations.

D. The reference evapotranspiration adjustment factor (ETAF) for SLA shall not exceed 1.0. The ETAF for all other landscaped areas shall not exceed 0.55 for residential areas and 0.45 for non-residential areas.

E. ETo values from the Reference Evapotranspiration Table in Appendix A shall be used In calculating the Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU). For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.For the purpose of determining Estimated Total Water Use, average irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

F. MAWA shall be calculated using the equation below:

MAWA = (ETo) (0.62) [(0.55 x LA) + (0.45 x SLA)] for residential areas

MAWA = (ETo) (0.62) [(0.45 x LA) + (0.55 x SLA)] for non-residential areas

Where:
MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration (inches per year)
0.62 = Conversion Factor (to gallons)
0.55 = Reference Evapotranspiration Adjustment Factor (ETAF) for residential areas

0.45 = Reference Evapotranspiration Adjustment Factor (ETAF) for non-residential areas
LA = Landscape Area including SLA (square feet)
0.45 = Additional Water Allowance for SLA in residential areas
0.55 = Additional Water Allowance for SLA in non-residential areas
SLA = Special Landscape Area (square feet)

G. A local agency or project applicant may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate the MAWA:

i. MAWA = (ETo - Eppt) (0.62) [(0.55 x LA) + (0.45 x SLA)] for residential areas.

ii. MAWA = (ETo - EPPT) (0.62) [(0.45 x LA) + (0.55 x SLA)] for non-residential areas.

H. Estimated Total Water Use (ETWU) will be calculated using the equation below. The sum of the ETWU calculated for all hydrozones will not exceed the MAWA.

$$ETWU = (ETo)(0.62)\left(\frac{PF\ x\ HA}{IE} + SLA\right)$$

Where:
ETWU = Estimated Total Water Use per year (gallons)
ETo = Reference Evapotranspiration (inches)
PF = Plant Factor from WUCOLS (see Section 491)
HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
0.75 = Irrigation Efficiency (IE) for overhead spray devices
0.81 = Irrigation Efficiency (IE) for drip system devices
SLA = Special Landscape Area (square feet)
0.62 = Conversion Factor

IX. Landscape Design Plan

A. For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

i. Plant Material

1. Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. Methods to achieve water efficiency shall include one or more of the following:

    a. Protection and preservation of native species and natural vegetation;

    b. Selection of water-conserving plant, tree and turf species, especially local native plants;

    c. Selection of plants based on local climate suitability, disease and pest resistance;

    d. Selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area;

    e. Selection of plants from local and regional landscape program plant lists; and

    f. Selection of plants from local Fuel Modification Plan Guidelines.

2. Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section X (A)(ii)(4).

3. Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. Methods to achieve water efficiency shall include one or more of the following:

    a. Use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;

    b. Recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; allow for adequate soil volume for healthy root growth;

    c. Consider the solar orientation for plant placement to maximize summer share and winter solar gain.

4. Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25%

means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

5. High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians.

6. A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches. Refer to the local Fuel Modification Plan guidelines.

7. The use of invasive plant species, such as those listed by the California Invasive Plant Council, is strongly discouraged.

8. The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

ii. Water Features

1. Recirculating water systems shall be used for water features.

2. Where available, recycled water shall be used as a source for decorative water features.

3. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

4. Pool and spa covers are required on any newly constructed pool or spa.

iii. Soil Preparation, Mulch and Amendments

1. Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement.

2. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section VII).

3. For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.

4. A minimum three inch (3″) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to 5% of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.

5. Stabilizing mulching products shall be used on slopes that meet current engineering standards.

6. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

7. Organic mulch materials made from recycled or post-consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.

B. The landscape design plan, at a minimum, shall:

i. Delineate and label each hydrozone by number, letter, or other method;

ii. Identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;

iii. Identify recreational areas;

iv. Identify areas permanently and solely dedicated to edible plants;

v. Identify areas irrigated with recycled water;

vi. Identify type of mulch and application depth;

vii. Identify soil amendments, type, and quantity;

viii. Identify type and surface area of water features;

ix. Identify hardscapes (pervious and non-pervious);

x. Identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Project applicants shall refer to the local agency or regional Water Quality Control Board for information on any applicable stormwater technical requirements. Stormwater best management practices are encouraged in the landscape design plan and examples are provided in Section XVI;

xi. Identify any applicable rain harvesting or catchment technologies as discussed in Section XVI and their 24-hour retention or infiltration capacity;

xii. Identify any applicable graywater discharge piping, system components and area(s) of distribution;

xiii. Contain the following statement: “I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan”; and

xiv. Bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.).

X. Irrigation Design Plan

A. This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers’ recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

i. System

1. Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000 sq.ft. (the level at which Water Code 535 applies) and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:

   a. A customer service meter dedicated to landscape use provided by the local water purveyor; or

   b. A privately owned meter or submeter.

2. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required for irrigation scheduling in all irrigation systems.

3. If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required to ensure that the dynamic pressure at

each emission device is within the manufacturer's recommended pressure range for optimal performance.

   a. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

   b. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

4. Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

5. Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

6. Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

7. Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non-residential landscapes and residential landscapes of 5000 sq. ft. or larger.

8. Master shut-off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.

9. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

10. Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

11. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

12. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section VIII regarding the Maximum Applied Water Allowance.

13. All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802-2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

14. It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

15. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

16. Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

17. Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

18. Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

19. Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur.

20. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

21. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

    a. The landscape area is adjacent to permeable surfacing and no runoff occurs; or

    b. The adjacent non-permeable surfaces are designed and

constructed to drain entirely to landscaping; or

c. The irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section X (A)(1)Prevention of overspray and runoff must be confirmed during the irrigation audit.

22. Slopes greater than 25% shall not be irrigated with an irrigation system with a application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

ii. Hydrozone

1. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

2. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

3. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.

4. Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

a. Plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or

b. The plant factor of the higher water using plant is used for calculations.

5. Individual hydrozones that mix high and low water use plants shall not be permitted.

6. On the Landscape Design Plan and Irrigation Design Plan, hydrozone areas shall be designated by number, letter, or other designation. On the Irrigation Design Plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.

B. The Irrigation Design Plan, at a minimum, shall contain:

i. Location and size of separate water meters for landscape;

ii. Location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;

iii. Static water pressure at the point of connection to the public water supply;

iv. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;

v. Recycled water irrigation systems as specified in Section XVII;

vi. The following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and

vii. The signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

XI. Grading Design Plan

A. For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan or completed Grading Design Survey (Appendix E) shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.

i. The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

1. Height of graded slopes;

2. Drainage patterns;

3. Pad elevations;

4. Finish grade; and

5. Storm water retention improvements, if applicable

ii. To prevent excessive erosion and runoff, it is highly recommended that project applicants:

1. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;

2. Avoid disruption of natural drainage patterns and undisturbed soil; and

3. Avoid soil compaction in landscape areas.

XII. Certificate of Completion

A. The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:

i. Project information sheet that contains:

1. Date

2. Project name

3. Project applicant name, telephone, and mailing address;

4. Project address and location; and

5. Property owner name, telephone, and mailing address;

ii. Certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

1. Where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification;

2. A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

iii. Irrigation scheduling parameters used to set the controller (see Section XIV);

iv. Landscape and irrigation maintenance schedule (see Section XV);

v. Irrigation audit report (see Section XIII); and

vi. Soil analysis report or soil management survey, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section VII).

B. The project applicant shall:

i. Submit the signed Certificate of Completion to the local agency for review; and

ii. Ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

C. The local agency shall:

i. Receive the signed Certificate of Completion from the project applicant; and

ii. Approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

XIII. Landscape Audit Report

A. The Landscape Audit Report shall include, but is not limited to: inspection to confirm that the landscaping and irrigation system were installed as specified in the Landscape and Irrigation Design Plan, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule.

B. The Landscape Audit Report shall include the following statement: “The landscape and irrigation system has been installed as specified in the Landscape and Irrigation Design Plan and complies with the criteria of the Ordinance and the permit”.

C. Local agency shall administer on-going programs that may include, but not be limited to, post-installation landscape inspection, irrigation water use analysis, irrigation audits, irrigation surveys and water budget calculations to evaluate compliance with the MAWA.

XIV. Irrigation Scheduling

A. For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

i. Irrigation scheduling shall be regulated by automatic irrigation controllers.

ii. Overhead irrigation shall be scheduled between 6:00 p.m. and 10:00 a.m. unless weather conditions prevent it. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

iii. For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules

shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

iv. Parameters used to set the automatic controller shall be developed and submitted for each of the following:

1. The plant establishment period;

2. The established landscape; and

3. Temporarily irrigated areas

v. Each irrigation schedule shall consider for each station all of the following that apply:

1. Irrigation interval (days between irrigation);

2. Irrigation run times (hours or minutes per irrigation event to avoid runoff);

3. Number of cycle starts required for each irrigation event to avoid runoff;

4. Amount of applied water scheduled to be applied on a monthly basis;

5. Application rate setting;

6. Root depth setting;

7. Plant type setting;

8. Soil type;

9. Slope factor setting;

10. Shade factor setting; and

11. Irrigation uniformity or efficiency setting.

XV. Landscape and Irrigation Maintenance Schedule

A. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.

B. A regular maintenance schedule shall include, but not be limited to, routine inspection; auditing; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; topdressing with compost; replenishing mulch; fertilizing; pruning; weeding in all landscape areas; and removing obstructions to emission devices. Operation of the irrigation system

outside the normal watering window is allowed for auditing and system maintenance.

C. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents or with components with greater efficiency.

D. A Project applicant is encouraged to implement established landscape industry sustainable Best Practices for all landscape maintenance activities.

XVI. Stormwater Management and Rainwater Retention

A. Stormwater management practices minimize runoff and increase infiltration, which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.

B. Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater technical requirements.

C. All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to Section IX (A)(iii).

D. It is strongly recommended that landscape areas be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious surfaces (e.g., roof and paved areas) from either: the one inch, 24-hour rain event or (2) the 85th percentile, 24-hour rain event, and/or additional capacity as required by any applicable local, regional, state or federal regulation.

E. It is recommended that stormwater projects incorporate any of the following elements to improve on-site stormwater and dry weather runoff capture and use:

i. Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.

ii. Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.

iii. Incorporate pervious or porous surfaces (e.g., gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.

iv. Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water capture and reuse.

v. Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.

vi. Incorporate infiltration beds, swales, basins and drywells to capture storm water and dry weather runoff and increase percolation into the soil.

vii. Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

XVII. Recycled Water

A. The installation of recycled water irrigation systems shall allow for the current and future use of recycled water.

B. All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

C. Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.

XVIII. Graywater Systems

A. Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards. Refer to Section II (B) for the applicability of this ordinance to landscape areas less than 2,500 square feet with the Estimated Total Water Use met entirely by graywater.

XIX. Environmental Review

A. The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

XX. Provisions for Existing Landscapes

A. A local agency may by mutual agreement, designate another agency to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

XXI. Provisions for Existing Landscapes Over One Acre in Size

This section shall apply to all existing landscapes that were installed before December 16, 2015, and are over one acre in size.

A. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.

i. For landscapes that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the MAWA for existing landscapes. The MAWA for existing landscapes shall be calculated as:

MAWA = (0.8) (ETo)(LA)(0.62).

ii. For landscapes that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

iii. All landscape irrigation audits for existing landscapes that are greater than one acre in size shall be conducted by a certified landscape irrigation auditor.

B. Water Waste Prevention.

i. Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures.

ii. Restrictions regarding overspray and runoff may be modified if:

1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or

2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

XXII. Penalties

A local agency may establish and administer penalties to the project applicant for non-compliance with this Ordinance to the extent permitted by law.

A. Violation and Notice of Correction.

It is unlawful for any person, firm, partnership, association, or corporation subject to the requirements of this Ordinance to fail to comply with the outdoor water use efficiency requirements of this Ordinance. The MPWD has the authority to conduct such inquiries, audits or surveys to ensure compliance with the requirements of this Ordinance. Whenever the General Manager for the MPWD determines that a violation of this Ordinance has occurred, they may serve a notice of correction on the owner(s) of the property on which the violation is situated. The owner(s) of record shall have ninety (90) days to take corrective action.

B. Enforcement.

If an applicant for new or expanded water service fails to comply with the provisions of this Ordinance, the MPWD may require the applicant to resubmit its water service application and revised Landscape Project Application for approval and may withhold approval of the application until the applicant complies with the terms of this Ordinance. In addition to any other remedy provided herein, the MPWD may also refer enforcement of violations under this Ordinance to the City Attorney or County Counsel of the municipality where the violation occurred.

XXIII. Public Education

A. Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.

i. The local agency shall provide information to all applicants regarding the design, installation, management, and maintenance of water-efficient landscapes and irrigation systems.

B. Model Homes. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water-efficient landscapes that are described in this Ordinance.

i. Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

ii. Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes.

XXIV. Severability

If any section, subsection, provision or part of this Ordinance, or its application to any person or circumstance, is held to be unconstitutional or otherwise invalid, the remainder of this Ordinance, and the application of such provision to other person or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.

XXV. Effective Date

This Ordinance shall take effect and be in full force as of the date of its enactment. All prior ordinances or parts of ordinances that may be inconsistent with this Ordinance No. 115 hereby are repealed.

REGULARLY PASSED AND ADOPTED at a meeting of the Board of Directors of the Mid-Peninsula Water District duly held on the 16th day of December 2015, by the following vote:

AYES:

NOES:

ABSENT:

_____
President of the Board of Directors
Mid-Peninsula Water District

ATTEST:

_____
Secretary of the Board

Appendix A: Reference Evapotranspiration (ETo) Table

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
ALAMEDA													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
ALPINE													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
AMADOR													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
BUTTE													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
CALAVERAS													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
COLUSA													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
CONTRA COSTA													
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
DEL NORTE													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
EL DORADO													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
FRESNO													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual ETo**
FRESNO													
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8
GLENN													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
HUMBOLDT													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
IMPERIAL													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
INYO													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
KERN													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9
KINGS													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
KINGS													
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7
LAKE													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
LASSEN													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
LOS ANGELES													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
MADERA													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
MARIN													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
MARIPOSA													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
MENDOCINO													
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual ETo**
MENDOCINO													
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
MERCED													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5
MODOC													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
MONO													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
MONTEREY													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
NAPA													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
NEVADA													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
ORANGE													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
PLACER													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual ETo**
PLUMAS													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
RIVERSIDE													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	3.1	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Desert	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
SACRAMENTO													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
SAN BENITO													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
SAN BERNARDINO													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
SAN DIEGO													
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
SAN DIEGO													
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0
SAN FRANCISCO													
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1
SAN JOAQUIN													
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5
SAN LUIS OBISPO													
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1
SAN MATEO													
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
SANTA BARBARA													
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6
SANTA CLARA													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
SANTA CLARA													
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
SANTA CRUZ													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
SHASTA													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8
SIERRA													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
SISKIYOU													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
SOLANO													
Benicia	1.3	1.4	2.7	3.8	4.9	5.0	6.4	5.5	4.4	2.9	1.2	0.7	40.3
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
SONOMA													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
STANISLAUS													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7
Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
STANISLAUS													
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
SUTTER													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
TEHAMA													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
TRINITY													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
TULARE													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
TUOLUMNE													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
VENTURA													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
YOLO													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
YUBA													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

* The values in this table were derived from:

1) California Irrigation Management Information System (CIMIS);
2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922;
4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

Appendix B

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) _____

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
			Totals		(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
			Totals		(C)	(D)	
						ETWU Total	
						Maximum Allowed Water Allowance (MAWA)[e]	

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** **(Annual Gallons Required) =**
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed) = (****Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

CERTIFICATE OF COMPLETION & INSTALLATION

SUBMIT UPON COMPLETION OF THE LANDSCAPE PROJECT

BAWSCA Water Efficient Landscape Ordinance

Project Information

Date:	Telephone
Project Name	Email
Applicant Name (print):	Street Address
Title	State
Company	Zip

Project Owner - Declaration of Completion

Project Owner Name or Designee:
Title
Company

I certify that I have received copies of all the documents associated with the landscape project and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.

Property Owner Signature	**Date**

Licensed Professional - Declaration of Installation

I certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package.

Print Name and Company of Landscape Architect or Irrigation Designer	**Signature***	**License Number**
Email Address	**Phone Number**	

***Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

REQUIRED ATTACHMENTS:

IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller as required by the ordinance.

SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance.

LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report as required by the MWELO ordinance.

SOIL MANAGEMENT REPORT/SOIL MANAGEMENT AND GRADING DESIGN SURVEY

Attach soil analysis report OR Soil Management and Grading Design Survey, if not previously submitted with the Landscape Documentation Package as required by the ordinance. Attach documentation verifying implementation of recommendations from soil analysis report as required.

Appendix D - Prescriptive Compliance Option.

(a) This appendix contains prescriptive requirements which may be used as a compliance option to the Model Water Efficient Landscape Ordinance.

(b) Compliance with the following items is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option:

(1) Submit a Landscape Documentation Package which includes the following elements:

(A) date

(B) project applicant

(C) project address (if available, parcel and/or lot number(s))

(D) total landscape area (square feet), including a breakdown of turf and plant material

(E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)

(F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well

(G) contact information for the project applicant and property owner

(H) applicant signature and date with statement, “I agree to comply with the requirements of the prescriptive compliance option to the MWELO”.

(2) Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscape area (unless contra-indicated by a soil test);

(3) Plant material shall comply with all of the following;

(A) For residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For non-residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using

recycled water;

(B) A minimum three inch (3″) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(4) Turf shall comply with all of the following:

(A) Turf shall not exceed 25% of the landscape area in residential areas, and there shall be no turf in non-residential areas;

(B) Turf shall not be planted on sloped areas which exceed a slope of 1 foot vertical elevation change for every 4 feet of horizontal length;

(C) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

(5) Irrigation systems shall comply with the following:

(A) Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain sensor.

(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(C) Pressure regulators shall be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

(D) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.
\

(E) All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802-2014. “Landscape Irrigation Sprinkler and Emitter Standard,” All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

(F) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(6) For non-residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance.

Soil Management and Grading Design Survey

Project Name:

Project Location:

Project Lot Size:

Site Analysis Completed By:

Signature Date

This soil analysis and grading report form is designed to assist the applicant in reviewing existing conditions at their project site and evaluate opportunities to maximize benefits. Respond to the following questions, and submit a report detailing geographic features surrounding the site, topography, vegetation and other site features as directed below.

Soil Management Survey

☐ Laboratory soil analysis results are attached.

OR answer the following questions:

1. What is the infiltration rate in inches per hour for the site soil type?
(Instructions – in a minimum of three distinct locations dig a hole that would accommodate planting a 5-gallon plant. Fill hole with water and let drain. Fill hole again and measure the depth of the water in the hole and record the time it takes to infiltrate totally into the soil with no remaining standing water. Note the time of year and the level of existing soil saturation by touch).

2. What is the primary project site soil texture? (Example – clay, loam, silt, sand, etc)

3. What is the soil color at 2 inches depth? What is the color at 6 inches? What is the color at 12 inches? (Example – black, dark or light brown, red, gold, gray, blue, etc)

4. Has the site been previously or historically contaminated with toxic materials?

Comments:

Grading Design Survey

☐ Grading Design Plan is attached.

OR answer the following questions:

1. Does the stormwater runoff from the site discharge to (check all that apply):
   - ☐ Indirectly to waters of the U.S. (i.e. discharge flows overland across adjacent properties or rights-of-way prior to discharging into water of the United States)
   - ☐ Storm drain system
   - ☐ Directly to the water of the U.S. (e.g. river, lake, creek, stream, bay, ocean, etc.)

2. Has a stormwater pollution prevention plan been prepared for this site?
   - ☐ Yes
   - ☐ No

3. Is there potential for filtering or infiltrating stormwater in the landscape areas (e.g. grassy swales, infiltration planters, bioretention areas)?
   - ☐ Yes
   - ☐ No

4. Is there potential to store rainwater for future use?
   - ☐ Yes
   - ☐ No

5. Is the proposed site within a 100 year floodplain?
   - ☐ Yes
   - ☐ No

6. Is a creek protection plan required for this site?
   - ☐ Yes
   - ☐ No

Comments:

MID-PENINSULA WATER DISTRICT

AGENDA ITEM NO. 7.A.

DATE: January 28, 2016

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: DROUGHT AND WATER CONSERVATION PROGRESS REPORT

RECOMMENDATION

Receive progress report on drought and water conservation activities.

BACKGROUND

June 1, 2015 was the start of the SWRCB's measurement period for the 2015/2016 statewide water conservation goals. The MPWD system's conservation goal is 20% when compared to 2013 water consumption. The measurement period initially ended February 29, 2016; however, the State is currently considering extension to October 31, 2016.

DISCUSSION

The report due January 15th to the SWRCB was timely submitted. December's water consumption was 70,423 units—**the lowest in MPWD's history for December since 1963!** The reduction (compared with 2013) measured -25.1% and **the R-GPCD was 54, exceeding the SWRCB's 55GPCD performance standard for indoor use!** *By comparison, the December 2014 PERCENT CHANGE was -22.6% and the R-GPCD was 57.*

MPWD's cumulative water savings (since tracking started on June 1, 2015) = -27.7%, which is 7.7% greater than the MPWD system conservation goal of 20%.

2015/2016 MONTH	*2015/2016 UNITS*	*2013 UNITS*	*PERCENT CHANGE**	*CUMULATIVE WATER SAVINGS**	*2015/2016 R-GPCD*	*2013 R-GPCD*
June	103,863	150,614	-31.0%	-31.0%	82.3	122.6
July	105,639	156,081	-32.3%	-31.7%	81.1	122.9
August	106,832	155,788	-31.4%	-31.6%	82.0	122.7
September	105,459	145,551	-27.5%	-30.6%	83.6	118.5
October	98,345	122,117	-19.5%	-28.3%	75.5	96.2
November	77,733	106,535	-27.0%	-28.1%	61.6	86.7
December	70,423	94,062	-25.1%	-27.7%	54.0	74.1
January		84,202				66.3
February		86,478				75.4

**Compared to 2013.*

The R-GPCD (Residential-Gallons Per Capita Day) calculations are highlighted above in yellow. The SWRCB performance standard for indoor use is 55GPCD. *(Note: For 2015/2016, the SWRCB formula for calculating the R-GPCD included MPWD factors: 85% residential use of total production, and 2014 population projection—26,730—from 2010 Urban Water Management Plan.)*

MPWD started tracking water waste complaints in July 2014. All have been investigated and resolved through communications and education.

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2016													
2015	2	0	5	12	6	6	12	5	5	3	1	0	58
2014	-	-	-	-	-	-	3	6	3	4	7	0	23

The first annual MPWD Water Conservation Report will be mailed out with the Winter 2015/2016 Waterline Newsletter by the end of January. It is filled with interesting water savings facts and articles to keep customers abreast of MPWD rebate program progress and water conservation activities and relationships.

The SWRCB statewide Emergency Conservation Regulation Update and Media Release entitled "State's Cumulative Water Savings Continue to Meet Governor's Ongoing Conservation Mandate," both dated January 5, 2016, are attached for information.

The quarterly report by Jeanette Kalabolas on water conservation activities is attached.

BACKGROUND

The following Calendar Year 2014 and 2015 tables reflect MPWD's water system purchases in units (1 unit = 748 gallons), percentage change comparison, and cumulative average savings (highlighted in blue).

CALENDAR YEAR 2015 - JANUARY THROUGH MAY

2015 MONTH	2015 UNITS	2014 UNITS	2013 UNITS	PERCENT CHANGE*	CUMULATIVE WATER SAVINGS*	2015 R-GPCD	2014 R-GPCD	2013 R-GPCD
January	82,360	102,910	84,202	-2.2%	-2.2% / -15.1%**	64.9	81.1	66.3
February	79,782	73,221	86,478	-7.7%	-5.0% / -14.5%	69.6	63.9	75.4
March	102,964	89,152	106,663	-3.5%	-4.5% / -13.7%	81.1	70.2	84.0
April	91,491	96,019	120,265	-23.9%	-9.3% / -14.4%	74.5	78.2	97.9
May	97,806	126,934	155,736	-37.2%	-14.9% / -15.8%	77.1	100.0	122.7

**Compared to 2013. **Cumulative total since February 2014.*

CALENDAR YEAR 2014 - FEBRUARY THROUGH DECEMBER

2014 MONTH	2014 UNITS	2013 UNITS	PERCENT CHANGE*	CUMULATIVE WATER SAVINGS*	2014 R-GPCD	2013 R-GPCD
February	73,221	86,478	-15.3%	-15.3%	64	75
March	89,152	106,663	-16.4%	-15.9%	70	84
April	96,019	120,265	-20.2%	-17.3%	78	98
May	126,934	155,736	-18.5%	-17.6%	100	123
June	139,729	150,614	-7.2%	-15.5%	114	123
July	134,669	156,081	-13.7%	-15.2%	106	123
August	128,924	155,788	-17.2%	-15.5%	102	123

September	118,284	145,551	-18.7%	-15.9%	96	119
October	109,652	122,117	-10.2%	-15.3%	92	96
November	86,670	106,535	-18.6%	-15.6%	71	87
December	72,835	94,062	-22.6%	-16.2%	57	74

**Compared to 2013.*

The R-GPCD (Residential-Gallons Per Capita Day) calculations are highlighted above in yellow. The SWRCB performance standard for indoor use is 55GPCD. *(Note: For Calendar Years 2014 and 2015 tracking, the SWRCB formula for calculating the R-GPCD included MPWD factors: 85% residential use of total production, and population from 2010 Urban Water Management Plan—26,030.)*

Attachments: SWRCB statewide Emergency Conservation Regulation Update dated January 5, 2016
SWRCB Media Release dated January 5, 2016
Staff Quarterly Report on Water Conservation Activities

MID-PENINSULA WATER DISTRICT

DATE: January 21, 2016

TO: Tammy Rudock, General Manager

FROM: Jeanette Kalabolas, Water Conservation Specialist

SUBJECT: 2015 FOURTH QUARTER WATER CONSERVATION STAFF REPORT

SUBJECT #1: CUWCC 2013-2014 Best Management Practices Filing
BACKGROUND: The California Urban Water Conservation Council (CUWCC) is a membership organization dedicated to maximizing urban water conservation throughout California by supporting and integrating innovative technologies and practices. In 1991 the CUWCC adopted an MOU regarding Urban Water Conservation in California containing "Best Management Practices (BMPs) intended to reduce long-term urban demands from what they would have been without implementation of specific practices and are in addition to programs which might be instituted during occasional water supply shortages.
DISCUSSION: Staff submitted the MPWD's 2013 and 2014 reports to the CUWCC by the deadline of October 31, 2015. CUWCC has reviewed the MPWD's filings and responded by issuing a retail coverage report stating MPWD is on track and in compliance with respect to all foundational BMPs, including allotted gallons per capita per day.

SUBJECT #2: 2015 Water Awareness Calendar Award Ceremony
BACKGROUND: Each year MPWD sponsors a community school contest grades 3-5 to increase students' water savings awareness. Rain or shine, key conservation practices are necessary to assure enough water for the health and well-being of our youth and planet.
DISCUSSION: The deadline to submit entries was November 13, 2015. Four schools participated in this year's contest - Belmont Oaks Academy, Cipriani Elementary School, Immaculate Heart of Mary and San Carlos Charter Learning Center for a total of 130 drawings. Twelve winning entries were selected by MPWD staff. Gift awards will be issued as follows: Grand-Prize $50, plus two Runner-Ups at $25 each. A small token of appreciation in the amount of $100.00 will also be presented to the teacher with the most student participation. Certificates of Recognition and copies of the finished calendar will be provided to nine honorable mention entries as well. A ceremony acknowledging all students whose artwork was chosen for feature in the 2016 annual calendar will take place at next week's Board meeting on Thursday, January 28, 2016 at 6:30PM. A brief reception will follow.

SUBJECT #3: MPWD 2016 Water Conservation Preview
BACKGROUND: Even though the El Nino weather pattern seems to be holding as predicted, state speculation based on early water year 2015-2016 rain totals to date seems to indicate that after four consecutive dry years significant drought challenges will remain.

DISCUSSION: MPWD will extend its 20 ways to save 20% campaign through the second half of FY 2015-2016. Messaging will continue through the use of routine bill inserts, the MPWD's website and community partnerships, i.e. City of Belmont, Chamber of Commerce, Schools, etc. The MPWD will also take the opportunity in 2016 to look into various award opportunities on all levels (local, regional and state). Possibilities include: Acterra, CoolCalifornia.org (California Small Businesses), ACWA and other business enviro-friendly prospects. Staff will also search "outside the box" this year and look to become more involved in unique community experiences featuring water savings opportunities. An event of this nature has already been scheduled for February 29, 2016. The MPWD's Water Conservation Specialist will participate on a panel as a judge for a private company called Accenture based out of Redwood City. Accenture is hosting a software hack-a-thon over a 48-hour period where competitors will work in teams of four or five to create a liquid application, and then present a finished product to a group of judges comprised of experienced water professionals that will grade the team projects on a series of predetermined measures. Accenture's event will serve to benefit Girls Who Code, a local charity charter that helps young girls bridge the gender gap in technology.

SUBJECT #4: SFPUC Early Winter Storage Outlook
BACKGROUND: Based on November 2015 supply totals, SFPUC advised that customer conservation remains strong and although the water bank has worked well for the past three years and will work again in 2016, limitations can be expected. They also reminded customers they will continue to monitor SWRCB actions regarding curtailments and take appropriate action with respect to water rights when necessary.
DISCUSSION: The National Weather Service's Climate Prediction Center continues to provide an optimistic seasonal outlook for precipitation in the upcoming months. Area water sheds are experiencing wetter weather patterns and are on track for "average" precipitation. November 2015 local rain fall totals were recorded as follows: Pilarcitos 57%, Lower Crystal Springs 63% and Calaveras 106% of average. Storage levels within the Hetch Hetchy Regional Water System remain substantially above the previous drought period of 1987-1992. In the high country cool storms every 7 to 10 days have been persistent over the course of the last few months. Seasonal snowpack is building and there is snow across the entire watershed above all 3 reservoirs (Hetch Hetchy, Cherry and Eleanor). Although cold temperatures are resulting in lower snowlines and substantial accumulation, river flows remain moderate.

SUBJECT #5: State Water Resources Control Board (SWRCB) Proposed Regulatory Framework for Extended Drought Emergency Regulations
BACKGROUND: In early 2014 Governor Brown signed a drought emergency proclamation mandating water industry officials take necessary actions in preparation for record dry conditions. Effective August 1, 2014, the SWRCB implemented emergency water conservation regulations prohibiting excess outdoor water use. Executive Order B-28-14 followed in December 2014 extending the operation of provisions through May 31, 2015. A third Executive Order B-29-15 was again issued in April 2015 with key provisions ordering the SWRCB to impose restrictions to achieve a 25% reduction in potable urban water usage through February 28, 2016, further directing the California Department of Water Resources to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directing the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.

DISCUSSION: On December 21, 2015, the SWRCB issued a proposed regulatory framework for extended emergency regulations for urban water conservation through October 31, 2016 as follow-up to the Governor's Executive Order 8-36-15 issued November 13, 2015. A summary of proposed changes are as follows – A) Climate Change – SWRCB staff recommends allowing the conservation standard to be reduced by up to 4% for urban water suppliers in the warmest regions of the state based on service area evapotranspiration relative to the statewide average ET, B) Growth Adjustment – SWRCB staff recommends allowing the conservation standard to be as a result of water efficient growth since 2013 based on the formula set forth in the proposed regulatory framework, C) Drought Resilient Sources of Supply Credit – SWRCB staff recommends allowing the conservation standard to be reduced by 4% for urban water suppliers that are using drought resilient water supplies (indirect potable reuse of coastal wastewater) or desalinated seawater developed since 2013 that makes up at least 4% of its potable water supply, D) Commercial Agriculture Exclusion - SWRCB staff recommends allowing the conservation standard to be reduced by subtracting a customers water use that produces a minimum of $1,000 per year in revenue from agricultural sales. Further, SWRCB staff recommends that all credits and adjustments to the conservation standard be capped at a maximum reduction of 4% (one tier) for any water supplier. In addition, SWRCB staff recommends that all other elements of the current emergency regulation remain in effect. SWRCB staff also recommends including a prohibition against homeowner's associations interfering with certain conservation actions by their association members in violation of existing law. The SWRCB staff considered, but does not recommend incorporating, proposals that involve (1) non-potable recycled water use credits, (2) groundwater credits, (3) a regional compliance approach, (4) an exemption for regions without drought conditions and no export/import of water (isolated hydro-geologic regions) or (5) revisions for suppliers with significant seasonal or transient populations. The SWRCB accepted comments to the proposed regulatory framework up to January 6. A draft of the SWRCB emergency regulation is expected to be released for public comment this week.

SUBJECT #6: Bay Area Water Supply and Conservation Agency (BAWSCA) Rebates Database Conversion

BACKGROUND: Come 2016 BAWSCA will administer a subscription-based Conservation Management System Program in which ConserveTrack will develop and implement a regional conservation Data Management System (DMS) for member Agencies.

DISCUSSION: This database system will primarily be used as a rebate center for online processing of High-Efficiency Toilet, Lawn Be Gone, and Rain Barrel rebate applications. All BAWSCA member agencies that participate in at least one of the aforementioned programs will be required at a minimum to use the "new" BAWSCA Rebate Center in a Mini DMS capacity for the processing of all rebate applications. Set up and maintenance costs will apply. An alternate option will also be made available, on a larger scale to any Agencies interested in ConserveTrack configuring Agency-specific water conservation programs and activities, including, but not limited to, retrofit programs, leak detection, surveys/audits, AMI integration and water waste violation enforcement. Additional monthly hosting, maintenance and user support fees will be charged.

Emergency Water Conservation Regulation Update

Office of Research, Planning, and Performance

January 5, 2016

CALIFORNIA Water Boards

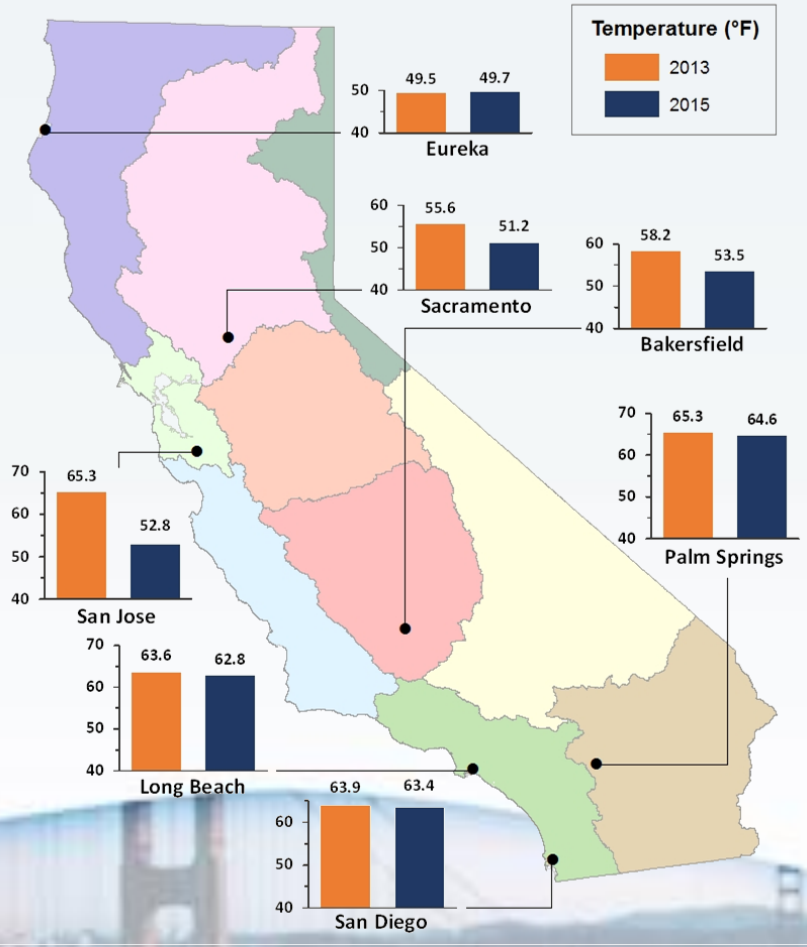
Status of Implementation

- Water production numbers collected from June 2014 through November 2015 (18 months)
- Sixth month with statewide goal to reduce total potable urban water use by 25 percent
- 405 (of 411) suppliers submitted November reports
- 1,500+ small water suppliers submitted reports

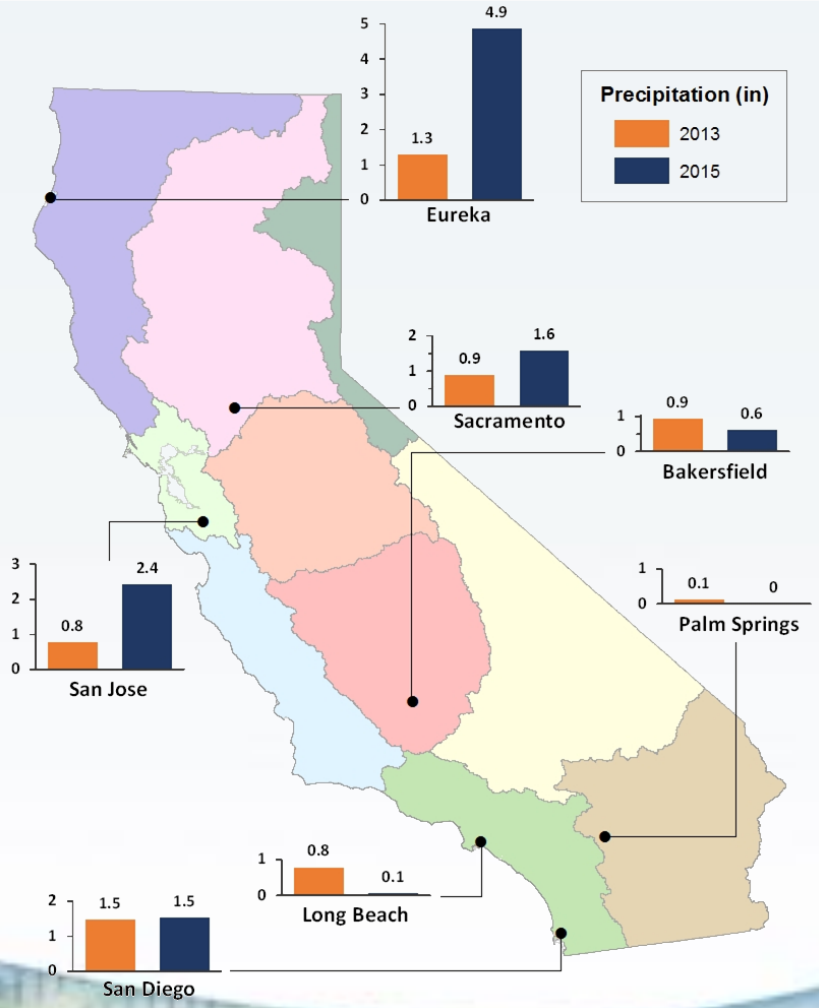
November Weather Conditions

(Select Cities)

Temperature



Precipitation

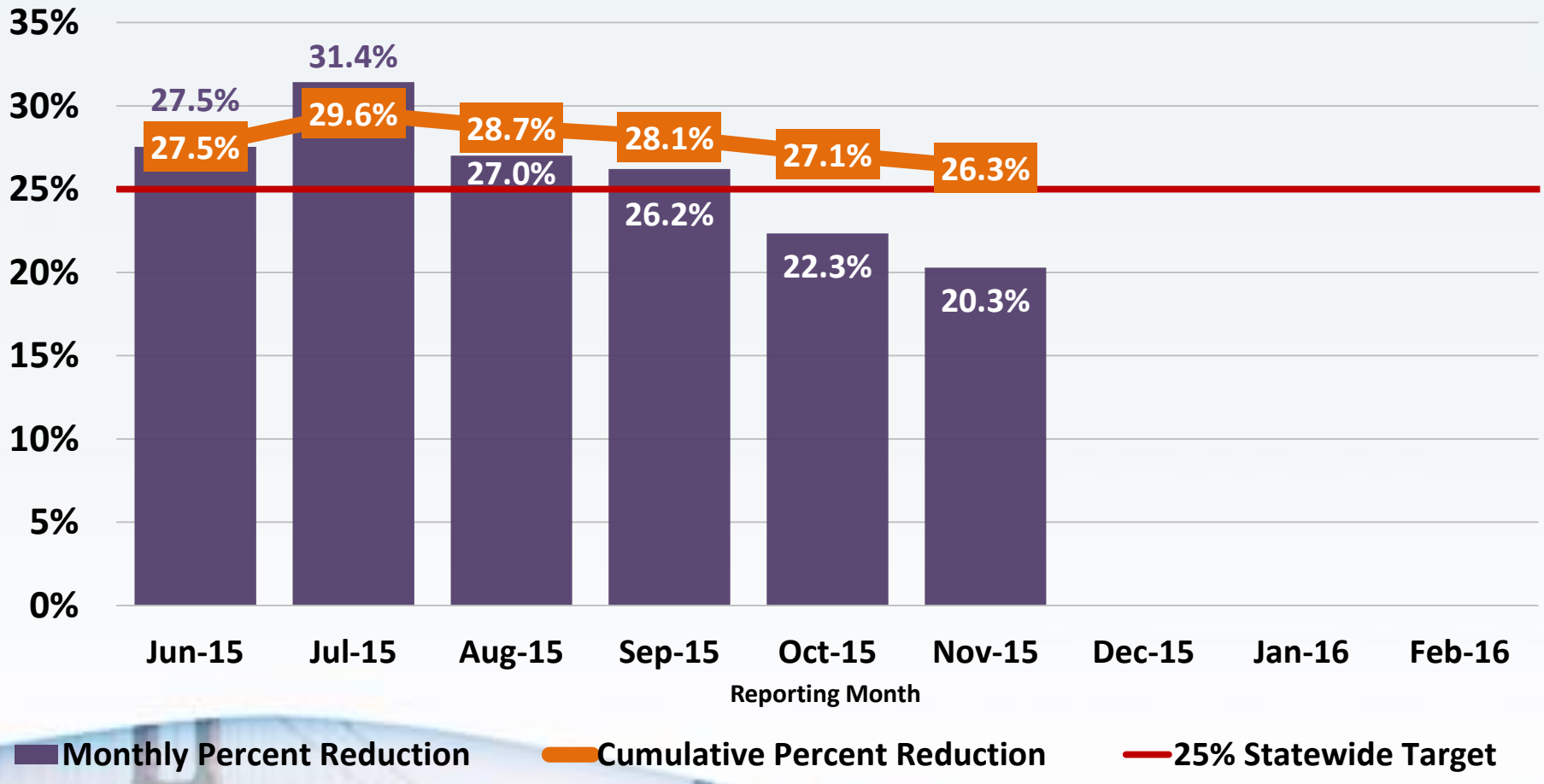


Statewide, November 2015 was cooler and wetter than November 2013.

Data Source: U.S. Climate Data http://www.usclimatedata.com/

Statewide Water Conservation Results Water Production Percentage Reduction

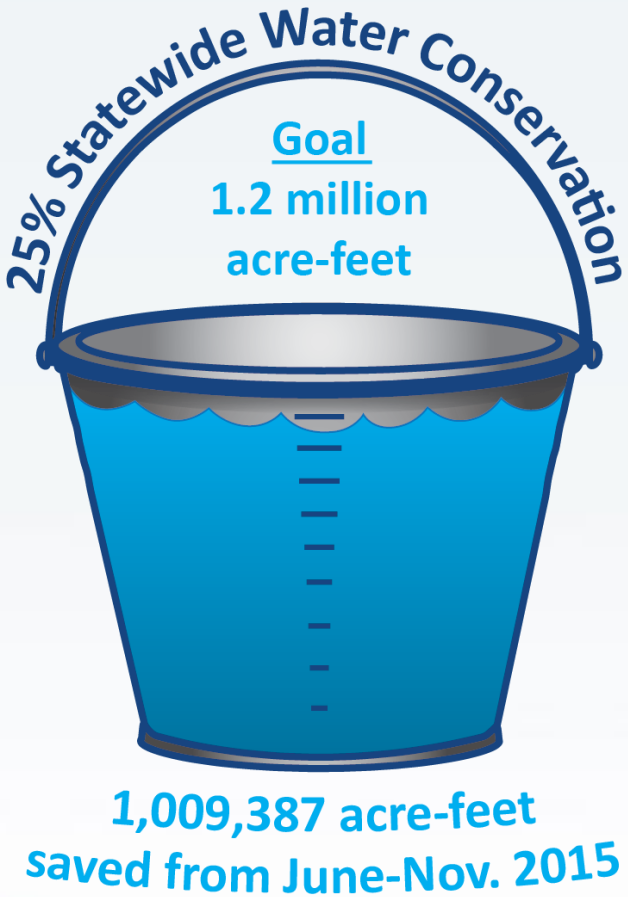
(Compared to 2013)



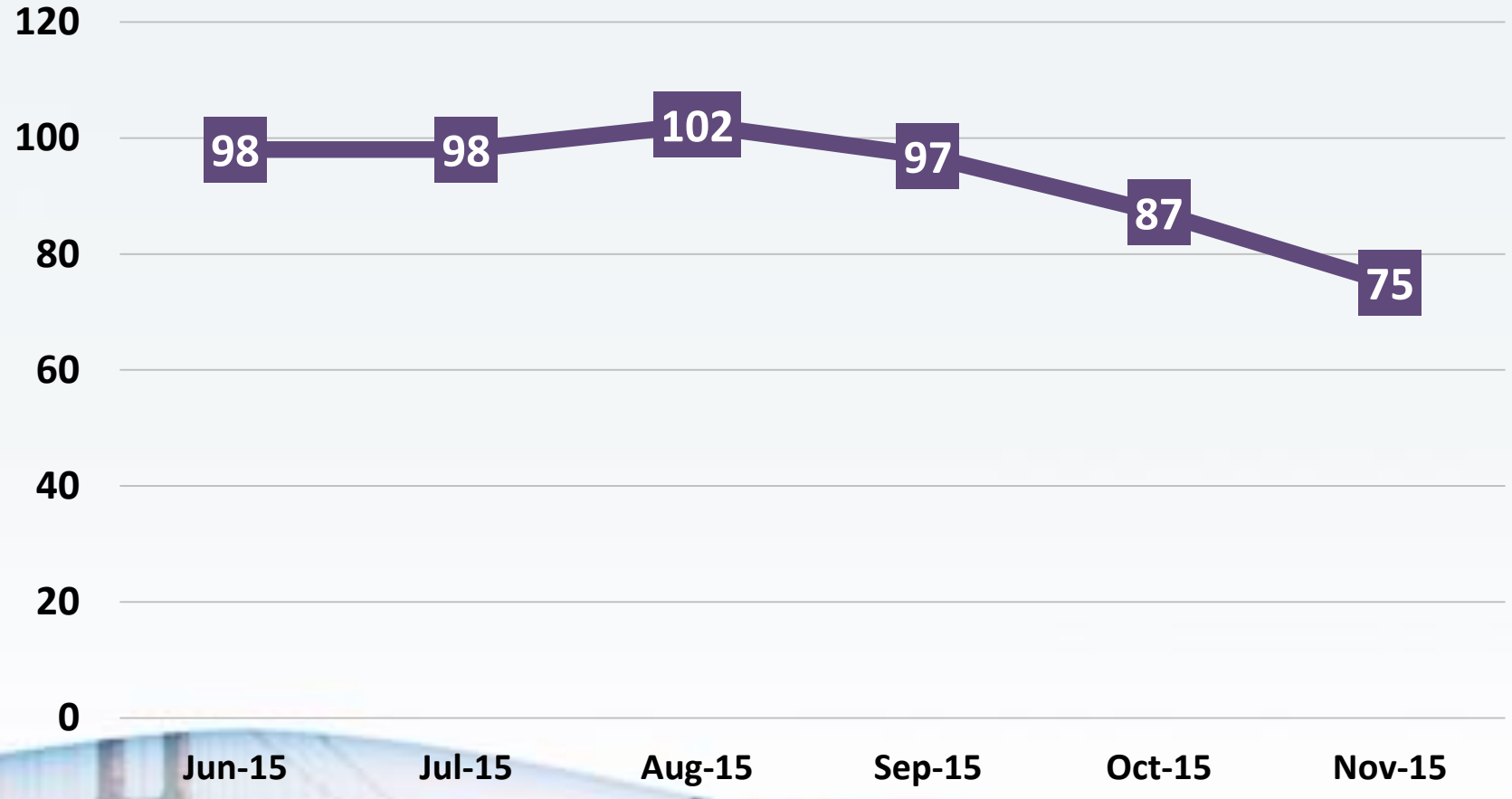
November 2015 savings (30.7 billion gallons) is two times greater than November 2014 savings (15.8 billion gallons)

Cumulative Savings (June - November 2015)

- 1,009,387 acre-feet (328.9 billion gallons) of water saved
- This is 84% of savings goal
- Savings is enough to provide 5 million Californians with water for one year



Statewide Monthly Average Residential Gallons per Capita per Day

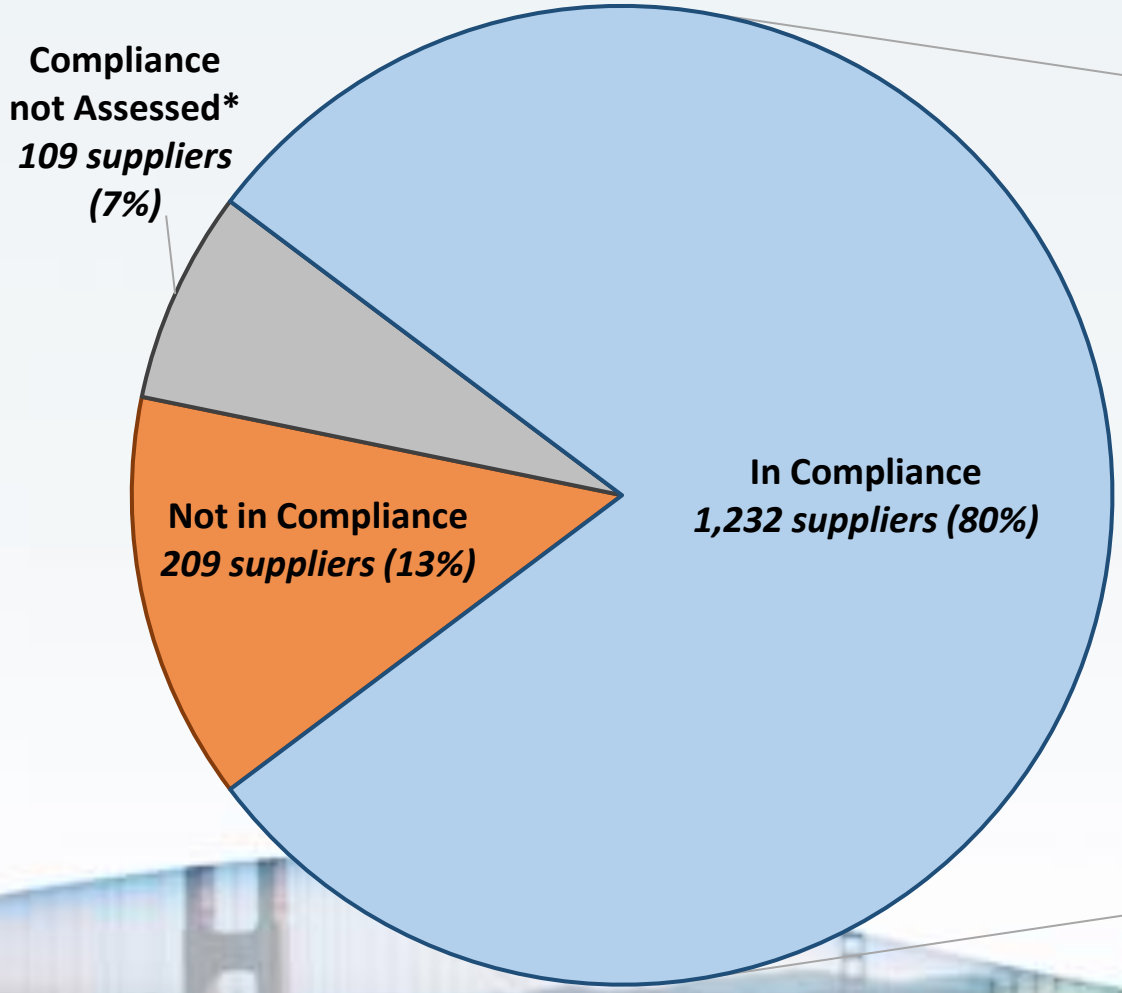


Average statewide November 2015 R-GPCD = 75

Small Water Supplier Reports

- Water use report for suppliers with 3,000 or fewer customers.
- Suppliers can comply by:
  - Limiting outdoor landscape irrigation to no more than two days per week, OR
  - Reducing June through November 2015 total potable water production by 25 percent, as compared to 2013.

Small Water Supplier Reports



> 25% Water Saved *228 suppliers (15%)*
> 25% Water Saved AND Max 2 Days/Week Irrigation *589 suppliers (38%)*
Max 2 Days/Week Irrigation *415 suppliers (27%)*

** Due to incomplete monthly total water production data.*

Next Steps

- January 6 - comments on staff-proposed framework for next iteration of emergency regulation due.
- Mid-January - release draft updated emergency regulation for public comment.
- Early February – Board consideration of updated emergency regulation.

Media Release

STATE'S CUMULATIVE WATER SAVINGS CONTINUE TO MEET GOVERNOR'S ONGOING CONSERVATION MANDATE

MONTHLY CONSERVATION AVERAGE DECREASES FOR SECOND MONTH IN A ROW; PER PERSON WATER USE DECLINES STATEWIDE WITH LOWEST AVERAGE EVER

FOR IMMEDIATE RELEASE
Jan. 5, 2016

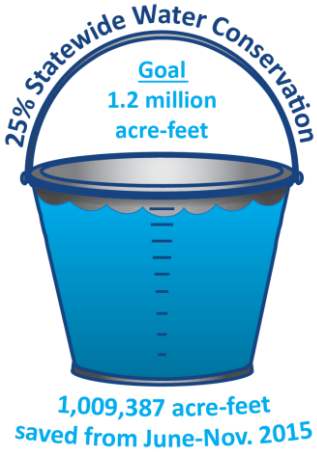
Contact: George Kostyrko
gkostyrko@waterboards.ca.gov

SACRAMENTO – Californians have reduced water use by 26.3 percent in the six months since emergency conservation regulations took effect in June, continuing to meet Governor Edmund G. Brown Jr.'s 25 percent mandate despite a decline in the statewide water-savings rate for the last two months.

In November, when outdoor water use dramatically drops, the statewide conservation rate was 20.3 percent, down from 22.3 percent in October. In contrast, average statewide water use declined from 87 gallons per person per day in October to 75 in November – the lowest observed since the Water Board's emergency regulation went into effect.

"We expected the percentage drop in the cooler fall and winter months when we use less water in general so we are still on track," said Felicia Marcus, chair of the State Water Resources Control Board. "The fact that per person water use dropped to 75 gallons per person per day on average is proof that Californians are clearly thinking twice before turning on the tap. As welcome as recent rain and snow are, we've been in such a deep drought that we won't know until spring whether we can let up on conservation."

In November 2015, the Governor issued an additional Executive Order directing the State Water Board to extend and revise the emergency water conservation regulations based on conditions through January. Out for public review is a staff-proposed framework for the next iteration of the drought



Water Conservation Quick Links

Factsheet: November by the Numbers

June 2014-November 2015 data set

Cumulative Savings and Conservation Compliance for November

November Savings by Region

Supplier Enforcement Statistics

Small Supplier June 2015-November 2015 data set

emergency water conservation regulation, which is intended to replace the current regulations, set to expire in the middle of next month. Following public review of the framework, staff will release a draft updated emergency regulation for public comment in mid-January. State Water Board consideration of an extended emergency regulation is anticipated Feb. 2.

Small Water Supplier Reporting Status

Small water suppliers (those with 3,000 or fewer customers) were required to report water use by Dec. 15, and to date about half of these small water suppliers have submitted reports. Of those reporting, 1,232 small water suppliers (80 percent) are in compliance with the emergency regulation; 209 suppliers (13 percent) are not in compliance; and compliance for 109 suppliers (7 percent) could not be assessed. The full report of information submitted by small water suppliers is available here.

November Conservation Data

- For June through November, the cumulative statewide reduction was 26.3 percent, compared with the same months in 2013. That equates to over 1 million acre-feet, putting the state more than 80 percent of the way to meeting the 1.2 million acre-feet savings goal to be achieved by February 2016.
- Statewide water savings for November 2015 was 20.3 percent (94,236 acre feet or 30.7 billion gallons), a decrease from October 2015's 22.3 percent savings. See fact sheet here.
- Statewide average R-GPCD for November 2015 was 75 gallons, a significant decrease from the 87 residential gallons per capita per day reported for October.

Conservation Must Continue Through Winter

Despite recent rain and snow, most of California is still experiencing severe drought. Residential water users are urged to keep up their efforts to conserve through the winter months. That includes complying with urban water supplier directives to switch to watering schedules of once a week as well as a prohibition against watering during a rain event and 48 hours directly following a rain event.

Background

In his April 1, 2015 Executive Order, Gov. Brown mandated a 25 percent water use reduction for cities and towns across California. In May 2015, the State Water Board adopted an emergency regulation requiring an immediate 25 percent reduction in overall potable urban water use. The regulation uses a sliding scale for setting conservation standards, so that

communities that have already reduced their R-GPCD through past conservation will have lower mandates than those that have not made such gains since the last major drought.

The State Water Board tracks water conservation for each of the state's urban water suppliers (those with more than 3,000 customers) on a monthly basis, but compliance with individual water supplier conservation requirements and the statewide 25 percent mandate is based on cumulative savings. Cumulative tracking means that conservation savings will be added together from one month to the next and compared to the amount of water used during the same months in 2013.

California has been dealing with the effects of an unprecedented drought. To learn about all the actions the state has taken to manage our water system and cope with the impacts of the drought, visit Drought.CA.Gov. Every Californian should take steps to conserve water. Find out how at SaveOurWater.com. In addition to many effective local programs, state-funded turf removal and toilet replacement rebates are also now available. Information and rebate applications can be found at: www.saveourwaterrebates.com/.

###

MID-PENINSULA WATER DISTRICT

AGENDA ITEM NO. 7.B.

DATE: January 28, 2016

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: PROGRESS REPORT ON 2015 URBAN WATER MANAGEMENT PLAN (UWMP)

RECOMMENDATION
Receive progress report on 2015 UWMP.

FISCAL IMPACT
This project is budgeted at $60,000 within the MPWD FY 2015/2016 Operating Budget. MPWD's contract with ManageWater Consulting, Inc. was approved by the Board on December 16, 2015, in the amount of $38,860, plus an option not to exceed $10,000 to negotiate services for a revised WSCP, for a potential project total of $48,860.

RECAP:	
Project budget:	$38,860 for UWMP
	$10,102 approved proposal for revised WSCP
TOTAL	$48,962
Expended to date:	$ 4,600
BALANCE	$44,362

BACKGROUND
The California Water Code (CWC) Section 10620(a) requires an urban water supplier to prepare and adopt an UWMP consistent with CWC Section 10640. All urban water suppliers, either publicly or privately owned, serving municipal water to 3,000 or more customers or supplying more than 3,000AF annually are required to prepare an UWMP. The UWMP is required for an urban water supplier to be eligible for California Department of Water Resources (CA DWR) state grants, loans, and drought assistance. **The UWMP must be adopted and submitted to the DWR by July 1, 2016.**

DISCUSSION

Progress highlights:

- A project kick-off meeting was held on December 18, 2015, wherein staff and consultant tasks and responsible parties were identified. The MPWD staff team: Tammy Rudock, Rene Ramirez, Brent Chester, and Jeanette Kalabolas. President Matt Zucca is the Director assigned as Board liaison for the project.

- The project team has finalized a DRAFT of the first three chapters.

- Vice President Warden's concern about the timing for the Board's consideration and approval of the UWMP was addressed by the team, and the schedule was amended to accommodate additional consideration at the Board's May 26, 2016 regular meeting. Any final edits will be considered at the Board's June 23, 2016 regular meeting for timely submittal to the State by July 1, 2016.

- President Zucca was updated on January 15, 2016, and he expressed an interest in attending the project meeting wherein water supply and demand will be discussed.

- The MPWD received the consultant's proposal dated January 16, 2016 to revise the MPWD WSCP ($10,102 total) and it was reviewed and deemed appropriate for the task.

- The next project meeting is scheduled for January 28, 2016.

For perspective, attached is a checklist (Table F-2) itemizing UWMP requirements from the Urban Water Management Planning Act and SB X7-7. It is provided to support water suppliers during preparation of their UWMPs.

Monthly progress reports will be presented on this project until the public review drafts of the 2015 UWMP are presented in May and June 2016.

Attachment F

UWMP Checklist

This checklist is developed directly from the Urban Water Management Planning Act and SB X7-7. It is provided to support water suppliers during preparation of their UWMPs. (Not included here is a similar Table F-1, which is organized according to the California Water Code.) Table F-2 is organized by subject.

Each water supplier submitting an UWMP can also provide DWR with the UWMP location of the required element by completing the last column of Table F-2. This will support DWR in its review of these UWMPs. The completed form can be included with the UWMP.

If an item does not pertain to a water supplier, then state the UWMP requirement and note that it does not apply to the agency. For example, if a water supplier does not use groundwater as a water supply source, then there should be a statement in the UWMP that groundwater is not a water supply source.

TABLE F2 – Checklist Arranged by Subject

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location *(Optional Column for Agency Use)*
10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Section 2.1	
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.5.2	
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.5.2	
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	
10631(a)	Indicate the current population of the service area.	System Description and Baselines and	Sections 3.4 and 5.4	

		Targets		
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	
1608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.8.2	
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Section 5.1	
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	

10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4	
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	
10631(i)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	
10631(j)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	
10631(j)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	
10633(b)	Describe the quantity of treated wastewater	System Supplies	Section	

	that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	(Recycled Water)	6.5.2.2	
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	
10632(a)(2)	Provide an estimate of the minimum water	Water Shortage	Section 8.9	

	supply available during each of the next three water years based on the driest three-year historic sequence for the agency.	Contingency Planning		
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	
10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2 and 9.3	
10631(f)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	
10631(j)	CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water	Plan Adoption, Submittal, and Implementation	Section 10.2.1	

	supplier will be reviewing the plan and considering amendments or changes to the plan.			
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	

MID-PENINSULA WATER DISTRICT

AGENDA ITEM NO. 8.A.

DATE: January 28, 2016

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: PROGRESS REPORT ON PRELIMINARY DESIGN AND CONSTRUCTION SCHEDULE FOR PROPOSED MPWD CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2016/2017 THROUGH 2020/2021

RECOMMENDATION

Receive progress report on preliminary Design and Construction Schedule for proposed MPWD CIP for FY 2016/2017 through 2020/2021.

FISCAL IMPACT

None.

DISCUSSION

District Engineer Pakpour and staff will present a progress report on the attached preliminary Design and Construction Schedule for the proposed MPWD CIP.

The District Counsel legal review was recently completed on the contract for the Municipal Financial Advisor, and staff will be finalizing it within the next couple of weeks to begin working with the team on CIP financing options.

Attachment: Preliminary Design and Construction Schedule Summary for Proposed MPWD CIP

BOARD ACTION: APPROVED:_____ DENIED:_____ POSTPONED:_____ STAFF DIRECTION:_____

UNANIMOUS_____ ZUCCA_____ WARDEN_____ STUEBING_____ VELLA_____ LINVILL_____

Priority	Project Number	Zone	Project Name	Quantity LF	Quantity SRV	Quantity HYD	Construction	Planning, Design & CM	Contingency	2015 Dollars	2016-2017	104.0% 2017-2018	108.2% 2018-2019	112.5% 2019-2020	117.0% 2020-2021	Total
1	15-14	3	Mezes Avenue Improvements	310	10	1	$ 122,500	$ 37,000	$ 15,500	$ 175,000	$175,000					$175,000
2	15-30	3	Alameda De Las Pulgas Improvements	1460	32	4	$ 591,000	$ 118,000	$ 71,000	$ 780,000	$780,000					$780,000
3	15-76	1	El Camino Real Improvements	4100	23	12	$ 1,463,000	$ 360,000	$ 277,000	$ 2,100,000		$150,000	$150,000	$2,024,755		$2,324,755
4	15-65	2	Folger Drive Improvements	830	12	3	$ 306,000	$ 77,000	$ 37,000	$ 420,000	$60,000	$374,400				$434,400
5	15-73	1	Karen Road Improvements	800	9	2	$ 307,000	$ 80,000	$ 38,000	$ 425,000	$425,000					$425,000
6	15-10	3	Notre Dame Avenue Loop Closure	2230	29	3	$ 689,500	$ 138,000	$ 82,500	$ 910,000	$110,000	$832,000				$942,000
7	15-44	2	South Road Abandonment	0	19	3	$ 302,000	$ 75,000	$ 38,000	$ 415,000	$60,000	$369,200				$429,200
8	15-22	3	Arthur Avenue Improvements	880	15	2	$ 345,000	$ 87,000	$ 43,000	$ 475,000	$475,000					$475,000
9	15-16	3	Williams Avenue, Ridge Road, Hillman Avenue Improvements	2460	59	4	$ 834,000	$ 166,000	$ 100,000	$ 1,100,000				$150,000	$1,111,366	$1,261,366
10	15-43	2	North Road Cross Country / Davey Glen Road Improvements	1400	17	5	$ 496,000	$ 124,000	$ 60,000	$ 680,000	$100,000	$603,200				$703,200
11	15-06	5	Zone 5 Fire Hydrant Upgrades	0	0	7	$ 105,000	$ 31,000	$ 14,000	$ 150,000		$156,000				$156,000
12	15-78	1	Civic Lane Improvements	1800	20	5	$ 605,000	$ 120,000	$ 75,000	$ 800,000	$100,000	$728,000				$828,000
13	15-17	3	Monte Cresta Drive / Alhambra Drive Improvements	2250	48	5	$ 781,500	$ 195,000	$ 98,500	$ 1,075,000				$175,000	$1,052,873	$1,227,873
14	15-87	1	Hillcrest Pressure Regulating Station	0	0	0	$ 250,000	$ 65,000	$ 30,000	$ 345,000	$345,000					$345,000
15	15-09	3	Dekoven Tank Utilization Project	2300	14	2	$ 782,000	$ 158,000	$ 95,000	$ 1,035,000		$150,000	$957,216			$1,107,216
16	15-28	7	Tahoe Drive Area Improvements	900	28	4	$ 369,000	$ 94,000	$ 47,000	$ 510,000	$80,000	$447,200				$527,200
17	15-29	7	Belmont Canyon Road Improvements	900	17	2	$ 306,000	$ 76,000	$ 38,000	$ 420,000		$65,000	$383,968			$448,968
18	15-38	8	Cliffside Court Improvements	330	14	2	$ 154,500	$ 46,500	$ 19,000	$ 220,000			$40,000	$202,476		$242,476
19	15-42	2	North Road Improvements	0	19	1	$ 152,000	$ 46,000	$ 22,000	$ 220,000			$40,000	$202,476		$242,476
20	15-02	5	Courtland Road Improvements	780	9	2	$ 252,000	$ 63,000	$ 30,000	$ 345,000			$60,000	$320,586		$380,586
21	15-24	3	San Juan Boulevard Improvements	520	16	3	$ 223,000	$ 67,000	$ 30,000	$ 320,000			$55,000	$298,089		$353,089
22	15-75	1	Old County Road Improvements	5500	111	26	$ 2,580,500	$ 510,000	$ 309,500	$ 3,400,000	$200,000	$300,000	$3,136,640			$3,636,640
23	15-41	2	Mills Avenue Improvements	280	12	2	$ 136,000	$ 41,000	$ 18,000	$ 195,000			$30,000	$185,603		$215,603
25	15-46	2	Miramar Terrace Improvements	1250	21	4	$ 435,500	$ 110,000	$ 54,500	$ 600,000			$90,000	$573,681		$663,681
26	15-61	2	Chula Vista Drive Improvements	800	10	2	$ 320,000	$ 80,000	$ 40,000	$ 440,000			$70,000	$416,200		$486,200
27	15-11	3	Camelita Avenue Improvements	1300	31	3	$ 463,000	$ 115,000	$ 57,000	$ 635,000				$100,000	$625,874	$725,874
28	15-72	1	SR 101 Crossing at PAMF Hospital	2300	0	2	$ 1,040,000	$ 350,000	$ 280,000	$ 1,670,000			$100,000	$200,000	$1,602,706	$1,902,706
29	15-49	2	Mid-Notre Dame Improvements	0	0	10	$ 110,000	$ 33,000	$ 17,000	$ 160,000		$166,400				$166,400
30	A	-	Replace / Update SCADA per Master Plan	0	0	0	$ 1,500,000	$ -	$ -	$ 1,500,000	$750,000	$750,000				$1,500,000
31	B	-	Complete AMI Installation	0	0	0	$ 2,000,000	$ -	$ -	$ 2,000,000	$1,000,000	$1,000,000				$2,000,000
32	C	-	MPWD Dairy Lane Operations Center Rehabilitation	0	0	0	$ 1,500,000	$ -	$ -	$ 1,500,000	Not Programmed Yet					$0
			Material Totals	**35680**	**595**	**121**										
			Subtotal (Programmed Projects)							**$25,020,000**	**$4,660,000**	**$6,091,400**	**$5,112,824**	**$4,848,864**	**$4,392,819**	**$25,105,907**
			Average CIP per year and Carryover							**$5,021,181**						

MID-PENINSULA WATER DISTRICT

AGENDA ITEM NO. 8.B.

DATE: January 28, 2016

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: PROGRESS REPORT ON PRELIMINARY SURVEYS OF MPWD FOLGER DRIVE PROPERTIES

RECOMMENDATION

Receive progress report on preliminary surveys of MPWD Folger Drive properties. (1510 Folger Drive and 1513 Folger Drive).

FISCAL IMPACT

None.

DISCUSSION

District Engineer Pakpour and staff will present a progress report on the preliminary results of surveys recently conducted of the MPWD's 1510 and 1513 Folger Drive properties.

As the Board knows, the long-time tenant at 1513 Folger Drive moved out at last month, providing adequate notice and opportunities for walk-through inspections. They were an excellent tenant, and the structure and property are in good condition.

BOARD ACTION: APPROVED:_____ DENIED:_____ POSTPONED:_____ STAFF DIRECTION:_____

UNANIMOUS_____ ZUCCA_____ WARDEN_____ STUEBING_____ VELLA_____ LINVILL_____

MID-PENINSULA WATER DISTRICT

TO: Board of Directors

FROM: Tammy A. Rudock
General Manager

DATE: January 28, 2016

MANAGER'S REPORT

FOLLOW-UP FROM 12/16/15 REGULAR BOARD MEETING

- ✓ Contract signed with ManageWater Consulting, Inc., for development of 2015 UWMP.

- ✓ Public Hearing Notice posted at MPWD's Dairy Lane location and website for Ordinance 115: MPWD Water Efficient Landscaping Ordinance.

BELMONT SEWER BILLING INFORMATION

Staff completed the task of assembling a DRAFT spreadsheet from MPWD's customer account database for the City of Belmont's sewer billing on its annual property tax statements. As the Board may recall, it was discovered last year that this was being performed externally per some past informal agreement between the City of Belmont and Stepford, Inc. We completed the task early so that we can finalize the process and format for handling this each year going forward, and memorialize it in an MOU, including a fee.

PERSONNEL MANUAL UPDATE

The new MPWD Personnel Manual was delayed somewhat because of the recent holidays and staff vacations but should be transmitted to District Counsel and ACWA/JPIA by the end of January. At this point, I believe the project schedule remains good for now for the remaining tasks:

TASK	***PROJECTED DATE***
DRAFT to MPWD Employees Association for review	02/26/16
Meet and confer with MPWD Employees Association	03/25/16
Complete FINAL DRAFT	04/01/16
Final Legal Review	04/15/16
Initial presentation for Board consideration and input	04/28/16
Final presentation for Board approval	05/26/16

MISCELLANEOUS FEES PROJECT UPDATE
Staff will regroup with Bartle Wells soon.

HOLIDAY CLOSURE
The MPWD Administration, Customer Services, and Field Operations will be closed on the following official holiday: Monday, February 15, 2016, in observance of Presidents' Day.

On-call staff will be available for service interruptions and emergencies. Customers may contact the MPWD's 24-hour answering service at 650-591-8941.

MEETINGS

DATE	***EVENT***
December 14th	Attended coordination meeting with City of Belmont Public Works staff, District Engineer, and Operations Manager regarding proposed 5-year CIP.
December 17th	Attended JT's 25th service anniversary luncheon. Participated in first annual employee "cut-throat white elephant" gift exchange!
December 18th	Attended kick-off meeting with project team for 2014 UWMP.
January 14th	Participated in meeting with Ops team and District Engineer regarding capital projects. Attended safety session with staff and facilitated GM rap session.
January 20th	Attended ACWA/JPIA Human Resources Group Meeting in Roseville with Administrative Service Manager.
January 21st	Attended ACWA/JPIA on-site training: Defensive Driving.
January 22nd	Attended quarterly GM lunch meeting at Purissima Hills Water District with District Engineer and Operations Manager.

UPCOMING MEETINGS/EVENTS
BAWSCA Water Management Meeting (Foster City) – February 4, 2016
HIA Meeting (Belmont) – February 4, 2016
Annual SFPUC GM Meeting with Wholesale Customers (Millbrae) – February 16, 2016
Water Education Foundation's 33rd Annual Executive Briefing *"Defining the New Normal"* (Sacramento) – March 17, 2016
ACWA/JPIA Spring Conference & Exhibition (Monterey) – May 2-6, 2016
CSDA Special Districts Legislative Days (Sacramento) – May 17-18, 2016

MID-PENINSULA WATER DISTRICT

TO: Board of Directors

FROM: Candy Pina

DATE: January 28, 2016

ADMINISTRATIVE SERVICES MANAGER'S REPORT

CONFERENCES, TRAINING, & MEETINGS:

1) Candy Pina/Tammy Rudock: 01/20/16 - JPIA training class Human Resources Group Meeting
2) Jeanette Kalabolas/Misty Malczon/Laura Ravella/Candy Pina: 01/21/16 – ACWA/JPIA Defensive Driving Seminar
3) Jeanette Kalabolas: 01/22/16 – Meeting with Thomas Kisch (Boy Scout) regarding Landscape Conversion Project

FINANCIAL REPORTING:

1) Schedule of Cash and Investments:

SCHEDULE OF CASH AND INVESTMENTS				
CASH ACCOUNT		BALANCE @ 12/31/15		BALANCE 01/21/16
PETTY CASH		400		400
CASH DRAWER		200		200
WELLS FARGO CHECKING	$	401,492	$	361,093
LAIF	$	3,392,186	$	3,792,186
TOTAL	**$**	**3,794,378**	**$**	**4,153,879**

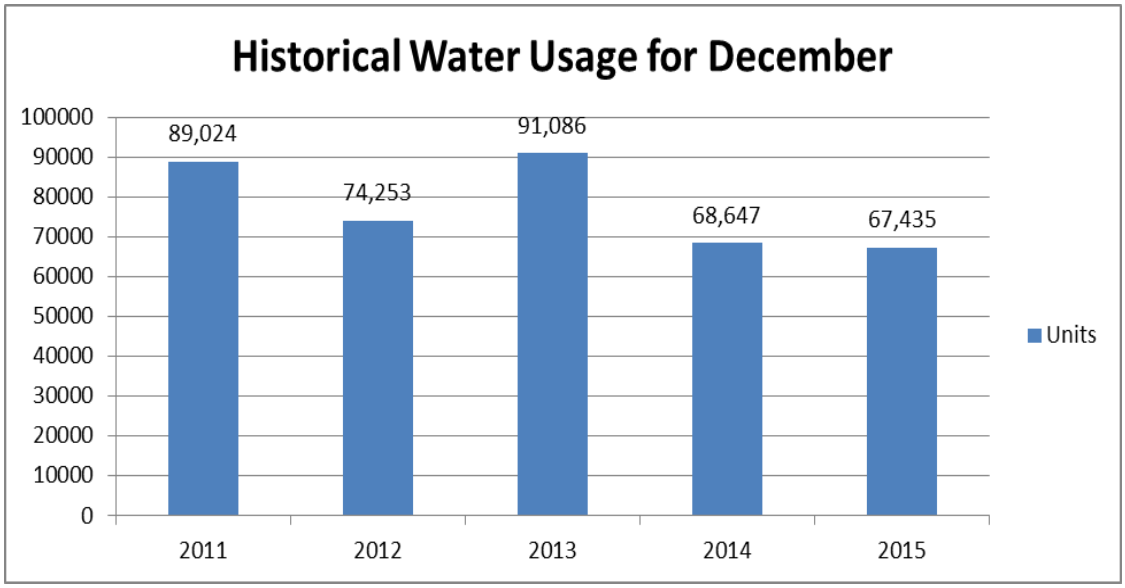
Month End Balance of PARS/OPEB for November 2015 (Oct & Nov 2015 reports not yet received): $491,554.37. An overall decrease in Net Earnings of $226.90 reported.

2) Reserve Report:

MPWD RESERVE FUNDS				
Reserve Account	**Balance @ 12/31/2013**	**Balance @ 12/31/2014**	**Balance @ 12/31/2015**	**Budget for Reserve Policy**
Capital Reserves	$1,422,112	$1,232,101	$ 892,186	$2,500,000
Emergency Reserves	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Working Capital Reserves	$ 500,000	$ 500,000	$ 500,000	$ 500,000
TOTAL RESERVE FUNDS	**$3,922,112**	**$3,732,101**	**$3,392,186**	**$5,000,000**

3) Water Revenue Report:

WATER REVENUES for FISCAL YEAR 2015/2016					
Month	Total Units	Water Commodity Charges	Fixed System Charges	Total Water Revenues	Misc Rev
JUL	102,202	655,215.69	174,717.33	829,933.02	1,223.75
AUG	104,096	788,694.37	206,692.18	995,386.55	1,217.50
SEP	101,546	767,490.00	206,247.53	973,737.53	1,213.75
OCT	95,095	715,010.00	206,496.89	921,506.89	1,218.88
NOV	81,298	601,597.16	205,707.83	807,304.99	1,220.00
DEC	67,438	489,420.00	205,756.47	695,176.47	1,198.75
TOTAL	**551,675**	**4,017,427.22**	**1,205,618.23**	**5,223,045.45**	**7,292.63**



TEAM BUILDING ACTIVITIES:

1. We continue to celebrate birthdays.

MID-PENINSULA WATER DISTRICT

TO: Board of Directors

FROM: Rene A. Ramirez, Operations Manager

DATE: January 28, 2016

OPERATIONS REPORT – December 2015

Projects:

- AMI: Latest data indicates 276 AMI meters installed in Zone 1 with another 240 left to install. Staff continues to work with our customers in Zone 1, many commercial accounts, and have been installing meters very early in the morning to minimize disruption to our customers water needs;
- The south Buckland Tank was taken out of service for its one-year Warranty Inspection. During the one-year warranty period, the tank was allowed to acclimate to water conditions and the cathodic protection system (rust prevention system) was purposely left off. At one-year some very minor rust was found in a few places and repaired by the tank's builder under warranty. The cathodic system was turned on and at the same time the contractor installed the Safety Climb System for staff to use;
- North Road regulator building painted to cover up some graffiti;
- Large meter assembly constructed for Carlmont High School, which was installed during their Holiday Break in coordination with School Staff;
- Meter boxes and valve cans adjusted within some new road improvements on Notre Dame in coordination with City staff;
- Continuation of field coordination with the City of Belmont's sewer project contractor; and
- The biannual leak survey continues. Subtronic has completed their work in Zones 7 and 8, and is nearing completion in Zone 3. To date, they have confirmed leaks at 8 residences and 1 irrigation service. These 9 leaks were all on the customer side of the service. So far, only 1 leak has been found on the District side of a residential meter. Their efforts have slowed somewhat due to the rain, which interferes with the sensitive audio equipment used to listen for leaks.

Maintenance:

- All backflow device testing requirements have been met for calendar year 2015;

- Responded to and completed 150 USA (underground service alerts) requests and identified infrastructure;
- Continued to perform normal maintenance and exercised water system pressure regulating valves;
- Hersom Tank and the West Dekoven Tank in Zone 2 were removed from service, cleaned and disinfected, and placed back in service following degradation of water quality;
- East Dekoven Tank in Zone 2 was removed from service and cleaned. It will remain out of service until spring when water use picks up. Excessive water storage due to conservation efforts affected water quality in Zone 2. There are no negative affects by removing this tank from service during the winter and its low consumption.
- Efforts continued with the District Engineer to determine whether removing tanks from service during long periods of low use would affect storage capacity for peak needs and fire protection, which are the main reasons for storage. Staff's concerns are water quality regulations and water quality due to conservation;
- Forty-four water samples for bacteriological testing – all samples were normal and showed no signs of coliform bacteria;
- Water system dead-ends continue to be monitored for disinfectant residual, and where needed, we flowed water into landscapes, street sweepers or sewer flushing trucks versus monitoring for discharge into the storm water systems to improve water quality; and
- Monitoring for signs of nitrification within our tanks continued.

System Repairs:

Location	Event	Material	Installation Date	Estimated Water Loss (Gals.)
2434 Hastings	Service Leak - Pinhole	Plastic	1976	100
2600 Allview	Main Break - Ring	CIP	1958	12,600
Coronet & Sharon	Main Break - Ring	CIP	1957	5,250
1507 Notre Dame	Main Break - Ring	CIP	1951	Not known

Development:

- Staff is currently working with developers on six (6) development projects located at:
    - 576-600 El Camino Real – there is nothing to report out at this time;
    - 400-490 El Camino Real – there is nothing to report out at this time;
    - 1401 Shoreway Road – a hotel building; their plans are in good shape. The District has made a request to make the landscape service

connection from Shoreway in order to improve water quality in the area versus Cormorant where they will be taking water for the hotel building has been agreed to by developer. The sizes for domestic and irrigations connections have been revised and staff is currently revising the cost estimate for water service installations;

- o 1201 Shoreway Road – there is nothing to report out at this time;
- o 360-380 Industrial Road – a commercial building; service installations are complete. Staff awaiting dryer conditions to relocate existing fire hydrant;
- o 2177 Carlmont Avenue – a 10 unit residential condominium project; staff developing a quote to construct the requested services;
- o 2113 Coronet – a new residential unit; staff is waiting for the construction detail from engineer/architect in order to determine fees; and
- o 2828 Monte Cresta – a new residential unit; staff working with developer on request to relocate existing services. Plans have been approved and staff waiting for fees to be paid.

Administration:

- No Ops Staff meetings held during month;
- Discussion with SFPUC staff took place to deal with high pressure spikes in Zone 1 due to work on the SFPUC system;
- Two members of Ops Staff attended a training seminar held in Hillsborough where the cost of the training was offset by a Chlorimeter (disinfectant measuring device) kit that was given to each member of staff to use in the field;
- Conversations held with Fire Department to address serious pressure spikes that occurred during a training event held on Davis Drive. At a subsequent training event, staff was on site to show how the opening and closing of a fire hydrant can result in dangerous pressure spikes in a water system;
- Power use monitoring continues for pumping with positive results and no net effect on the water system;
- Other Ops Staff attended a training seminar in Hillsborough to the topic of monitoring and managing nitrification in distribution systems;
- Ops Staff attended a meeting held by the San Mateo County Sea Change Technical Committee;
- A meeting was held with City of Belmont staff to discuss District CIP and begin the coordination process; and
- Continue conversing with Crown Castle Corporation, as the representative for T-Mobile, on two potential projects on cellular phone service towers on District property under agreement, and with Verizon. Verizon has interest in erecting a new cell tower at the Hallmark Tank site.

MID-PENINSULA WATER DISTRICT
BUDGET FOR YEAR 2015-2016
SUMMARY

DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/15 12/31/15	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% Y-T-D % OF BUDGET
OPERATING REVENUE				
WATER COMMODITY CHARGES	8,400,000	4,013,099	4,386,901	47.8%
FIXED SYSTEM CHARGES	2,443,780	1,211,786	1,231,994	49.6%
FIRE SERVICE CHARGES	14,400	7,291	7,109	50.6%
METER CHARGES	10,000	5,428	4,572	54.3%
SERVICE LINE & INSTALLATION CHARGES	25,000	30,229	(5,229)	120.9%
WATER SYSTEM CAPACITY CHARGES	200,000	28,125	171,875	14.1%
WATER DEMAND OFFSET CHARGES	10,000	3,651	6,349	36.5%
TEMP CONSTRUCTION CONNECTION CHARGES	10,000	-	10,000	NA
MISCELLANEOUS CHARGES	10,000	5,032	4,968	50.3%
INTEREST REVENUE - LAIF	10,000	5,785	4,215	57.9%
LEASE OF PHYSICAL PROPERTY	245,140	91,574	153,566	37.4%
PROPERTY TAX REVENUE	245,000	91,634	153,366	NA
TOTAL OPERATING REVENUE	**11,623,320**	**5,493,633**	**6,129,687**	47.3%
OPERATING EXPENDITURES				
SALARIES & WAGES	1,653,300	768,504	884,796	46.5%
PAYROLL TAXES & BENEFITS	1,141,017	531,280	609,737	46.6%
PURCHASED WATER	5,062,000	2,409,652	2,652,348	47.6%
CUSTOMER CREDIT CARD SERVICE FEES	114,638	59,526	55,112	51.9%
OUTREACH & EDUCATION	130,000	72,705	57,295	55.9%
M&R - OPS SYSTEM	364,215	165,961	198,254	45.6%
M&R - FACILITIES & EQUIPMENT	123,600	51,000	72,600	41.3%
MAJOR MAINTENANCE	32,000	700	31,300	2.2%
OFFICE SUPPLIES & EQUIPMENT	207,486	82,472	125,014	39.7%
MEMBERSHIP & GOV FEES	173,900	104,169	69,731	59.9%
BAD DEBT & CLAIMS	37,000	7,021	29,979	19.0%
UTILITIES	340,334	143,553	196,781	42.2%
PROFESSIONAL SERVICES	568,567	231,753	336,814	40.8%
TRAINING/TRAVEL & RECRUITMENT	54,140	7,699	46,441	14.2%
RESTRICTED EARNINGS	(10,000)	(5,785)	(4,215)	57.9%
RESERVES	61,123	-	61,123	NA
DEPRECIATION	870,000	473,920	396,080	54.5%
TOTAL OPERATING EXPENDITURES	**10,923,320**	**5,104,131**	**5,819,189**	46.7%
OPERATING REVENUE LESS EXPENDITURES	**700,000**	**389,502**	**310,498**	55.6%
NET TRANSFERS TO CAPITAL	**(700,000)**	**(389,502)**	**(310,498)**	55.6%
NET RESULTS OF OPERATIONS	-	-	-	

MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR YEAR 2015-2016
DETAILED

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% Y-T-D % OF BUDGET
4010	WATER COMMODITY CHARGES	8,400,000	4,013,099	4,386,901	47.8%
4020	FIXED SYSTEM CHARGES	2,443,780	1,211,786	1,231,994	49.6%
4030	FIRE SERVICE CHARGES	14,400	7,291	7,109	50.6%
4040	METER CHARGES	10,000	-	10,000	NA
4050	SERVICE LINE & INSTALLATION CHARGES (A)	25,000	30,229	(5,229)	120.9%
4060	WATER SYSTEM CAPACITY CHARGES	200,000	28,125	171,875	14.1%
4070	WATER DEMAND OFFSET CHARGES	10,000	3,651	6,349	36.5%
4080	TEMPORARY CONSTRUCTION CONNECTION CHARGES	10,000		10,000	NA
4090	MISCELLANEOUS CHARGES	10,000	5,428	4,572	54.3%
4000	TOTAL WATER AND FEE CHARGES	11,123,180	5,299,608	5,823,572	47.6%
4102	Interest Revenue- LAIF	10,000	5,785	4,215	57.9%
4100	INTEREST REVENUE	10,000	5,785	4,215	57.9%
4201	Lease of Physical Property	245,140	91,574	153,566	37.4%
4202	Property Tax Revenue (B)	245,000	91,634	153,366	37.4%
4203	New Construction Revenue	-	3,632	(3,632)	NA
4208	Landscape Plan Permit Review	-	400	(400)	NA
4206	Other Miscellaneous Charges	-	1,000	(1,000)	NA
4200	OTHER REVENUE	490,140	188,240	301,900	38.4%
4000	TOTAL OPERATING REVENUE	11,623,320	5,493,633	6,129,687	47.3%
6011	Salaries & Wages	1,546,900	729,428	817,472	47.2%
6012	Director Compensation	11,000	3,400	7,600	30.9%
6017	Capital Salaries & Wages	-	14,671	(14,671)	NA
6010	GROSS REGULAR WAGES	1,557,900	747,498	810,402	48.0%
6017	CAPITAL SALARY & WAGES reversed	-	(14,671)	14,671	N/A
6021	Overtime Labor	58,300	19,868	38,432	34.1%

MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR YEAR 2015-2016
DETAILED

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% Y-T-D % OF BUDGET
6022	Standby Labor	37,100	15,808	21,292	42.6%
6020	SUB-TOTAL SALARY & WAGES	1,653,300	768,504	884,796	46.5%
6031	FICA/Medicare PR Tax	126,477	52,461	74,016	41.5%
6038	ACWA Health Care	310,272	151,887	158,385	49.0%
6039	ACWA Dental	29,991	13,768	16,223	45.9%
6040	ACWA Vision	4,223	2,240	1,983	53.0%
6041	ACWA Life/AD&D	4,035	2,160	1,875	53.5%
6042	Standard LDL/SDL Disabiility	9,953	4,572	5,381	45.9%
6043	Workers' Comp Insurance	48,000	19,687	28,313	41.0%
6044	Unemployment	1,000	-	1,000	NA
6045	CALPERS Retirement - ER 2%@55	250,706	101,520	149,186	40.5%
6054	CAPITAL PAYROLL TAXES & BENEFITS	-	7,433	(7,433)	N/A
6046	Retirees' ACWA Health Care	54,400	28,450	25,950	52.3%
6047	Directors' ACWA Health Care	105,060	50,840	54,220	48.4%
6049	Medical Reimbursement	2,500	268	2,232	10.7%
6050	Employee Service Recognition (C)	3,000	4,046	(1,046)	134.9%
6051	Safety Incentive Program	7,200	3,600	3,600	50.0%
6052	Uniforms (D)	24,000	15,681	8,319	65.3%
6053	PARS OPEB Expense	160,200	80,100	80,100	50.0%
6030	SUB-TOTAL PAYROLL TAXES & BENEFITS	1,141,017	538,713	602,304	47.2%
6054	CAPITAL PAYROLL TAXES & BENEFITS	-	(7,433)	7,433	N/A
6000	PERSONNEL COSTS	2,794,317	1,299,784	1,494,533	46.5%
6101	SFPUC Treated Water	4,600,000	2,139,677	2,460,323	46.5%
6102	BAWSCA (Debt Service Surcharges)	462,000	230,628	231,372	49.9%
6103	Rates Stabilization	-	-	-	NA
6104	SFPUC Water Service Charge	-	39,346	(39,346)	N/A
6100	PURCHASED WATER	5,062,000	2,409,652	2,652,348	47.6%
6201	Customer Credit Card Service Fees	114,638	59,526	55,112	51.9%
6200	CUSTOMER CREDIT CARD SVS FEES	114,638	59,526	55,112	51.9%
6301	Water Conservation Program	25,000	3,852	21,148	15.4%
6302	School Conservation Program	15,000	1,115	13,885	7.4%
6303	Public Outreach & Education	40,000	11,721	28,279	29.3%
6305	HET Rebates (E)	10,000	14,436	(4,436)	144.4%

MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR YEAR 2015-2016
DETAILED

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% Y-T-D % OF BUDGET
6306	Washing Machine Rebates (F)	15,000	17,298	(2,298)	115.3%
6307	Lawn-Be-Gone Rebates (G)	20,000	23,626	(3,626)	118.1%
6308	Rain Barrel Rebates	5,000	657	4,343	13.1%
6304	TOTAL WATER CONSERVATION REBATES	50,000	56,018	(6,018)	112.0%
6300	OUTREACH/EDUCATION	130,000	72,705	57,295	55.9%
6401	Water Quality	65,000	32,661	32,339	50.2%
6402	Pumping	25,750	13,290	12,460	51.6%
6403	Storage Tanks	5,150	474	4,676	9.2%
6404	Mains/Distribution	154,500	44,020	110,480	28.5%
6405	Meters & Service (H)	77,250	46,453	30,797	60.1%
6406	Fire Hydrants (I)	15,965	19,300	(3,335)	120.9%
6407	Regulator Stations (J)	10,300	7,223	3,077	70.1%
6408	Safety	10,300	2,540	7,760	24.7%
6400	M&R - OPS SYSTEMS	364,215	165,961	198,254	45.6%
6501	M&R-Buildings&Grounds	61,800	30,415	31,385	49.2%
6502	M&R- Equipment&Tools	20,600	7,126	13,474	34.6%
6503	M&R- Vehicles & Large Equipment	10,300	2,424	7,876	23.5%
6504	M&R - Fuel	30,900	11,035	19,865	35.7%
6500	M&R - FACILITIES & EQUIPMENT	123,600	51,000	72,600	41.3%
6601	Cathodic Protection Survey	-	700	(700)	NA
6602	Leak Detection Survey	32,000	-	32,000	NA
6600	MAJOR MAINTENANCE	32,000	700	31,300	2.2%
6701	Office Supplies (K)	10,300	9,405	895	91.3%
6702	Insurance- Liability/Vehicles	85,000	34,196	50,804	40.2%
6703	Bank Service Fees	546	1	545	0.2%
6704	Postage	5,150	167	4,983	3.2%
6705	Printing/Printing Supplies	24,710	6,341	18,369	25.7%
6706	Equipment Services/Maintenance	55,000	26,310	28,690	47.8%
6707	Computer Supplies & Upgrades	11,330	5,067	6,263	44.7%
6708	Security & Safety	15,450	985	14,465	6.4%
6709	Other Fees	-		-	NA
6700	OFFICE SUPPLIES & EQUIP	207,486	82,472	125,014	39.7%
6801	Dues & Publications	41,200	17,416	23,784	42.3%
6802	Gov't Fees & Licenses (L)	30,000	39,299	(9,299)	131.0%

MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR YEAR 2015-2016
DETAILED

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% Y-T-D % OF BUDGET
6803	BAWSCA Membership Assessments	61,800	33,654	28,146	54.5%
6804	Env Health - Cross Connection Inspection	30,900	13,800	17,100	44.7%
6805	Software License	10,000	-	10,000	NA
6800	MEMBERSHIP & GOV FEES	173,900	104,169	69,731	59.9%
6901	Bad Debt	7,000	3,034	3,966	43.3%
6902	Claims	30,000	3,987	26,013	13.3%
6900	BAD DEBT & CLAIMS	37,000	7,021	29,979	19.0%
7001	Utilities-Internet/Cable (M)	4,244	3,873	371	91.2%
7002	Utilities-Cellular Telephones	14,853	5,117	9,736	34.5%
7003	Utilities-Electric-Pumping	275,834	110,989	164,845	40.2%
7004	Utilities-Electric-Bldgs&Grounds	24,401	12,084	12,317	49.5%
7005	Utilities-Telephones	13,792	8,229	5,563	59.7%
7006	Utilities-Sewer - NPDES	7,210	3,260	3,950	45.2%
7000	UTILITIES	340,334	143,553	196,781	42.2%
7101	Prof Serv - District Counsel	106,000	48,873	57,127	46.1%
7102	Prof Serv - District Engineer (N)	100,000	64,529	35,471	64.5%
7103	Prof Serv - IT	25,194	10,949	14,245	43.5%
7104	Prof Serv- Annual Finance Audit (O)	20,000	18,600	1,400	93.0%
7105	Prof Serv - Mngmt Consult	-	-	-	NA
7106	Prof Serv- Accounting & Payroll	17,510	10,602	6,908	60.6%
7107	Prof Serv- Customer Billing	70,040	32,905	37,135	47.0%
7108	Prof Serv - Answering Svs	4,223	-	4,223	NA
7110	Prof Serv - Miscellaneous	222,000	44,395	177,605	20.0%
7111	Prof Serv - District Treasurer	3,600	900	2,700	25.0%
7100	PROFESSIONAL SERVICES	568,567	231,753	336,814	40.8%
7201	Director Travel	6,180	-	6,180	NA
7202	Director Expense	2,060	87	1,973	4.2%
7203	Elections	15,000	-	15,000	NA
7204	Employee Travel/Training	25,750	5,893	19,857	22.9%
7205	Meetings Expense	5,150	1,719	3,431	33.4%
7200	TRAINING & TRAVEL	54,140	7,699	46,441	14.2%
7302	Restricted Earnings Expense - Interest LAIF	(10,000)	(5,785)	(4,215)	57.9%
7300	RESTRICTED EARNINGS EXPENSE	(10,000)	(5,785)	(4,215)	57.9%

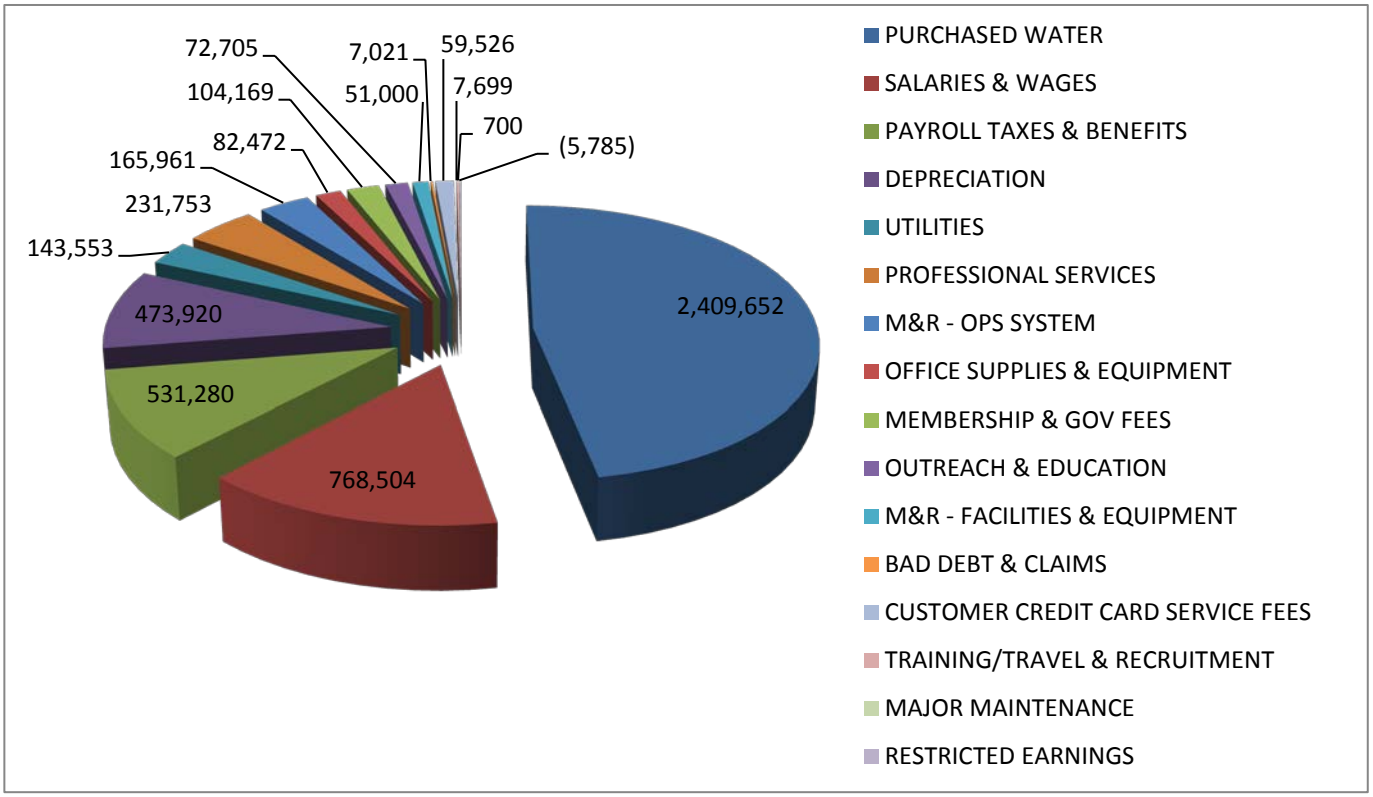
MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR YEAR 2015-2016
DETAILED

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	APPROVED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% **Y-T-D % OF BUDGET**
8001	Working Reserves: Capital	-	-	-	NA
8002	Working Reserves: Operating	61,123	-	61,123	NA
8000	RESERVES	61,123	-	61,123	NA
9010	DEPRECIATION	870,000	473,920	396,080	54.5%
SUB-TOTAL - OPERATING EXPENSES		8,129,003	3,804,347	4,324,656	46.8%
TOTAL OPERATING EXPENSES		10,923,320	5,104,131	5,819,189	46.7%
	NET OPERATING SURPLUS/(LOSS) TRANSFER TO CAPITAL	700,000	389,502	310,498	55.6%
			-		

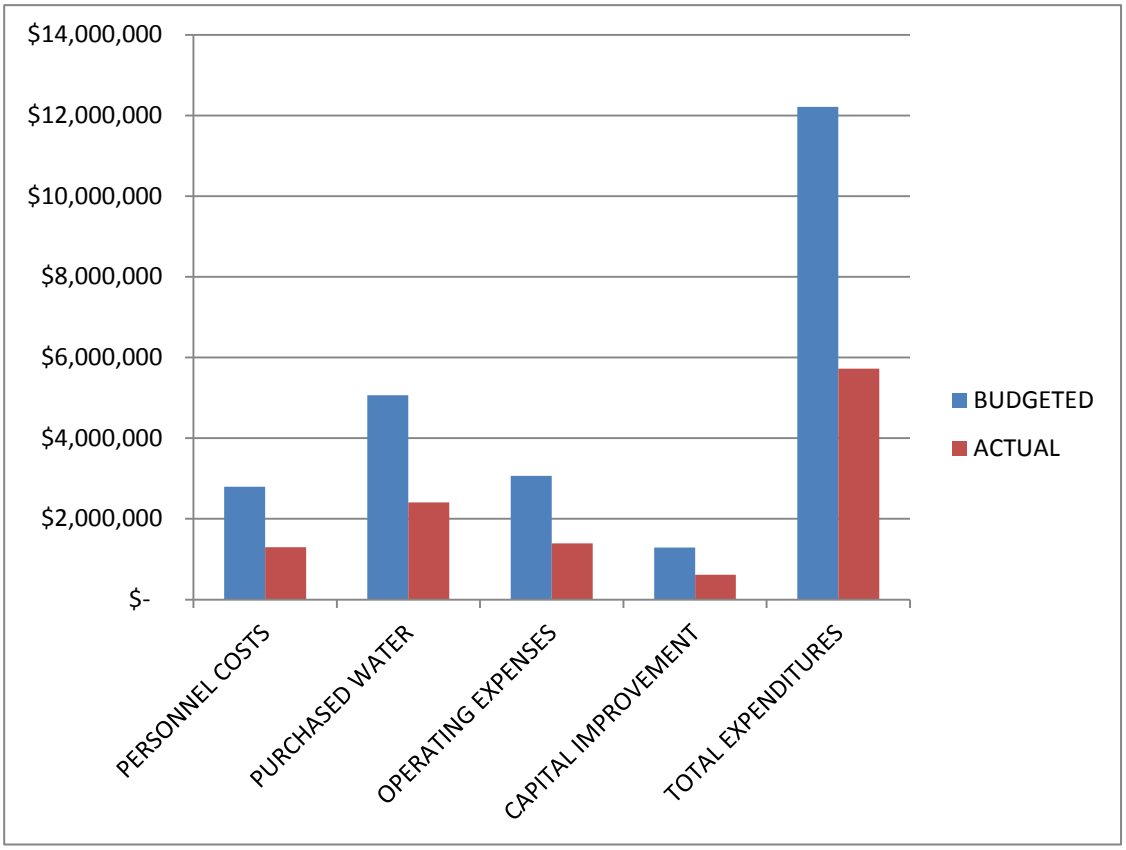
(A) Three new service line installations.
(B) Receipt of Property Tax revenue: December 2015 and April 2016.
(C) Partnered with ACWA/JPIA with Wellness Program $1961.
(D) Annual work boots purchased for Operations staff $2,215.
(E) High Efficiency Toilet Rebate Program excess participation.
(F) Washing Machine Rebate Program excess participation.
(G) Lawn-Be-Gone Rebate Program excess participation.
(H) Accounting for Inventory and operation expenses (expensing per policy items over $5,000).
(I) Accounting for Inventory and operation expenses (expensing per policy items over $5,000).
(J) Accounting for Inventory and operation expenses (expensing per policy items over $5,000).
(K) Restocking low office supplies.
(L) Prior Year Charge: 2014/2015 SWRCB bill for permitting, inspections & investigations, compliance, and monitoring totaling $20,395.92
(M) FY 2014/2015 Comcast expenses included.
(N) Distribution System Analysis totaled $13,363.
(O) Audit complete.

MID-PENINSULA WATER DISTRICT
ACTUAL OPERATING EXPENDITURES SUMMARY
Dec-15

OPERATING EXPENDITURES	ACTUAL $	% OF TOTAL
PURCHASED WATER	2,409,652	47.2%
SALARIES & WAGES	768,504	15.1%
PAYROLL TAXES & BENEFITS	531,280	10.4%
DEPRECIATION	473,920	9.3%
UTILITIES	143,553	2.8%
PROFESSIONAL SERVICES	231,753	4.5%
M&R - OPS SYSTEM	165,961	3.3%
OFFICE SUPPLIES & EQUIPMENT	82,472	1.6%
MEMBERSHIP & GOV FEES	104,169	2.0%
OUTREACH & EDUCATION	72,705	1.4%
M&R - FACILITIES & EQUIPMENT	51,000	1.0%
BAD DEBT & CLAIMS	7,021	0.1%
CUSTOMER CREDIT CARD SERVICE FEES	59,526	1.2%
TRAINING/TRAVEL & RECRUITMENT	7,699	0.2%
MAJOR MAINTENANCE	700	0.0%
RESTRICTED EARNINGS	(5,785)	-0.1%
TOTAL OPERATING EXPENDITURES	**5,104,131**	**100%**



2014/2015 BUDGET vs ACTUAL TOTAL EXPENDITURES
Dec-15



TOTAL EXPENDITURES	BUDGETED	ACTUAL	BUDGETED % OF TOTAL	ACTUAL % OF TOTAL
PERSONNEL COSTS	$ 2,794,317	$ 1,299,784	23%	23%
PURCHASED WATER	$ 5,062,000	$ 2,409,652	41%	42%
OPERATING EXPENSES	$ 3,067,003	$ 1,394,695	25%	24%
CAPITAL IMPROVEMENT	$ 1,292,000	$ 615,458	11%	11%
TOTAL EXPENDITURES	**$ 12,215,320**	**$ 5,719,589**	**100%**	**100%**

MID-PENINSULA WATER DISTRICT
PROPOSED AMENDED BUDGET FOR FY 2015-2016
CAPITAL OUTLAY/CAPITAL PROJECTS

DESCRIPTION	APPROVED AMENDED FY 2015-2016 BUDGET $	ACTUAL 7/1/2015 12/31/2015	REMAINING BALANCE/ (OVER BUDGET)	Target YTD % 50.4% **Y-T-D % OF BUDGET**
CAPITAL IMPROVEMENTS - WORK IN PROCESS (WIP)				
AMI Meter Change Out Program	400,000	363,090	36,910	90.8%
Karen Road Water Main Replacement - CIP	100,000	9,472	90,528	9.5%
Hallmark Tank Structural and Seismic Retrofit - CIP	55,000	5,524	49,476	10.0%
Dekoven Tanks Structural and Seismic Retrofit - CIP	55,000	29,147	25,853	53.0%
Folger Pump Station Demolition - CIP	50,000	15,928	34,072	31.9%
Buckland Tank Replacement Project - CIP	46,000	24,310	21,690	52.8%
Alameda de las Pulgas Water Main Replacement Project - CIP	30,000	23,830	6,170	79.4%
CAPITAL IMPROVEMENTS - WIP TOTAL	**736,000**	**471,301**	**264,699**	64.0%
CAPITAL OUTLAY				
SCADA Replacement Project	171,000	22,552	148,448	13.2%
Financial Management System (FMS) - Comprehensive Replacement	145,000	58,684	86,316	40.5%
Fleet Replacement: Four pickup trucks	125,000	-	125,000	0.0%
Dairy Lane Wiring/Cabling	40,000	31,601	8,399	79.0%
Replacement Printer/Copier/Scanner	25,000	21,294	3,706	85.2%
Miscellaneous Capital Outlay/Projects	50,000	10,027	39,973	20.1%
CAPITAL OUTLAY TOTAL	**556,000**	**144,158**	**411,842**	25.9%
CAPITAL IMPROVEMENTS & CAPITAL OUTLAY TOTAL	**1,292,000**	**615,458**	**676,542**	47.6%
DEPRECIATION	870,000	473,920	396,080	54.5%
TRANSFER FROM OPS	700,000	389,502	310,498	55.6%
TRANSFER (TO)/FROM CAPITAL RESERVES	(278,000)	(250,663)	(27,337)	90.2%
CAPITAL OUTLAY/CAPITAL PROJECTS	(1,292,000)	(615,458)	(676,542)	47.6%
NET RESULTS OF CAPITAL	**-**	**(2,700)**	**2,700**	N/A

MID-PENINSULA WATER DISTRICT
PREVIOUS YEAR COMPARISON

	Jul - Dec 15	Jul - Dec 14	$ Change	% Change
Ordinary Income/Expense				
Income				
4000 · OPERATING REVENUE	5,299,608.12	5,103,777.29	195,830.83	3.84%
4100 · INTEREST INCOME	5,785.00	5,266.10	518.90	9.85%
4200 · OTHER INCOME	188,239.73	342,223.82	-153,984.09	-45.0%
Total Income	5,493,632.85	5,451,267.21	42,365.64	0.78%
Cost of Goods Sold				
5000 · Cost of Goods Sold	0.00	0.00	0.00	0.0%
Total COGS	0.00	0.00	0.00	0.0%
Gross Profit	5,493,632.85	5,451,267.21	42,365.64	0.78%
Expense				
6000 · PERSONNEL COSTS	1,299,784.13	1,134,457.63	165,326.50	14.57%
6100 · PURCHASED WATER	2,409,651.52	2,275,885.76	133,765.76	5.88%
6200 · CUSTOMER CREDIT CARD SVS FEES	59,526.08	49,706.27	9,819.81	19.76%
6300 · OUTREACH/EDUCATION	72,705.20	28,506.16	44,199.04	155.05%
6400 · M&R - OPS SYSTEMS	165,961.24	151,591.70	14,369.54	9.48%
6500 · M&R - FACILITIES & EQUIPMENT	51,000.46	56,089.21	-5,088.75	-9.07%
6600 · MAJOR MAINTENANCE	700.00	1,390.00	-690.00	-49.64%
6700 · OFFICE SUPPLIES & EQUIPMENT	82,472.16	119,698.16	-37,226.00	-31.1%
6800 · MEMBERSHIP & GOV FEES	104,168.93	70,700.83	33,468.10	47.34%
6900 · BAD DEBT & CLAIMS	7,020.93	22,661.30	-15,640.37	-69.02%
7000 · UTILITIES	143,552.71	166,161.89	-22,609.18	-13.61%
7100 · PROFESSIONAL SERVICES	231,753.44	185,775.41	45,978.03	24.75%
7200 · TRAINING & TRAVEL	7,699.40	11,494.54	-3,795.14	-33.02%
Total Expense	4,635,996.20	4,274,118.86	361,877.34	8.47%
Net Ordinary Income	857,636.65	1,177,148.35	-319,511.70	-27.14%
Other Income/Expense				
Other Expense				
9000 · OTHER EXPENSE	473,919.90	421,695.97	52,223.93	12.38%
Total Other Expense	473,919.90	421,695.97	52,223.93	12.4%
7302 - RESTRICTED EARNINGS EXPENSE - INTEREST LAIF	-5,785.00	-5,266.10	-518.90	-9.9%
Total Restricted Earnings Expense	-5,785.00	-5,266.10	-518.90	-9.9%
Net Operating Surplus/(Loss)	389,501.75	760,718.48	-371,216.73	-48.8%

WATER COMMODITY SALES & PURCHASED WATER ANALYSIS
MID-PENINSULA WATER DISTRICT
FY 2015/2016

Month	Projected Water Commodity Revenue	Actual Water Commodity Revenue	Projected SFPUC Water Commodity Expense	Actual SFPUC Water Commodity Expense
15-Jul	840,000	659,123	552,000	360,472
15-Aug	924,000	784,369	506,000	419,573
15-Sep	840,000	764,745	506,000	398,063
15-Oct	840,000	717,527	414,000	372,194
15-Nov	672,000	601,541	414,000	339,011
15-Dec	504,000	492,909	276,000	250,365
16-Jan	588,000		322,000	
16-Feb	504,000		276,000	
16-Mar	504,000		276,000	
16-Apr	588,000		322,000	
16-May	756,000		322,000	
16-Jun	840,000		414,000