

**SPECIAL MEETING OF THE  
BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
Jointly with the  
**ADMINISTRATION & FINANCE COMMITTEE**  
February 12, 2014, 8:30 a.m.  
MWDOC Conference Room 101

**Committee:**

Director Thomas, Chairman  
Director Barbre  
Director Osborne

Staff: R. Hunter, K. Seckel, C. Harris,  
K. Davanaugh, H. Chumpitazi,  
J. Stalvey

Ex Officio Member: J. Finnegan

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MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

**PUBLIC COMMENTS** - Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED** - Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING --**  
Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District's business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District's Internet Web site, accessible at <http://www.mwdoc.com>.

**PROPOSED BOARD CONSENT CALENDAR ITEMS-ACTION**

1. TREASURER'S REPORT
  - a. Revenue/Cash Receipt Report – January 2014
  - b. Disbursement Approval Report for the month of February 2014
  - c. Disbursement Ratification Report for the month of January 2014
  - d. GM Approved Disbursement Report for the month of January 2014
  - e. Water Use Efficiency Projects Cash Flow – January 31, 2014
  - f. Consolidated Summary of Cash and Investment – December 2013
  - g. OPEB Trust Fund monthly statement (to be emailed separately)

2. FINANCIAL REPORT
  - a. Combined Financial Statements and Budget Comparative for the period ending December 31, 2013
  - b. General Manager's Year-to-Date Budget Report

**ACTION ITEMS**

3. RETURN OF FUNDS TO MEMBER AGENCIES FROM CLOSE-OUT OF CAPACITY CHARGE ACCOUNT
4. RESOLUTION ON CALLING FOR ENHANCED WATER USE EFFICIENCY EFFORTS TO EXTEND REGIONAL WATER SUPPLIES FOR ORANGE COUNTY RESIDENTS AND BUSINESSES
5. BOARD INPUT ON LEVEL OF OTHER POST-EMPLOYMENT BENEFITS (OPEB) LIABILITY PAYMENT

**DISCUSSION ITEMS**

6. CALPERS ANNUAL VALUATION REPORT AS OF JUNE 30, 2012

**INFORMATION ITEMS** – (THE FOLLOWING ITEMS ARE FOR INFORMATIONAL PURPOSES ONLY – BACKGROUND INFORMATION IS INCLUDED IN THE PACKET. DISCUSSION IS NOT NECESSARY UNLESS REQUESTED BY A DIRECTOR.)

7. MONTHLY WATER USAGE DATA, TIER 2 PROJECTION & WATER SUPPLY INFORMATION
8. SEMI-ANNUAL DIRECTORS ACTIVITIES REPORT
9. SEMI-ANNUAL OVERTIME REPORT
10. LEGAL AND PROFESSIONAL SERVICES OPEN PURCHASE ORDERS
11. ANNUAL AUTO ALLOWANCE REPORT
12. FY 2014/15 BUDGET SCHEDULE
13. ANNUAL REVIEW OF COASTAL MUNICIPAL WATER DISTRICT ISSUES
14. DEPARTMENT ACTIVITIES REPORTS
  - a. Administration
  - b. Finance and Information Technology

**OTHER ITEMS**

15. REVIEW ISSUES REGARDING DISTRICT ORGANIZATION, PERSONNEL MATTERS, EMPLOYEE BENEFITS FINANCE AND INSURANCE

**ADJOURNMENT**

**NOTE:** At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

**Municipal Water District of Orange County**  
**REVENUE / CASH RECEIPT REPORT**  
**January 2014**

**WATER REVENUES**

<b>Date</b>	<b>From</b>	<b>Description</b>	<b>Amount</b>
01/06/14	City of La Palma	November 2013 Water deliveries	43,742.01
01/06/14	Santa Margarita Water District	November 2013 Water deliveries	1,765,498.61
01/09/14	City of Fountain Valley	November 2013 Water deliveries	378,992.29
01/09/14	Trabuco Canyon Water District	November 2013 Water deliveries	12,413.17
01/09/14	City of Garden Grove	November 2013 Water deliveries	348,562.20
01/10/14	El Toro Water District	November 2013 Water deliveries	624,022.67
01/10/14	East Orange County Water District	November 2013 Water deliveries	499,891.56
01/10/14	City of San Clemente	November 2013 Water deliveries	613,873.01
01/13/14	City of San Juan Capistrano	November 2013 Water deliveries	245,048.14
01/13/14	Serrano Water District	November 2013 Water deliveries	180,576.61
01/14/14	City of Newport Beach	November 2013 Water deliveries	660,178.01
01/14/14	Yorba Linda Water District	November 2013 Water deliveries	610,970.23
01/14/14	City of Orange	November 2013 Water deliveries	488,182.92
01/14/14	City of Westminster	November 2013 Water deliveries	511,250.20
01/15/14	Laguna Beach County Water District	November 2013 Water deliveries	277,188.90
01/15/14	South Coast Water District	November 2013 Water deliveries	379,923.98
01/15/14	Orange County Water District	November 2013 Water deliveries	4,342,359.69
01/15/14	Irvine Ranch Water District	November 2013 Water deliveries	582,251.56
01/15/14	Santiago Aqueduct Commission	November 2013 Water deliveries	125,258.25
01/15/14	Moulton Niguel Water District	November 2013 Water deliveries	1,993,520.03
01/15/14	Golden State Water Company	November 2013 Water deliveries	369,273.32
01/15/14	City of Seal Beach	November 2013 Water deliveries	7,809.64
01/15/14	Mesa Water	November 2013 Water deliveries	349,621.96
01/22/14	City of Garden Grove	December 2013 Water deliveries	172,135.32
01/24/14	City of Brea	December 2013 Water deliveries	166,559.95
01/29/14	City of San Juan Capistrano	December 2013 Water deliveries	267,128.01
01/31/14	City of La Habra	December 2013 Water deliveries	12,819.05
01/31/14	South Coast Water District	December 2013 Water deliveries	353,807.22
01/31/14	City of San Clemente	December 2013 Water deliveries	587,659.87
01/31/14	City of Huntington Beach	December 2013 Water deliveries	231,005.98

TOTAL REVENUES \$ 17,201,524.36



**Municipal Water District of Orange County**  
**REVENUE / CASH RECEIPT REPORT**  
**January 2014**

**MISCELLANEOUS REVENUES**

<b>Date</b>	<b>From</b>	<b>Description</b>	<b>Amount</b>
01/17/14	Lewis Consulting	5/16/14 OC Water Summit sponsorship	1,000.00
01/27/14	Santa Margarita Water District	5/16/14 OC Water Summit sponsorship	1,600.00
01/22/14	2 Checks	10/23/13 Water policy dinner	150.00
01/09/14	Serrano WD	2/6/14 Water policy dinner	450.00
01/13/14	Best, Best & Krieger	2/6/14 Water policy dinner	225.00
01/17/14	3 Checks	2/6/14 Water policy dinner	300.00
01/24/14	2 Checks	2/6/14 Water policy dinner	225.00
01/31/14	Paypal	2/6/14 Water policy dinner	5,303.47
01/31/14	Serrano WD	2/6/14 Water policy dinner	450.00
01/09/14	Serrano WD	ISDOC registrations	102.00
01/31/14	Paypal	ISDOC registrations	831.71
01/31/14	Serrano WD	ISDOC registrations	85.00
01/09/14	Susan Hunt	Feb-Mar 2014 COBRA Health premium	720.42
01/09/14	Lorraine Roy	Partial Jan-Mar 2014 Retiree medical premium	7.66
01/22/14	Stan Sprague	February 2014 Retiree medical premium	259.97
01/31/14	Judy Pfister	Jan-Mar 2014 Retiree medical premium	113.88
01/17/14	Susan Hinman	Oct-Dec 2013 Director's Pension and Health reimbursement	856.09
01/22/14	Joan Finnegan	Oct-Dec 2013 Director's Pension and Health reimbursement	431.40
01/09/14	Laura Loewen	Movie tickets	48.00
01/27/14	Katie Davanaugh	Movie tickets	15.50
01/29/14	Grisel Rodriguez	Movie tickets	90.00
01/13/14	PNY Technologies	Rebate for hard drive purchase	10.00
01/31/14	CRWUA	Refund for Conference registration for Director Barbre	425.00
01/22/14	Irvine Ranch Water District	September 2013 Smartimer rebate program	225.00
01/02/14	Yorba Linda Water District	October 2013 Smartimer rebate program	75.00
01/13/14	Moulton Niguel Water District	October 2013 Smartimer rebate program	375.00
01/17/14	City of Fullerton	October 2013 Smartimer rebate program	9.96
01/22/14	Irvine Ranch Water District	August 2013 Smartimer & Turf Removal rebate program	7,326.72
01/22/14	Irvine Ranch Water District	October 2013 Smartimer & Turf Removal rebate program	12,397.17
01/06/14	Golden State Water Company	November 2013 Turf Removal rebate program	105.00
01/17/14	City of Brea	November 2013 Turf Removal rebate program	561.00
01/22/14	Irvine Ranch Water District	November 2013 Turf Removal rebate program	4,255.10
01/28/14	Irvine Ranch Water District	October 2013 So Cal Watersmart rebate program	34,924.00
01/09/14	El Toro Water District	November 2013 So Cal Watersmart rebate program	500.00
01/10/14	Irvine Ranch Water District	November 2013 So Cal Watersmart rebate program	6,979.00
01/24/14	Santa Margarita Water District	November 2013 So Cal Watersmart rebate program	1,258.00
01/28/14	Irvine Ranch Water District	November 2013 Landscape Performance Certification program	750.00
01/31/14	Department of Water Resources	Jul-Sep 2013 Industrial Process Water Use Reduction	3,145.66
01/27/14	Santa Ana Police Department	Jul-Sep 2013 UASI Water trailers grant	298,386.00

TOTAL MISCELLANEOUS REVENUES \$ **384,972.71**

TOTAL REVENUES \$ **17,586,497.07**



Robert J. Hunter, General Manager



Hilary Chumpitazi, Deputy Treasurer

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b>Core Expenditures:</b>		
	<b>ACCO Engineered Systems</b>	
715848	HVAC Replacement project	155,562.00
	*** Total ***	155,562.00
	<b>Richard Ackerman</b>	
1024	December 2013 Legal consulting on water policy issues	1,050.00
1026	January 2014 Legal consulting on water policy issues	1,925.00
	*** Total ***	2,975.00
	<b>Aleshire &amp; Wynder LLP</b>	
26646/26647	December 2013 Legal services	16,444.49
	*** Total ***	16,444.49
	<b>Alliance Resource Consulting</b>	
MWDOC-02-03	January 2014 Progress billing for recruitment of CFO position	5,500.00
MWDOC-02-04	Final billing for recruitment of CFO position	2,500.00
	*** Total ***	8,000.00
	<b>Best Best and Krieger LLP</b>	
55401-DEC13	November 2013 Legal services	28,004.46
	*** Total ***	28,004.46
	<b>C3 Office Solutions LLC</b>	
INV23357	Staples for Canon copier	169.84
	*** Total ***	169.84
	<b>Hunter T. Cook</b>	
011014	November 2013-January 2014 Coastal retiree health benefit	1,373.30
	*** Total ***	1,373.30
	<b>CSU Fullerton ASC</b>	
AR162989	FY 13/14 3rd Quarter Center for Demographic Research support	9,989.75
	*** Total ***	9,989.75
	<b>El Toro Water District</b>	
2132	2014 Lease for WEROC SEOC space	1,000.00
	*** Total ***	1,000.00
	<b>Finley &amp; Cook PLLC</b>	
SI-0000058	Year-end regulatory update for payroll module	885.00
012714	Prepayment for upgrade of Navision software for Finance department	10,000.00
	*** Total ***	10,885.00

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>FoodCraft Coffee &amp; Refreshment</i></b>	
5-538437	1/2/14 Coffee & tea supplies	198.37
	*** Total ***	198.37
	<b><i>Fry's Electronics</i></b>	
20050965	1/24/14 Computer supplies	37.56
	*** Total ***	37.56
	<b><i>Ronald R. Gastelum</i></b>	
010614	December 2013 Strategic assistance on MET issues	7,500.00
020614	January 2014 Strategic assistance on MET issues	7,500.00
	*** Total ***	15,000.00
	<b><i>GovConnection, Inc.</i></b>	
50990953	Replacement part for Ricoh color printer	237.70
	*** Total ***	237.70
	<b><i>Greenshades Software</i></b>	
59829	2013 Payroll tax form upload fee	17.05
	*** Total ***	17.05
	<b><i>Independent Special Districts of Orange County</i></b>	
2014	2014 Annual membership dues	200.00
013014	Reimbursement of PayPal receipts for 1/30/14 ISDOC meeting	831.71
013014A	1/30/14 ISDOC meeting registration for Directors Barbre, Clark, Finnegan, Hinman & Osborne	88.00
013114	Reimburse ISDOC for 1/30/14 meeting payment SWD made payable to MWDOC	85.00
	*** Total ***	1,204.71
	<b><i>Irvine Window Cleaning</i></b>	
2564	Interior and exterior window cleaning	225.00
	*** Total ***	225.00
	<b><i>James C. Barker, PC</i></b>	
105-0114	January 2014 Federal legislative advocacy services	8,000.00
	*** Total ***	8,000.00
	<b><i>Lewis Consulting Group, LLC</i></b>	
1304	January 2014 Professional services	4,125.00
	*** Total ***	4,125.00

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b>Edward G. Means III</b>	
MWDOC-1014	December 2013 Support on MET issues & strategic guidance to Engineering department	4,500.00
MWDOC-1015	January 2014 Support on MET issues & strategic guidance to Engineering department	4,500.00
	*** Total ***	9,000.00
	<b>Metropolitan Water District of Southern California</b>	
012714	Preliminary deposit for modifications to OC-58 Service Connection	20,000.00
	*** Total ***	20,000.00
	<b>Norco Delivery Services</b>	
565769	12/30/13 Delivery charges for MET	66.77
570198	1/16/14 Delivery charges for Board packets	311.10
	*** Total ***	377.87
	<b>Office Solutions</b>	
I-00558525	1/3/14 Office supplies	980.39
I-00559100	1/6/14 Office supplies	13.72
I-00560771	1/8/14 Office supplies	132.27
I-00573414	2/3/14 Office supplies	641.81
I-00573863	2/4/14 Office supplies	48.59
I-00574488	2/5/14 Office supplies	4.99
	*** Total ***	1,821.77
	<b>Orange County Water District</b>	
13468	December 2013 50% share WACO expense	295.20
13490	December 2013 Office expense & postage	9,181.50
	*** Total ***	9,476.70
	<b>Jessica H. Ouwerkerk</b>	
012714	August-December 2013 Education reimbursement	1,759.45
	*** Total ***	1,759.45
	<b>Patricia Kennedy Inc.</b>	
5374	February 2014 Plant maintenance	214.00
	*** Total ***	214.00
	<b>Petty Cash</b>	
013114	January 2014 Petty Cash reimbursement	162.38
	*** Total ***	162.38
	<b>Lester A. Rosenberg</b>	
14-03	September-December 2013 Consultant fees for Air Handling Unit Basin project	3,325.00
14-04	January 2014 Consultant fees for Air Handling Unit Basin project	650.00
	*** Total ***	3,975.00

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>Serrano Water District</i></b>	
013114	Reimbursement of duplicate payments for ISDOC 1/30/14 meeting and MWDOC 2/6/14 Water Policy dinner	552.00
	*** Total ***	552.00
	<b><i>Staples Advantage</i></b>	
8028530290	1/25/14 Office supplies	73.74
	*** Total ***	73.74
	<b><i>State Net</i></b>	
670368-02.14-99	2014 Renewal for web-based legislative tracking service	1,740.00
	*** Total ***	1,740.00
	<b><i>System One</i></b>	
0069783-IN	3/1/14-2/28/15 Annual maintenance for binding machine	595.00
	*** Total ***	595.00
	<b><i>Top Hat Productions</i></b>	
88372	1/9/14 Lunch for O.C. MET Caucus	171.07
88403	1/16/14 Lunch for Managers' meeting	395.28
	*** Total ***	566.35
	<b><i>Townsend Public Affairs, Inc.</i></b>	
9934	January 2014 State and Federal legislative advocacy services	7,500.00
	*** Total ***	7,500.00
	<b><i>Total Core Expenditures</i></b>	<hr/> 321,263.49

***Choice Expenditures:***

	<b><i>Discovery Science Center</i></b>	
123113MWDOC	December 2013 School program	10,748.75
	*** Total ***	10,748.75
	<b><i>Lucho Ortega Design</i></b>	
0165	January 2014 Graphic design services for California Sprinkler Adjustment Notification System program	165.00
	*** Total ***	165.00
	<b><i>Total Choice Expenditures</i></b>	<hr/> 10,913.75

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b>Other Funds Expenditures:</b>		
	<b><i>AquaFicient Consulting</i></b>	
02-056	December 2013 Landscape Performance Certification program funded by IRWD & MET	1,500.00
	*** Total ***	1,500.00
	<b><i>CESA</i></b>	
244862507	2014 Annual membership for K. Hubbard	75.00
	*** Total ***	75.00
	<b><i>ConserVision Consulting, LLC</i></b>	
LPCP-214	December 2013 Consulting services for Landscape Performance Certification program	6,132.00
	*** Total ***	6,132.00
	<b><i>Enterprise Information Sys Inc</i></b>	
MWDOC-82108	December 2013 Services to Develop the California Sprinkler Adjustment Notification System program	7,200.00
	*** Total ***	7,200.00
	<b><i>Geoscience Support Services</i></b>	
1274-11-22	November-December 2013 Hydrogeology studies for San Juan Basin Groundwater Model for Doheny Ocean Desal project	1,130.00
	*** Total ***	1,130.00
	<b><i>President and Fellows of Harvard College</i></b>	
565671	Leadership in Crises program - Registration for Kelly Hubbard	6,900.00
	*** Total ***	6,900.00
	<b><i>Mission RCD</i></b>	
1608	December 2013 Field verifications for Water Use Efficiency rebate programs	8,883.94
	*** Total ***	8,883.94
	<b><i>City of Newport Beach</i></b>	
24375	11/1-11/26/13 Activity for Residential WBIC & Rotating Nozzle installation program	5,964.00
24378	12/1-12/20/13 Activity for Residential WBIC & Rotating Nozzle installation program	2,084.00
24384	12/5/13-1/13/14 Activity for Commercial WBIC & Rotating Nozzle installation program	4,546.00
	*** Total ***	12,594.00
	<b><i>Noah Gwartney</i></b>	
012714	January 2014 Bi-monthly cleaning for WEROC EOCs	115.00
	*** Total ***	115.00
	<b><i>Power Plus!</i></b>	
S39816-519065	Generator repair and maintenance for WEROC NEOC	2,174.93
S39816-517978	Generator inspection and loadbank test for WEROC NEOC	671.37
	*** Total ***	2,846.30

**Municipal Water District of Orange County**  
**Disbursement Approval Report**  
**For the month of February 2014**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b><i>Turf Removal Program</i></b>		
TR4-GSWC-003	M. Slagle	2,641.00
TR4-GSWC-005	L. Post	2,082.00
TR4-HB-002	D. Mullins	659.00
TR4-HB-009	T. Honrath	1,709.00
TR4-HB-010	J. Wells	475.00
TR4-IRWD-004	M. Burns	2,467.50
TR4-IRWD-019	M. Lee	513.00
TR4-IRWD-020	Back Bay Gardens HOA (Costa Mesa)	19,500.00
TR4-IRWD-021	D. Mourer	1,647.00
TR4-IRWD-023	C. Chen	990.00
TR4-IRWD-024	V. Van	759.00
TR4-IRWD-025	M. Blackwood	1,003.50
TR4-MN-002A	Hillcrest Community Association ( Mission Viejo)	836.00
TR4-MN-002B	Hillcrest Community Association ( Mission Viejo)	599.00
TR4-MN-002C	Hillcrest Community Association ( Mission Viejo)	3,714.00
TR4-MN-002D	Hillcrest Community Association ( Mission Viejo)	1,909.00
TR4-MN-002E	Hillcrest Community Association ( Mission Viejo)	2,530.00
TR4-MN-002F	Hillcrest Community Association ( Mission Viejo)	2,788.00
TR4-O-003	R. McGinnis	1,434.00
TR4-SC-006	L. Bard	1,200.00
TR4-SM-002	A. Afzali	184.80
TR4-SM-006	J. Clark	192.40
TR4-SM-008	K. Smead	1,971.60
TR4-SM-013	C. David	524.40
TR4-SOCO-007	J. Hawlish	1,400.00
	*** Total ***	53,729.20
<b><i>URS Corporation Americas</i></b>		
5766144	October 2013 Professional services for Industrial Process Water Use Reduction program	2,135.00
	*** Total ***	2,135.00
<b><i>Vavrinek, Trine, Day &amp; Co., LLP</i></b>		
0102430-IN	December 2013 Professional services for audit of FY 12/13 Financial Statements	2,400.00
	*** Total ***	2,400.00
<b><i>Total Other Funds Expenditures</i></b>		<b>105,640.44</b>
<b><i>Total Expenditures</i></b>		<b>437,817.68</b>

**Municipal Water District of Orange County**  
**Disbursement Ratification Report**  
**For the month of January 2014**

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>Core Disbursements:</b>				
125502	1/7/14	TIMEWA 5210-JAN14	<b>Time Warner Cable</b> January 2014 Telephone and internet expense ***Total ***	929.73 929.73
ACH000785	1/14/14	BARBCO DEC2013	<b>Brett Barbre</b> December 2013 MET Director's compensation ***Total ***	2,327.00 2,327.00
ACH000787	1/14/14	DICKCO DEC2013	<b>Larry Dick</b> December 2013 MET Director's compensation ***Total ***	1,396.20 1,396.20
ACH000788	1/14/14	DICKEX 123113	<b>Larry Dick</b> December 2013 Business expense ***Total ***	223.83 223.83
ACH000791	1/14/14	FRAZIE 123113	<b>Leah Frazier</b> December 2013 Business expense ***Total ***	25.99 25.99
ACH000792	1/14/14	HINMAN 123113	<b>Susan Hinman</b> December 2013 Business expense ***Total ***	545.22 545.22
125507	1/15/14	C3OFFI INV22999	<b>C3 Office Solutions LLC</b> January 2014 Copier maintenance ***Total ***	216.72 216.72
125508	1/15/14	CLARKW 123013	<b>Wayne Clark</b> December 2013 Business expense ***Total ***	90.40 90.40
125511	1/15/14	DELAGE 20533365	<b>De Lage Landen Public Finance</b> January 2014 Copier lease ***Total ***	509.00 509.00
125512	1/15/14	FAHLBE 123113	<b>Beth Fahl</b> December 2013 Business expense ***Total ***	36.73 36.73
125513	1/15/14	FINNEG 123113	<b>Joan Finnegan</b> December 2013 Business expense ***Total ***	118.23 118.23



**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of January 2014**

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>125516</b>	<b>1/15/14</b>	<b>IRONMO JVX2851</b>	<b>Iron Mountain</b> January 2014 Storage/retrieval of archived documents ***Total ***	823.39 823.39
<b>125521</b>	<b>1/15/14</b>	<b>HUNTER 010714</b>	<b>Robert J. Hunter</b> December 2013-January 2014 Business expense ***Total ***	13.08 13.08
<b>125523</b>	<b>1/15/14</b>	<b>TIMEWA 3564-JAN14</b>	<b>Time Warner Cable</b> January 2014 Telephone expense for 4 analog fax lines ***Total ***	127.67 127.67
<b>125544</b>	<b>1/15/14</b>	<b>VERIZO 9717231974</b>	<b>Verizon Wireless</b> December 2013 4G Mobile broadband unlimited service ***Total ***	38.01 38.01
<b>EFTFSA2014</b>	<b>1/28/14</b>	<b>WAGEWO 125AI0293903</b>	<b>Wageworks</b> 2014 Annual administration for Flexible Spending plan ***Total ***	1,700.00 1,700.00
<b>125546</b>	<b>1/31/14</b>	<b>BURKED 012114</b>	<b>Darcy M. Burke</b> December 2013-January 2014 Business expense ***Total ***	397.11 397.11
<b>125548</b>	<b>1/31/14</b>	<b>FINNEG 113013</b>	<b>Joan Finnegan</b> November 2013 Business expense ***Total ***	36.28 36.28
<b>125550</b>	<b>1/31/14</b>	<b>JACOBI 123113</b>	<b>Lee Jacobi</b> December 2013 Business expense ***Total ***	19.21 19.21
<b>125552</b>	<b>1/31/14</b>	<b>FRANKS 011514</b>	<b>Sarah Franks</b> January 2014 Business expense ***Total ***	21.50 21.50
<b>125556</b>	<b>1/31/14</b>	<b>USBANK DEC2013</b>	<b>U.S. Bank</b> 11/21/13-12/23/13 Cal Card charges ***Total *** (See attached sheet for details)	7,189.87 7,189.87
<b>ACH000801</b>	<b>1/31/14</b>	<b>BARBRE 013114</b>	<b>Brett Barbre</b> January 2014 Business expense ***Total ***	255.95 255.95

**Municipal Water District of Orange County**  
**Disbursement Ratification Report**  
**For the month of January 2014**

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>ACH000802</b>	<b>1/31/14</b>	<b>DELATO</b>	<b>Harvey De La Torre</b>	
		010914	January 2014 Business expense	30.00
			***Total ***	30.00
<b>ACH000804</b>	<b>1/31/14</b>	<b>OUWERK</b>	<b>Jessica H. Ouwerkerk</b>	
		123113	December 2013 Business expense	106.21
			***Total ***	106.21
<b>ACH000806</b>	<b>1/31/14</b>	<b>THOMAS</b>	<b>Jeffery Thomas</b>	
		123113	December 2013 Business expense	1,085.27
			***Total ***	1,085.27
<b>Total Core Disbursements</b>				<b>18,262.60</b>

**Choice Disbursements:**


<b>ACH000804</b>	<b>1/31/14</b>	<b>OUWERK</b>	<b>Jessica H. Ouwerkerk</b>	
		123113	December 2013 Business expense	83.59
			***Total ***	83.59
<b>Total Choice Disbursements</b>				<b>83.59</b>


**Other Funds Disbursements:**

<b>125499</b>	<b>1/7/14</b>	<b>ATTEOC</b>	<b>AT&amp;T</b>	
		8200-DEC13	December 2013 N. EOC telephone expense	154.58
		4492-DEC13	December 2013 S. EOC telephone expense	216.34
		0532-DEC13	December 2013 N. EOC dedicated phone line	108.59
			***Total ***	479.51
<b>125500</b>	<b>1/7/14</b>	<b>SDG&amp;E</b>	<b>SDG&amp;E</b>	
		7768-DEC13	11/18/13-12/18/13 Electrical service for Doheny Ocean	118.09
			Desalination project - Phase 3 operation	
			***Total ***	118.09
<b>125501</b>	<b>1/7/14</b>	<b>SPRINT</b>	<b>Sprint</b>	
		320982721-112	December 2013 WEROC cell phone expense	41.79
			***Total ***	41.79
<b>125547</b>	<b>1/31/14</b>	<b>CATALI</b>	<b>Catalina Island Conservancy</b>	
		0009707	January 2014 WEROC radio repeater site lease	1,413.64
			***Total ***	1,413.64

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of January 2014**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>125553</b>	<b>1/31/14</b>	<b>SDG&amp;E</b> 7768-JAN14	<b>SDG&amp;E</b> 12/18/13-1/20/14 Electrical service for Doheny Ocean Desalination project - Phase 3 operation ***Total ***	 122.38  122.38
<b>125554</b>	<b>1/31/14</b>	<b>SANTAM</b> NOV2013	<b>Santa Margarita Water District</b> November 2013 SCP Operation surcharge ***Total ***	 23,220.98 23,220.98
<b>125556</b>	<b>1/31/14</b>	<b>USBANK</b> DEC2013	<b>U.S. Bank</b> 11/21/13-12/23/13 Cal Card charges ***Total *** (See attached sheet for details)	 675.00 675.00
<b>ACH000805</b>	<b>1/31/14</b>	<b>SPRINT</b> 320982721-113	<b>Sprint</b> January 2014 WEROC cell phone expense ***Total ***	 41.84 41.84
<b>WIRE-140131</b>	<b>1/31/14</b>	<b>METWAT</b> 7868	<b>Metropolitan Water District</b> November 2013 Water deliveries ***Total ***	 16,066,594.09 16,066,594.09
<b>Total Other Funds Disbursements</b>				<b>16,092,707.32</b>
<b>Total Disbursements</b>				<b>16,111,053.51</b>

  
Robert J. Hunter, General Manager

  
Hilary Chumpitazi, Deputy Treasurer

**Cal Card Statement Detail**  
**Statement Date: December 23, 2013**  
**Payment Date: January 31, 2014**

<b>Date</b>	<b>Description</b>	<b>Amount</b>
<b><u>Karl's Card</u></b>		
11/22/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Registration for Director Thomas	\$ 425.00
11/22/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Accommodations for Director Thomas	393.12
11/22/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Airfare for Director Thomas	399.80
11/22/13	Prepaid Regal movie tickets for employee purchases	408.00
11/22/13	Prepaid Cinemark movie tickets for employee purchases	458.50
11/24/13	Computer supply	38.87
11/24/13	Prepaid AMC movie tickets for employee purchases	409.95
11/26/13	UPS delivery charges for Board & Committee packets on Nov. 14, 2013	75.29
11/26/13	Christmas tree for office	107.75
11/30/13	1099 Forms & envelopes	72.85
12/03/13	Orange County Water Association annual membership for R. Bell	50.00
12/03/13	Annual subscription for Surveygizmo online application and database tool	675.00
12/04/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Airfare for R. Hunter	201.80
12/05/13	ACWA Fall conference in Los Angeles, CA from Dec. 3-6, 2013 - Accommodations for Director Hinman	230.10
12/05/13	ACWA Fall conference in Los Angeles, CA from Dec. 3-6, 2013 - Accommodations for R. Hunter	246.87
12/10/13	Lunch for Administrative staff meeting on Dec. 10, 2013	106.13
12/10/13	UPS delivery charges for Board & Committee packets on Dec. 5, 2013	5.89
12/11/13	Office supplies	6.99
12/12/13	Typewriter service and supplies	335.07
12/16/13	CalChamber annual membership renewal	449.00
12/17/13	UPS delivery charges for Board & Committee packets on Nov. 21 & Dec. 11, 2013	136.56
12/17/13	Legislative activities in Sacramento, CA on Jan. 9, 2014 - Airfare for H. De La Torre	153.80
12/18/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Accommodations for H. De La Torre	131.04
12/19/13	Sympathy flowers for staff member	104.72
12/20/13	California Urban Water Conservation Council meeting in Sacramento, CA on Jan. 16, 2014 - Airfare for J. Berg	461.80
<b>Total</b>		<b><u><u>\$ 6,083.90</u></u></b>

**Cal Card Statement Detail**  
**Statement Date: December 23, 2013**  
**Payment Date: January 31, 2014**

<u>Date</u>	<u>Description</u>	<u>Amount</u>
<b><u>Karl's Card</u></b>		
12/18/13	Staff holiday luncheon	\$ 877.75
	<b>Total</b>	<b><u><u>\$ 877.75</u></u></b>
<b><u>Rob's Card</u></b>		
11/22/13-12/23/13	Meals for R. Hunter's meetings on various dates	\$ 836.65 <sup>1</sup>
12/11/13-12/12/13	Colorado River Water Users Association 2013 Annual conference in Las Vegas, NV from Dec. 11-13, 2013 - Transportation charges for R. Hunter	66.57
	<b>Total</b>	<b><u><u>\$ 903.22</u></u></b>

<sup>1</sup> R. Hunter reimbursed MWDOC \$20.00

**Municipal Water District of Orange County  
GM Approved Disbursement Report (1)  
For the month of January 2014**

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>Core Disbursements:</b>				
125549	1/31/14	ISDOC 103113B	<i>Independent Special Districts of OC</i> Reimbursement for 10/31/13 Luncheon receipts received in September 2013 in MWDOC's PayPal account	113.76
			***Total***	113.76
			<b>Total Core Disbursements</b>	<u>113.76</u>
<b>Choice Disbursements:</b>				
			<b>Total Choice Disbursements</b>	<u>0.00</u>
<b>Other Funds Disbursements:</b>				
			<b>Total Other Funds Disbursements</b>	<u>0.00</u>
			<b>Total Disbursements</b>	<u><u>113.76</u></u>



Robert J. Hunter, General Manager



Hilary Chumpitazi, Deputy Treasurer

- (1) For disbursements that did not make the cut-off of previous month's Disbursement Approval report.  
Disbursements are approved by GM for payment and need A & F Committee ratification.

Municipal Water District of Orange County  
WATER USE EFFICIENCY PROJECTS  
Cash Flow as of 1/31/14

Cash - Beginning Balance	Jul 2013	Aug 2013	Sep 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	TOTALS
\$	(204,195.07)	\$ (120,906.78)	\$ 153,254.44	\$ 203,884.71	\$ 194,437.45	\$ 86,512.97	\$ 298,487.84	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	
<b>REVENUES:</b>													
BUREC						129,236.42							\$ 129,236.42
City of Anaheim, Brea, Buena Park		75.00				75.00	561.00						\$ 711.00
City of Fountain Valley, Fullerton				84.96			9.96						\$ 94.92
City of Garden Grove, Huntington Beach	75.00	105.00	224.28	394.96		75.00							\$ 874.24
City of La Palma, La Habra, Newport Bch			9.96	150.00	150.00								\$ 309.96
City of Santa Ana, San Clemente	300.00	75.00	220.91										\$ 670.91
City of San Juan Capistrano	105.00	315.00		241.92									\$ 661.92
City of Tustin, Westminster	315.00	285.00	75.00	70.91	87.25	150.00							\$ 983.16
City of Orange, CUWCC	945.00	7,842.25	554.85	324.96		180.00							\$ 9,847.06
Department of Water Resources	6,502.95		91,318.70	11,804.40			3,145.66						\$ 112,771.71
East Orange County Water District													\$ -
El Toro Water District	7,198.83		2,743.20	2,796.39	4,569.99		500.00						\$ 17,808.41
Golden State Water Company	525.00		892.84	1,039.99	210.00	2,622.94	105.00						\$ 5,395.77
Irvine Ranch Water District	55,800.00		1,500.00	43,514.14	2,250.00	750.00	66,856.99						\$ 170,671.13
Laguna Beach County Water District			9.96			75.00							\$ 84.96
Mesa Water District	654.96		75.00			75.00							\$ 804.96
Metropolitan Water District	116,677.96	292,381.42	722.05	5,372.28	22,225.79	158,856.54							\$ 596,236.04
Moulton Niguel Water District, NRCS	234.96	75.00	491.97			361.55	375.00						\$ 1,538.48
MWDOC				54,000.00									\$ 54,000.00
Santa Margarita Water District	300.00	534.96	1,106.21	6,402.99	246.99	3,333.94	1,258.00						\$ 13,183.09
Serrano Water District													\$ -
South Coast Water District		143.00											\$ 143.00
State Water Resources Control Board		127,400.00											\$ 127,400.00
Yorba Linda Water District		75.00		159.98			75.00						\$ 309.98
Trabuco Canyon Water District													\$ -
Miscellaneous Revenues													
Interest Revenue	1.20												\$
Total Revenues	189,635.86	429,306.63	99,944.93	126,357.88	29,815.02	295,791.39	72,886.61	-	-	-	-	-	\$ 1,243,738.32
<b>EXPENDITURES:</b>													
Alliance for WUE, A&N Technical	11,070.00	3,295.00	2,170.00	1,143.50									17,678.50
Aquaficient, ABG Mktg,	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00						10,500.00
Bridgecreek landscape, Boeing							37,924.96						37,924.96
CA Lndscope Contractor, Chang's Lndscp													-
Conservation Consulting, LLC, Earthco	7,659.00	7,105.50	6,858.00	7,818.75	7,326.00	7,175.25	7,029.00						50,971.50
City of Buena Park, City of Newport Bch	54,622.00	31,700.00			95,532.00	16,632.00							198,486.00
City of San Clemente, San Juan Cap		105.00											105.00
City of Tustin, City of Westminster		210.00		439.50									649.50
EOCWD, El Toro WD, Fountain Valley													-
Eco friendly landscape, EIS		8,850.00											8,850.00
Federal Express, Glen's Landscaping													-
Glen Grove, Hotel Prog part, IRWD					6,350.00								6,350.00
Mesa, MESA, MNWD				8,060.72			24,066.44						32,127.16
Mission RCD, Oakley, Paradise Designs	10,398.07	8,684.21	7,246.00	22,135.63		21,301.33							69,765.24
Rancho Fin Consultants, Santa Rosa													-
SCWD, SCWD, Survey Gizmo				3,115.02			675.00						3,790.02
Terra Firma, Turf Removal, URS Corp	16,118.50	90,345.70	21,493.77	84,789.00	23,521.50	29,412.00	23,781.92						289,462.39
Water Landscaping, Waterwise Consult	4,980.00	3,350.00	2,050.00	1,700.00	3,510.00		6,820.00						22,410.00
Yorba Linda													-
Miscellaneous Expenses													
Interest Expense				41.86									41.86
Salary & Benefit			7,996.89	5,061.16		7,795.94							20,853.99
Total Expenditures													
Cash - Ending Balance	\$ (120,906.78)	\$ 153,254.44	\$ 203,884.71	\$ 194,437.45	\$ 86,512.97	\$ 298,487.84	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 269,577.13	\$ 769,966.12





## Municipal Water District of Orange County Consolidated Summary of Cash and Investment

December 31, 2013

**Street Address:**18700 Ward Street  
Fountain Valley, California 92708**Mailing Address:**P.O. Box 20895  
Fountain Valley, CA 92728-0895

(714) 963-3058

Fax: (714) 964-9389

[www.mwdoc.com](http://www.mwdoc.com)Joan C. Finnegan  
*President*Jeffery M. Thomas  
*Vice President*Brett R. Barbre  
*Director*Larry D. Dick  
*Director*Wayne A. Clark  
*Director*Susan Hinman  
*Director*Wayne Osborne  
*Director*Robert J. Hunter  
*General Manager***MEMBER AGENCIES**

City of Brea  
City of Buena Park  
East Orange County Water District  
El Toro Water District  
Emerald Bay Service District  
City of Fountain Valley  
City of Garden Grove  
Golden State Water Co.  
City of Huntington Beach  
Irvine Ranch Water District  
Laguna Beach County Water District  
City of La Habra  
City of La Palma  
Mesa Water District  
Moulton Niguel Water District  
City of Newport Beach  
City of Orange  
Orange County Water District  
City of San Clemente  
City of San Juan Capistrano  
Santa Margarita Water District  
City of Seal Beach  
Serrano Water District  
South Coast Water District  
Trabuco Canyon Water District  
City of Tustin  
City of Westminster  
Yorba Linda Water District

District investments and cash balances are held in various funds designated for certain purposes as follows:

Fund	Book Value	% of Portfolio
Designated Reserves		
General Operations	\$1,637,135	16.83%
Grant & Project Cash Flow	1,000,000	10.28%
Building Repair	239,491	2.46%
Total Designated Reserves	2,876,626	29.57%
General Fund	4,544,117	46.73%
Water Fund	2,021,632	20.79%
Conservation Fund	298,488	3.07%
Desalination Feasibility Study Fund	330,563	3.40%
WEROC Fund	114,929	1.18%
Water Trailers Grant	(464,152)	-4.77%
Trustee Activities	2,951	0.03%
<b>Total</b>	<b>\$9,725,154</b>	<b>100.00%</b>

The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	1.03%	\$100,215	\$100,214
Short-term investment			
• LAIF	53.05%	\$5,159,236	\$5,159,236
• OCIP	24.27%	2,360,669	2,360,669
Long-term investment			
• Misc. Securities	20.62%	2,005,034	2,079,488
• Certificates of Deposit	1.03%	100,000	99,417
<b>Total</b>	<b>100.00%</b>	<b>\$9,725,154</b>	<b>\$9,799,024</b>

The average number of days to maturity/call as of December 31, 2013 equaled 135 and the average yield to maturity is 0.888%. During the month, the District's average daily balance was \$21,492,188.37. Funds were invested in Federal Agency Issues, Certificates of Deposit, Negotiable CD's, Miscellaneous Securities, the Local Agency Investment Funds (LAIF) and the Orange County Investment Pool (OCIP) during the month of December 2013.

The \$73,870 difference between the book value and the market value on December 31, 2013 represents the exchange difference if all investments had been liquidated on that date. Since it is the District's practice to "buy and hold" investments until maturity, the market values are a point of reference, not an indication of actual loss or gain. There are no current plans or cash flow requirements identified in the near future that would require the sale of these securities prior to maturity.

Robert J. Hunter  
*General Manager*  
Hilary Chumpitazi  
*Deputy Treasurer*



# MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Portfolio Management - Portfolio Summary December 31, 2013



12/31/2013	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Certificates of Deposit - Bank	100,000.00	99,417.00	100,000.00	1.04	1119	1.050
Local Agency Investment Funds	5,159,236.18	5,159,236.18	5,159,236.18	53.63	1	0.264
Miscellaneous Securities - Coupon	2,000,000.00	2,079,487.50	2,005,034.36	20.79	592	3.346
Orange County Investment Pool	2,360,668.92	2,360,668.92	2,360,668.92	24.54	1	0.164
<b>Total Investments</b>	<b>9,619,905.10</b>	<b>9,698,809.60</b>	<b>9,624,939.46</b>	<b>100.00%</b>	<b>135</b>	<b>0.888</b>
<b>Cash</b>						
Passbook Checking	100,214.46	100,214.46	100,214.46		1	0.00
<b>Total Cash and Investments</b>	<b>9,720,119.56</b>	<b>9,799,024.06</b>	<b>9,725,153.92</b>		<b>135</b>	<b>0.888</b>

<b>Total Earnings</b>	<b>Month Ending December</b>	<b>Fiscal Year to Date</b>
Current Year	9,506.47	57,497.63
Average Daily Balance	21,492,188.37	
Effective Rate of Return	0.888%	

We certify that this report reflects the cash and investments of the Municipal Water District of Orange County and is in conformity with the Government Code requirements and the District Investment Policy and Guidelines in effect at the time of investment. The Investment Program herein shown provides sufficient cash flow liquidity to meet the next six month's estimated expenditure. The source for the market values are from Union Bank

  
Robert J. Huntley, General Manager

Date

2.4.14

  
Hilary Chumpitazi, Deputy Treasurer

Date

02/04/2014

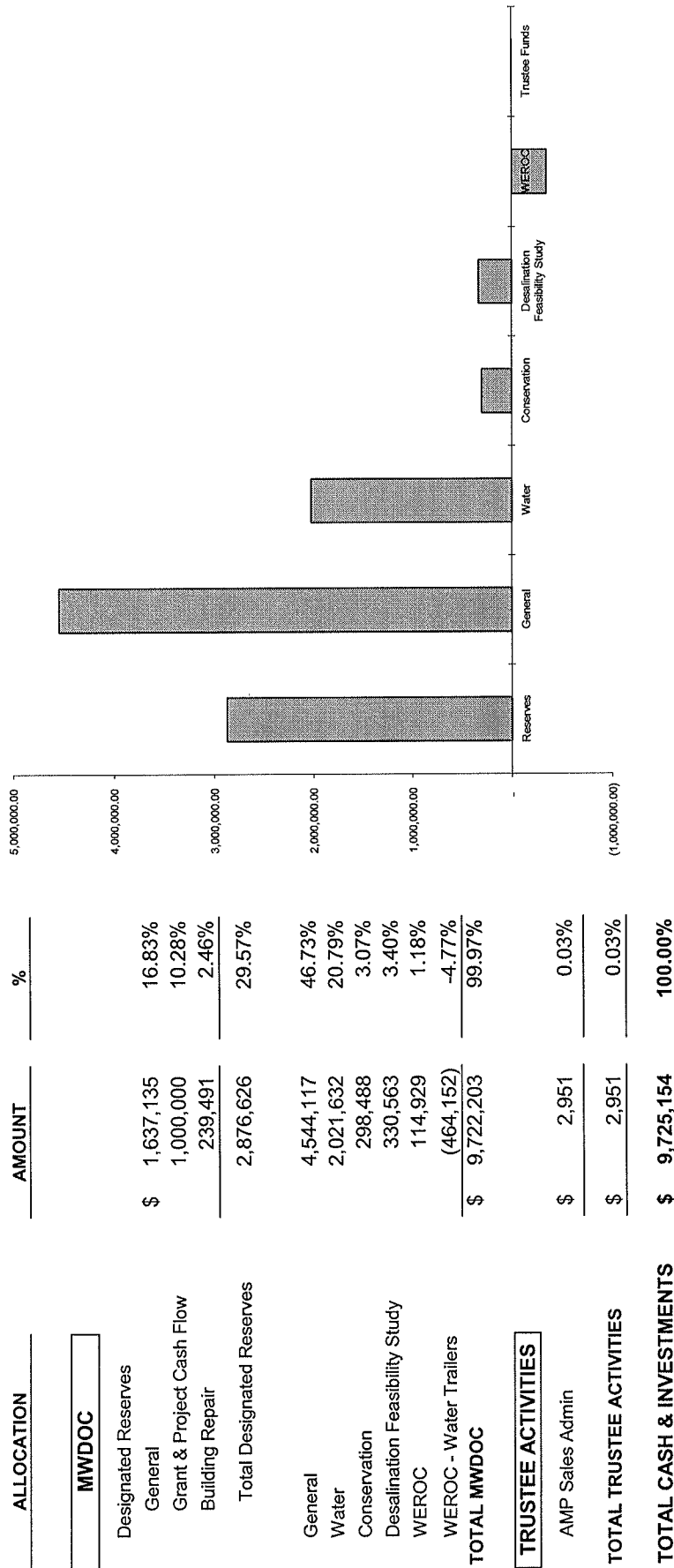
**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Long-Term Portfolio Details - Investments**  
**December 31, 2013**

Issuer	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
<b>Certificate of Deposit - Bank</b>									
Goldman Sachs Bank	38143A4T9	1/23/2013	100,000.00	99,417.00	100,000.00	1.050	1.050	1119	1/23/2017
<b>Sub Total</b>			<b>100,000.00</b>	<b>99,417.00</b>	<b>100,000.00</b>	<b>1.050</b>	<b>1.050</b>	<b>1119</b>	
<b>Miscellaneous Securities - Coupon</b>									
Bank of America	06051GED7	10/14/2010	250,000.00	261,327.50	252,691.49	3.700	3.000	609	9/1/2015
JPMorgan Chase	46625HHR4	11/23/2010	250,000.00	259,610.00	252,419.35	3.400	2.700	540	6/24/2015
MetLife Global	59217GAD1	2/25/2011	500,000.00	521,170.00	501,102.55	3.125	3.007	741	1/11/2016
Morgan Stanley	61747YCT0	3/9/2011	500,000.00	520,455.00	499,506.33	3.450	3.508	671	11/2/2015
UBS Financial Services	90261XFY3	6/10/2010	500,000.00	516,925.00	499,314.64	3.500	4.020	380	1/15/2015
<b>Sub Total</b>			<b>2,000,000.00</b>	<b>2,079,487.50</b>	<b>2,005,034.36</b>	<b>3.500</b>	<b>3.346</b>	<b>592</b>	
<b>Total Investments</b>			<b>2,100,000.00</b>	<b>2,178,904.50</b>	<b>2,105,034.36</b>	<b>3.383</b>	<b>3.237</b>	<b>617</b>	
<b>Total Earnings</b>									
Current Year			5,873.66		34,831.96				

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Short-Term Portfolio Details - Cash and Investments**  
**December 31, 2013**

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
<b>Local Agency Investment Funds</b>									
LAIF LGIP	LAIF	6/30/2010	5,159,236.18	5,159,236.18	5,159,236.18	0.264	0.264	1	N/A
<b>Sub Total</b>			<b>5,159,236.18</b>	<b>5,159,236.18</b>	<b>5,159,236.18</b>	<b>0.264</b>	<b>0.264</b>	<b>1</b>	
<b>Orange County Investment Pool</b>									
County of Orange LGIP	OCIP	6/29/2005	2,360,668.92	2,360,668.92	2,360,668.92	0.164	0.164	1	N/A
<b>Sub Total</b>			<b>2,360,668.92</b>	<b>2,360,668.92</b>	<b>2,360,668.92</b>	<b>0.164</b>	<b>0.164</b>	<b>1</b>	
<b>Total Investments</b>			<b>7,519,905.10</b>	<b>7,519,905.10</b>	<b>7,519,905.10</b>	<b>0.233</b>	<b>0.233</b>		
<b>Passbook Checking</b>									
Bank of America Cash	CASH0547	7/1/2011	99,714.46	99,714.46	99,714.46	0.000	0.000	1	N/A
Petty Cash Cash	CASH	7/1/2011	500.00	500.00	500.00	0.000	0.000	1	N/A
<b>Total Cash</b>			<b>100,214.46</b>	<b>100,214.46</b>	<b>100,214.46</b>	<b>0.000</b>	<b>0.000</b>	<b>1</b>	
<b>Total Cash and Investments</b>			<b>7,620,119.56</b>	<b>7,620,119.56</b>	<b>7,620,119.56</b>	<b>0.233</b>	<b>0.233</b>	<b>1</b>	
<b>Total Earnings</b>									
Current Year			3,632.81		22,665.67				

**Municipal Water District of Orange County  
Cash and Investments at December 31, 2013**



**MUNICIPAL WATER DIST OF ORANGE COUNTY**  
**PARS GASB 45 Program**

**Monthly Account Report for the Period**  
**12/1/2013 to 12/31/2013**

Rob Hunter  
General Manager  
Municipal Water Dist of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708

**Account Summary**

Source	Beginning Balance as of 12/1/2013	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 12/31/2013
Employer Contribution	\$847,229.74	\$0.00	\$7,992.80	\$194.10	\$0.00	\$0.00	\$855,028.44
<b>Totals</b>	<b>\$847,229.74</b>	<b>\$0.00</b>	<b>\$7,992.80</b>	<b>\$194.10</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$855,028.44</b>

**Investment Selection**

Moderate HighMark PLUS

**Investment Objective**

The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.

**Investment Return**

1-Month	3-Months	1-Year	Annualized Return			Inception Date
			3-Years	5-Years	10-Years	
0.94%	4.51%	13.83%	N/A	N/A	N/A	10/26/2011

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past Performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Inception Date: Plans inception date

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**COMBINED FINANCIAL STATEMENTS**  
**AND**  
**BUDGET COMPARATIVE**  
**JULY 1, 2013 THRU DECEMBER 30, 2013**

**Municipal Water District of Orange County  
Combined Balance Sheet  
As of December 31, 2013**

<b><u>ASSETS</u></b>	<b>Amount</b>
Cash in Bank	100,214.46
Investments	9,624,939.46
Accounts Receivable	26,642,297.55
Accounts Receivable - Other	149,592.18
Accrued Interest Receivable	33,331.05
Prepays/Deposits	316,355.79
Leasehold Improvements	2,796,412.08
Furniture, Fixtures & Equipment	536,387.64
Less: Accum Depreciation	(2,367,910.79)
<b>TOTAL ASSETS</b>	<b><u>\$37,831,619.42</u></b>
<b><u>LIABILITIES AND FUND BALANCES</u></b>	
<b>Liabilities</b>	
Accounts Payable	27,127,651.32
Accrued Salaries and Benefits Payable	271,777.37
Other Liabilities	499,151.18
Other post employment benefits (OPEB) liabilities	31,956.00
Unearned Revenue	1,185,295.57
Total Liabilities	<u>29,115,831.44</u>
<b>Fund Balances</b>	
Restricted Fund Balances	
Water Fund - T2C	1,010,646.56
Water Fund - CC	90,303.38
Total Restricted Fund Balances	<u>1,100,949.94</u>
Unrestricted Fund Balances	
Designated Reserves	
General Operations	1,605,179.27
Grant & Project Cash Flow	1,000,000.00
Election Expense	
Building Repair	239,491.00
Total Designated Reserves	<u>2,844,670.27</u>
GENERAL FUND	1,302,401.12
WEROC	49,543.25
Total Unrestricted Fund Balances	<u>4,196,614.64</u>
Excess Revenue over Expenditures	
Operating Fund	3,616,390.22
Other Funds	(198,166.82)
Total Fund Balance	<u>8,715,787.98</u>
<b>TOTAL LIABILITIES AND FUND BALANCES</b>	<b><u>\$37,831,619.42</u></b>

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July thru December 2013**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>REVENUES</u></b>						
Retail Connection Charge	0.00	5,129,804.40	5,121,824.00	100.16%	0.00	(7,980.40)
Water Increment	<u>35,775.53</u>	<u>463,879.22</u>	<u>709,840.00</u>	<u>65.35%</u>	<u>0.00</u>	<u>245,960.78</u>
Water rate revenues	35,775.53	5,593,683.62	5,831,664.00	95.92%	0.00	237,980.38
Interest Revenue	<u>9,253.54</u>	<u>55,957.42</u>	<u>138,000.00</u>	<u>40.55%</u>	<u>0.00</u>	<u>82,042.58</u>
Subtotal	45,029.07	5,649,641.04	5,969,664.00	94.64%	0.00	320,022.96
Choice Programs	0.00	907,845.48	907,846.00	100.00%	0.00	0.52
Miscellaneous Income	41.75	1,782.91	3,000.00	59.43%	0.00	1,217.09
School Contracts	<u>8,694.87</u>	<u>22,806.63</u>	<u>70,000.00</u>	<u>32.58%</u>	<u>0.00</u>	<u>47,193.37</u>
Subtotal	<u>8,736.62</u>	<u>932,435.02</u>	<u>980,846.00</u>	<u>95.06%</u>	<u>0.00</u>	<u>48,410.98</u>
<b>TOTAL REVENUES</b>	<u>53,765.69</u>	<u>6,582,076.06</u>	<u>6,950,510.00</u>	<u>94.70%</u>	<u>0.00</u>	<u>368,433.94</u>



**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July thru December 2013**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>EXPENSES</u></b>						
Salaries & Wages	270,824.94	1,433,022.62	2,848,711.00	50.30%	8,000.00	1,407,688.38
Salaries & Wages - Grant Recovery	(6,102.94)	(16,142.60)	(20,851.00)	77.42%	0.00	(4,708.40)
Directors' Compensation	14,892.80	82,608.50	200,357.00	41.23%	0.00	117,748.50
MWD Representation	3,723.20	38,395.50	114,490.00	33.54%	0.00	76,094.50
Employee Benefits	65,700.74	399,151.96	962,227.00	41.48%	0.00	563,075.04
OPEB Annual Contribution	0.00	0.00	111,112.00	0.00%	0.00	111,112.00
Employee Benefits - Grant Recovery	(1,693.00)	(4,711.39)	0.00	0.00%	0.00	4,711.39
Director's Benefits	6,072.07	40,420.50	87,592.00	46.15%	0.00	47,171.50
Health Ins \$'s for Retirees	2,761.88	24,483.52	44,463.00	55.06%	0.00	19,979.48
Training Expense	0.00	1,361.00	14,200.00	9.58%	0.00	12,839.00
Tuition Reimbursement	0.00	1,969.15	6,000.00	32.82%	0.00	4,030.85
Personnel Expenses	356,179.69	2,000,558.76	4,368,301.00	45.80%	8,000.00	2,358,986.16
Engineering Expense	4,500.00	34,500.00	170,000.00	20.29%	27,000.00	108,500.00
Legal Expense	44,448.95	199,537.74	304,500.00	65.53%	71,703.76	33,258.50
Audit Expense	2,400.00	17,900.00	23,000.00	77.83%	0.00	5,100.00
Professional Services	36,414.52	292,323.34	797,913.00	36.64%	233,475.25	272,114.41
Professional Fees	87,763.47	544,261.08	1,295,413.00	42.01%	332,179.01	418,972.91
Conference-Staff	0.00	3,640.00	12,520.00	29.07%	0.00	8,880.00
Conference-Directors	425.00	1,970.00	7,960.00	24.75%	0.00	5,990.00
Travel & Accom.-Staff	2,863.55	6,434.41	28,360.00	22.69%	0.00	21,925.59
Travel & Accom.-Directors	1,994.29	3,552.27	15,950.00	22.27%	0.00	12,397.73
Travel & Conference	5,282.84	15,596.68	64,790.00	24.07%	0.00	49,193.32
Membership/Sponsorship	5,793.00	74,418.70	88,087.00	84.48%	0.00	13,668.30
CDR Support	0.00	19,979.50	39,140.00	51.05%	19,979.50	(819.00)
Dues & Memberships	5,793.00	94,398.20	127,227.00	74.20%	19,979.50	12,849.30
Business Expense	494.96	3,477.37	7,000.00	49.68%	0.00	3,522.63
Maintenance Office	4,415.14	46,677.41	104,880.00	44.51%	43,418.22	14,784.37
Building Repair & Maintenance	5,081.75	5,081.75	0.00	0.00%	4,872.62	(9,954.37)
Storage Rental & Equipment Lease	979.07	6,297.23	14,309.00	44.01%	7,010.77	1,001.00
Office Supplies	2,170.79	12,110.08	24,000.00	50.46%	1,919.94	9,969.98
Postage/Mail Delivery	1,690.24	5,268.99	15,100.00	34.89%	2,861.37	6,969.64
Subscriptions & Books	0.00	493.62	2,400.00	20.57%	0.00	1,906.38
Reproduction Expense	28.75	9,215.89	68,587.00	13.44%	9,828.45	49,542.66
Maintenance-Computers	47.50	1,280.79	7,500.00	17.08%	799.12	5,420.09
Software Purchase	0.00	1,769.94	9,500.00	18.63%	649.00	7,081.06
Software Support	0.00	9,015.14	54,400.00	16.57%	0.00	45,384.86
Automotive Expense	1,310.91	6,386.30	14,300.00	44.66%	0.00	7,913.70
Toll Road Charges	145.40	645.85	1,290.00	50.07%	0.00	644.15
Insurance Expense	12,445.68	53,039.08	96,000.00	55.25%	0.00	42,960.92
Utilities - Telephone	1,240.94	7,192.71	16,900.00	42.56%	0.00	9,707.29
Bank Fees	859.74	5,381.61	10,560.00	50.96%	0.00	5,178.39
Miscellaneous Expense	2,870.01	27,918.50	80,550.00	34.66%	2,844.74	49,786.76
MWDOC's Contrb. To WEROC	9,068.00	54,412.00	108,820.00	50.00%	0.00	54,408.00
Depreciation Expense	2,942.02	17,651.94	0.00	0.00%	0.00	(17,651.94)
Other Expenses	45,790.90	273,316.20	636,096.00	42.97%	74,204.23	288,575.57
Building Repair & Maintenance	9,667.20	23,263.20	315,000.00	7.39%	167,083.80	124,653.00
Capital Acquisition	3,961.47	14,291.72	23,500.00	60.82%	0.00	9,208.28
<b>TOTAL EXPENSES</b>	<b>514,438.57</b>	<b>2,965,685.84</b>	<b>6,830,327.00</b>	<b>43.42%</b>	<b>601,446.54</b>	<b>3,263,194.62</b>
<b>NET INCOME (LOSS)</b>	<b>(460,672.88)</b>	<b>3,616,390.22</b>	<b>120,183.00</b>			

**Municipal Water District of Orange County  
Revenues and Expenditures Budget Comparative Report  
Water Fund  
From July thru December 2013**

	<b>Month to Date</b>	<b>Year to Date</b>	<b>Annual Budget</b>	<b>% Used</b>	<b>Budget Remaining</b>
<b><u>WATER REVENUES</u></b>					
Water Sales	9,153,683.30	90,117,640.10	145,306,842.00	62.02%	55,189,201.90
Readiness to Serve Charge	885,708.68	5,314,252.08	10,293,552.00	51.63%	4,979,299.92
Capacity Charge CCF	261,066.67	1,566,400.02	3,132,800.00	50.00%	1,566,399.98
SCP Surcharge	23,601.92	181,758.07	354,112.00	51.33%	172,353.93
Interest	216.30	1,459.89	4,630.00	31.53%	3,170.11
<b>TOTAL WATER REVENUES</b>	<b>10,324,276.87</b>	<b>97,181,510.16</b>	<b>159,091,936.00</b>	<b>61.09%</b>	<b>61,910,425.84</b>
<b><u>WATER PURCHASES</u></b>					
Water Sales	9,153,683.30	90,117,640.10	145,306,842.00	62.02%	55,189,201.90
Readiness to Serve Charge	885,708.68	5,314,252.08	10,293,552.00	51.63%	4,979,299.92
Capacity Charge CCF	261,066.67	1,566,400.02	3,132,800.00	50.00%	1,566,399.98
SCP Surcharge	23,601.92	181,758.07	354,112.00	51.33%	172,353.93
<b>TOTAL WATER PURCHASES</b>	<b>10,324,060.57</b>	<b>97,180,050.27</b>	<b>159,087,306.00</b>	<b>61.09%</b>	<b>61,907,255.73</b>
<b>EXCESS OF REVENUE OVER EXPENDITURES</b>	<b>216.30</b>	<b>1,459.89</b>	<b>4,630.00</b>		

**Municipal Water District of Orange County**  
**WUE Revenues and Expenditures (Actuals vs Budget)**  
**From July thru December 2013**

	Year to Date Actual	Annual Budget	% Used
<b>Landscape Performance Certification</b>			
Revenues	104,262.94	116,000.00	89.88%
Expenses	56,223.75	107,000.00	52.55%
Excess of Revenues over Expenditures	<u>48,039.19</u>	<u>0.00</u>	
<b>SmarTimer Program</b>			
Revenues	36,682.17	125,200.00	29.30%
Expenses	42,648.65	125,200.00	34.06%
Excess of Revenues over Expenditures	<u>(5,966.48)</u>	<u>0.00</u>	
<b>Industrial Water Use Reduction</b>			
Revenues	11,047.50	113,478.00	9.74%
Expenses	59,000.97	113,478.00	51.99%
Excess of Revenues over Expenditures	<u>(47,953.47)</u>	<u>0.00</u>	
<b>Rotating Nozzles Rebate</b>			
Revenues	116,870.41	0.00	0.00%
Expenses	116,937.52	0.00	0.00%
Excess of Revenues over Expenditures	<u>(67.11)</u>	<u>0.00</u>	
<b>Hotel Water Use Reduction Program</b>			
Revenues	7,100.00	189,484.00	3.75%
Expenses	25,457.06	189,484.00	13.43%
Excess of Revenues over Expenditures	<u>(18,357.06)</u>	<u>0.00</u>	
<b>ULFT Rebate Program</b>			
Revenues	25,247.89	40,000.00	63.12%
Expenses	30,529.96	40,000.00	76.32%
Excess of Revenues over Expenditures	<u>(5,282.07)</u>	<u>0.00</u>	
<b>HECW Rebate Program</b>			
Revenues	126,260.26	380,000.00	33.23%
Expenses	142,156.28	380,000.00	37.41%
Excess of Revenues over Expenditures	<u>(15,896.02)</u>	<u>0.00</u>	
<b>Large Landscape Survey</b>			
Revenues	22,792.00	21,600.00	105.52%
Expenses	43,255.40	21,600.00	200.26%
Excess of Revenues over Expenditures	<u>(20,463.40)</u>	<u>0.00</u>	
<b>Indoor-Outdoor Survey</b>			
Revenues	1,757.97	12,150.00	14.47%
Expenses	0.00	12,150.00	0.00%
Excess of Revenues over Expenditures	<u>1,757.97</u>	<u>0.00</u>	
<b>Turf Removal Program</b>			
Revenues	217,141.87	105,000.00	206.80%
Expenses	221,142.97	105,000.00	210.61%
Excess of Revenues over Expenditures	<u>(4,001.10)</u>	<u>0.00</u>	

**Municipal Water District of Orange County**  
**WUE & Other Funds Revenues and Expenditures (Actuals vs Budget)**  
**From July thru December 2013**

	Year to Date Actual	Annual Budget	% Used
<b>WUE Master Plan</b>			
Revenues	3,313.50	0.00	0.00%
Expenses	3,323.41	0.00	0.00%
Excess of Revenues over Expenditures	(9.91)	0.00	
<b>WEROC</b>			
Revenues	159,319.00	213,577.00	74.60%
Expenses	98,130.92	213,577.00	45.95%
Excess of Revenues over Expenditures	61,188.08	0.00	
<b>WEROC - Water Trailers</b>			
Revenues	265,232.00	0.00	0.00%
Expenses	464,150.00	0.00	0.00%
Excess of Revenues over Expenditures	(198,918.00)	0.00	
<b>WUE Projects</b>			
Revenues	672,476.51	1,102,912.00	60.97%
Expenses	740,675.97	1,093,912.00	67.71%
Excess of Revenues over Expenditures	(68,199.46)	9,000.00	
<b>RPOI Distributions</b>			
Revenues	4,447,821.66	1,619,665.00	274.61%
Expenses	4,447,821.66	1,619,665.00	274.61%
Excess of Revenues over Expenditures	0.00	0.00	
<b>Ocean Desalination</b>			
Revenues	52,620.07	115,459.00	45.57%
Expenses	52,620.07	115,459.00	45.57%
Excess of Revenues over Expenditures	0.00	0.00	



## Memorandum

**DATE:** February 6, 2014  
**TO:** Administrative & Finance Committee  
(Directors Thomas, Barbre, Osborne)  
**FROM:** Robert Hunter  
**SUBJECT:** Six months ending December 2013 Financials Actual versus Budget

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The following reports are attached:

- Revenues and Expenditures Actual versus Budget for the General Fund
- Revenues and Expenditures Actual versus Budget Detailed Comparative Report for the General Fund
- General Fund Footnotes
- Revenues and Expenditures Actual versus Budget for Other Funds
- Revenues and Expenditures Actual versus Budget for the Water Use Efficiency Funds
- Revenues and Expenditures Actual versus Budget for the Water Fund

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget Summary Report  
Six months ending December 2013  
( \$000 Omitted )  
General Fund

	<u>YTD Actual</u>	<u>Budget</u>	<u>% Used</u>
<u>REVENUES</u>			
Water Rate revenues:			
Retail connection fees	5,130	5,122	100.2%
Water rate increment	<u>464</u>	<u>710</u>	<u>65.3%</u>
Subtotal	5,594	5,832	95.9%
Other Revenues:			
Interest income	56	138	40.5%
Choice Programs	908	908	100.0%
School Contracts	23	70	32.6%
Other income	<u>2</u>	<u>3</u>	<u>59.4%</u>
Subtotal	988	1,119	88.3%
 TOTAL REVENUES	 6,582	 6,951	 94.7%
<u>EXPENSES</u>			
	2,001	4,368	45.8%
Professional services	310	821	37.8%
Outside engineering	35	170	20.3%
Legal expense <sup>(1)</sup>	200	305	65.5%
Travel & Conference <sup>(2)</sup>	16	65	24.1%
Dues and memberships <sup>(3)</sup>	94	127	74.2%
General & Admin expense	273	636	43.0%
Building Repair & Maintenance <sup>(4)</sup>	23	315	7.4%
Capital acquisition (not including building costs) <sup>(5)</sup>	<u>14</u>	<u>24</u>	<u>60.8%</u>
TOTAL EXPENSES	2,966	6,830	43.4%
 EXCESS OF REVENUES OVER EXPENSES	 3,616	 120	

Municipal Water District of Orange County  
Revenues and Expenditures Actual vs Budget Line Item Report  
Six Month Ending December 2013  
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
REVENUES			
Retail Connection Charge	5,129,804	5,121,824	100.16%
Water Increment	463,879	709,840	65.35%
Water rate revenues	5,593,684	5,831,664	95.92%
Choice Programs	907,845	907,846	100.00%
Interest Revenue	55,957	138,000	40.55%
Miscellaneous Income	1,783	3,000	59.43%
School Contracts	22,807	70,000	32.58%
Transfer to Reserve	-	0	0.00%
Other revenues	988,392	1,118,846	88.34%
TOTAL REVENUES	6,582,076	6,950,510	94.70%

OPERATING EXPENSES			
Salaries & Wages	1,433,023	2,848,711	50.30%
less Recovery from Grants	(20,854)	(20,851)	100.01%
Directors' Compensation	82,609	200,357	41.23%
MWD Representation	38,396	114,490	33.54%
Employee Benefits	399,152	962,227	41.48%
OPEB Annual Contribution	-	111,112	0.00%
Directors Benefits	40,421	87,592	46.15%
Health Insurances for Retirees	24,484	44,463	55.06%
Training Expense	1,361	14,200	9.58%
Tuition Reimbursement	1,969	6,000	32.82%
Personnel Expenses	2,000,559	4,368,301	45.80%
Engineering Expense	34,500	170,000	20.29%
Legal Expense	199,538	304,500	65.53%
Audit Expense	17,900	23,000	77.83%
Professional Services	292,323	797,913	36.64%
Professional Fees	544,261	1,295,413	42.01%
Conference-Staff	3,640	12,520	29.07%
Conference-Directors	1,970	7,960	24.75%
Travel & Accom.-Staff	6,434	28,360	22.69%
Travel & Accom.-Directors	3,552	15,950	22.27%
Travel & Conference	15,597	64,790	24.07%
Membership/Sponsorship	74,419	88,087	84.48%
CDR Support	19,980	39,140	51.05%
Dues & Memberships	94,398	127,227	74.20%

Municipal Water District of Orange County  
Revenues and Expenditures Actual vs Budget Line Item Report  
Six Month Ending December 2013  
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
Business Expense	3,477	7,000	
Maintenance Office	46,677	104,880	44.51%
Building Repair & Maintenance	5,082	-	0.00%
Storage Rental & Equipment Lease	6,297	14,309	44.01%
Office Supplies	12,110	24,000	50.46%
Postage/Mail Delivery	5,269	15,100	34.89%
Subscriptions & Books	494	2,400	20.57%
Reproduction Expense	9,216	68,587	13.44%
Maintenance-Computers	1,281	7,500	17.08%
Software Purchase	1,770	9,500	18.63%
Software Support	9,015	54,400	16.57%
Automotive Expense	6,386	14,300	44.66%
Toll Road Charges	646	1,290	50.07%
Insurance Expense	53,039	96,000	55.25%
Utilities - Telephone	7,193	16,900	42.56%
Bank Fees	5,382	10,560	50.96%
Miscellaneous Expense	27,919	80,550	34.66%
MWDOC's Contribution To WEROC	54,412	108,820	50.00%
Depreciation Expense	17,652	-	0.00%
Election Expense	-	-	0.00%
Building Repair and Maintenance	23,263	315,000	7.39%
Capital Acquisition	14,292	23,500	60.82%
Other Expenses	310,871	974,596	31.90%
TOTAL EXPENSES	2,965,686	6,830,327	43.42%
-			
EXCESS OF REVENUES OVER EXPENSES	3,616,390	120,183	



Municipal Water District of Orange County  
Actual versus Budget Variance Analysis report  
Six months ending December 2013

General Fund Footnotes

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- 1 Legal expenses in the first half of the year were high due to SDCWA lawsuit, public record requests, preparation of a number of agreements and legal costs for special projects.
- 2 Travel and conference expenses are generally lower in the first half of the year as well as, due to a number of staff positions being vacant and competing interests.
- 3 Dues and memberships were up in the first half of the year (this is a typical occurrence due to many memberships being due early in the year).
- 4 The building repair and maintenance was low, but the contractor payments for the HVAC are coming due, although for the year, we will probably finish under budget due to the competitive bids.
- 5 Capital acquisition involving computer servers for replacement at MWDOC and for our business resumption system were purchased early in the year resulting in higher expenses in the first part of the year.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Statement of Revenues and Expenditures  
**Water Funds**  
Six Month Ending December 2013

	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>
<b><u>Water Revenues</u></b>			
Water sales	90,117,640	145,306,842	(55,189,202)
Ready to Serve Charge	5,314,252	10,293,552	(4,979,300)
Capacity Charge Flat Rate	1,566,400	3,132,800	(1,566,400)
SCP Surcharge	181,758	354,112	(172,354)
Interest	<u>1,460</u>	<u>4,630</u>	<u>(3,170)</u>
Total Water Revenues	<u>97,181,510</u>	<u>159,091,936</u>	<u>(61,910,426)</u>
 <b><u>Water Purchases</u></b>			
Water sales	90,117,640	145,306,842	(55,189,202)
Ready to Serve Charge	5,314,252	10,293,552	(4,979,300)
Capacity Charge	1,566,400	3,132,800	(1,566,400)
Tier 2 Contingency	-	-	-
SCP Surcharge	<u>181,758</u>	<u>354,112</u>	<u>(172,354)</u>
Total Water Purchases	<u>97,180,050</u>	<u>159,087,306</u>	<u>(61,907,256)</u>
 EXCESS OF REVENUES OVER EXPENDITURES	 <u>1,460</u>	 <u>4,630</u>	 <u>(3,170)</u>

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Six months ending December 2013

Other Funds

	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>
<u>WEROC</u>			
Revenues	159,319	213,577	(54,258)
Expenditures	<u>98,131</u>	<u>213,577</u>	<u>(115,446)</u>
Excess of Revenues over Expenditures	61,188	-	61,188
 <u>WUE Projects</u> (details on page 5)			
Revenues	669,163	1,102,912	(433,749)
Expenditures	<u>737,353</u>	<u>1,093,912</u>	<u>(356,559)</u>
Excess of Revenues over Expenditures	(68,190)	9,000	(77,190)
 <u>RPOI Distribution</u>			
Revenues	4,447,822	1,619,665	2,828,157
Expenditures	<u>4,447,822</u>	<u>1,619,665</u>	<u>2,828,157</u>
Excess of Revenues over Expenditures	-	-	-
 <u>Ocean Desalination</u>			
Revenues	52,620	115,459	(62,839)
Expenditures	<u>52,620</u>	<u>115,459</u>	<u>(62,839)</u>
Excess of Revenues over Expenditures	-	-	-

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Six Month Ending December 2013  
Water Use Efficiency Projects

		<u>Actual</u>	<u>Budget</u>	<u>% Used</u>
<b><u>Landscape Performance Certification</u></b>				
Revenues		104,263	116,000	90%
Expenditures		<u>56,224</u>	<u>107,000</u>	53%
Excess of Revenues over Expenditures		48,039	9,000	
<b><u>Smartimer Rebate</u></b>				
Revenues	1	36,682	125,200	29%
Expenditures		<u>42,649</u>	<u>125,200</u>	34%
Excess of Revenues over Expenditures		(5,966)	-	
<b><u>Rotating Nozzle Rebate</u></b>				
Revenues	2	116,870	-	0%
Expenditures		<u>116,938</u>	<u>-</u>	0%
Excess of Revenues over Expenditures		(67)	-	
<b><u>Industrial Water Use Reduction</u></b>				
Revenues	3	11,048	113,478	10%
Expenditures		<u>59,001</u>	<u>113,478</u>	52%
Excess of Revenues over Expenditures		(47,953)	-	
<b><u>Hotel Water Use Reduction Program</u></b>				
Revenues		7,100	189,484	4%
Expenditures		<u>25,457</u>	<u>189,484</u>	13%
Excess of Revenues over Expenditures		(18,357)	-	
<b><u>ULFT Rebate Program</u></b>				
Revenues		25,248	40,000	63%
Expenditures		<u>30,530</u>	<u>40,000</u>	76%
Excess of Revenues over Expenditures		(5,282)	-	
<b><u>HECW Rebate Program</u></b>				
Revenues		126,260	380,000	33%
Expenditures		<u>142,156</u>	<u>380,000</u>	37%
Excess of Revenues over Expenditures		(15,896)	-	

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Six Month Ending December 2013  
Water Use Efficiency Projects

		<u>Actual</u>	<u>Budget</u>	<u>% Used</u>
<b><u>Large Landscape Survey</u></b>				
Revenues	<div style="border: 1px solid black; padding: 0 2px;">4</div>	22,792	21,600	106%
Expenditures		<u>43,255</u>	<u>21,600</u>	200%
Excess of Revenues over Expenditures		(20,463)	-	
<b><u>Indoor-Outdoor Survey</u></b>				
Revenues		1,758	12,150	14%
Expenditures		<u>-</u>	<u>12,150</u>	0%
Excess of Revenues over Expenditures		1,758	-	
<b><u>Turf Removal Program</u></b>				
Revenues	<div style="border: 1px solid black; padding: 0 2px;">4</div>	217,142	105,000	207%
Expenditures		<u>221,143</u>	<u>105,000</u>	211%
Excess of Revenues over Expenditures		(4,001)	-	

1

 Grant agreement extended for an additional 2 years term. This allowed for the program to be spread out over another 2 years.

2

 Rotating Nozzle grant ended. Did not foresee MET and Newport Beach passthru agreement.

3

 Grant term extended. Weak economy affected businesses ability to obtain financing to do suggested improvements.

4

 Larger participation than expected.



**ACTION ITEM**  
February 19, 2014

**TO:** Board of Directors

**FROM:** Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)

**Rob Hunter, General Manager**

**SUBJECT:** Return of Funds to Member Agencies from Close-Out of Capacity Charge Account

**STAFF RECOMMENDATION**

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Staff recommends the Board authorize the General Manager to close out and return funding from the Capacity Charge Account to the member agencies in accordance with the process used in 2007 to close the remainder of the account (approximately \$90,000 would be returned to the member agencies).

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

---

Between 2003 and 2006, MWDOC's implementation of MET's Capacity Charge was accomplished via a melded per AF charge imposed on our agencies. To ensure sufficient funds were available, the melded rate was initially set to collect additional funds to establish a "contingency fund" to be used in the event additional costs were incurred due to excessive peaking. For several years, the melded rate was set based on expected peaking charges. In 2006, MWDOC changed its capacity charge collection method to the highest peak day flow per cfs per agency over the base three year period and thus no longer needed a fund to manage the collection of the charge. At that time, the majority of the funds, over \$400,000, were returned to the MWDOC agencies based on their contributions; funds were retained in the account to cover the last year of reconciliation with the actual Capacity Charge to be assessed by MET. The amount retained plus interest earnings have grown over the years to about \$90,000. Staff recommends these funds be returned to the member agencies based on the same methodology as was used for the last disbursement in 2007.

Budgeted (Y/N): No	Budgeted amount: \$0	Core <input checked="" type="checkbox"/>	Choice __
Action item amount: 0	Line item:		
Fiscal Impact (explain if unbudgeted):			

MWDOC's Executive Committee discussed this last month and requested General Manager Hunter to discuss the options for the funds with the member agencies at the Manager's Meeting. Based on that discussion, most agencies supported a refund of the remaining amount, even if MWDOC requires additional funds this coming year to complete the HVAC and other building improvements – the general feeling was that MWDOC should follow through on what was started in 2007.

Attached is the Action taken by MWDOC's Board in October 2007 to return the first portion of the Capacity Charge Funds.

Below is a table indicating the level of the remaining refunds to each agency to take place in February 2014.

<b>February 2014 Refund Of Capacity Charge Reserve Fund</b>			
<b>Allocation Based On Capacity Charges Paid From January 2003 through December 2006</b>			
<b>Refund Amount = \$90,286</b>			
<b>Agency</b>	<b>Total</b>	<b>Percent of Total</b>	<b>Refund Amount</b>
Brea, City of	\$260,373	2.06%	\$1,863
Buena Park, City of	\$347,279	2.75%	\$2,485
East Orange CWD	\$201,162	1.59%	\$1,440
El Toro WD	\$612,871	4.86%	\$4,386
Fountain Valley, City of	\$200,325	1.59%	\$1,434
Garden Grove, City of	\$493,057	3.91%	\$3,528
Golden State Water Co.	\$579,509	4.59%	\$4,147
Huntington Beach, City of	\$544,100	4.31%	\$3,894
Irvine Ranch WD	\$1,103,724	8.75%	\$7,898
La Habra, City of	\$214,285	1.70%	\$1,533
La Palma, City of	\$33,162	0.26%	\$237
Laguna Beach CWD	\$262,113	2.08%	\$1,876
Mesa Consolidated WD	\$147,657	1.17%	\$1,057
Moulton Niguel WD	\$1,929,311	15.29%	\$13,806
Newport Beach, City of	\$342,340	2.71%	\$2,450
OCWD	\$395,712	3.14%	\$2,832
Orange, City of	\$546,465	4.33%	\$3,911
San Clemente, City of	\$575,585	4.56%	\$4,119
San Juan Capistrano, City of	\$354,678	2.81%	\$2,538
Santa Margarita WD	\$1,831,645	14.52%	\$13,108
Seal Beach, City of	\$75,244	0.60%	\$538
Serrano WD	\$37,200	0.29%	\$266
South Coast WD	\$449,676	3.56%	\$3,218
Trabuco Canyon WD	\$136,378	1.08%	\$976
Westminster, City of	\$253,717	2.01%	\$1,816
Yorba Linda WD	\$688,902	5.46%	\$4,930
<b>Total</b>	<b>\$12,616,469</b>	<b>100.00%</b>	<b>\$90,286</b>



## INFORMATION ITEM

October 10, 2007

**TO:** Board of Directors

**FROM:** Administration & Finance Committee  
(Directors Barbre, Royce, Finnegan)

Kevin Hunt  
General Manager

Staff Contact: Deven Upadhyay

**SUBJECT:** Allocation of 2007 Refunds

### STAFF RECOMMENDATION

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Staff recommends the Board of Directors receive and file this report.

### COMMITTEE RECOMMENDATION

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Committee recommends (To be determined at Committee Meeting)

### SUMMARY

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Earlier this year the Board approved distribution of two separate refunds to MWDOC's member agencies:

- A \$3,000,000 refund from MWDOC's Tier 2 Contingency Fund.
- A \$417,000 refund from MWDOC's Capacity Charge Reserve Fund.

The Board requested a report on the distribution of the funds once the refunds were complete. The attached table shows the distribution of each of the refunds to MWDOC's member agencies.

<b>Budgeted (Y/N):</b>	Budgeted amount:
<b>Action item amount:</b>	Line item:
<b>Fiscal Impact (explain if unbudgeted):</b>	



### MWDOC Refund Summary

Agency	Refund of Tier 2 Contingency Fund	Refund of Capacity Charge Reserve Fund	Sum of Both Refunds
Brea, City of	\$ 62,183.78	\$ 8,605.85	\$ 70,789.63
Buena Park, City of	\$ 82,821.78	\$ 11,478.28	\$ 94,300.06
East Orange CWD	\$ 47,571.27	\$ 6,648.82	\$ 54,220.09
El Toro WD	\$ 145,990.02	\$ 20,256.64	\$ 166,246.66
Fountain Valley, City of	\$ 47,284.81	\$ 6,621.16	\$ 53,905.97
Garden Grove, City of	\$ 116,358.40	\$ 16,296.55	\$ 132,654.95
Golden State Water Co.	\$ 137,891.58	\$ 19,153.96	\$ 157,045.54
Huntington Beach, City of	\$ 130,147.19	\$ 17,983.61	\$ 148,130.80
Irvine Ranch WD	\$ 262,763.51	\$ 36,480.31	\$ 299,243.82
La Habra, City of	\$ 51,227.96	\$ 7,082.55	\$ 58,310.51
La Palma, City of	\$ 7,915.82	\$ 1,096.08	\$ 9,011.90
Laguna Beach CWD	\$ 62,433.91	\$ 8,663.38	\$ 71,097.29
Mesa Consolidated WD	\$ 35,383.09	\$ 4,880.35	\$ 40,263.44
Moulton Niguel WD	\$ 459,409.14	\$ 63,767.67	\$ 523,176.81
Newport Beach, City of	\$ 81,230.88	\$ 11,315.04	\$ 92,545.92
OCWD	\$ 91,519.44	\$ 13,079.07	\$ 104,598.51
Orange, City of	\$ 129,391.54	\$ 18,061.77	\$ 147,453.31
San Clemente, City of	\$ 137,165.35	\$ 19,024.25	\$ 156,189.60
San Juan Capistrano, City of	\$ 85,005.71	\$ 11,722.82	\$ 96,728.53
Santa Margarita WD	\$ 435,458.85	\$ 60,539.59	\$ 495,998.44
Seal Beach, City of	\$ 17,769.27	\$ 2,486.96	\$ 20,256.23
Serrano WD	\$ 8,981.19	\$ 1,229.54	\$ 10,210.73
South Coast WD	\$ 107,043.29	\$ 14,862.69	\$ 121,905.98
Trabuco Canyon WD	\$ 32,444.90	\$ 4,507.57	\$ 36,952.47
Westminster, City of	\$ 60,032.11	\$ 8,385.87	\$ 68,417.98
Yorba Linda WD	\$ 164,575.21	\$ 22,769.62	\$ 187,344.83
<b>Sum of MWDOC Agencies</b>	<b>\$ 3,000,000.00</b>	<b>\$ 417,000.00</b>	<b>\$ 3,417,000.00</b>



**ACTION ITEM**  
February 19, 2014

**TO:** Board of Directors

**FROM:** **Administration & Finance Committee**  
(Directors Thomas, Barbre, Osborne)

Robert J. Hunter, General Manager

Staff Contact: Harvey De La Torre

**SUBJECT: RESOLUTION ON CALLING FOR ENHANCED WATER USE EFFICIENCY  
EFFORTS TO EXTEND REGIONAL WATER SUPPLIES FOR ORANGE  
COUNTY RESIDENTS AND BUSINESSES**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors adopt the proposed resolution calling for enhanced water use efficiency efforts to extend regional water supplies for Orange County residents and businesses

**COMMITTEE RECOMMENDATION**

---

Committee recommends (To be determined at Committee Meeting)

**REPORT**

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On January 31, the state's second snowpack survey showed that conditions in northern California had worsened to 12 percent of average water content. This caused the California Department of Water Resources to take the unprecedented step of reducing the State Water Project (SWP) Table "A" Allocation from 5 percent to zero.

With the SWP Allocation currently at zero and Governor Brown's drought declaration, Metropolitan is recommending adoption of a Water Supply Alert Resolution calling for local water agencies and cities to increase their water use efficiency efforts, including

<b>Budgeted (Y/N): NA</b>	Budgeted amount: NA	Core <u>_x_</u>	Choice <u>__</u>
<b>Action item amount: NA</b>	Line item:		
<b>Fiscal Impact (explain if unbudgeted):</b>			

adopting and implementing local drought ordinances to sustain their regional storage reserves through this drought.

Although, Metropolitan has approximately 2.4 million acre-feet of dry year storage and does not plan to implement mandatory water delivery reductions in 2014, the Water Supply Alert is a part of Metropolitan's Water Surplus and Drought Management (WSDM) plan.

As a result of the state's water supply conditions and Metropolitan's call for additional water use efficiency efforts, MWDOC staff is recommending to the Board to adopt a similar resolution. As the County's regional imported water provider, this resolution encourages every Orange County water agency, city, resident, and business to do their part in reducing their water usage in order to extend stored water supplies and prepare for a prolonged drought.

**RESOLUTION NO. \_\_\_\_\_**  
**OF THE BOARD OF DIRECTORS OF**  
**THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**CALLING FOR ENHANCED WATER USE EFFICIENCY EFFORTS TO**  
**EXTEND REGIONAL WATER SUPPLIES**  
**FOR ORANGE COUNTY RESIDENTS AND BUSINESSES.**

**Whereas**, Orange County depends on imported water from Northern California and the Colorado River to meet approximately half of its supply demand; with the balance of the county's demand being met by local groundwater via a large basin under north and central Orange County, smaller basins in south Orange County, and through local water recycling and water use efficiency; and

**Whereas**, the state of California is experiencing record dry year conditions, with 2014 projected to become the driest year on record; and

**Whereas**, now in its third consecutive year of a drought, the State of California's annual precipitation levels are inadequate to fill the state's key reservoirs; and

**Whereas**, effective January 17, 2014, Governor Edmund G. Brown, Jr. declared a statewide state of emergency due to drought conditions

**Whereas**, on January 31, 2014, the state of California's second snow survey reported statewide snowpack at 12% of normal levels and the California Department of Water Resources (DWR) officially reduced the State Water Project (SWP) Table A Allocation to zero percent of contract amounts; and

**Whereas**, the National Weather Service's most recent *Three-Month Outlook* for California forecasts above normal temperatures and below normal precipitation throughout the entire state; and

**Whereas**, the Colorado River Basin drought has stretched into a 14<sup>th</sup> year, continuing to negatively impact storage levels on the river's two main reservoirs; and

**Whereas**, over the past 20 years, southern California rate payers have invested more than \$15 billion in regional storage, infrastructure improvements, local resources and water use efficiency programs that are now serving to sustain supplies during this historic dry period; and

**Whereas**, Metropolitan Water District of Southern California (Metropolitan) has indicated that its water storage reserves, committed to meeting regional drought demands, remain relatively healthy at nearly 2.4 million acre-feet and, as such, does not intend to institute mandatory water reductions within its service area for 2014; and

**Whereas**, Metropolitan has declared a Water Supply Alert calling for all cities, counties, member agencies and retails water agencies to implement extraordinary water use efficiency measures, adopt and implement local drought ordinances to preserve regional storage reserves; and

**Whereas**, the cities and water agencies serving Orange County's population of 3.1 million have done an outstanding job working together to develop water-management strategies and implement comprehensive water use efficiency programs to help ensure a reliable supply of high-quality water to meet countywide demand; and

**Whereas**, many cities and water agencies serving Orange County have also invested and continue to invest in research and technology to develop new sources of water such as water recycling and desalination to meet demands; and

**Whereas**, Municipal Water District of Orange County and its member agencies are increasing their public messaging to create a heightened awareness of the state's water supply conditions; and

**Whereas**, increasing and applying efficient water use habits today is the responsible thing to do and will help ensure Orange County has enough water to maintain our quality of life and thriving economy; and

**Whereas**, there are numerous resources and programs to assist us in our countywide water use efficiency efforts, including rebates for water saving devices and information on water-saving strategies at [www.bewaterwise.com](http://www.bewaterwise.com), and [www.mwdoc.com](http://www.mwdoc.com),

**Now, therefore, be it resolved that the** Municipal Water District of Orange County the regional imported water provider do hereby encourage every Orange County water agency, resident and business to take the necessary actions to reduce their water usage through enhanced water use efficiency measures in an effort to extend stored water supplies and prepare for a prolonged drought; and

**Be it further resolved** that the Municipal Water District of Orange County will coordinate with Metropolitan and its member agencies to develop a unified regional message and significant accelerate its outreach efforts in order to communicate the need for additional water use efficiency efforts to Orange County public officials, residents and businesses; and

**Be it further resolved**, that the Municipal Water District of Orange County encourage all local water agencies, cities, and the County of Orange to join in this call for enhancing water use efficiency efforts through the adoption of appropriate resolutions or ordinances in their jurisdictions.

Said Resolution was adopted on February \_\_, 2014, by the following roll call vote:

AYES:	Directors
NOES:	Directors
ABSENT:	None
ABSTAIN:	None

I HEREBY CERTIFY the foregoing is a full, true and correct copy of Resolution No. \_\_\_\_ adopted by the Board of Directors of Municipal Water District of Orange County at its meeting held on February \_\_, 2014.

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Maribeth Goldsby, Secretary  
Municipal Water District of Orange County



## Item No. 5

### **ACTION ITEM** February 19, 2014

**TO:** Board of Directors

**FROM:** Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)

**Rob Hunter, General Manager**

**SUBJECT:** Board Input on Level of Other Post-Employment Benefits (OPEB)  
Liability Payment

#### **STAFF RECOMMENDATION**

---

Staff recommends the Board authorize the General Manager to initiate an extra payment in 2014-15 of \$28,000 towards MWDOC's OPEB liability and report back to the Board on the status of the OPEB liability upon completion of the updated Actuarial Study to be completed in the summer of 2014.

#### **COMMITTEE RECOMMENDATION**

---

Committee recommends (To be determined at Committee Meeting)

#### **DETAILED REPORT**

---

MWDOC's most recent report from Dempsey Filliger Associates to update our GASB 45 valuation of the OPEB Liability was September 20, 2012. MWDOC is scheduled to complete an update every three years with the next update occurring in the summer of 2014.

The September 20, 2012 valuation indicated the following information:

- Actuarial liability = \$2.3 M as of July 1, 2011 (before the district's contribution into an irrevocable trust to reduce the liability). This amount is defined as the amount that if invested beginning July 1 of 2011 and which continued to earn interest at 6% per

Budgeted (Y/N): No	Budgeted amount: \$0	Core <input checked="" type="checkbox"/>	Choice __		
Action item amount: 0		Line item:			
Fiscal Impact (explain if unbudgeted):					

year would exactly pay-off the District liability, assuming all calculations hold for the next 20 years.

- Based on the District's anticipated contribution of \$500,000 as a starting balance in the irrevocable trust account held by PARS in 2011, the 20-year level contribution to fund the liability was calculated as \$155,575 per year.

Based on the valuation, MWDOC has been using the 20-year level pay plan for funding our OPEB liability by contributing into the PARS account the difference between the level pay amount and the actual medical premiums paid by the District for the qualifying retirees. The following payments have been made into the PARS account:

1. \$500,000 starting contribution in October 2011
2. June 2012 payment of \$86k
3. June 2013 payment of \$115k

Based on these contributions and interest earnings thereon (which have been very good), the November 2013 statement shows the PARS account contained \$847k. Interest earnings above the assumed 6% will result in the liability being satisfied sooner.

Staff was requested by the Board to examine options for accelerating the payoff of the OPEB liability from 20 years to something shorter. With the policy decision by the Board in 2013 to eliminate lifetime medical benefits for employees of 25 years or more, it may be more appropriate to fund the OPEB liability over the expected remaining working term for the employees that are likely to reach the 25 years of employment. Currently, 7 retirees are being funded under various benefit programs; it is very likely that 7 additional employees will reach the 25 year threshold and there is the potential, though less likely, that up to 18 others could reach the 25-year threshold. The seven that are likely to reach the threshold are likely to work an average of 10 more years; benefits would likely be paid out over an additional 20 to 25 years or so depending on the longevity of the retired employees and their spouse.

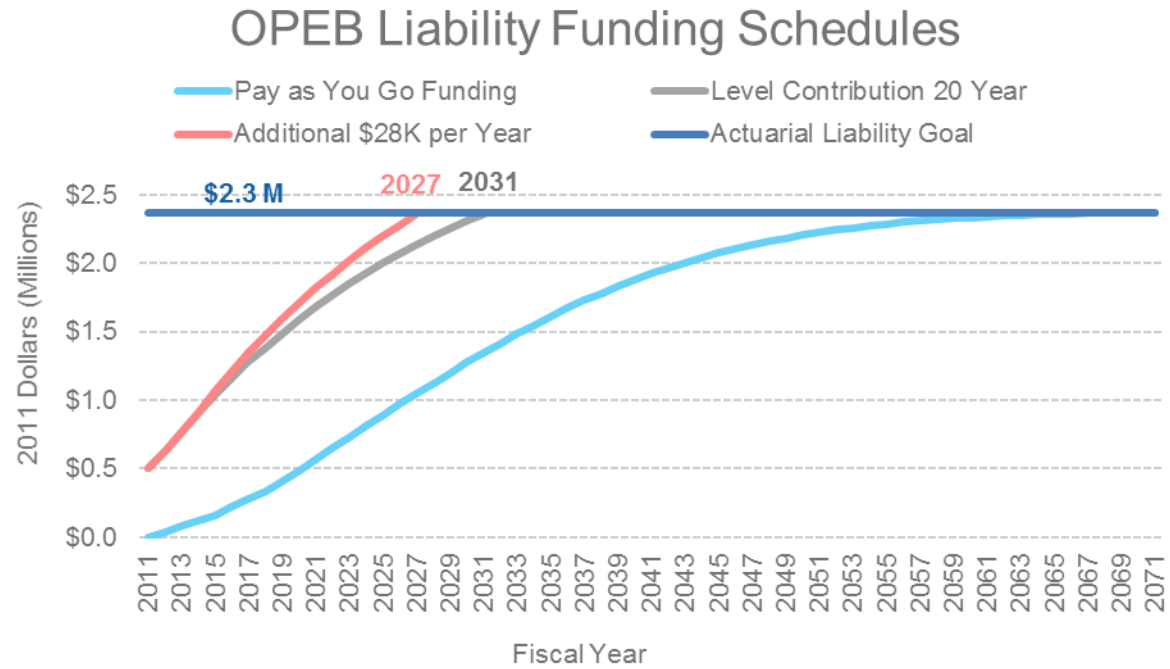
Staff considered the following additional payments that are approximately in increments of 1% of Salaries and Wages:

Fiscal Year	Additional Annual Contribution
FY 2014-15	28,000
FY 2015-16	28,000
FY 2016-17	28,000
FY 2017-18	28,000
FY 2018-19	28,000
FY 2019-20	28,000
FY 2020-21	28,000
FY 2021-22	28,000
FY 2022-23	28,000
FY 2023-24	28,000
FY 2024-25	28,000
FY 2025-26	28,000
FY 2026-27	28,000
Additional Investment	\$364,000

The graph below presents the Pay-as-you-Go plan, the 20-year levelized payment plan and an accelerated payoff plan. The accelerated plan of paying an extra \$28k per year, or total payments of \$364k, results in satisfying the OPEB liability four years sooner than the 20-year levelized plan. Staff could examine other options as well to either shorten or lengthen the payoff period. Over the period of the analysis, the District would save \$258k in total payments. Because of the many assumptions included in the analysis, staff is recommending that the Board take only the initial step at this time of augmenting the annual payment by \$28,000 for 2014-15. Staff will return to the Board upon completion of the next actuarial study and discussion of the options with our actuary. Key assumptions included:

- 6% discount factor (same as used by our actuary)
- 6% interest earnings on investment
- Staff will be updating the analysis to allow a number of alternative analyses to be made.







**DISCUSSION ITEM**

February 12, 2014

**TO: Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)**

**FROM: Robert Hunter,  
General Manager**

**Staff Contact: Cathy Harris, Administrative Services Manager**

**SUBJECT: CALPERS Annual Valuation Report as of June 30, 2012**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors receive and file the information as presented.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

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MWDOC received its CalPERS Annual Valuation Report as of June 30, 2012 and held a teleconference with CalPERS actuary, Kerry Worgan, to provide an explanation on the key components of the report, employer contribution rates and future rate increases. Key discussion points included:

- MWDOC's total PERS obligation effective July 1, 2014 will be 18.522% (this is approximately 0.9% higher than last year's rate of 17.781%).
- The District contribution amount less the employee contribution will be 15.522% for Fiscal Year 2014-2015. Attachment 1 shows MWDOC's contribution rates from 2004 through 2015-2016.
- Key factors contributing to the rate increase for 2014/15 include:
  - Transition to the new amortization and smoothing policy;
  - In 2011, the CalPERS Board changed the discount rate from 7.75% to 7.50% and approved a 2-year phase in period. The impact is reflected in the risk pool amortization payment rate. (Attachment 2, Page 4)

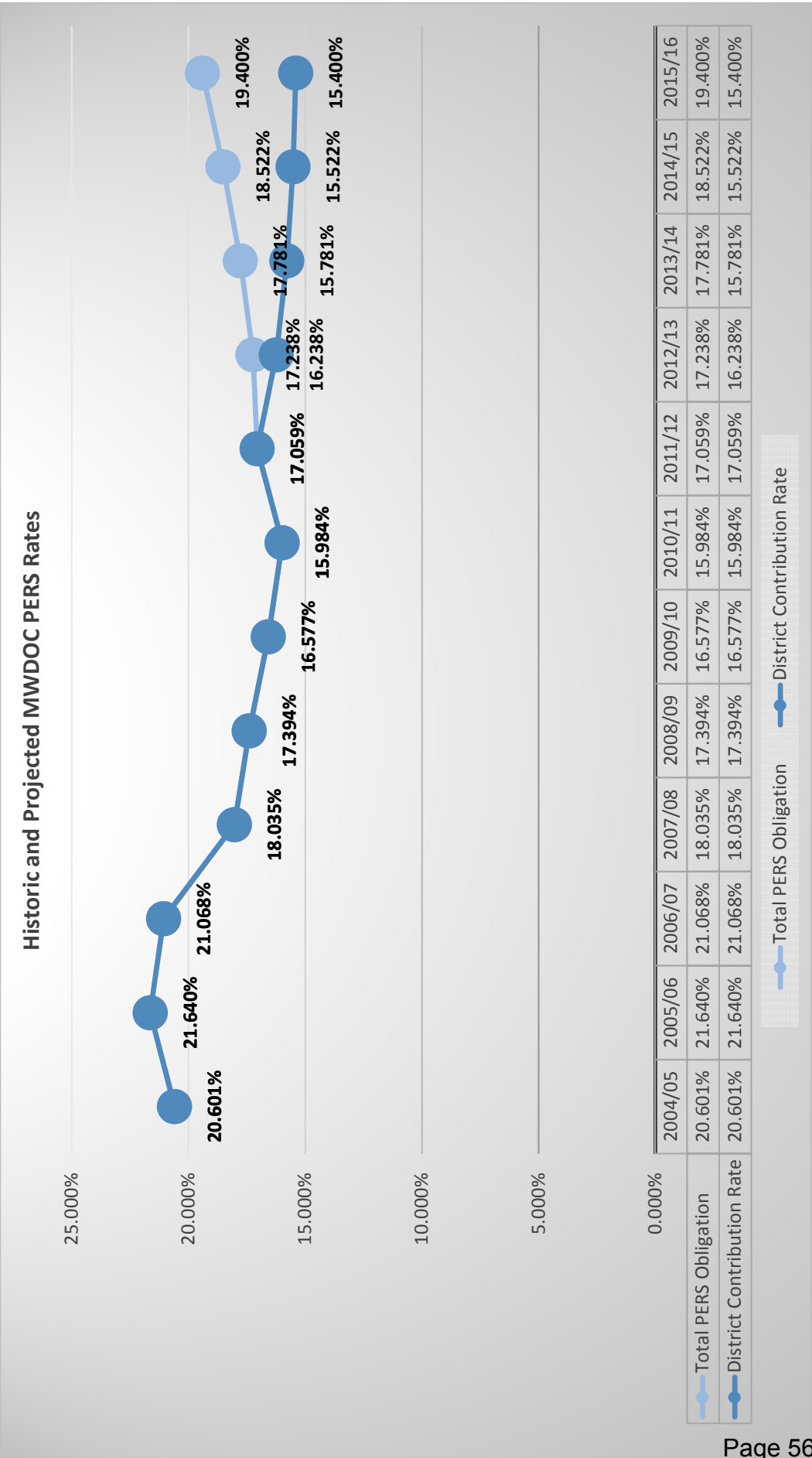
<b>Budgeted (Y/N): NA</b>	Budgeted amount: NA	Core __	Choice __
<b>Action item amount:</b>		Line item:	
<b>Fiscal Impact (explain if unbudgeted):</b>			

- Since the District is in a pool, the asset volatility ratio is based on the pool's asset to payroll ratio, demographic experience and investment returns. The District's asset volatility ratio is on the lower end resulting in lower employer contribution increases.
- MWDOC's current plan obligation as of June 30, 2012 is \$6,273,252 and is 77.2% funded.
- The Annual Lump Sum Prepayment Option for the Employer's Contribution Rate for 2014/15 is \$323,591. Prepaying the amount would save the District approximately 3.75% in interest. Staff is recommending that the prepayment option be utilized for this coming year for a savings of about \$10,000. In accordance with CalPERS policy, the prepayment would need to be paid by July 10, 2014 (prior to the first payroll reporting to PERS for fiscal year 2014/15).
- The valuation report now includes a hypothetical termination liability amount if the District were to terminate its CalPERS contract. The amount is based on the valuation date of June 30, 2012. The discount rate used to calculate the amount is lowered and is based on a 30-year bond yield. This is only an estimate and actual amounts will depend on any changes to the contract since the last valuation report and the discount rate at the time of termination.
- In the event of a consolidation, if a CalPERS Agency were to go inactive instead of terminating its contract, it could continue making annual payments without incurring the penalty payment which could result in a lower liability cost. Staff is contacting CalPERS to evaluate the options.

#### ***Future Impacts to Rates***

- CalPERS Board approved changes to their actuarial method in April 2013, so that CalPERS will be fully funded at 100% in 30 years.
  - The new policy will utilize an amortization and smoothing policy that will account for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread over a 5-year period.
  - The new policy will be used in the June 30, 2013 actuarial valuations and the rates will be implemented in the fall of 2014 and will set the employer contribution rates for fiscal year effective July 1, 2015.
  - The goal is to improve funding levels for plans by increasing the rates in the near-term and having lower rates over the long term.
  - To accommodate more volatility from year to year with protection against extreme volatility with large investment losses.
- CalPERS is also reviewing its asset allocation, economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.
  - Current mortality projections are based on 5 years. CalPERS is looking at implementing 15 or 20 year projections.
  - People are living longer and in order to continue to provide retirement benefits, actuaries are looking at using mortality improvement scales to project future mortality rates.
- PEPR implementation will also likely increase future CalPERS rates.

This information is being provided for receive and file.





California Public Employees' Retirement System  
 Actuarial Office  
 P.O. Box 942709  
 Sacramento, CA 94229-2709  
 TTY: (916) 795-3240  
 (888) 225-7377 phone – (916) 795-2744 fax  
[www.calpers.ca.gov](http://www.calpers.ca.gov)

October 2013

**MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
 (CalPERS ID: 6497938438)  
 Annual Valuation Report as of June 30, 2012**

Dear Employer,

As an attachment to this letter, you will find a copy of Section 1 of the June 30, 2012 actuarial valuation report of your pension plan. Because this plan is in a risk pool, the following valuation report has been separated into two Sections:

- Section 1 contains specific information for your plan, including the development of your pooled employer contribution rate, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to your plan, as of June 30, 2012.

Section 2 can be found on the CalPERS website at ([www.calpers.ca.gov](http://www.calpers.ca.gov)) then select in order "Employers", "Actuarial, Risk Pooling & GASB 27 Information", "Risk Pooling", "Risk Pool Annual Valuation Reports", then select the appropriate pool report.

Your 2012 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary, whose signature appears in the Actuarial Certification Section on page 1, is available to discuss your report with you.

**Future Contribution Rates**

The exhibit below displays the Minimum Employer Contribution Rate, before any cost sharing, for 2014-15 along with estimates of the contribution rate for 2015-16. The estimated rate for 2015-16 is based on a projection of the most recent information we have available, including an estimated 12% investment return for fiscal 2012-13, and the impact of the new smoothing methods adopted by the CalPERS Board in April 2013 that will impact employer rates for the first time in 2015-16. See Section 2 Risk Analysis, "Analysis of Future Investment Return Scenarios", for how much the Risk Pool's portion of your rate is expected to increase beyond 2015-16 under a variety of investment return scenarios. Please disregard any projections provided to you in the past.

Fiscal Year	Employer Contribution Rate
2014-15	11.522%
2015-16	12.4% (projected)

Member contributions, other than cost sharing (whether paid by the employer or the employee), are in addition to the above rates. **The employer contribution rates in this report do not reflect any cost sharing arrangements you may have with your employees.**

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their result, we ask that, you wait until after November 30 to contact us with actuarial related questions.

If you have other questions, please call our customer contact center at (888) CalPERS or (888-**225-7377**).

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Milligan", with a stylized, flowing script.

ALAN MILLIGAN  
Chief Actuary



# **ACTUARIAL VALUATION**

as of June 30, 2012

**for the  
MISCELLANEOUS PLAN  
of the  
MUNICIPAL WATER DISTRICT OF ORANGE  
COUNTY**

(CalPERS ID: 6497938438)

## **REQUIRED CONTRIBUTIONS FOR FISCAL YEAR**

**July 1, 2014 - June 30, 2015**

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## **SECTION 1 – PLAN SPECIFIC INFORMATION**

## **SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION**



# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Plan Specific Information  
for the  
MISCELLANEOUS PLAN  
of the  
MUNICIPAL WATER DISTRICT OF  
ORANGE COUNTY**

**(CalPERS ID: 6497938438)  
(Rate Plan: 4054)**

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**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## **ACTUARIAL CERTIFICATION**

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2012 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2012 provided by employers participating in the risk pool to which your plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the Pool Actuary has certified that, in her opinion, the valuation of the Risk Pool containing your MISCELLANEOUS PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the Risk Pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law. Changes to the pool that will occur as a result of PEPPRA are not reflected in this report.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for your plan, it is my opinion as your Plan Actuary that the Side Fund as of June 30, 2012 and employer contribution rate as of July 1, 2014, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, who is a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



KERRY J. WORGAN, MAAA, FSA, FCIA  
Senior Pension Actuary, CalPERS  
Plan Actuary

## **HIGHLIGHTS AND EXECUTIVE SUMMARY**

### **Introduction**

This report presents the results of the June 30, 2012 actuarial valuation of the MISCELLANEOUS PLAN of the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY of the California Public Employees' Retirement System (CalPERS). This actuarial valuation was used to set the 2014-15 required employer contribution rates.

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the assumptions and the benefit provision listings of the June 30, 2013 valuation for the 2015-16 rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Prior to this change, CalPERS employed an amortization and smoothing policy which spread investment returns over a 15-year period with experience gains and losses paid for over a rolling 30-year period. After this change, CalPERS will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period.

The new amortization and smoothing policy will be used for the first time in the June 30, 2013 actuarial valuations. These valuations will be performed in the fall of 2014 and will set employer contribution rates for the Fiscal Year 2015-16.

As stewards of the System, CalPERS must ensure that the pension fund is sustainable over multiple generations. Our strategic plan calls for us to take an integrated view of our assets and liabilities and to take steps designed to achieve a fully funded plan. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013 which will influence future discount rates. In addition CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

### **Purpose of Section 1**

This section 1 report for the MISCELLANEOUS PLAN of the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY of the California Public Employees' Retirement System (CalPERS) was prepared by the Plan Actuary in order to:

- Set forth the actuarial assets and accrued liabilities of this plan as of June 30, 2012;
- Determine the required employer contribution rate for this plan for the fiscal year July 1, 2014 through June 30, 2015;
- Provide actuarial information as of June 30, 2012 to the CalPERS Board of Administration and other interested parties; and
- Provide pension information as of June 30, 2012 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Cost Sharing Multiple Employer Defined Benefit Pension Plan.

The use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Required Employer Contribution

	Fiscal Year	Fiscal Year
Actuarially Determined Employer Contributions:	2013-14	2014-15
Required Employer Contributions (in Projected Dollars)		
Risk Pool's Net Employer Normal Cost	\$ 234,523	\$ 227,825
Risk Pool's Payment on Amortization Bases	64,951	93,413
Surcharge for Class 1 Benefits		
a) FAC 1	14,534	14,268
Phase out of Normal Cost Difference	0	0
Amortization of Side Fund	0	0
Total Employer Contribution	\$ 314,008	\$ 335,506
Projected Payroll for the Contribution Fiscal Year	2,912,611	\$ 2,911,874
Required Employer Contributions (Percentage of Payroll)		
Risk Pool's Net Employer Normal Cost	8.052%	7.824%
Risk Pool's Payment on Amortization Bases	2.230%	3.208%
Surcharge for Class 1 Benefits		
a) FAC 1	0.499%	0.490%
Phase out of Normal Cost Difference	0.000%	0.000%
Amortization of Side Fund	0.000%	0.000%
Total Employer Contribution	10.781%	11.522%
<b>Minimum Employer Contribution Rate<sup>1</sup></b>	<b>10.781%</b>	<b>11.522%</b>
<b>Annual Lump Sum Prepayment Option<sup>2</sup></b>	\$ 302,856	\$ 323,591

Appendix C of Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

Risk pooling was implemented for most plans as of June 30, 2003. The normal cost difference was scheduled to be phased out over a five year period. The phase out of normal cost difference is 100 percent for the first year of pooling, and is incrementally reduced by 20 percent of the original normal cost difference for each subsequent year.

<sup>1</sup> The Minimum Employer Contribution Rate under PEPR is the greater of the required employer rate or the total employer normal cost.

<sup>2</sup> Payment must be received by CalPERS before the first payroll reported to CalPERS of the new fiscal year and after June 30. **The prepayment amount applies only to this plan. Please note that it is not possible to prepay contributions for new plans that had no reported membership prior to June 30, 2012.**

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

**Plan's Funded Status**

	<b>June 30, 2011</b>		<b>June 30, 2012</b>
1. Present Value of Projected Benefits (PVB)	8,719,688	\$	9,426,480
2. Entry Age Normal Accrued Liability	5,636,322		6,273,252
3. Plan's Actuarial Value of Assets (AVA)	5,152,504	\$	5,720,525
4. Unfunded Liability (AVA Basis) [(2) - (3)]	483,818	\$	552,727
5. Funded Ratio (AVA Basis) [(3) / (2)]	91.4%		91.2%
6. Plan's Market Value of Assets (MVA)	4,612,177	\$	4,841,500
7. Unfunded Liability (MVA Basis) [(2) - (6)]	1,024,145		1,431,752
8. Funded Ratio (MVA Basis) [(6) / (2)]	81.8%		77.2%

**Projected Contributions**

The rate shown below is an estimate for the employer contribution for Fiscal Year 2015-16. The estimated rate is based on a projection of the most recent information we have available, including an estimate of the investment return for fiscal year 2012-13, namely 12 percent. It also reflects implementation of the more conservative rate smoothing method mentioned earlier.

Projected Employer Contribution Rate: 12.4%

The estimate also assumes that there are no liability gains or losses among the plans in your risk pool, that your plan has no new amendments in the next year, and that your plan's and your risk pool's payrolls both increase exactly 3.0 percent in the 2012-13 fiscal year. Therefore, the projected employer contribution rate for 2015-16 is just an estimate. Your actual rate for 2015-16 will be provided in next year's valuation report.

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## **Rate Volatility**

Your plan's employer contribution rate will inevitably fluctuate, for many reasons. One of the biggest causes of fluctuations for pooled plans has been from changes in the side fund rate resulting from unexpected changes in payroll. The following figure shows how much your 2015-16 side fund rate would change for each 1 percent deviation between our 3 percent payroll growth assumption and your actual 2012-13 payroll growth.

**POTENTIAL 2015-16 RATE IMPACT  
FROM 2012-13 PAYROLL DEVIATION**

**% Rate Change per 1% Deviation from Assumed 3.0% Payroll Growth:** 0.000%

Examples: To see how your employer contribution rate might be affected by unexpected payroll change, suppose the following:

- The Percentage Rate Change per 1 percent Deviation figure given above is -0.400%
- Your plan's payroll increased 10 percent in 2012-13 (7.0 percent more than our 3.0 percent assumption).

Then your 2015-16 rate would decrease  $-0.400\% \times (10 - 3.0) = 2.80\%$  from that cause alone.

Or conversely, using the same Percentage Rate Change per 1 percent Deviation figure given above, suppose your plan's payroll remained the same in 2012-13 (3.0 percent less than our 3.0 percent assumption).

Then your 2015-16 rate would increase  $-0.400\% \times (0 - 3.0) = 1.2\%$  from that cause alone.

Note that if your plan had a negative side fund, an unexpected payroll increase would spread the payback of the negative side fund over a bigger payroll, which would decrease your plan's side fund percentage rate and the total employer contribution rate. On the other hand, if your plan had a positive side fund, an unexpected payroll increase would spread the payback of the positive side fund over a larger payroll, which would increase your plan's side fund percentage rate and the total employer contribution rate. In either case, the amortization of Side Fund dollar amount would not change.

Another big cause of rate fluctuations has been from investment return volatility. The degree to which your plan's rates may be susceptible to investment return volatility is described in the Risk Analysis section of your Section 2 report under "Volatility Ratios".

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## **FINANCIAL AND DEMOGRAPHIC INFORMATION**

### **Plan's Side Fund**

At the time your plan joined the Risk Pool, a side fund was created to account for the difference between the funded status of the pool and the funded status of your plan, in addition to your existing unfunded liability. The side fund for your plan as of the June 30, 2012 valuation is shown in the following table.

Your side fund will be credited, on an annual basis, with the actuarial investment return assumption. This assumption is 7.5 percent. A positive side fund will cause your required employer contribution rate to be reduced by the Amortization of Side Fund shown above in Required Employer Contributions. A negative side fund will cause your required employer contribution rate to be increased by the Amortization of Side Fund. In the absence of subsequent contract amendments or funding changes, the side fund will disappear at the end of the amortization period shown below.

#### **Plan's Side Fund Reconciliation**

	<b>June 30, 2011</b>	<b>June 30, 2012</b>
Side Fund as of valuation date*	\$ 0	\$ 0
Adjustments	0	0
Side Fund Payment	0	0
Side Fund one year later	\$ 0	\$ 0
Adjustments	0	0
Side Fund Payment	0	0
Side Fund two years later	\$ 0	\$ 0
Amortization Period	4	3
Side Fund Payment during last year	\$ 0	\$ 0

\* If your agency employed superfunded vouchers in fiscal year 2011-12 to pay employee contributions, the June 30, 2012 Side Fund amount has been adjusted by a like amount without any further adjustment to the Side Fund's amortization period. Similarly, the Side Fund has been adjusted for the increase in liability from any recently adopted Class 1 or Class 2 contract amendments. Also, the Side Fund may be adjusted or eliminated due to recent lump sum payments. Contract amendments and lump sum payments may result in an adjustment to the Side Fund amortization period.



**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## Development of the Actuarial Value of Assets

		<b>June 30, 2012</b>
1. Plan's Accrued Liability	\$	6,273,252
2. Plan's Side Fund		0
3. Pool's Accrued Liability		4,175,139,166
4. Pool's Side Fund		(132,335,224)
5. Pool's Actuarial Value of Assets Including Receivables		3,686,598,343
6. Plan's Actuarial Value of Assets (AVA) Including Receivables $[(1 + 2) / (3 + 4) \times 5]$	\$	5,720,525
7. Pool's Market Value of Assets (MVA) Including Receivables		3,120,110,130
8. Plan's Market Value of Assets (MVA) Including Receivables $[(1 + 2) / (3 + 4) \times 7]$	\$	4,841,500

## Funding History

The Funding History below shows the actuarial accrued liability, the plan's share of the pool's market value of assets, plan's share of the pool's unfunded liability, funded ratio and the annual covered payroll.

<b>Valuation Date</b>	<b>Accrued Liability (AL)</b>	<b>Share of Pool's Market Value of Assets (MVA)</b>	<b>Plan's Share of Pool's Unfunded Liability</b>	<b>Funded Ratio</b>	<b>Annual Covered Payroll</b>
06/30/2011	\$ 5,636,322	\$ 4,612,177	\$ 1,024,145	81.8%	\$ 2,665,451
06/30/2012	6,273,252	4,841,500	1,431,752	77.2%	2,664,777

## Plan's Total Normal Cost Rate

The Public Employees' Pension Reform Act of 2013 requires that new employees pay at least 50 percent of the total annual normal cost and that current employees approach the same goal through collective bargaining. Please refer to the CalPERS website for more details.

Shown below are the total annual normal cost rates for your plan.

	<b>Fiscal Year</b>	<b>Fiscal Year</b>
	<b>2013-14</b>	<b>2014-15</b>
Pool's Net Total Normal Cost Rate	14.922%	14.711%
Surcharge for Class 1 Benefits		
a) FAC 1	<u>0.499%</u>	<u>0.490%</u>
Plan's Total Normal Cost Rate	15.421%	15.201%

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## **Hypothetical Termination Liability**

Below is an estimate of the financial position of your plan if you had terminated your contract with CalPERS as of June 30, 2011 or 2012 using the discount rates shown below. Your plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. In August 2011, the CalPERS Board adopted a more conservative investment policy and asset allocation strategy for the Terminated Agency Pool. Since the Terminated Agency Pool has limited funding sources, expected benefit payments are secured by risk-free assets. With this change, CalPERS increased benefit security for members while limiting its funding risk. This asset allocation has a lower expected rate of return than the PERF. Consequently, the lower discount rate for the Terminated Agency pool results in higher liabilities for terminated plans.

In order to terminate your plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow your plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of your plan liabilities. CalPERS advises you to consult with your plan actuary before beginning this process.

<b>Valuation Date</b>	<b>Hypothetical Termination Liability<sup>1</sup></b>	<b>Market Value of Assets (MVA)</b>	<b>Unfunded Termination Liability</b>	<b>Termination Funded Ratio</b>	<b>Termination Liability Discount Rate<sup>2</sup></b>
06/30/2011	\$ 7,326,015	\$ 4,612,177	\$ 2,713,838	63.0%	4.82%
06/30/2012	10,159,300	4,841,500	5,317,800	47.7%	2.98%

<sup>1</sup> The hypothetical liabilities calculated above include a 7 percent mortality load contingency in accordance with Board policy. Other actuarial assumptions, such as wage and inflation assumptions, can be found in appendix A.

<sup>2</sup> The discount rate assumption used for termination valuations is a weighted average of the 10 and 30-year US Treasury yields in effect on the valuation date that equal the duration of the pension liabilities. For purposes of this hypothetical termination liability estimate, the discount rate used, 2.98 percent, is the yield on the 30-year US Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS) as of June 30, 2012. In last year's report the May 2012 rate of 2.87 percent was inadvertently shown rather than the June rate of 2.98 percent. Please note, as of June 30, 2013 the 30-year STRIPS yield was 3.72 percent.

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

## **Participant Data**

The table below shows a summary of your plan's member data upon which this valuation is based:

	<b>June 30, 2011</b>	<b>June 30, 2012</b>
Projected Payroll for Contribution Purposes	\$ 2,912,611	\$ 2,911,874
Number of Members		
Active	31	30
Transferred	7	8
Separated	12	11
Retired	4	6

## **List of Class 1 Benefit Provisions**

- One Year Final Compensation

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Information for Compliance with GASB Statement No. 27 for Cost-Sharing Multiple-Employer Defined Benefit Plan

Disclosure under GASB 27 follows. However, note that effective for financial statements for fiscal years beginning after June 15, 2014, GASB 68 replaces GASB 27. Disclosure required under GASB 68 will require additional reporting. CalPERS is planning to provide GASB 68 disclosure information upon request for an additional fee. We urge you to start discussions with your auditors on how to implement GASB 68.

Your plan is part of the Miscellaneous 2% at 55 Risk Pool, a cost-sharing multiple-employer defined benefit plan. Under GASB 27, an employer should recognize annual pension expenditures/expense equal to its contractually required contributions to the plan. Pension liabilities and assets result from the difference between contributions required and contributions made. The contractually required contribution for the period July 1, 2014 to June 30, 2015 has been determined by an actuarial valuation of the plan as of June 30, 2012. Your unadjusted contribution rate for the indicated period is 11.522% percent of payroll. In order to calculate the dollar value of the contractually required contributions for inclusion in financial statements prepared as of June 30, 2015, this contribution rate, less any employee cost sharing, and as modified by any subsequent financing changes or contract amendments for the year, would be multiplied by the payroll of covered employees that was actually paid during the period July 1, 2014 to June 30, 2015. However, if this contribution is fully prepaid in a lump sum, then the dollar value of contractually required contributions is equal to the lump sum prepayment. The employer and the employer's auditor are responsible for determining the contractually required contributions. Further, the required contributions in dollars and the percentage of that amount contributed for the current year and each of the two preceding years is to be disclosed under GASB 27.

A summary of principal assumptions and methods used to determine the contractually required contributions is shown below for the cost-sharing multiple-employer defined benefit plan.

Valuation Date	June 30, 2012
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization Method	Level Percent of Payroll
Average Remaining Period	19 Years as of the Valuation Date
Asset Valuation Method	15 Year Smoothed Market
Actuarial Assumptions	
Discount Rate	7.50% (net of administrative expenses)
Projected Salary Increases	3.30% to 14.20% depending on Age, Service, and type of employment
Inflation	2.75%
Payroll Growth	3.00%
Individual Salary Growth	A merit scale varying by duration of employment coupled with an assumed annual inflation growth of 2.75% and an annual production growth of 0.25%.

Complete information on assumptions and methods is provided in Appendix A of the Section 2 report. Appendix B of the Section 2 report contains a description of benefits included in the Risk Pool Actuarial Valuation.

A Schedule of Funding for the Risk Pool's actuarial value of assets, accrued liability, their relationship, and the relationship of the unfunded liability (UL) to payroll for the risk pool(s) to which your plan belongs can be found in Section 2 of the report.

# SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Appendix B within Section 2 of this report.

Benefit Provision	Contract package	
	Receiving	Active
Benefit Formula		2.0% @ 55
Social Security Coverage Full/Modified		no full
Final Average Compensation Period		12 mos.
Sick Leave Credit		yes
Non-Industrial Disability		standard
Industrial Disability		no
Pre-Retirement Death Benefits		yes
Optional Settlement 2W		level 4
1959 Survivor Benefit Level		no
Special		no
Alternate (firefighters)		
Post-Retirement Death Benefits		
Lump Sum	\$500 no	\$500 no
Survivor Allowance (PRSA)		
COLA	2%	2%

## Section 2

### CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Section 2 may be found on the CalPERS website  
([www.calpers.ca.gov](http://www.calpers.ca.gov)) then selecting:**

- **Employers**
- **Actuarial & GASB 27 Information**
- **Risk Pooling**
- **Risk Pool Annual Valuation Report**

## Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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### **Miscellaneous 2% at 55 Risk Pool as of June 30, 2012**

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## ACTUARIAL CERTIFICATION

### ACTUARIAL CERTIFICATION

To the best of our knowledge, **Section 2** of this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous 2% at 55 Risk Pool. This valuation is based on the member and financial data as of June 30, 2012 provided by the various CalPERS databases and the benefits under this Risk Pool with CalPERS as of the date this report was produced. Changes to the pool that will occur as a result of PEPRA are not reflected in this report. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this risk pool, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned are CalPERS staff actuaries who are members of the American Academy of Actuaries and the Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



SHELLY CHU, ASA, MAAA  
Senior Pension Actuary, CalPERS  
Pool Actuary



KUNG-PEI HWANG, ASA, MAAA  
Senior Pension Actuary, CalPERS  
Pool Reviewing Actuary

## **HIGHLIGHTS AND EXECUTIVE SUMMARY**

- **PURPOSE OF SECTION 2**
- **RISK POOL'S REQUIRED EMPLOYER CONTRIBUTION**
- **RISK POOL'S REQUIRED BASE EMPLOYER RATE**
- **RISK POOL'S NET TOTAL NORMAL COST RATE**
- **FUNDED STATUS OF THE RISK POOL**
- **COST**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

## HIGHLIGHTS AND EXECUTIVE SUMMARY

### Purpose of Section 2

This Actuarial Valuation for the Miscellaneous 2% at 55 Risk Pool of the California Public Employees' Retirement System (CalPERS) was performed by CalPERS' staff actuaries using data as of June 30, 2012 in order to:

- Set forth the actuarial assets and accrued liabilities of this risk pool as of June 30, 2012
- Determine the required contribution rate of the pool for the fiscal year July 1, 2014 through June 30, 2015
- Provide actuarial information as of June 30, 2012 to the CalPERS Board of Administration and other interested parties

The use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

### California Actuarial Advisory Panel Recommendations

This report satisfies all basic disclosure requirements under the *Model Disclosure Elements for Actuarial Valuation Reports* recommended by the *California Actuarial Advisory Panel*, except for the original base amounts of the various components of the unfunded liability amortization.

The report gives the following additional information classified as enhanced risk disclosures under the *Model Disclosure Elements for Actuarial Valuation Reports* recommended by the *California Actuarial Advisory Panel*.

- "Deterministic stress test", projecting future results under different investment income scenarios.
- "Sensitivity analysis", showing the impact on current valuation results of a plus or minus 1% change in the discount rate.

### Risk Pool's Required Employer Contribution

	Fiscal Year 2013-14	Fiscal Year 2014-15
<b>1) Contribution in Projected Dollars</b>		
a) Total Pool's Normal Cost	129,104,598	127,031,625
b) Employee Contribution	56,998,174	56,972,311
c) Pool's Gross Employer Normal Cost [(1a) – (1b)]	\$ 72,106,424	\$ 70,059,314
d) Payment on Pool's Amortization Bases	18,502,203	26,537,022
e) Payment on Employer Side Funds	<u>14,847,635</u>	<u>14,214,751</u>
f) Total Required Employer Contribution* [(1c)+(1d)+(1e)]	\$ 105,459,067	\$ 110,809,365
* Total may not add up due to rounding		
<b>2) Contribution as a Percentage of Projected Pay</b>		
a) Total Pool's Normal Cost	15.561%	15.356%
b) Employee Contribution	6.870%	6.887%
c) Pool's Gross Employer Normal Cost [(2a) – (2b)]	8.691%	8.469%
d) Payment on Pool's Amortization Bases	2.230%	3.208%
e) Payment on Employer Side Funds	<u>1.790%</u>	<u>1.718%</u>
f) Total Required Employer Contribution [(2c)+(2d)+(2e)]	12.711%	13.395%

These rates are the total required employer contributions to the pool for fiscal years 2013-14 and 2014-15. The Pool's Gross Employer Normal Cost includes the Class 1 surcharges for all employers that contract for the Class 1 type benefits. The payment on the pool's amortization bases is the payment on the ongoing cumulative gains and losses experienced by the pool since its June 30, 2003 inception. The payment on employer side funds is the combination of all expected individual amortization payments on every side fund in the pool.

## HIGHLIGHTS AND EXECUTIVE SUMMARY

### Risk Pool's Required Base Employer Rate

	Fiscal Year 2013-14	Fiscal Year 2014-15
1. Pool's Gross Employer Normal Cost	8.691%	8.469%
Less: Surcharges for Class 1 Benefits	<u>0.639%</u>	<u>0.645%</u>
2. Pool's Net Employer Normal Cost	8.052%	7.824%
3. Payment on Pool's Amortization Bases	<u>2.230%</u>	<u>3.208%</u>
4. Pool's Base Employer Rate	10.282%	11.032%

The base employer contribution rate is the rate that each plan within the pool pays before any adjustments are made. It represents the pool funding for basic benefits (no Class 1 surcharges) for the fiscal year shown. To arrive at a plan's total contribution rate, several components must be added to this base rate. These components are Class 1 benefit surcharges, normal cost phase-out and any side fund payment. More information about those additional components can be found in Section 1 of this report.

### Risk Pool's Net Total Normal Cost Rate

	Fiscal Year 2013-14	Fiscal Year 2014-15
1. Pool's Net Employer Normal Cost	8.052%	7.824%
2. Pool's Employee Contribution Rate	<u>6.870%</u>	<u>6.887%</u>
3. Pool's Net Total Normal Cost Rate	14.922%	14.711%

### Funded Status of the Risk Pool

	June 30, 2011	June 30, 2012
1. Present Value of Projected Benefits	\$ 4,531,905,824	\$ 5,060,957,695
2. Entry Age Normal Accrued Liability	\$ 3,619,835,876	\$ 4,175,139,166
3. Actuarial Value of Assets (AVA)	\$ 3,203,214,899	\$ 3,686,598,343
4. Unfunded Liability (AVA Basis) [(2) – (3)]	416,620,977	488,540,823
5. Funded Ratio (AVA Basis) [(3) / (2)]	88.5%	88.3%
6. Market Value of Assets (MVA)	\$ 2,867,303,802	\$ 3,120,110,130
7. Unfunded Liability (MVA Basis) [(2) – (6)]	\$ 752,532,074	\$ 1,055,029,036
8. Funded Ratio (MVA Basis) [(6) / (2)]	79.2%	74.7%

## HIGHLIGHTS AND EXECUTIVE SUMMARY

### Cost

#### Actuarial Cost Estimates in General

What will this plan or pool cost? Unfortunately, there is no simple answer. There are two major reasons for the complexity of the answer:

First, all actuarial calculations, including those in this report, are based on a number of assumptions about the future. These assumptions can be divided into two categories.

- Demographic assumptions include the percentage of employees that will terminate, die, become disabled, and retire in each future year.
- Economic assumptions include future salary increases for each active employee, and the assumption with the greatest impact, future asset returns at CalPERS for each year into the future until the last dollar is paid to current members of your plan.

While CalPERS has set these assumptions as our best estimate of the real future of your plan, it must be understood that these assumptions are very long term predictors and will surely not be realized in any one year. For example, while the asset earnings at CalPERS have averaged more than the assumed return of 7.5 percent over the past twenty year period ending June 30, 2013, returns for each fiscal year ranged from -24 percent to +21.7 percent.

Second, the very nature of actuarial funding produces the answer to the question of plan or pool cost as the sum of two separate pieces:

- The Normal Cost (i.e., the future annual premiums in the absence of surplus or unfunded liability) expressed as a percentage of total active payroll, and
- The Past Service Cost or Accrued Liability (i.e., representing the current value of the benefit for all credited past service of current members) which is expressed as a lump sum dollar amount.

The cost is the sum of a percent of future pay and a lump sum dollar amount (the sum of an apple and an orange if you will). To communicate the total cost, either the Normal Cost (i.e., future percent of payroll) must be converted to a lump sum dollar amount (in which case the total cost is the present value of benefits), or the Past Service Cost (i.e., the lump sum) must be converted to a percent of payroll (in which case the total cost is expressed as the employer's rate, part of which is permanent and part temporary). Converting the Past Service Cost lump sum to a percent of payroll requires a specific amortization period, and the plan or pool rate will vary depending on the amortization period chosen.

### Changes since the Prior Year's Valuation

#### Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by employers within the risk pool are generally included in the first valuation that is prepared after the amendment becomes effective even if the valuation date is prior to the effective date of the amendment.

The valuation generally reflects plan changes by amendments effective prior to July 1, 2013. Please refer to Appendix B for a summary of the plan provisions used in this valuation report. The provisions in Appendix B do not indicate the class of benefits voluntarily contracted for by individual employers within the risk pool. Refer to Section 1 of the valuation report for a list of your specific contracted benefits. The increase in the pool's unfunded liabilities due to Class 1 or 2 amendments by individual employers within the pool is embedded in the Liability (Gain) / Loss shown in the (Gain) / Loss section of this report. This amount, however, is offset by additional contributions through a surcharge for employers who voluntarily contract for those benefits.

#### Public Employees' Pension Reform Act of 2013 (PEPRA)

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect, requiring that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost rate. Beginning July 1, 2013, this means that some

## HIGHLIGHTS AND EXECUTIVE SUMMARY

plans with surplus will be paying more than they otherwise would. For more information on PEPRAs please refer to the CalPERS website.

## Subsequent Events

### Actuarial Methods and Assumptions

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Analysis of Future Investment Return Scenarios" subsection of the "Risk Analysis" section of your Section 2 report.

**Not reflected** in the "Analysis of Future Investment Return Scenarios" subsection of the "Risk Analysis" section is the impact of assumption changes that we expect will also impact future rates. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years. The partial closure of the pool (to most new hires) due to the enactment of PEPRAs will also impact future pool rates.

## **ASSETS**

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**
- **ASSET ALLOCATION**
- **CALPERS HISTORY OF INVESTMENT RETURNS**

## ASSETS

### Reconciliation of the Market Value of Assets

1. Market Value of Assets as of June 30, 2011 Including Receivables	\$	2,867,303,802
2. Receivables for Service Buybacks as of June 30, 2011		4,587,787
3. Market Value of Assets as of June 30, 2011 [1 - 2]		2,862,716,015
4. Employer Contributions		95,290,430
5. Employee Contributions		55,736,994
6. Benefit Payments to Retirees and Beneficiaries		(139,141,752)
7. Refunds		(5,419,608)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		147,473,146
10. Investment Return		(5,615,610)
11. Market Value of Assets as of June 30, 2012 (w/o Pool Transfers)	\$	3,011,039,615
12. Transfers into and out of the Risk Pool		101,875,065
13. Market Value of Assets as of June 30, 2012	\$	3,112,914,680
14. Receivables for Service Buybacks as of June 30, 2012		7,195,450
15. Market Value of Assets as of June 30, 2012 Including Receivables [13 + 14]		3,120,110,130

### Development of the Actuarial Value of Assets

1. Actuarial Value of Assets as of June 30, 2011 Used for Rate Setting Purposes		3,203,214,899
2. Receivables for Service Buyback as of June 30, 2011		4,587,787
3. Actuarial Value of Assets as of June 30, 2011 [1 - 2]		3,198,627,112
4. Employer Contributions		95,290,430
5. Employee Contributions		55,736,994
6. Benefit Payments to Retirees and Beneficiaries		(139,141,752)
7. Refunds		(5,419,608)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		147,473,146
10. Expected Investment Income at 7.5%		245,565,393
11. Expected Actuarial Value of Assets (w/o Pool Transfers)	\$	3,598,131,715
12. Market Value of Assets June 30, 2012 (w/o Pool Transfers)		3,011,039,615
13. Preliminary Actuarial Value of Assets (w/o Pool Transfers) $[(11) + ((12) - (11)) / 15]$		3,558,992,242
14. Preliminary Actuarial Value to Market Value Ratio		118.2%
15. Final Actuarial Value to Market Value Ratio (minimum 80%, maximum 120%)		118.2%
16. Market Value of Assets June 30, 2012		3,112,914,680
17. Actuarial Value of Assets as of June 30, 2012		3,679,402,893
18. Receivables for Service Buybacks as of June 30, 2012		7,195,450
19. Actuarial Value of Assets as of June 30, 2012 Used for Rate Setting Purposes [17 + 18]		3,686,598,343



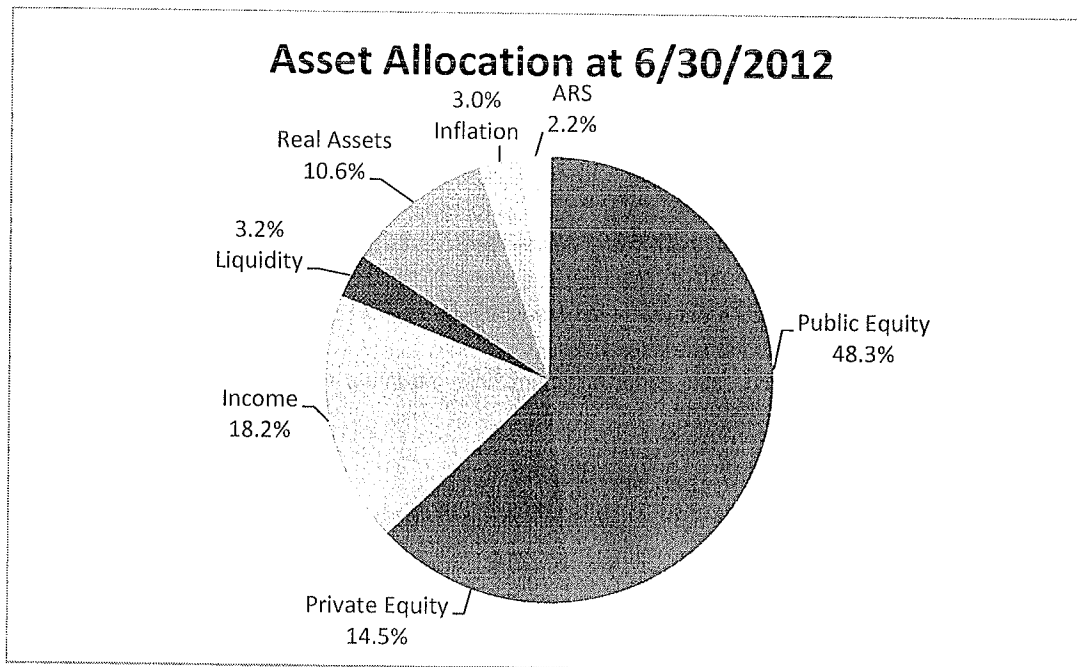
## ASSETS

### Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges, and manages those asset class allocations within their policy ranges. CalPERS recognizes that over 90 percent of the variation in investment returns of a well-diversified pool of assets can typically be attributed to asset allocation decisions. The Board approved in December 2010 policy asset class targets and ranges listed below. These policy asset allocation targets and ranges are expressed as a percentage of total assets and were expected to be implemented over a period of one to two years beginning July, 1 2011 and reviewed again in December 2013.

The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2012. The assets for Miscellaneous 2% at 55 Risk Pool are part of the Public Employees Retirement Fund (PERF) and are invested accordingly.

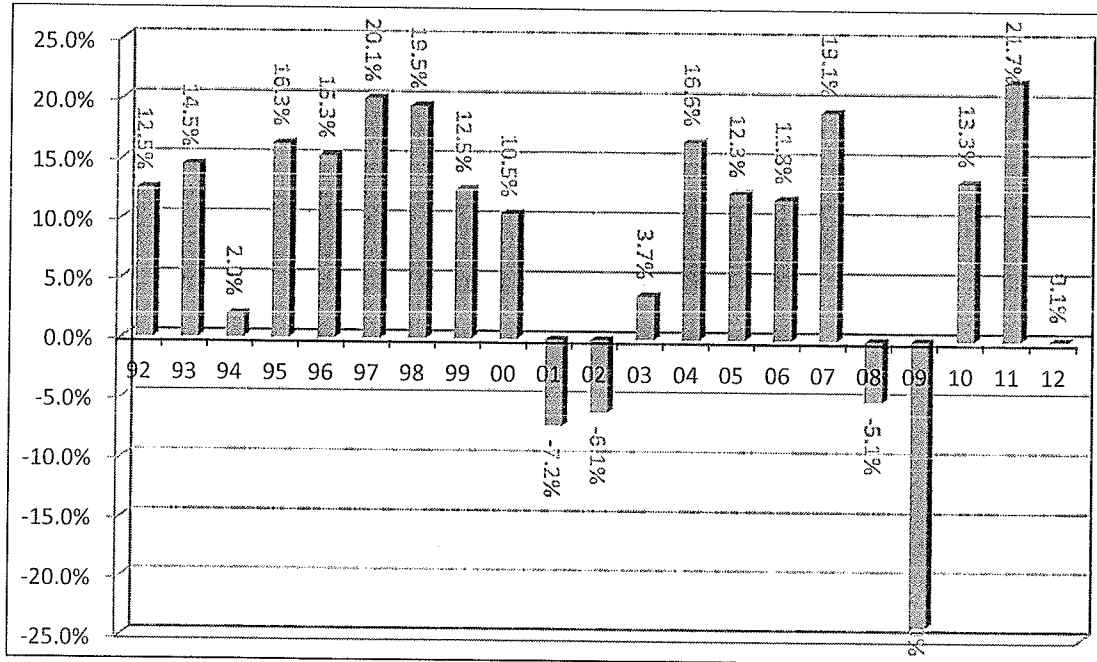
(A) Asset Class	(B) Market Value (\$ Billion)	(C) Policy Target Allocation	(D) Policy Target Range
1) Public Equity	113.0	50.0%	+/- 7%
2) Private Equity	33.9	14.0%	+/- 4%
3) Fixed Income	42.6	17.0%	+/- 5%
4) Cash Equivalents	7.5	4.0%	+/- 5%
5) Real Assets	24.8	11.0%	+/- 3%
6) Inflation Assets	7.0	4.0%	+/- 3%
7) Absolute Return Strategy (ARS)	5.1	0.0%	N/A
<b>Total Fund</b>	<b>\$233.9</b>	<b>100.0%</b>	<b>N/A</b>



## ASSETS

### CalPERS History of Investment Returns

The following is a chart with historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning with June 30, 2002, the figures are reported as gross of fees.



## **LIABILITIES AND RATES**

- **DEVELOPMENT OF POOL'S ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN)/LOSS ANALYSIS 06/30/11 - 06/30/12**
- **SCHEDULE OF AMORTIZATION BASES FOR THE RISK POOL**
- **DEVELOPMENT OF RISK POOL'S ANNUAL REQUIRED BASE CONTRIBUTION**
- **POOL'S EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

## LIABILITIES AND RATES

### Development of Pools **Accrued and Unfunded Liabilities**

	June 30, 2011	June 30, 2012
1. Present Value of Projected Benefits		
a) Active Members	\$ 2,520,059,809	\$ 2,555,617,406
b) Transferred Members	338,865,099	345,074,499
c) Separated Members	122,880,531	162,816,493
d) Members and Beneficiaries Receiving Payments	<u>1,550,100,385</u>	<u>1,997,449,297</u>
e) Total	\$ 4,531,905,824	\$ 5,060,957,695
2. Present Value of Future Employer Normal Costs	\$ 489,382,958	\$ 468,476,219
3. Present Value of Future Employee Contributions	\$ 422,688,961	\$ 417,342,310
4. Entry Age Normal Accrued Liability		
a) Active Members [(1a) - (2) - (3)]	\$ 1,607,989,861	\$ 1,669,798,877
b) Transferred Members (1b)	338,865,099	345,074,499
c) Separated Members (1c)	122,880,531	162,816,493
d) Members and Beneficiaries Receiving Payments (1d)	<u>1,550,100,385</u>	<u>1,997,449,297</u>
e) Total	\$ 3,619,835,876	\$ 4,175,139,166
5. Actuarial Value of Assets (AVA) Including Receivables	\$ 3,203,214,899	\$ 3,686,598,343
6. Unfunded Accrued Liability (AVA Basis) [(4e) - (5)]	416,620,977	488,540,823
7. Funded Ratio (AVA Basis) [(5) / (4e)]	88.5%	88.3%
8. Side Funds	\$ (115,840,552)	\$ (132,335,224)
9. Unfunded Liability excluding Side Funds [(4e) - (5) + (8)]	300,780,425	356,205,599
10. Market Value of Assets (MVA) Including Receivables	\$ 2,867,303,802	\$ 3,120,110,130
11. Funded Ratio (MVA Basis) [(10) / (4e)]	79.2%	74.7%

## LIABILITIES AND RATES

### (Gain)/Loss Analysis 06/30/11 - 06/30/12

To calculate the cost requirements of your pool, we use assumptions about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is contrasted against the expected experience based on the actuarial assumptions. The differences are reflected below as your pool's actuarial gains or losses.

<b>1. Total (Gain)/Loss for the Year</b>		
a) Unfunded Liability/(Surplus) as of June 30, 2011	\$	300,780,425
b) Expected payment on the Unfunded Liability		10,144,367
c) Interest accumulation $[(.075 \times (1a) - ((1.075)^{.5} - 1) \times (1b)]$		22,184,996
d) Expected Unfunded Liability before other changes $[(1a) - (1b) + (1c)]$		312,821,054
e) Change due to assumption changes		0
f) Expected Unfunded Liability after changes $[(1d) + (1e)]$		312,821,054
g) Actual Unfunded Liability/(Surplus) as of June 30, 2012		<u>356,205,599</u>
h) Total (Gain)/Loss $[(1g) - (1f)]$	\$	43,384,545
<b>2. Contribution (Gain)/Loss for the Year</b>		
a) Expected contribution (Employer and Employee)	\$	154,619,460
b) Interest on Expected Contributions		5,693,408
c) Total expected Contributions with interest $[(2a) + (2b)]$		160,312,868
d) Actual Contributions		151,027,424
e) Interest on Actual Contributions		5,561,142
f) Total Actual Contributions with interest $[(2d) + (2e)]$		<u>156,588,566</u>
g) Contribution (Gain)/Loss $[(2c) - (2f)]$	\$	3,724,302
<b>3. Asset (Gain)/Loss for the Year</b>		
a) Actuarial Value of Assets as of 06/30/11 Including Receivables	\$	3,203,214,899
b) Receivables as of 06/30/11		<u>4,587,787</u>
c) Actuarial Value of Assets as of 06/30/11		3,198,627,112
d) Contributions received		151,027,424
e) Benefits and Refunds Paid		(144,561,360)
f) Transfers and miscellaneous adjustments		147,473,146
g) Expected interest		245,565,393
h) Transfers into the pool (AVA Basis)		121,936,552
i) Transfers out of the pool (AVA Basis)		<u>(1,522,263)</u>
j) Expected Assets as of 06/30/12 $[\text{Sum } (3c) \text{ through } (3i)]$		3,718,546,004
k) Receivables as of 06/30/12		<u>7,195,450</u>
l) Expected Assets Including Receivables		3,725,741,454
m) Actual Actuarial Value of Assets as of 06/30/12 Including Receivables		<u>3,686,598,343</u>
n) Asset (Gain)/Loss $[(3l) - (3m)]$	\$	39,143,111
<b>4. Liability (Gain)/Loss for the Year</b>		
a) Total (Gain)/Loss (1h)	\$	43,384,545
b) Contribution (Gain)/Loss (2g)		3,724,302
c) Asset (Gain)/Loss excluding side fund (3n)		<u>39,143,111</u>
d) Liability (Gain)/Loss $[(4a) - (4b) - (4c)]^*$	\$	517,132

\* Includes (Gain)/Loss on plans transferring into the pool.

# LIABILITIES AND RATES

## Schedule of Amortization Bases for the Risk Pool

The schedule below shows the development of the payment on the Pool's amortization bases used to determine the Total Required Employer Contributions to the Pool. Each row of the schedule gives a brief description of a base (or portion of the Unfunded Actuarial Liability), the balance of the base on the valuation date, and the number of years remaining in the amortization period. In addition, we show the expected payments for the two years immediately following the valuation date, the balances on the dates a year and two years after the valuation date, and the scheduled payment for fiscal year 2014-15. Please refer to Appendix A for an explanation of how amortization periods are determined.

Reason for Base	Amortization Period	Balance on June 30, 2012	Expected Payment 12-13	Balance June 30, 2013	Expected Payment 13-14	Balance June 30, 2014	Scheduled Payment for 2014-15	Payment as a percentage of payroll
2004 FRESH START	22	\$31,833,144	\$2,158,787	\$31,982,352	\$2,217,371	\$32,082,009	\$2,283,892	0.276%
2005 (GAIN)/LOSS	30	\$107,186,230	\$3,840,538	\$111,243,244	\$3,879,556	\$115,564,079	\$6,939,684	0.838%
2005 PAYMENT (GAIN)/LOSS	30	\$(100,511)	\$(3,317,711)	\$3,331,828	\$(1,099,926)	\$4,722,142	\$283,568	0.034%
2009 ASSUMPTION CHANGE	17	\$63,612,732	\$4,977,384	\$63,223,025	\$5,111,250	\$62,665,295	\$5,264,588	0.636%
2009 SPECIAL (GAIN)/LOSS	27	\$79,538,754	\$4,869,584	\$80,455,268	\$5,002,725	\$81,302,477	\$5,152,807	0.623%
2010 SPECIAL (GAIN)/LOSS	28	\$12,238,514	\$736,644	\$12,392,634	\$756,869	\$12,537,343	\$779,575	0.094%
2011 ASSUMPTION CHANGE	19	\$70,243,624	\$(2,448,728)	\$78,050,791	\$1,964,419	\$81,867,847	\$6,387,900	0.772%
2011 SPECIAL (GAIN)/LOSS	29	\$(8,346,888)	\$0	\$(8,972,905)	\$(538,828)	\$(9,087,204)	\$(554,992)	(0.067%)
<b>Total excluding side funds</b>		<b>\$356,205,599</b>	<b>\$10,816,498</b>	<b>\$371,706,237</b>	<b>\$17,293,436</b>	<b>\$381,653,988</b>	<b>\$26,537,022</b>	<b>3.208%</b>

The special (gain)/loss bases were special bases established for the gain/loss that is recognized in the 2009, 2010, and 2011 annual valuations. Unlike the gain/loss occurring in previous and subsequent years, the gain/loss recognized in the 2009, 2010, and 2011 annual valuations will be amortized over fixed and declining 30 year periods so that these annual gain/losses will be fully paid off in 30 years. The gain/loss recognized in 2012 and later valuations will be combined with the gain/loss from 2008 and earlier valuations.

## LIABILITIES AND RATES

### Contributions of Risk Pools Annual Required Rate Contribution

	Fiscal Year 2013-14	Fiscal Year 2014-15
<b>1. Contribution in Projected Dollars</b>		
a) Total Normal Cost	\$ 129,104,598	\$ 127,031,625
b) Employee Contribution	56,998,174	56,972,311
c) Pool's Gross Employer Normal Cost [(1a) - (1b)]	72,106,424	70,059,314
d) Total Surcharges for Class 1 Benefits	5,301,577	5,335,725
e) Net Employer Normal Cost [(1c) - (1d)]	66,804,847	64,723,589
f) Payment on Pool's Amortization Bases	\$ <u>18,502,203</u>	\$ <u>26,537,022</u>
g) Total Required Employer Contributions [(1e) + (1f)]	85,307,050	91,260,611
<b>2. Annual Covered Payroll as of Valuation Date</b>	\$ 759,263,518	\$ 757,045,663
<b>3. Projected Payroll for Contribution Fiscal Year</b>	\$ 829,667,746	\$ 827,244,236
<b>4. Contribution as a % of Projected Pay</b>		
a) Total Normal Cost [(1a) / (3)]	15.561%	15.356%
b) Employee Contribution [(1b) / (3)]	6.870%	6.887%
c) Pool's Gross Employer Normal Cost [(1c) / (3)]	8.691%	8.469%
d) Total Surcharges for Class 1 Benefits [(1d) / (3)]	0.639%	0.645%
e) Net Employer Normal Cost [(1e) / (3)]	8.052%	7.824%
f) Payment on Pool's Amortization Bases [(1f) / (3)]	2.230%	3.208%
g) Total Required Employer Contributions [(1g) / (3)]	10.282%	11.032%

## LIABILITIES AND RATES

### Pool's Employer Contribution Rate History

Fiscal Date	Net Employer Normal Cost	Total Surcharges for Class 1 Benefits	Gross Employer Normal Cost	Payment on Pool's Amortization Bases	Total Payment On Employer Side Funds	Total Employer Contribution
06/30/2008	7.740%	0.657%	8.397%	0.735%	2.144%	11.276%
06/30/2009	7.684%	0.656%	8.340%	1.855%	1.955%	12.150%
06/30/2010	7.720%	0.655%	8.375%	1.996%	1.886%	12.257%
06/30/2011	8.052%	0.639%	8.691%	2.230%	1.790%	12.711%
06/30/2012	7.824%	0.645%	8.469%	3.208%	1.718%	13.395%

### Funding History

Valuation Date	Accrued Liabilities (AL)	Market Value of Assets (MVA)	Funded Ratio (MVA/AL)
06/30/2008	\$2,780,280,768	\$2,581,857,668	92.9%
06/30/2009	\$3,104,798,222	\$2,014,366,226	64.9%
06/30/2010	\$3,309,064,934	\$2,320,125,367	70.1%
06/30/2011	\$3,619,835,876	\$2,867,303,802	79.2%
06/30/2012	\$4,175,139,166	\$3,120,110,130	74.7%

Valuation Date	Accrued Liabilities (AL)	Actuarial Value of Assets (AVA)	Unfunded Liabilities (UL)	Funded Ratio (AVA/AL)	Annual Covered Payroll	UL As a % of Payroll
06/30/2008	\$2,780,280,768	\$2,547,323,278	\$232,957,490	91.6%	\$688,606,681	33.8%
06/30/2009	\$3,104,798,222	\$2,758,511,101	\$346,287,121	88.9%	\$742,981,488	46.6%
06/30/2010	\$3,309,064,934	\$2,946,408,106	\$362,656,828	89.0%	\$748,401,352	48.5%
06/30/2011	\$3,619,835,876	\$3,203,214,899	\$416,620,977	88.5%	\$759,263,518	54.9%
06/30/2012	\$4,175,139,166	\$3,686,598,343	\$488,540,823	88.3%	\$757,045,663	64.5%

Information shown here is for compliance with GASB No. 27 for a cost-sharing multiple-employer defined benefit plan.

However, note that beginning next year, GASB 68 will supersede GASB 27. Disclosure required under GASB 68 will require additional reporting which CalPERS may be able to provide for an additional cost.



## **RISK ANALYSIS**

- **VOLATILITY RATIOS**
- **PROJECTED RATES**
- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**

## RISK ANALYSIS

### Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about very long term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year to year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

#### Asset Volatility Ratio (AVR)

Pools that have higher asset to payroll ratios produce more volatile employer rates due to investment return. For example, a pool with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a pool with an asset to payroll ratio of 4. Below we have shown your asset volatility ratio, a measure of the pool's potential future rate volatility. It should be noted that this ratio increases over time but generally tends to stabilize as the pool matures.

#### Liability Volatility Ratio

Pools that have higher liability to payroll ratios produce more volatile employer rates due to investment return. For example, a pool with an liability to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a pool with an liability to payroll ratio of 4. Below we have shown your volatility index, a measure of the plan's potential future rate volatility. It should be noted that this ratio increases over time but generally tends to stabilize as the pool matures.

As of June 30, 2012	
1. Market Value of Assets without Receivables	\$ 3,112,914,680
2. Payroll	757,045,663
3. Asset Volatility Ratio (AVR = 1. / 2.)	4.1
4. Accrued Liability	4,175,139,166
5. Payroll	757,045,663
6. Liability Volatility Ratio (4. / 5.)	5.5

## RISK ANALYSIS

### Projected Rates

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that will set the 2015-16 rates, CalPERS will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The table below shows projected pool contribution rates (before cost sharing) for the next five Fiscal Years, **assuming CalPERS earns 12 percent for fiscal year 2012-13 and 7.50 percent every fiscal year thereafter**, and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16. **Consequently, these projections do not take into account potential rate increases from likely future assumption changes.** In addition they do not take into account the positive impact PEPRA is expected to gradually have on the normal cost nor the possibility that a plan may be required under PEPRA to contribute a higher normal cost than would otherwise be calculated. PEPRA is expected to reduce expected payroll for this pool in the future and as a result CalPERS may need to change its method of allocating pooled plan unfunded liability. These potential changes are not reflected in the projected rates.

	New Rate	Projected Future Pool Contribution Rates				
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
<b>Contribution Rates:</b>	11.032%	11.9%	12.8%	13.7%	14.6%	15.5%

### Analysis of Future Investment Return Scenarios

In July 2013, the investment return for fiscal year 2012-13 was announced to be 12.5 percent. Note that this return is before administrative expenses and also does not reflect final investment return information for real estate and private equities. The final return information for these two asset classes is expected to be available later in October. For purposes of projecting future employer rates, we are assuming a 12 percent investment return for fiscal year 2012-13.

The investment return realized during a fiscal year first affects the contribution rate for the fiscal year 2 years later. Specifically, the investment return for 2012-13 will first be reflected in the June 30, 2013 actuarial valuation that will be used to set the 2015-16 employer contribution rates, the 2013-14 investment return will first be reflected in the June 30, 2014 actuarial valuation that will be used to set the 2016-17 employer contribution rates and so forth.

Based on a 12 percent investment return for fiscal year 2012-13 and the April 17, 2013 CalPERS Board-approved amortization and rate smoothing method change and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16, the effect on the 2015-16 Employer Rate is as follows:

**Estimated 2015-16 Pool's Base  
Employer Rate**

11.9%

**Estimated Increase in Pool's Base Employer Rate  
between 2014-15 and 2015-16**

0.9%

As part of this report, a sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2013-14, 2014-15 and 2015-16 on the 2016-17, 2017-18 and 2018-19 employer rates. Once again, the projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

## RISK ANALYSIS

Five different investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 5<sup>th</sup> percentile return corresponds to a negative -4.1 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 25<sup>th</sup> percentile return corresponds to a 2.6 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The third scenario assumed the return for 2013-14, 2014-15, 2015-16 would be our assumed 7.5 percent investment return which represents about a 49<sup>th</sup> percentile event.
- The fourth scenario is what one would expect if the markets were to give us a 75<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 75<sup>th</sup> percentile return corresponds to a 11.9 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 95<sup>th</sup> percentile return corresponds to a 18.5 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.

The table below shows the estimated changes in the Pool's Base rate for 2016-17, 2017-18 and 2018-19 under the five different scenarios.

2013-16 Investment Return Scenario	Estimated Change in Pool's Base Rate Between Year Shown and Preceding Year			
	2016-17	2017-18	2018-19	Cumulative Increase
-4.10% (5th percentile)	1.6%	2.3%	3.0%	6.9%
2.60% (25th percentile)	1.2%	1.5%	1.8%	4.5%
7.5%	0.9%	0.9%	0.9%	2.7%
11.90% (75th percentile)	0.6%	0.3%	0.0%	0.9%
18.50% (95th percentile)	0.2%	-0.6%	-1.6%	-2.0%

## Analysis of Discount Rate Sensitivity

The following analysis looks at the 2014-15 employer contribution rates under two different discount rate scenarios. Shown below are the employer contribution rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis gives an indication of the potential required employer contribution rates if the PERF were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to the risk pool contribution rates.

2014-15 Employer Contribution Rate			
As of June 30, 2012	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Pool's Gross Employer Normal Cost	11.9%	8.5%	5.8%
Payment on Pool's Amortization Bases	8.7%	3.2%	-1.6%
Total	20.6%	11.7%	4.2%

## **APPENDICES**

- **APPENDIX A - ACTUARIAL METHODS AND ASSUMPTIONS**
- **APPENDIX B - PLAN PROVISIONS**
- **APPENDIX C - PLAN OPTIONS AND VARIABLES**
- **APPENDIX D - LIST OF PARTICIPATING EMPLOYERS**
- **APPENDIX E - PARTICIPANT DATA**
- **APPENDIX F - GLOSSARY OF ACTUARIAL TERMS**

## **APPENDIX A**

### **ACTUARIAL METHODS AND ASSUMPTIONS**

- **ACTUARIAL DATA**
- **ACTUARIAL METHODS**
- **ACTUARIAL ASSUMPTIONS**
- **MISCELLANEOUS**

## **Actuarial Data**

As stated in the Actuarial Certification, the data which serves as the basis of this valuation has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of this valuation, except that data does not always contain the latest salary information for former members now in reciprocal systems and does not recognize the potential for unusually large salary deviation in certain cases such as elected officials. Therefore, salary information in these cases may not be accurate. These situations are relatively infrequent, however, and when they do occur, they generally do not have a material impact on the employer contribution rates.

## **Actuarial Methods**

### **Funding Method**

The actuarial funding method used for the Retirement Program is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the pool allocated to prior years. The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for members entitled to deferred benefits, is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

The excess of the total actuarial accrued liability over the actuarial value of plan assets is called the unfunded actuarial accrued liability. Funding requirements are determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of assumed future payrolls. All changes in liability due to changes in actuarial assumptions, or changes in actuarial methodology are amortized separately over a 20-year period. All new gains or losses are tracked and amortized over a rolling 30-year period. If a pool's accrued liability exceeds the actuarial value of assets, the annual contribution with respect to the total unfunded liability may not be less than the amount produced by a 30-year amortization of the unfunded liability.

Additional contributions will be required for any plan or pool if their cash flows hamper adequate funding progress by preventing the expected funded status on a market value of assets basis of the plan to either:

- Increase by at least 15 percent by June 30, 2043; or
- Reach a level of 75 percent funded by June 30, 2043

The necessary additional contribution will be obtained by changing the amortization period of the gains and losses except for those occurring in the fiscal years 2008-2009, 2009-2010, and 2010-2011 to a period which will result in the satisfaction of the above criteria. CalPERS actuaries will reassess the criteria above when performing each future valuation to determine whether or not additional contributions are necessary.

An exception to the funding rules above is used whenever the application of such rules results in inconsistencies. In these cases a "fresh start" approach is used. This simply means that the current unfunded actuarial liability is projected and amortized over a set number of years. As mentioned above, if the annual contribution on the total unfunded liability was less than the amount produced by a 30-year amortization of the unfunded liability, the plan actuary would implement a 30-year fresh start. However, in the case of a 30-year fresh start, just the unfunded liability not already in the (gain)/loss base (which already is amortized over 30 years) will go into the new fresh start base. In addition, a fresh start is needed in the following situations:

- 1) When a positive payment would be required on a negative unfunded actuarial liability (or conversely a negative payment on a positive unfunded actuarial liability); or
- 2) When there is excess assets, rather than an unfunded liability. In this situation a 30-year fresh start is used, unless a larger fresh start is needed to avoid a negative total rate.

## **APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS**

It should be noted that the actuary may choose to use a fresh start under other circumstances. In all cases, the period of the fresh start is chosen by the actuary according to his or her best judgment, but not be less than five years, nor greater than 30 years.

### **Asset Valuation Method**

In order to dampen the effect of short term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. First an Expected Value of Assets is computed by bringing forward the prior year's Actuarial Value of Assets and the contributions received and benefits paid during the year at the assumed actuarial rate of return. The Actuarial Value of Assets is then computed as the Expected Value of Assets plus one-fifteenth of the difference between the actual Market Value of Assets and the Expected Value of Assets as of the valuation date. However, in no case will the Actuarial Value of Assets be less than 80 percent, nor greater than 120 percent of the actual Market Value of Assets.

In June 2009, the CalPERS Board adopted changes to the asset smoothing method in order to phase in over a three-year period the impact of the negative -24 percent investment loss experienced by CalPERS in fiscal year 2008-2009. The following changes were adopted:

- Increase the corridor limits for the actuarial value of assets from 80 percent-120 percent of market value to 60 percent-140 percent of market value on June 30, 2009
- Reduce the corridor limits for the actuarial value of assets to 70 percent-130 percent of market value on June 30, 2010
- Return to the 80 percent-120 percent of market value corridor limits for the actuarial value of assets on June 30, 2011 and thereafter

**On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 contribution rates, CalPERS will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period.**



## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

# Actuarial Assumptions

### Economic Assumptions

#### **Discount Rate**

7.5 percent compounded annually (net of expenses). This assumption is used for all plans.

#### **Termination Liability Discount Rate**

The discount rate used for termination valuation is a weighted average of the 10 and 30-year US Treasury yields in effect on the valuation date that equal the duration of the pension liabilities. For purposes of this hypothetical termination liability estimate, the discount rate used, 2.98 percent, is the yield on the 30-year US Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS) as of June 30, 2012. Please note, as of June 30, 2013 the 30-year STRIPS yield was 3.72 percent.

#### **Salary Growth**

Annual increases vary by category, entry age, and duration of service. Sample which is assumed increases are shown below.

#### **Public Agency Miscellaneous**

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1420	0.1240	0.0980
1	0.1190	0.1050	0.0850
2	0.1010	0.0910	0.0750
3	0.0880	0.0800	0.0670
4	0.0780	0.0710	0.0610
5	0.0700	0.0650	0.0560
10	0.0480	0.0460	0.0410
15	0.0430	0.0410	0.0360
20	0.0390	0.0370	0.0330
25	0.0360	0.0360	0.0330
30	0.0360	0.0360	0.0330

#### **Public Agency Fire**

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1050	0.1050	0.1020
1	0.0950	0.0940	0.0850
2	0.0870	0.0830	0.0700
3	0.0800	0.0750	0.0600
4	0.0740	0.0680	0.0510
5	0.0690	0.0620	0.0450
10	0.0510	0.0460	0.0350
15	0.0410	0.0390	0.0340
20	0.0370	0.0360	0.0330
25	0.0350	0.0350	0.0330
30	0.0350	0.0350	0.0330

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

<b>Public Agency Police</b>			
<u>Duration of Service</u>	<u>(Entry Age 20)</u>	<u>(Entry Age 30)</u>	<u>(Entry Age 40)</u>
0	0.1090	0.1090	0.1090
1	0.0930	0.0930	0.0930
2	0.0810	0.0810	0.0780
3	0.0720	0.0700	0.0640
4	0.0650	0.0610	0.0550
5	0.0590	0.0550	0.0480
10	0.0450	0.0420	0.0340
15	0.0410	0.0390	0.0330
20	0.0370	0.0360	0.0330
25	0.0350	0.0340	0.0330
30	0.0350	0.0340	0.0330

<b>Public Agency County Peace Officers</b>			
<u>Duration of Service</u>	<u>(Entry Age 20)</u>	<u>(Entry Age 30)</u>	<u>(Entry Age 40)</u>
0	0.1290	0.1290	0.1290
1	0.1090	0.1060	0.1030
2	0.0940	0.0890	0.0840
3	0.0820	0.0770	0.0710
4	0.0730	0.0670	0.0610
5	0.0660	0.0600	0.0530
10	0.0460	0.0420	0.0380
15	0.0410	0.0380	0.0360
20	0.0370	0.0360	0.0340
25	0.0350	0.0340	0.0330
30	0.0350	0.0340	0.0330

<b>Schools</b>			
<u>Duration of Service</u>	<u>(Entry Age 20)</u>	<u>(Entry Age 30)</u>	<u>(Entry Age 40)</u>
0	0.1080	0.0960	0.0820
1	0.0940	0.0850	0.0740
2	0.0840	0.0770	0.0670
3	0.0750	0.0700	0.0620
4	0.0690	0.0640	0.0570
5	0.0630	0.0600	0.0530
10	0.0450	0.0440	0.0410
15	0.0390	0.0380	0.0350
20	0.0360	0.0350	0.0320
25	0.0340	0.0340	0.0320
30	0.0340	0.0340	0.0320

- The Miscellaneous salary scale is used for Local Prosecutors.
- The Police salary scale is used for Other Safety, Local Sheriff, and School Police.

### Overall Payroll Growth

3.00 percent compounded annually (used in projecting the payroll over which the unfunded liability is amortized). This assumption is used for all plans.

### Inflation

2.75 percent compounded annually. This assumption is used for all plans.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Non-valued Potential Additional Liabilities

The potential liability loss for a cost-of-living increase exceeding the 2.75 percent inflation assumption, and any potential liability loss from future member service purchases are not reflected in the valuation.

### Miscellaneous Loading Factors

#### Credit for Unused Sick Leave

Final Average Salary is increased by 1 percent for those agencies that have accepted the provision providing Credit for Unused Sick Leave.

#### Conversion of Employer Paid Member Contributions (EPMC)

Final Average Salary is increased by the Employee Contribution Rate for those agencies that have contracted for the provision providing for the Conversion of Employer Paid Member Contributions (EPMC) during the final compensation period.

#### Norris Decision (Best Factors)

Employees hired prior to July 1, 1982 have projected benefit amounts increased in order to reflect the use of "Best Factors" for these employees in the calculation of optional benefit forms. This is due to a 1983 Supreme Court decision, known as the Norris decision, which required males and females to be treated equally in the determination of benefit amounts. Consequently, anyone already employed at that time is given the best possible conversion factor when optional benefits are determined. No loading is necessary for employees hired after July 1, 1982.

#### Termination Liability

The termination liabilities include a 7 percent contingency load. This load is for unforeseen improvements in mortality.

### Demographic Assumptions

#### Pre-Retirement Mortality

Non-Industrial Death Rates vary by age and gender. Industrial Death rates vary by age. See sample rates in table below. The non-industrial death rates are used for all plans. The industrial death rates are used for Safety Plans (except for Local Prosecutor safety members where the corresponding Miscellaneous Plan does not have the Industrial Death Benefit).

Age	Non-Industrial Death (Not Job-Related)		Industrial Death (Job-Related)
	Male	Female	Male and Female
20	0.00047	0.00016	0.00003
25	0.00050	0.00026	0.00007
30	0.00053	0.00036	0.00010
35	0.00067	0.00046	0.00012
40	0.00087	0.00065	0.00013
45	0.00120	0.00093	0.00014
50	0.00176	0.00126	0.00015
55	0.00260	0.00176	0.00016
60	0.00395	0.00266	0.00017
65	0.00608	0.00419	0.00018
70	0.00914	0.00649	0.00019
75	0.01220	0.00878	0.00020
80	0.01527	0.01108	0.00021

Miscellaneous Plans usually have Industrial Death rates set to zero unless the agency has specifically contracted for Industrial Death benefits. If so, each Non-Industrial Death rate shown above will be split into two components: 99 percent will become the Non-Industrial Death rate and 1 percent will become the Industrial Death rate.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Post-Retirement Mortality

Rates vary by age, type of retirement and gender. See sample rates in table below. These rates are used for all plans.

Age	Healthy Recipients		Non-Industrially Disabled (Not Job-Related)		Industrially Disabled (Job-Related)	
	Male	Female	Male	Female	Male	Female
50	0.00239	0.00125	0.01632	0.01245	0.00443	0.00356
55	0.00474	0.00243	0.01936	0.01580	0.00563	0.00546
60	0.00720	0.00431	0.02293	0.01628	0.00777	0.00798
65	0.01069	0.00775	0.03174	0.01969	0.01388	0.01184
70	0.01675	0.01244	0.03870	0.03019	0.02236	0.01716
75	0.03080	0.02071	0.06001	0.03915	0.03585	0.02665
80	0.05270	0.03749	0.08388	0.05555	0.06926	0.04528
85	0.09775	0.07005	0.14035	0.09577	0.11799	0.08017
90	0.16747	0.12404	0.21554	0.14949	0.16575	0.13775
95	0.25659	0.21556	0.31025	0.23055	0.26108	0.23331
100	0.34551	0.31876	0.45905	0.37662	0.40918	0.35165
105	0.58527	0.56093	0.67923	0.61523	0.64127	0.60135
110	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board, first used in the June 30, 2009 valuation. For purposes of the post-retirement mortality rates, those revised rates include 5 years of projected on-going mortality improvement using Scale AA published by the Society of Actuaries until June 30, 2010. There is no margin for future mortality improvement beyond the valuation date. The mortality assumption will be reviewed with the next experience study expected to be completed for the June 30, 2013 valuation to determine an appropriate margin to be used.

### Marital Status

For active members, a percentage married upon retirement is assumed according to the following table.

Member Category	Percent Married
Miscellaneous Member	85%
Local Police	90%
Local Fire	90%
Other Local Safety	90%
School Police	90%

### Age of Spouse

It is assumed that female spouses are 3 years younger than male spouses. This assumption is used for all plans.

### Terminated Members

It is assumed that terminated members refund immediately if non-vested. Terminated members who are vested are assumed to follow the same service retirement pattern as active members but with a load to reflect the expected higher rates of retirement, especially at lower ages. The following table shows the load factors that are applied to the service retirement assumption for active members to obtain the service retirement pattern for separated vested members:

Age	Load Factor
50	450%
51	250%
52 through 56	200%
57 through 60	150%
61 through 64	125%
65 and above	100% (no change)

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Termination with Refund

Rates vary by entry age and service for Miscellaneous Plans. Rates vary by service for Safety Plans. See sample rates in tables below.

Public Agency Miscellaneous						
Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40	Entry Age 45
0	0.1742	0.1674	0.1606	0.1537	0.1468	0.1400
1	0.1545	0.1477	0.1409	0.1339	0.1271	0.1203
2	0.1348	0.1280	0.1212	0.1142	0.1074	0.1006
3	0.1151	0.1083	0.1015	0.0945	0.0877	0.0809
4	0.0954	0.0886	0.0818	0.0748	0.0680	0.0612
5	0.0212	0.0193	0.0174	0.0155	0.0136	0.0116
10	0.0138	0.0121	0.0104	0.0088	0.0071	0.0055
15	0.0060	0.0051	0.0042	0.0032	0.0023	0.0014
20	0.0037	0.0029	0.0021	0.0013	0.0005	0.0001
25	0.0017	0.0011	0.0005	0.0001	0.0001	0.0001
30	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Public Agency Safety			
Duration of Service	Fire	Police	County Peace Officer
0	0.0710	0.1013	0.0997
1	0.0554	0.0636	0.0782
2	0.0398	0.0271	0.0566
3	0.0242	0.0258	0.0437
4	0.0218	0.0245	0.0414
5	0.0029	0.0086	0.0145
10	0.0009	0.0053	0.0089
15	0.0006	0.0027	0.0045
20	0.0005	0.0017	0.0020
25	0.0003	0.0012	0.0009
30	0.0003	0.0009	0.0006
35	0.0003	0.0009	0.0006

The Police Termination and Refund rates are used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools						
Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40	Entry Age 45
0	0.1730	0.1627	0.1525	0.1422	0.1319	0.1217
1	0.1585	0.1482	0.1379	0.1277	0.1174	0.1071
2	0.1440	0.1336	0.1234	0.1131	0.1028	0.0926
3	0.1295	0.1192	0.1089	0.0987	0.0884	0.0781
4	0.1149	0.1046	0.0944	0.0841	0.0738	0.0636
5	0.0278	0.0249	0.0221	0.0192	0.0164	0.0135
10	0.0172	0.0147	0.0122	0.0098	0.0074	0.0049
15	0.0115	0.0094	0.0074	0.0053	0.0032	0.0011
20	0.0073	0.0055	0.0038	0.0020	0.0002	0.0002
25	0.0037	0.0023	0.0010	0.0002	0.0002	0.0002
30	0.0015	0.0003	0.0002	0.0002	0.0002	0.0002
35	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Termination with Vested Benefits

Rates vary by entry age and service for Miscellaneous Plans. Rates vary by service for Safety Plans. See sample rates in tables below.

Public Agency Miscellaneous					
Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0656	0.0597	0.0537	0.0477	0.0418
10	0.0530	0.0466	0.0403	0.0339	0.0000
15	0.0443	0.0373	0.0305	0.0000	0.0000
20	0.0333	0.0261	0.0000	0.0000	0.0000
25	0.0212	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety			
Duration of Service	Fire	Police	County Peace Officer
5	0.0162	0.0163	0.0265
10	0.0061	0.0126	0.0204
15	0.0058	0.0082	0.0130
20	0.0053	0.0065	0.0074
25	0.0047	0.0058	0.0043
30	0.0045	0.0056	0.0030
35	0.0000	0.0000	0.0000

- When a member is eligible to retire, the termination with vested benefits probability is set to zero.
- After termination with vested benefits, a miscellaneous member is assumed to retire at age 59 and a safety member at age 54.
- The Police Termination with vested benefits rates are used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools					
Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0816	0.0733	0.0649	0.0566	0.0482
10	0.0629	0.0540	0.0450	0.0359	0.0000
15	0.0537	0.0440	0.0344	0.0000	0.0000
20	0.0420	0.0317	0.0000	0.0000	0.0000
25	0.0291	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Non-Industrial (Not Job-Related) Disability

Rates vary by age and gender for Miscellaneous Plans.

Rates vary by age for Safety Plans.

Age	Miscellaneous		Fire	Police	County Peace Officer	Schools	
	Male	Female	Male and Female	Male and Female	Male and Female	Male	Female
20	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
25	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
30	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001
35	0.0006	0.0009	0.0001	0.0003	0.0004	0.0006	0.0004
40	0.0015	0.0016	0.0001	0.0004	0.0007	0.0014	0.0009
45	0.0025	0.0024	0.0002	0.0005	0.0013	0.0028	0.0017
50	0.0033	0.0031	0.0005	0.0008	0.0018	0.0044	0.0030
55	0.0037	0.0031	0.0010	0.0013	0.0010	0.0049	0.0034
60	0.0038	0.0025	0.0015	0.0020	0.0006	0.0043	0.0024

- The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors.
- The Police Non-Industrial Disability rates are used for Other Safety, Local Sheriff, and School Police.

### Industrial (Job-Related) Disability

Rates vary by age and category.

Age	Fire	Police	County Peace Officer
20	0.0002	0.0007	0.0003
25	0.0012	0.0032	0.0015
30	0.0025	0.0064	0.0031
35	0.0037	0.0097	0.0046
40	0.0049	0.0129	0.0063
45	0.0061	0.0161	0.0078
50	0.0074	0.0192	0.0101
55	0.0721	0.0668	0.0173
60	0.0721	0.0668	0.0173

- The Police Industrial Disability rates are used for Local Sheriff and Other Safety.
- Fifty Percent of the Police Industrial Disability rates are used for School Police.
- One Percent of the Police Industrial Disability rates are used for Local Prosecutors.
- Normally, rates are zero for Miscellaneous Plans unless the agency has specifically contracted for Industrial Disability benefits. If so, each Miscellaneous Non-Industrial Disability rate will be split into two components: 50 percent will become the Non-Industrial Disability rate and 50 percent will become the Industrial Disability rate.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Service Retirement

Retirement rate vary by age, service, and formula, except for the safety  $\frac{1}{2}$  @ 55 and 2% @ 55 formulas, where retirement rates vary by age only.

#### Public Agency Miscellaneous 1.5% @ 65

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.008	0.011	0.013	0.015	0.017	0.019
51	0.007	0.010	0.012	0.013	0.015	0.017
52	0.010	0.014	0.017	0.019	0.021	0.024
53	0.008	0.012	0.015	0.017	0.019	0.022
54	0.012	0.016	0.019	0.022	0.025	0.028
55	0.018	0.025	0.031	0.035	0.038	0.043
56	0.015	0.021	0.025	0.029	0.032	0.036
57	0.020	0.028	0.033	0.038	0.043	0.048
58	0.024	0.033	0.040	0.046	0.052	0.058
59	0.028	0.039	0.048	0.054	0.060	0.067
60	0.049	0.069	0.083	0.094	0.105	0.118
61	0.062	0.087	0.106	0.120	0.133	0.150
62	0.104	0.146	0.177	0.200	0.223	0.251
63	0.099	0.139	0.169	0.191	0.213	0.239
64	0.097	0.136	0.165	0.186	0.209	0.233
65	0.140	0.197	0.240	0.271	0.302	0.339
66	0.092	0.130	0.157	0.177	0.198	0.222
67	0.129	0.181	0.220	0.249	0.277	0.311
68	0.092	0.129	0.156	0.177	0.197	0.221
69	0.092	0.130	0.158	0.178	0.199	0.224
70	0.103	0.144	0.175	0.198	0.221	0.248

#### Public Agency Miscellaneous 2% @ 60

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.011	0.015	0.018	0.021	0.023	0.026
51	0.009	0.013	0.016	0.018	0.020	0.023
52	0.013	0.018	0.022	0.025	0.028	0.031
53	0.011	0.016	0.019	0.022	0.025	0.028
54	0.015	0.021	0.025	0.028	0.032	0.036
55	0.023	0.032	0.039	0.044	0.049	0.055
56	0.019	0.027	0.032	0.037	0.041	0.046
57	0.025	0.035	0.042	0.048	0.054	0.060
58	0.030	0.042	0.051	0.058	0.065	0.073
59	0.035	0.049	0.060	0.068	0.076	0.085
60	0.062	0.087	0.105	0.119	0.133	0.149
61	0.079	0.110	0.134	0.152	0.169	0.190
62	0.132	0.186	0.225	0.255	0.284	0.319
63	0.126	0.178	0.216	0.244	0.272	0.305
64	0.122	0.171	0.207	0.234	0.262	0.293
65	0.173	0.243	0.296	0.334	0.373	0.418
66	0.114	0.160	0.194	0.219	0.245	0.274
67	0.159	0.223	0.271	0.307	0.342	0.384
68	0.113	0.159	0.193	0.218	0.243	0.273
69	0.114	0.161	0.195	0.220	0.246	0.276
70	0.127	0.178	0.216	0.244	0.273	0.306



## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Public Agency Miscellaneous 2% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.015	0.020	0.024	0.029	0.033	0.039
51	0.013	0.016	0.020	0.024	0.027	0.033
52	0.014	0.018	0.022	0.027	0.030	0.036
53	0.017	0.022	0.027	0.032	0.037	0.043
54	0.027	0.034	0.041	0.049	0.056	0.067
55	0.050	0.064	0.078	0.094	0.107	0.127
56	0.045	0.057	0.069	0.083	0.095	0.113
57	0.048	0.061	0.074	0.090	0.102	0.122
58	0.052	0.066	0.080	0.097	0.110	0.131
59	0.060	0.076	0.092	0.111	0.127	0.151
60	0.072	0.092	0.112	0.134	0.153	0.182
61	0.089	0.113	0.137	0.165	0.188	0.224
62	0.128	0.162	0.197	0.237	0.270	0.322
63	0.129	0.164	0.199	0.239	0.273	0.325
64	0.116	0.148	0.180	0.216	0.247	0.294
65	0.174	0.221	0.269	0.323	0.369	0.439
66	0.135	0.171	0.208	0.250	0.285	0.340
67	0.133	0.169	0.206	0.247	0.282	0.336
68	0.118	0.150	0.182	0.219	0.250	0.297
69	0.116	0.147	0.179	0.215	0.246	0.293
70	0.138	0.176	0.214	0.257	0.293	0.349

### Public Agency Miscellaneous 2.5% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.026	0.033	0.040	0.048	0.055	0.062
51	0.021	0.026	0.032	0.038	0.043	0.049
52	0.021	0.026	0.032	0.038	0.043	0.049
53	0.026	0.033	0.040	0.048	0.055	0.062
54	0.043	0.054	0.066	0.078	0.089	0.101
55	0.088	0.112	0.136	0.160	0.184	0.208
56	0.055	0.070	0.085	0.100	0.115	0.130
57	0.061	0.077	0.094	0.110	0.127	0.143
58	0.072	0.091	0.111	0.130	0.150	0.169
59	0.083	0.105	0.128	0.150	0.173	0.195
60	0.088	0.112	0.136	0.160	0.184	0.208
61	0.083	0.105	0.128	0.150	0.173	0.195
62	0.121	0.154	0.187	0.220	0.253	0.286
63	0.105	0.133	0.162	0.190	0.219	0.247
64	0.105	0.133	0.162	0.190	0.219	0.247
65	0.143	0.182	0.221	0.260	0.299	0.338
66	0.105	0.133	0.162	0.190	0.219	0.247
67	0.105	0.133	0.162	0.190	0.219	0.247
68	0.105	0.133	0.162	0.190	0.219	0.247
69	0.105	0.133	0.162	0.190	0.219	0.247
70	0.125	0.160	0.194	0.228	0.262	0.296

# APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

## Public Agency Miscellaneous 2.7% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.028	0.035	0.043	0.050	0.058	0.065
51	0.022	0.028	0.034	0.040	0.046	0.052
52	0.022	0.028	0.034	0.040	0.046	0.052
53	0.028	0.035	0.043	0.050	0.058	0.065
54	0.044	0.056	0.068	0.080	0.092	0.104
55	0.091	0.116	0.140	0.165	0.190	0.215
56	0.061	0.077	0.094	0.110	0.127	0.143
57	0.063	0.081	0.098	0.115	0.132	0.150
58	0.074	0.095	0.115	0.135	0.155	0.176
59	0.083	0.105	0.128	0.150	0.173	0.195
60	0.088	0.112	0.136	0.160	0.184	0.208
61	0.085	0.109	0.132	0.155	0.178	0.202
62	0.124	0.158	0.191	0.225	0.259	0.293
63	0.107	0.137	0.166	0.195	0.224	0.254
64	0.107	0.137	0.166	0.195	0.224	0.254
65	0.146	0.186	0.225	0.265	0.305	0.345
66	0.107	0.137	0.166	0.195	0.224	0.254
67	0.107	0.137	0.166	0.195	0.224	0.254
68	0.107	0.137	0.166	0.195	0.224	0.254
69	0.107	0.137	0.166	0.195	0.224	0.254
70	0.129	0.164	0.199	0.234	0.269	0.304

## Public Agency Miscellaneous 3% @ 60

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.026	0.033	0.040	0.048	0.055	0.062
51	0.021	0.026	0.032	0.038	0.043	0.049
52	0.019	0.025	0.030	0.035	0.040	0.046
53	0.025	0.032	0.038	0.045	0.052	0.059
54	0.039	0.049	0.060	0.070	0.081	0.091
55	0.083	0.105	0.128	0.150	0.173	0.195
56	0.055	0.070	0.085	0.100	0.115	0.130
57	0.061	0.077	0.094	0.110	0.127	0.143
58	0.072	0.091	0.111	0.130	0.150	0.169
59	0.080	0.102	0.123	0.145	0.167	0.189
60	0.094	0.119	0.145	0.170	0.196	0.221
61	0.088	0.112	0.136	0.160	0.184	0.208
62	0.127	0.161	0.196	0.230	0.265	0.299
63	0.110	0.140	0.170	0.200	0.230	0.260
64	0.110	0.140	0.170	0.200	0.230	0.260
65	0.149	0.189	0.230	0.270	0.311	0.351
66	0.110	0.140	0.170	0.200	0.230	0.260
67	0.110	0.140	0.170	0.200	0.230	0.260
68	0.110	0.140	0.170	0.200	0.230	0.260
69	0.110	0.140	0.170	0.200	0.230	0.260
70	0.132	0.168	0.204	0.240	0.276	0.312

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Public Agency Fire ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.01588	56	0.11079
51	0.00000	57	0.00000
52	0.03442	58	0.09499
53	0.01990	59	0.04409
54	0.04132	60	1.00000
55	0.07513		

### Public Agency Police ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.02552	56	0.06921
51	0.00000	57	0.05113
52	0.01637	58	0.07241
53	0.02717	59	0.07043
54	0.00949	60	1.00000
55	0.16674		

### Public Agency Police 2% @ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.014	0.014	0.014	0.025	0.045
51	0.012	0.012	0.012	0.012	0.023	0.040
52	0.026	0.026	0.026	0.026	0.048	0.086
53	0.052	0.052	0.052	0.052	0.096	0.171
54	0.070	0.070	0.070	0.070	0.128	0.227
55	0.090	0.090	0.090	0.090	0.165	0.293
56	0.064	0.064	0.064	0.064	0.117	0.208
57	0.071	0.071	0.071	0.071	0.130	0.232
58	0.063	0.063	0.063	0.063	0.115	0.205
59	0.140	0.140	0.140	0.140	0.174	0.254
60	0.140	0.140	0.140	0.140	0.172	0.251
61	0.140	0.140	0.140	0.140	0.172	0.251
62	0.140	0.140	0.140	0.140	0.172	0.251
63	0.140	0.140	0.140	0.140	0.172	0.251
64	0.140	0.140	0.140	0.140	0.172	0.251
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

<b>Public Agency Fire 2%@50</b>						
Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.013	0.019
52	0.017	0.017	0.017	0.017	0.027	0.040
53	0.047	0.047	0.047	0.047	0.072	0.107
54	0.064	0.064	0.064	0.064	0.098	0.147
55	0.087	0.087	0.087	0.087	0.134	0.200
56	0.078	0.078	0.078	0.078	0.120	0.180
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.079	0.079	0.079	0.079	0.122	0.182
59	0.073	0.073	0.073	0.073	0.112	0.168
60	0.114	0.114	0.114	0.114	0.175	0.262
61	0.114	0.114	0.114	0.114	0.175	0.262
62	0.114	0.114	0.114	0.114	0.175	0.262
63	0.114	0.114	0.114	0.114	0.175	0.262
64	0.114	0.114	0.114	0.114	0.175	0.262
65	1.000	1.000	1.000	1.000	1.000	1.000

<b>Public Agency Police 3%@ 55</b>						
Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.019	0.019	0.019	0.019	0.040	0.060
51	0.024	0.024	0.024	0.024	0.049	0.074
52	0.024	0.024	0.024	0.024	0.051	0.077
53	0.059	0.059	0.059	0.059	0.121	0.183
54	0.069	0.069	0.069	0.069	0.142	0.215
55	0.116	0.116	0.116	0.116	0.240	0.363
56	0.076	0.076	0.076	0.076	0.156	0.236
57	0.058	0.058	0.058	0.058	0.120	0.181
58	0.076	0.076	0.076	0.076	0.157	0.237
59	0.094	0.094	0.094	0.094	0.193	0.292
60	0.141	0.141	0.141	0.141	0.290	0.438
61	0.094	0.094	0.094	0.094	0.193	0.292
62	0.118	0.118	0.118	0.118	0.241	0.365
63	0.094	0.094	0.094	0.094	0.193	0.292
64	0.094	0.094	0.094	0.094	0.193	0.292
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Public Agency Fire 3%@55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.012	0.012	0.012	0.018	0.028	0.033
51	0.008	0.008	0.008	0.012	0.019	0.022
52	0.018	0.018	0.018	0.027	0.042	0.050
53	0.043	0.043	0.043	0.062	0.098	0.114
54	0.057	0.057	0.057	0.083	0.131	0.152
55	0.092	0.092	0.092	0.134	0.211	0.246
56	0.081	0.081	0.081	0.118	0.187	0.218
57	0.100	0.100	0.100	0.146	0.230	0.268
58	0.081	0.081	0.081	0.119	0.187	0.219
59	0.078	0.078	0.078	0.113	0.178	0.208
60	0.117	0.117	0.117	0.170	0.267	0.312
61	0.078	0.078	0.078	0.113	0.178	0.208
62	0.098	0.098	0.098	0.141	0.223	0.260
63	0.078	0.078	0.078	0.113	0.178	0.208
64	0.078	0.078	0.078	0.113	0.178	0.208
65	1.000	1.000	1.000	1.000	1.000	1.000

### Public Agency Police 3%@ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.070	0.070	0.070	0.131	0.193	0.249
51	0.050	0.050	0.050	0.095	0.139	0.180
52	0.061	0.061	0.061	0.116	0.171	0.220
53	0.069	0.069	0.069	0.130	0.192	0.247
54	0.071	0.071	0.071	0.134	0.197	0.255
55	0.090	0.090	0.090	0.170	0.250	0.322
56	0.069	0.069	0.069	0.130	0.191	0.247
57	0.080	0.080	0.080	0.152	0.223	0.288
58	0.087	0.087	0.087	0.164	0.242	0.312
59	0.090	0.090	0.090	0.170	0.251	0.323
60	0.135	0.135	0.135	0.255	0.377	0.485
61	0.090	0.090	0.090	0.170	0.251	0.323
62	0.113	0.113	0.113	0.213	0.314	0.404
63	0.090	0.090	0.090	0.170	0.251	0.323
64	0.090	0.090	0.090	0.170	0.251	0.323
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

## APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS

### Public Agency Fire 3%@50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.034	0.034	0.034	0.048	0.068	0.080
51	0.046	0.046	0.046	0.065	0.092	0.109
52	0.069	0.069	0.069	0.097	0.138	0.163
53	0.084	0.084	0.084	0.117	0.166	0.197
54	0.103	0.103	0.103	0.143	0.204	0.241
55	0.127	0.127	0.127	0.177	0.252	0.298
56	0.121	0.121	0.121	0.169	0.241	0.285
57	0.101	0.101	0.101	0.141	0.201	0.238
58	0.118	0.118	0.118	0.165	0.235	0.279
59	0.100	0.100	0.100	0.140	0.199	0.236
60	0.150	0.150	0.150	0.210	0.299	0.354
61	0.100	0.100	0.100	0.140	0.199	0.236
62	0.125	0.125	0.125	0.175	0.249	0.295
63	0.100	0.100	0.100	0.140	0.199	0.236
64	0.100	0.100	0.100	0.140	0.199	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

### Schools 2%@ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.009	0.013	0.015	0.016	0.018
51	0.005	0.010	0.014	0.017	0.019	0.021
52	0.006	0.012	0.017	0.020	0.022	0.025
53	0.007	0.014	0.019	0.023	0.026	0.029
54	0.012	0.024	0.033	0.039	0.044	0.049
55	0.024	0.048	0.067	0.079	0.088	0.099
56	0.020	0.039	0.055	0.065	0.072	0.081
57	0.021	0.042	0.059	0.070	0.078	0.087
58	0.025	0.050	0.070	0.083	0.092	0.103
59	0.029	0.057	0.080	0.095	0.105	0.118
60	0.037	0.073	0.102	0.121	0.134	0.150
61	0.046	0.090	0.126	0.149	0.166	0.186
62	0.076	0.151	0.212	0.250	0.278	0.311
63	0.069	0.136	0.191	0.225	0.251	0.281
64	0.067	0.133	0.185	0.219	0.244	0.273
65	0.091	0.180	0.251	0.297	0.331	0.370
66	0.072	0.143	0.200	0.237	0.264	0.295
67	0.067	0.132	0.185	0.218	0.243	0.272
68	0.060	0.118	0.165	0.195	0.217	0.243
69	0.067	0.133	0.187	0.220	0.246	0.275
70	0.066	0.131	0.183	0.216	0.241	0.270

## **APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS**

### **Miscellaneous**

#### **Superfunded Status**

Prior to enactment of the Public Employees' Pension Reform Act (PEPRA) effective January 1, 2013, a plan in superfunded status (actuarial value of assets exceeding present value of benefits) would normally pay a zero employer contribution rate while also being permitted to use its superfunded assets to pay its employees' normal member contributions.

However, Section 7522.52(a) of PEPRA states, "In any fiscal year a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the total normal cost rate..." This means that not only must employers pay their employer normal cost, regardless of plan surplus, but also that employers may no longer use superfunded assets to pay employee normal member contributions.

Superfunded status applies only to individual plans, not risk pools. For rate plans within a risk pool, actuarial value of assets is the sum of the rate plan's side fund plus the rate plan's pro-rata share of non-side fund assets.

#### **Internal Revenue Code Section 415**

The limitations on benefits imposed by Internal Revenue Code Section 415 were taken into account in this valuation. Each year the impact of any changes in this limitation since the prior valuation is included and amortized as part of the actuarial gain or loss base. This results in lower contributions for those employers contributing to the Replacement Benefit Fund and it also protects CalPERS from prefunding expected benefits in excess of limits imposed by federal tax law.

#### **Internal Revenue Code Section 401(a)(17)**

The limitations on compensation imposed by Internal Revenue Code Section 401(a)(17) were taken into account in this valuation. Each year the impact of any changes in this compensation limitation since the prior valuation is included and amortized as part of the actuarial gain or loss base.

#### **PEPRA Assumptions**

The Public Employees' Pension Reform Act of 2013 (PEPRA) requires new benefits and member contributions for new members as defined by PEPRA, that are hired after January 1, 2013. For non-pooled plans, these members will first be reflected in the June 30, 2013 non-pooled plan valuations. Members in pooled plans will be reflected in the new Miscellaneous and Safety risk pools created by the CalPERS Board in November 2012 in response to the passage of PEPRA, beginning with the June 30, 2013 valuation. Different assumptions for the new PEPRA members will be disclosed in the 2013 valuation.

## **APPENDIX B**

### **PRINCIPAL PLAN PROVISIONS**



## APPENDIX B - PRINCIPAL PLAN PROVISIONS

The following is a description of the principal plan provisions used in calculating the liabilities of the Miscellaneous 2% at 55 Risk Pool. Plan provisions are divided based on whether they are standard, Class 1, Class 2 or Class 3 benefits. Standard benefits are applicable to all members of the risk pool while Class 1, 2 or 3 benefits vary among employers. Provided at the end of the listing in Appendix C is a table showing the percentage of members participating in the pool that are subject to Class 1 benefits.

Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

## PEPRA Benefit Changes

The Public Employees' Pension Reform Act of 2013 (PEPRA) requires new benefits and member contributions for new members as defined by PEPRA, that are hired after January 1, 2013. For non-pooled plans, these members will first be reflected in the June 30, 2013 non-pooled plan valuations. Members in pooled plans will be reflected in the new Miscellaneous and new Safety risk pools created by the CalPERS Board in November 2012 in response to the passage of PEPRA, also beginning with the June 30, 2013 valuation.

## Service Retirement

### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements). For employees hired into a plan with the 1.5% at 65 formula, eligibility for service retirement is age 55 with at least 5 years of service.

### Benefit

The Service Retirement benefit is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*.

- The *benefit factor* for this group of employees comes from the **2% at 55 or 1.5% at 65 Miscellaneous** benefit formula factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

Retirement Age	2% at 55 Miscellaneous Factor	Retirement Age	2% at 55 Miscellaneous Factor
50	1.426%	57	2.104%
51	1.522%	58	2.156%
52	1.628%	59	2.210%
53	1.742%	60	2.262%
54	1.866%	61	2.314%
55	2%	62	2.366%
56	2.052%	63 & Up	2.418%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at a rate of 0.004 years of service for each day of sick leave.

## APPENDIX B - PRINCIPAL PLAN PROVISIONS

- The *final compensation* is the monthly average of the member's highest 36 or 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The standard benefit available to all members is 36 months. Employers have the option of providing a final compensation equal to the highest 12 consecutive months by contracting for this Class 1 optional benefit. Final compensation must be defined by the highest 36 consecutive months' pay under the 1.5% at 65 formula.
- Employees must be covered by Social Security with the 1.5% at 65 formula. Social Security is optional for all other benefit formulas. For employees covered by the modified formula, the final compensation is offset by \$133.33 (or by one third if the final compensation is less than \$400). Employers have the option to contract for the Class 3 benefit that will eliminate the offset applicable to the final compensation of employees covered by a modified formula.
- The Miscellaneous Service Retirement benefit is not capped. The Safety Service Retirement benefit is capped at 90 percent of final compensation.

## Vested Deferred Retirement

### Eligibility for Deferred Status

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

### Eligibility to Start Receiving Benefits

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50 (55 for employees hired into a 1.5% @ 65 plan).

### Benefit

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

## Non-Industrial (Non-Job Related) Disability Retirement

### Eligibility

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

### Standard Benefit

The standard Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8 percent of final compensation, multiplied by *service*, which is determined as follows:

- *Service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *Service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3 percent of Final Compensation.

## **APPENDIX B - PRINCIPAL PLAN PROVISIONS**

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

### **Improved Benefit**

Employers have the option of providing this improved benefit by contracting for this Class 3 optional benefit.

The improved Non-Industrial Disability Retirement benefit is a monthly allowance equal to 30 percent of final compensation for the first 5 years of service, plus 1% for each additional year of service to a maximum of 50 percent of final compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

## **Industrial (Job Related) Disability Retirement**

Employers have the option of providing this improved benefit by contracting for this Class 1 optional benefit.

### **Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes disabled while working, where disabled means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

### **Standard Benefit**

The standard Industrial Disability Retirement benefit is a monthly allowance equal to 50 percent of final compensation. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of or annuitization of the accumulated member contributions with respect to employment in this group. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit.

### **Increased Benefit (75 percent of Final Compensation)**

The increased Industrial Disability Retirement benefit is a monthly allowance equal to 75 percent of final compensation for total disability. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of or annuitization of the accumulated member contributions with respect to employment in this group. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit.

## **Post-Retirement Death Benefit**

### **Standard Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$500 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Improved Lump Sum Payment**

Employers have the option of providing any of these improved lump sum death benefit by contracting for any of these class 3 optional benefits.

## **APPENDIX B - PRINCIPAL PLAN PROVISIONS**

Upon the death of a retiree, a one-time lump sum payment of \$600, \$2,000, \$3,000, \$4,000 or \$5,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Form of Payment for Retirement Allowance**

#### **Standard Form of Payment**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

#### **Improved Form of Payment (Post Retirement Survivor Allowance)**

Employers have the option to contract for this Class 1 benefit providing an improved post retirement survivor allowance.

For retirement allowances with respect to service subject to the modified formula, 25 percent of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. For retirement allowances with respect to service subject to the full formula, 50 percent of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. This additional benefit is often referred to as post retirement survivor allowance (PRSA) or simply as survivor continuance.

In other words, 25 percent or 50 percent of the allowance, the continuance portion, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime. This benefit will not be discontinued in the event the spouse remarries.

The remaining 75 percent or 50 percent of the retirement allowance, which may be referred to as the option portion of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this option portion to be paid to any designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

### **Pre-Retirement Death Benefits**

#### **Basic Death Benefit**

##### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

##### **Standard Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5 percent per year, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

## APPENDIX B - PRINCIPAL PLAN PROVISIONS

### 1957 Survivor Benefit

#### Eligibility

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. An eligible survivor means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

#### Standard Benefit

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

### Optional Settlement 2W Death Benefit

#### Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2W Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

#### Standard Benefit

The Optional Settlement 2W Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2W. (A retiree who elects Optional Settlement 2W receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried children under age 18, if applicable. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### Special Death Benefit

#### Eligibility

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

#### Improved Benefit

The Special Death benefit is a monthly allowance equal to 50 percent of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

## APPENDIX B - PRINCIPAL PLAN PROVISIONS

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

## Cost-of-Living Adjustments (COLA)

### Standard Benefit

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2 percent. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### Improved Benefit

Employers have the option of providing any of these improved cost-of-living adjustments by contracting for any one of these Class 1 optional benefits. An improved COLA is not available in conjunction with the 1.5% at 65 formula.

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by either 3 percent, 4 percent or 5 percent. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

## Purchasing Power Protection Allowance (PPPA)

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 80 percent of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan.

## Employee Contributions

Each employee contributes toward his or her retirement based upon the following schedule.

The percent contributed below the monthly compensation breakpoint is 0 percent.

The monthly compensation breakpoint is \$0 for full and supplemental formula members, except for those members in the CSU auxiliary organizations where the breakpoint is \$513.

The monthly compensation breakpoint is \$133.33 for employees covered by the modified formula.

The percent contributed above the monthly compensation breakpoint is 7 percent for 2% at 55 Miscellaneous Benefit Formula and 2 percent for 1.5% at 65, except for those members in the CSU auxiliary organizations where the contribution rate has been set at the State member level.

The employer may choose to "pick-up" these contributions for the employees (Employer Paid Member Contributions), or EMPC. An employer may also include Employee Cost Sharing in the contract, where employees contribute an additional percentage of compensation based on any optional benefit for which a contract amendment was made on or after January 1, 1979.

## **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6 percent interest.

## **1959 Survivor Benefit**

This is a pre-retirement death benefit available only to members not covered by Social Security. Any agency joining CalPERS subsequent to 1993 was required to provide this benefit if the members were not covered by Social Security. The benefit is optional for agencies joining CalPERS prior to 1994. Levels 1, 2 and 3 are now closed. Any new agency or any agency wishing to add this benefit or increase the current level must choose the 4th or Indexed Level.

This benefit is not included in the results presented in this valuation. More information on this benefit is available on the CalPERS website at [www.calpers.ca.gov](http://www.calpers.ca.gov).

## **APPENDIX C**

### **PLAN OPTIONS AND VARIABLES**

- **CLASSIFICATION OF OPTIONAL BENEFITS**
- **EXAMPLE OF INDIVIDUAL AGENCY'S RATE CALCULATION**
- **DISTRIBUTION OF CLASS 1 BENEFITS**



## APPENDIX C – PLAN OPTIONS AND VARIABLES

### Classification of Optional Benefits

Below is the list of the available optional benefit provisions and their initial classification upon establishment of risk pools. When new benefits become available as a result of legislation, the Chief Actuary will determine their classification in accordance with the criteria established in the Board policy.

#### Class 1

Class 1 benefits have been identified to be additional benefits which have a significant, ongoing effect on the total plan cost. In some cases, a Class 1 benefit may be an alternate benefit formula. These benefits vary by employer across the risk pool. Agencies contracting for a Class 1 benefit will be responsible for the past service liability associated with such benefit and will be required to pay a surcharge established by the actuary to cover the ongoing cost (normal cost) of the Class 1 benefit.

The table below shows the list of Class 1 benefits and their applicable surcharge for the Miscellaneous 2% at 55 Risk Pool. Last year's surcharges are shown for comparison.

	June 30, 2011	June 30, 2012
• One Year Final Compensation	0.499%	0.490%
• EPMC by contract, 7%	0.958%	0.941%
• EPMC by contract, 8%	N/A	N/A
• EPMC by contract, 9%	N/A	N/A
• 25% PRSA	0.822%	0.808%
• 50% PRSA	0.822%	0.808%
• 3% Annual COLA	0.928%	0.912%
• 4% Annual COLA	0.928%	0.912%
• 5% Annual COLA	0.928%	0.912%
• IDR For Local Miscellaneous Members	0.491%	0.481%
• Increased IDR Allowance to 75% of Compensation	0.858%	0.840%
• Improved Industrial Disability Allowance for Local Safety Members	N/A	N/A
• Employee Cost Sharing	varies	varies
• Employee Contribution Rate for CSUC Auxiliary Organizations Reduced to State Member Level - Covered by Social Security	2.000%	2.000%
• Employee Contribution Rate for CSUC Auxiliary Organizations Reduced to State Member Level - Not Covered by Social Security	1.000%	1.000%

For employers contracting for more than one Class 1 benefit, the surcharges listed in this table will be added together

- Employee cost sharing had been eliminated as a surcharge from some of the June 30, 2010 valuations and from all of the June 30, 2011 and later valuations. It is now shown on MyCalPERS as a rate adjustment.

## **APPENDIX C – PLAN OPTIONS AND VARIABLES**

### **Class 2**

Class 2 benefits have been identified to be the ancillary benefits providing one-time increases in benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 2 benefit will be responsible for the past service liability associated with such benefit.

The following benefits shall be classified as Class 2:

- One-time 1% to 6% Ad Hoc COLA Increases for members who retired or died prior to January 1, 1998 (Section 21328)
- "Golden Handshakes" – Section 20903 Two Years Additional Service Credit
- Credit for Prior Service Paid for by the Employer
- Military Service Credit (Section 20996)
- Credit for Local Retirement System Service for Employees of Agencies Contracted on a Prospective basis (Section 20530.1)
- Prior Service Credit for Employees of an Assumed Agency Function (Section 20936)
- Limit Prior Service to Members Employed on Contract Date (Section 20938)
- Public Service Credit for Limited Prior Service (Section 21031)
- Public Service Credit for Employees of an Assumed Agency or Function (Section 21025)

### **Class 3**

Class 3 benefits have been identified to be additional benefits which have a minimal effect on the total plan cost. Class 3 benefits may vary by rate plan within each risk pool. However, the employer contribution rate will not vary within the risk pool due to the Class 3 benefits.

The following benefits shall be classified as Class 3:

- Full formula plus social security
- Post Retirement Lump Sum Death Benefit
- \$600 lump sum retired death benefit (Section 21622)
- \$2,000 lump sum retired death benefit (Section 21623.5)
- \$3,000 lump sum retired death benefit (Section 21623.5)
- \$4,000 lump sum retired death benefit (Section 21623.5)
- \$5,000 lump sum retired death benefit (Section 21623.5)
- Improved non-industrial disability allowance (Section 21427)
- Special death benefit for local miscellaneous members (Section 21540.5)
- Service Credit Purchased by Member
- Partial Service Retirement (Section 21118)
- Optional Membership for Part Time Employees (Section 20325)
- Extension of Reciprocity Rights for Elective Officers (Section 20356)
- Removal of Contract Exclusions Prospectively Only (Section 20503)
- Alternate Death Benefit for Local Fire Members credited with 20 or more years of service (Section 21547.7)

## APPENDIX C – PLAN OPTIONS AND VARIABLES

### Example Of Individual Agency's Rate Calculation

An individual employer rate is comprised of several components. These include the pool's net employer normal cost, payment on the pool's unfunded liability, additional surcharge payments for contracted Class 1 benefits, the normal cost phase-out and an agency's payment for their own side fund. An example of the total rate for an employer might look something like this:

Net Pool's Employer Normal Cost	7.824%
Rate Plan Surcharges	0.490%
Total Employer Normal Cost	8.314%
Plus: Plan's share of Pool's Payment on the Amortization Bases	3.208%
Side Fund Amortization Payment	2.600%
Total Employer Rate for fiscal year 2014-15	14.122%

Your plan's actual required contribution can be found in Section 1.

### Distribution of Class 1 Benefits

	% of members in the pool with contracted benefit
<b><i>Final Compensation</i></b>	
One Year Final Compensation	69.1%
Three Years Final Compensation	31.0%
<b><i>Post Retirement Survivor Continuance (PRSA)</i></b>	
No PRSA	79.8%
With PRSA	20.3%
<b><i>Cost-of-Living Adjustments (COLA)</i></b>	
2% COLA	95.0%
3% COLA	2.8%
4% COLA	1.0%
5% COLA	1.2%
<b><i>Industrial Disability Benefit</i></b>	
None	95.8%
Standard Industrial Disability Benefit (50% of Final Compensation)	3.7%
Improved Industrial Disability Benefit (75% of Final Compensation)	0.6%
Improved Industrial Disability Benefit (50% - 90% of Final Compensation)	0.0%

## **APPENDIX D**

### **PARTICIPATING EMPLOYERS**

## APPENDIX D - PARTICIPATING EMPLOYERS

### Employer Name

AGOURA HILLS AND CALABASAS COMMUNITY CENTER  
ALAMEDA CORRIDOR TRANSPORTATION AUTHORITY  
ALAMEDA COUNTY FIRE DEPARTMENT  
ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT  
ALLIANCE OF SCHOOLS FOR COOPERATIVE INSURANCE PROGRAMS  
ALTADENA LIBRARY DISTRICT  
AMADOR COUNTY TRANSPORTATION COMMISSION  
AMADOR TRANSIT  
AMADOR WATER AGENCY  
AMERICAN RIVER FLOOD CONTROL DISTRICT  
ANDERSON CEMETERY DISTRICT  
ANTELOPE VALLEY TRANSIT AUTHORITY  
ARCADE CREEK RECREATION AND PARK DISTRICT  
AROMAS WATER DISTRICT  
ARROWBEAR PARK COUNTY WATER DISTRICT  
ASSOCIATED STUDENTS INC CALIFORNIA STATE UNIVERSITY EAST BAY  
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS  
AUBURN AREA RECREATION AND PARK DISTRICT  
AUBURN PUBLIC CEMETERY DISTRICT  
AZTEC SHOPS, LTD.  
BAY AREA WATER SUPPLY AND CONSERVATION AGENCY  
BEAR VALLEY COMMUNITY SERVICES DISTRICT  
BELVEDERE-TIBURON LIBRARY AGENCY  
BIG BEAR CITY AIRPORT DISTRICT  
BIG BEAR MUNICIPAL WATER DISTRICT  
BLACK GOLD COOPERATIVE LIBRARY SYSTEM  
BONITA-SUNNYSIDE FIRE PROTECTION DISTRICT  
BROOKTRAILS TOWNSHIP COMMUNITY SERVICES DISTRICT  
BROWNS VALLEY IRRIGATION DISTRICT  
BUENA PARK LIBRARY DISTRICT  
BURNEY FIRE DISTRICT  
BUTTE COUNTY AIR QUALITY MANAGEMENT DISTRICT  
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS  
BUTTE COUNTY IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY  
BUTTE LOCAL AGENCY FORMATION COMMISSION  
BUTTE SCHOOLS SELF-FUNDED PROGRAMS  
CENTRAL CONTRA COSTA SOLID WASTE AUTHORITY  
CRA/LA, A DESIGNATED LOCAL AUTHORITY  
CSAC EXCESS INSURANCE AUTHORITY  
CABRILLO COLLEGE FOUNDATION  
CACHUMA OPERATION AND MAINTENANCE BOARD  
CAL POLY POMONA FOUNDATION, INC.  
CALAVERAS COUNCIL OF GOVERNMENTS  
CALIFORNIA AUTHORITY OF RACING FAIRS  
CALIFORNIA BEAR CREDIT UNION  
CALIFORNIA FAIR SERVICES AUTHORITY  
CALIFORNIA FIREFIGHTER'S JOINT APPRENTICESHIP COMMITTEE  
CALIFORNIA INTERSCHOLASTIC FEDERATION NORTH COAST SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, CENTRAL COAST SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, NORTHERN SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, SAC-JOQUIN SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, SAN DIEGO SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, SOUTHERN SECTION  
CALIFORNIA INTERSCHOLASTIC FEDERATION, STATE OFFICE  
CALIFORNIA JOINT POWERS INSURANCE AUTHORITY  
CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION  
CALIFORNIA STATE AND FEDERAL EMPLOYEES #20 CREDIT UNION

## **APPENDIX D - PARTICIPATING EMPLOYERS**

CALIFORNIA STATE UNIVERSITY, FRESNO ATHLETIC CORPORATION  
CALIFORNIA STATE UNIVERSITY-FRESNO ASSOCIATION, INC.  
CALLEGUAS MUNICIPAL WATER DISTRICT  
CAMBRIA COMMUNITY HEALTHCARE DISTRICT  
CAMERON PARK COMMUNITY SERVICES DISTRICT  
CAMROSA WATER DISTRICT  
CAPITOL AREA DEVELOPMENT AUTHORITY  
CARMICHAEL WATER DISTRICT  
CARPINTERIA SANITARY DISTRICT  
CARPINTERIA VALLEY WATER DISTRICT  
CASTAIC LAKE WATER AGENCY  
CASTRO VALLEY SANITARY DISTRICT  
CENTRAL BASIN MUNICIPAL WATER DISTRICT  
CENTRAL COAST WATER AUTHORITY  
CENTRAL SIERRA CHILD SUPPORT AGENCY  
CENTRAL WATER DISTRICT  
CHICO AREA RECREATION AND PARK DISTRICT  
CHILDREN AND FAMILIES COMMISSION OF SAN LUIS OBISPO COUNTY  
CITRUS HEIGHTS WATER DISTRICT  
CITY OF AGOURA HILLS  
CITY OF ALISO VIEJO  
CITY OF AMERICAN CANYON  
CITY OF ARVIN  
CITY OF AUBURN  
CITY OF AVALON  
CITY OF AVENAL  
CITY OF BELLFLOWER  
CITY OF BELMONT  
CITY OF BELVEDERE  
CITY OF BISHOP  
CITY OF BRAWLEY  
CITY OF BUELLTON  
CITY OF CALABASAS  
CITY OF CANYON LAKE  
CITY OF CARMEL-BY-THE-SEA  
CITY OF CARPINTERIA  
CITY OF CATHEDRAL CITY  
CITY OF CITRUS HEIGHTS  
CITY OF CLAYTON  
CITY OF CLEARLAKE  
CITY OF CLOVERDALE  
CITY OF COLUSA  
CITY OF CORCORAN  
CITY OF CORNING  
CITY OF DANA POINT  
CITY OF DIAMOND BAR  
CITY OF DINUBA  
CITY OF DUNSMUIR  
CITY OF FILLMORE  
CITY OF FORT BRAGG  
CITY OF FORTUNA  
CITY OF GOLETA  
CITY OF GREENFIELD  
CITY OF GRIDLEY  
CITY OF GUADALUPE  
CITY OF HALF MOON BAY  
CITY OF HERCULES  
CITY OF HERMOSA BEACH  
CITY OF HIGHLAND

## **APPENDIX D - PARTICIPATING EMPLOYERS**

CITY OF IRWINDALE  
CITY OF KING CITY  
CITY OF KINGSBURG  
CITY OF LA CANADA FLINTRIDGE  
CITY OF LA MIRADA  
CITY OF LAGUNA NIGUEL  
CITY OF LAGUNA WOODS  
CITY OF LAKE FOREST  
CITY OF LATHROP  
CITY OF LAWNSDALE  
CITY OF LEMOORE  
CITY OF LIVINGSTON  
CITY OF LOMA LINDA  
CITY OF MALIBU  
CITY OF MARINA  
CITY OF MARTINEZ  
CITY OF MARYSVILLE  
CITY OF MAYWOOD  
CITY OF MILL VALLEY  
CITY OF MONTE SERENO  
CITY OF MOORPARK  
CITY OF MT. SHASTA  
CITY OF NEEDLES  
CITY OF NEWMAN  
CITY OF OJAI  
CITY OF OROVILLE  
CITY OF PACIFIC GROVE  
CITY OF PALOS VERDES ESTATES  
CITY OF PARLIER  
CITY OF PLACENTIA  
CITY OF PLACERVILLE  
CITY OF PLEASANT HILL  
CITY OF RED BLUFF  
CITY OF REEDLEY  
CITY OF RIO VISTA  
CITY OF RIVERBANK  
CITY OF ROLLING HILLS ESTATES  
CITY OF ROSEMEAD  
CITY OF SAN CARLOS  
CITY OF SAN DIMAS  
CITY OF SAN FERNANDO  
CITY OF SAN JOAQUIN  
CITY OF SAN JOSE  
CITY OF SAN MARINO  
CITY OF SANTA PAULA  
CITY OF SARATOGA  
CITY OF SEAL BEACH  
CITY OF SEASIDE  
CITY OF SEBASTOPOL  
CITY OF SHAFTER  
CITY OF SIGNAL HILL  
CITY OF SONOMA  
CITY OF SOUTH PASADENA  
CITY OF ST. HELENA  
CITY OF STANTON  
CITY OF SUISUN CITY  
CITY OF TAFT  
CITY OF TEHACHAPI  
CITY OF TULELAKE

## **APPENDIX D - PARTICIPATING EMPLOYERS**

CITY OF VILLA PARK  
CITY OF WALNUT  
CITY OF WILLIAMS  
CITY OF WINTERS  
CITY OF WOODLAKE  
CITY OF YREKA  
CITY OF YUCAIPA  
CLEARLAKE OAKS COUNTY WATER DISTRICT  
COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS  
COACHELLA VALLEY PUBLIC CEMETERY DISTRICT  
COAST LIFE SUPPORT DISTRICT  
COLLEGE OF THE CANYONS FOUNDATION  
COLUSA COUNTY ONE-STOP PARTNERSHIP  
COLUSA MOSQUITO ABATEMENT DISTRICT  
CONTRA COSTA COUNTY SCHOOLS INSURANCE GROUP  
CONTRA COSTA TRANSPORTATION AUTHORITY  
COOPERATIVE ORGANIZATION FOR THE DEVELOPMENT OF EMPLOYEE SELECTION PROCEDURES  
CORDOVA RECREATION AND PARK DISTRICT  
COSTA MESA SANITARY DISTRICT  
COUNTY OF ALPINE  
CRESCENT CITY HARBOR DISTRICT  
CRESCENTA VALLEY WATER DISTRICT  
DAIRY COUNCIL OF CALIFORNIA  
DEL PASO MANOR WATER DISTRICT  
DEL PUERTO WATER DISTRICT  
DIXON PUBLIC LIBRARY DISTRICT  
DONALD P AND KATHERINE B LOKER UNIVERSITY STUDENT UNION, INC  
EAST QUINCY SERVICES DISTRICT  
EAST SAN GABRIEL VALLEY HUMAN SERVICES CONSORTIUM  
EL DORADO COUNTY FIRE PROTECTION DISTRICT  
EL DORADO COUNTY RESOURCE CONSERVATION DISTRICT  
EL DORADO COUNTY TRANSIT AUTHORITY  
EL DORADO COUNTY TRANSPORTATION COMMISSION  
EL DORADO HILLS COMMUNITY SERVICES DISTRICT  
ESPARTO FIRE PROTECTION DISTRICT  
EXETER DISTRICT AMBULANCE  
FAIR OAKS RECREATION & PARK DISTRICT  
FAIR OAKS WATER DISTRICT  
FEATHER RIVER RECREATION AND PARK DISTRICT  
FLORIN RESOURCE CONSERVATION DISTRICT ELK GROVE WATER DISTRICT  
FOOTHILL MUNICIPAL WATER DISTRICT  
FORT ORD REUSE AUTHORITY  
FRESNO WESTSIDE MOSQUITO ABATEMENT DISTRICT  
FULLERTON CALIFORNIA STATE UNIVERSITY ASSOCIATED STUDENTS  
FULTON EL-CAMINO RECREATION AND PARK DISTRICT  
GARDEN VALLEY FIRE PROTECTION DISTRICT  
GEORGETOWN DIVIDE RESOURCE CONSERVATION DISTRICT  
GILSIZER COUNTY DRAINAGE DISTRICT  
GLENN COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT  
GOLD RIDGE RESOURCE CONSERVATION DISTRICT  
GOLETA SANITARY DISTRICT  
GOLETA WATER DISTRICT  
GOLETA WEST SANITARY DISTRICT  
GRANADA SANITARY DISTRICT  
GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT  
GREATER VALLEJO RECREATION DISTRICT  
GRIDLEY BIGGS CEMETERY DISTRICT  
GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT AUXILIARY ORGANIZATION  
HAPPY HOMESTEAD CEMETERY DISTRICT



## APPENDIX D - PARTICIPATING EMPLOYERS

HAYWARD CALIFORNIA STATE UNIVERSITY, AUXILIARY FOUNDATION, INC.  
HENRY MILLER RECLAMATION DISTRICT #2131  
HOUSING AUTHORITY OF THE CITY OF ALAMEDA  
HOUSING AUTHORITY OF THE COUNTY OF BUTTE  
HOUSING AUTHORITY OF THE CITY OF SAN LUIS OBISPO  
HOUSING AUTHORITY OF THE COUNTY OF SANTA CRUZ  
HUMAN RIGHTS/FAIR HOUSING COMMISSION OF THE CITY AND COUNTY OF SACRAMEN  
HUMBOLDT BAY HARBOR RECREATION AND CONSERVATION DISTRICT  
HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
HUMBOLDT COMMUNITY SERVICES DISTRICT  
HUMBOLDT NO. 1 FIRE PROTECTION DISTRICT OF HUMBOLDT COUNTY  
HUMBOLDT STATE UNIVERSITY CENTER BOARD OF DIRECTORS  
HUMBOLDT TRANSIT AUTHORITY  
HUMBOLDT WASTE MANAGEMENT AUTHORITY  
INTERGOVERNMENTAL TRAINING AND DEVELOPMENT CENTER  
ISLA VISTA RECREATION AND PARK DISTRICT  
JOSHUA BASIN WATER DISTRICT  
JURUPA AREA RECREATION AND PARK DISTRICT  
KINGS COUNTY AREA PUBLIC TRANSIT AGENCY  
KINGS COUNTY ASSOCIATION OF GOVERNMENTS  
KINGS COUNTY IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY  
KINGS MOSQUITO ABATEMENT DISTRICT  
KONOCTI COUNTY WATER DISTRICT  
LAGUNA BEACH COUNTY WATER DISTRICT  
LAKE HEMET MUNICIPAL WATER DISTRICT  
LAKE SHASTINA COMMUNITY SERVICES DISTRICT  
LAKEPORT COUNTY FIRE PROTECTION DISTRICT  
LITTLE LAKE FIRE PROTECTION DISTRICT  
LIVERMORE/AMADOR VALLEY TRANSIT AUTHORITY  
LOCAL AGENCY FORMATION COMMISSION OF MONTEREY COUNTY  
LOCAL GOVERNMENT SERVICES AUTHORITY, A JOINT POWERS AUTHORITY  
LOMPICO COUNTY WATER DISTRICT  
LONG BEACH STATE UNIVERSITY, ASSOCIATED STUDENTS  
LONG BEACH STATE UNIVERSITY, FORTY-NINER SHOPS, INC.  
LOOMIS FIRE PROTECTION DISTRICT  
LOS GATOS-SARATOGA DEPARTMENT OF COMMUNITY EDUCATION AND RECREATION  
LOS OSOS COMMUNITY SERVICES DISTRICT  
LOWER LAKE CEMETERY DISTRICT  
LOWER TULE RIVER IRRIGATION DISTRICT  
MADERA CEMETERY DISTRICT  
MADERA COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT  
MAIN SAN GABRIEL BASIN WATERMASTER  
MANAGEMENT OF EMERYVILLE SERVICES AUTHORITY  
MARIN CHILDREN AND FAMILIES COMMISSION  
MARIN COUNTY HOUSING AUTHORITY  
MARIN COUNTY IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY  
MAXWELL PUBLIC UTILITY DISTRICT  
MC KINLEYVILLE COMMUNITY SERVICES DISTRICT  
MEEKS BAY FIRE PROTECTION DISTRICT  
MENDOCINO COUNTY RUSSIAN RIVER FLOOD CONTROL & WATER CONSERVATION IMPROVEMENT DT  
MESA WATER DISTRICT  
MID-PENINSULA WATER DISTRICT  
MID-PLACER PUBLIC SCHOOLS TRANSPORTATION AGENCY  
MIDWAY CITY SANITARY DISTRICT  
MOKELUMNE RURAL FIRE DISTRICT  
MONTECITO SANITARY DISTRICT OF SANTA BARBARA COUNTY  
MONTECITO WATER DISTRICT  
MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT  
MONTEREY COUNTY WATER RESOURCES AGENCY

## **APPENDIX D - PARTICIPATING EMPLOYERS**

MONTEREY PENINSULA AIRPORT DISTRICT  
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT  
MOULTON-NIGUEL WATER DISTRICT  
MT. SAN ANTONIO COLLEGE AUXILIARY SERVICES  
MUNICIPAL POOLING AUTHORITY  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
NAPA SANITATION DISTRICT  
NEVADA COUNTY LOCAL AGENCY FORMATION COMMISSION  
NEVADA-SIERRA REGIONAL IHSS PUBLIC AUTHORITY  
NEWHALL COUNTY WATER DISTRICT  
NORTH BAY SCHOOLS INSURANCE AUTHORITY  
NORTH CENTRAL COUNTIES CONSORTIUM  
NORTH COAST RAILROAD AUTHORITY  
NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT  
NORTH TAHOE PUBLIC UTILITY DISTRICT  
NORTHERN CALIFORNIA SPECIAL DISTRICTS INSURANCE AUTHORITY  
NORTHERN SALINAS VALLEY MOSQUITO ABATEMENT DISTRICT  
NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT  
NORTHSHORE FIRE PROTECTION DISTRICT  
NOVATO SANITARY DISTRICT  
OAKDALE RURAL FIRE PROTECTION DISTRICT  
OCEANO COMMUNITY SERVICES DISTRICT  
OJAI VALLEY SANITARY DISTRICT  
ORANGE COUNTY TRANSPORTATION AUTHORITY  
ORANGE COUNTY VECTOR CONTROL DISTRICT  
ORLAND CEMETERY DISTRICT  
OROVILLE MOSQUITO ABATEMENT DISTRICT  
PAJARO VALLEY PUBLIC CEMETERY DISTRICT  
PAJARO VALLEY WATER MANAGEMENT AGENCY  
PALMDALE WATER DISTRICT  
PALOS VERDES LIBRARY DISTRICT  
PARADISE RECREATION AND PARK DISTRICT  
PASADENA CITY COLLEGE BOOKSTORE  
PENINSULA FIRE PROTECTION DISTRICT  
PICO WATER DISTRICT  
PINE GROVE MOSQUITO ABATEMENT DISTRICT  
PIONEER CEMETERY DISTRICT  
PLACER COUNTY CEMETERY DISTRICT #1  
PLACER COUNTY RESOURCE CONSERVATION DISTRICT  
PLACER COUNTY TRANSPORTATION PLANNING AGENCY  
PLACER HILLS FIRE PROTECTION DISTRICT  
PLACER MOSQUITO AND VECTOR CONTROL DISTRICT  
PLEASANT HILL - MARTINEZ JOINT FACILITIES AGENCY  
PLEASANT HILL RECREATION AND PARK DISTRICT  
PLUMAS EUREKA COMMUNITY SERVICES DISTRICT  
POMERADO CEMETERY DISTRICT  
QUARTZ HILL WATER DISTRICT  
QUINCY COMMUNITY SERVICES DISTRICT  
RANCHO CUCAMONGA FIRE PROTECTION DISTRICT  
RANCHO MURIETA COMMUNITY SERVICES DISTRICT  
RECLAMATION DISTRICT # 1001  
RECLAMATION DISTRICT #1000  
REGIONAL HOUSING AUTHORITY OF SUTTER AND NEVADA COUNTIES  
REGIONAL WATER AUTHORITY  
RESCUE FIRE PROTECTION DISTRICT  
RESOURCE CONSERVATION DISTRICT OF THE SANTA MONICA MOUNTAINS  
RINCON DEL DIABLO MUNICIPAL WATER DISTRICT  
RIO LINDA ELVERTA COMMUNITY WATER DISTRICT  
RIVERSIDE COUNTY LAW LIBRARY

## **APPENDIX D - PARTICIPATING EMPLOYERS**

RUSSIAN RIVER FIRE PROTECTION DISTRICT  
SACRAMENTO COUNTY PUBLIC LAW LIBRARY  
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT  
SACRAMENTO METROPOLITAN CABLE TELEVISION COMMISSION  
SACRAMENTO SUBURBAN WATER DISTRICT  
SALINAS VALLEY SOLID WASTE AUTHORITY  
SAN BERNARDINO, CALIFORNIA STATE UNIVERSITY, STUDENT UNION  
SAN DIEGO RURAL FIRE PROTECTION DISTRICT  
SAN DIEGO STATE UNIVERSITY ASSOCIATED STUDENTS  
SAN FRANCISCO CITY AND COUNTY REDEVELOPMENT AGENCY  
SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY  
SAN FRANCISCO HEALTH AUTHORITY  
SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY  
SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS  
SAN GABRIEL VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT  
SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT  
SAN JOAQUIN COUNTY HOUSING AUTHORITY  
SAN JOAQUIN COUNTY IHSS PUBLIC AUTHORITY  
SAN LORENZO VALLEY WATER DISTRICT  
SAN LUIS OBISPO CAL POLY ASSOCIATED STUDENTS, INC.  
SAN LUIS OBISPO COUNCIL OF GOVERNMENTS  
SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY  
SAN MATEO COUNTY LAW LIBRARY  
SANTA ANA WATERSHED PROJECT AUTHORITY  
SANTA CLARA COUNTY HEALTH AUTHORITY  
SANTA CLARA COUNTY OPEN SPACE AUTHORITY  
SANTA CLARA COUNTY SCHOOLS INSURANCE GROUP  
SANTA CLARITA VALLEY SCHOOL FOOD SERVICES AGENCY  
SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION  
SANTA CRUZ LOCAL AGENCY FORMATION COMMISSION  
SANTA CRUZ REGIONAL 9-1-1  
SANTA MARIA PUBLIC AIRPORT DISTRICT  
SANTA NELLA COUNTY WATER DISTRICT  
SANTA YNEZ RIVER WATER CONSERVATION DIST., IMPROVEMENT DISTRICT NO. 1  
SCHOOL RISK AND INSURANCE MANAGEMENT GROUP  
SCHOOLS EXCESS LIABILITY FUND  
SCHOOLS INSURANCE AUTHORITY  
SCOTTS VALLEY FIRE PROTECTION DISTRICT  
SCOTTS VALLEY WATER DISTRICT  
SELMA CEMETERY DISTRICT  
SELMA-KINGSBURG-FOWLER COUNTY SANITATION DISTRICT  
SEWER AUTHORITY MID-COASTSIDE  
SHAFTER WASCO IRRIGATION DISTRICT  
SHASTA AREA SAFETY COMMUNICATIONS AGENCY  
SHASTA MOSQUITO AND VECTOR CONTROL DISTRICT  
SHILOH PUBLIC CEMETERY DISTRICT  
SILICON VALLEY ANIMAL CONTROL AUTHORITY  
SOLANO COUNTY MOSQUITO ABATEMENT DISTRICT  
SOLANO COUNTY WATER AGENCY  
SOLANO TRANSPORTATION AUTHORITY  
SONOMA MARIN AREA RAIL TRANSIT DISTRICT  
SOUTH BAY REGIONAL PUBLIC COMMUNICATIONS AUTHORITY  
SOUTH BAYSIDE SYSTEM AUTHORITY  
SOUTH COAST WATER DISTRICT  
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY  
SOUTH PLACER MUNICIPAL UTILITY DISTRICT  
SOUTHERN CALIFORNIA LIBRARY COOPERATIVE  
SOUTHERN SONOMA COUNTY RESOURCE CONSERVATION DISTRICT  
SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY

## **APPENDIX D - PARTICIPATING EMPLOYERS**

SQUAW VALLEY PUBLIC SERVICE DISTRICT  
STATE WATER CONTRACTORS  
STATE AND FEDERAL CONTRACTORS WATER AGENCY  
STEGER SANITARY DISTRICT  
STOCKTON EAST WATER DISTRICT  
SUCCESSOR AGENCY TO THE REDEVELOPMENT AGENCY OF THE CITY OF FRESNO  
SUISUN RESOURCE CONSERVATION DISTRICT  
SUTTER CEMETERY DISTRICT  
SWEETWATER SPRINGS WATER DISTRICT  
THREE VALLEYS MUNICIPAL WATER DISTRICT  
TOWN OF APPLE VALLEY  
TOWN OF ATHERTON  
TOWN OF FAIRFAX  
TOWN OF LOOMIS  
TOWN OF LOS ALTOS HILLS  
TOWN OF MORAGA  
TOWN OF PARADISE  
TOWN OF PORTOLA VALLEY  
TOWN OF ROSS  
TOWN OF SAN ANSELMO  
TOWN OF TIBURON  
TOWN OF WINDSOR  
TOWN OF YOUNTVILLE  
TRANSBAY JOINT POWERS AUTHORITY  
TRANSPORTATION AGENCY FOR MONTEREY COUNTY  
TRI-CITY MENTAL HEALTH CENTER  
TURLOCK MOSQUITO ABATEMENT DISTRICT  
UPLAND CITY HOUSING AUTHORITY  
VALLEY SPRINGS PUBLIC UTILITY DISTRICT  
VENTURA COLLEGE FOUNDATION  
VENTURA COUNTY SCHOOLS BUSINESS SERVICES AUTHORITY  
VENTURA COUNTY SCHOOLS SELF-FUNDING AUTHORITY  
VENTURA PORT DISTRICT  
WALNUT VALLEY WATER DISTRICT  
WEST CITIES COMMUNICATION CENTER  
WEST COUNTY TRANSPORTATION AGENCY  
WEST STANISLAUS IRRIGATION DISTRICT  
WEST VALLEY WATER DISTRICT  
WESTBOROUGH WATER DISTRICT  
WESTERN CONTRA COSTA TRANSIT AUTHORITY  
WESTLANDS WATER DISTRICT  
WOODSIDE FIRE PROTECTION DISTRICT  
YOLO COUNTY HOUSING AUTHORITY  
YOLO COUNTY IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY  
YOLO EMERGENCY COMMUNICATIONS AGENCY  
YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT  
YORBA LINDA WATER DISTRICT  
YUBA COUNTY WATER AGENCY  
YUBA SUTTER TRANSIT AUTHORITY

## **APPENDIX E**

### **PARTICIPANT DATA**

- **SOURCE OF THE PARTICIPANT DATA**
- **DATA VALIDATION TESTS AND ADJUSTMENTS**
- **SUMMARY OF VALUATION DATA**
- **ACTIVE MEMBERS**
- **TRANSFERRED AND TERMINATED MEMBERS**
- **RETIRED MEMBERS AND BENEFICIARIES**

## **APPENDIX E – PARTICIPANT DATA**

### **Source of the Participant Data**

The data was extracted from various databases within CalPERS and placed in a database by a series of extract programs. Included in this data are:

- Individual member and beneficiary information,
- Employment and payroll information,
- Accumulated contributions with interest,
- Service information,
- Benefit payment information,
- Information about the various organizations which contract with CalPERS, and
- Detailed information about the plan provisions applicable to each group of members.

### **Data Validation Tests and Adjustments**

Once the information is extracted from the various computer systems into the database, update queries are then run against this data to correct for flaws found in the data. This part of the process is intended to validate the participant data for all CalPERS plans. The data is then checked for reasonableness and consistency with data from the prior valuation.

Checks on the data include:

- A reconciliation of the membership of the plans,
- Comparisons of various member statistics (average attained age, average entry age, average salary, etc.) for each plan with those from the prior year valuation,
- Comparisons of pension amounts for each retiree and beneficiary receiving payments with those from the prior year valuation,
- Checks for invalid ages and dates, and
- Reasonableness checks on various key data elements such as service and salary

As a result of the tests on the data, a number of adjustments were determined to be necessary. These included:

- Dates of hire and dates of entry were adjusted where necessary to be consistent with the service fields, the date of birth and each other.

## APPENDIX E – PARTICIPANT DATA

### Summary of Valuation Data

	June 30, 2011	June 30, 2012
1. <b>Number of Plans in the Risk Pool</b>	442	465
2. <b>Active Members</b>		
a) Counts	12,238	11,913
b) Average Attained Age	45.57	45.94
c) Average Entry Age on Rate Plan	36.77	36.72
d) Average Years of Service	8.80	9.22
e) Average Annual Covered Pay	\$ 62,041	\$ 63,548
f) Annual Covered Payroll	\$ 759,263,518	\$ 757,045,663
g) Projected Annual Payroll for Contribution Year	\$ 829,667,746	\$ 827,244,236
h) Present Value of Future Payroll	\$ 6,146,530,673	\$ 6,050,931,351
3. <b>Transferred Members</b>		
a) Counts	5,127	5,236
b) Average Attained Age	47.64	47.74
c) Average Years of Service	3.95	3.94
d) Average Annual Covered Pay	\$ 81,890	\$ 81,141
4. <b>Terminated Members</b>		
a) Counts	6,617	7,431
b) Average Attained Age	45.19	45.40
c) Average Years of Service	2.87	3.10
d) Average Annual Covered Pay	\$ 41,396	\$ 43,620
5. <b>Retired Members and Beneficiaries</b>		
a) Counts*	9,475	10,169
b) Average Attained Age	68.41	68.29
c) Average Annual Benefits*	\$ 13,932	\$ 16,621
6. <b>Active to Retired Ratio [(2a) / (5a)]</b>	1.29	1.17

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

\* Values may not match those on pages E-5 and E-6 due to inclusion of community property settlements.

**APPENDIX E – PARTICIPANT DATA****Active Members**

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

**Distribution of Active Members by Age and Service  
Years of Service at Valuation Date**

<b>Attained Age</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25+</b>	<b>Total</b>
15-24	267	9	0	0	0	0	276
25-29	678	258	9	0	0	0	945
30-34	681	533	107	6	0	0	1,327
35-39	546	495	248	50	3	0	1,342
40-44	508	481	277	122	56	6	1,450
45-49	511	494	311	202	126	65	1,709
50-54	503	476	349	205	207	179	1,919
55-59	391	391	300	180	175	214	1,651
60-64	206	230	188	115	87	113	939
65 and over	70	112	71	42	28	32	355
<b>All Ages</b>	<b>4361</b>	<b>3479</b>	<b>1860</b>	<b>922</b>	<b>682</b>	<b>609</b>	<b>11,913</b>

**Distribution of Average Annual Salaries by Age and Service**

**Years of Service at Valuation Date**

<b>Attained Age</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25+</b>	<b>Average</b>
15-24	\$30,699	\$43,029	\$0	\$0	\$0	\$0	\$31,101
25-29	42,635	50,114	49,862	0	0	0	44,745
30-34	50,209	56,228	61,544	71,140	0	0	53,635
35-39	56,430	62,808	62,816	65,727	107,394	0	60,423
40-44	60,101	64,734	68,625	73,908	72,962	63,573	64,939
45-49	64,377	69,559	71,870	75,998	79,274	71,300	69,974
50-54	64,374	67,713	72,631	76,074	76,896	79,425	70,709
55-59	64,090	67,665	69,844	78,771	74,980	79,649	70,754
60-64	65,893	64,362	69,155	76,592	76,382	79,099	70,042
65 and over	54,144	65,441	58,830	63,999	68,022	62,696	61,677
<b>Average</b>	<b>55,111</b>	<b>63,437</b>	<b>68,523</b>	<b>75,219</b>	<b>76,225</b>	<b>77,540</b>	<b>63,548</b>



**APPENDIX E – PARTICIPANT DATA**

## **Transferred and Terminated Members**

**Distribution of Transfers to Other CalPERS Plans by Age and Service**

<b>Attained Age</b>	<b>Years of Service at Valuation Date</b>						<b>Total</b>	<b>Average Salary</b>
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-25</b>	<b>25+</b>		
15-24	17	0	0	0	0	0	17	\$42,067
25-29	182	8	0	0	0	0	190	55,398
30-34	412	33	4	0	0	0	449	63,449
35-39	452	100	6	3	0	0	561	72,293
40-44	587	118	38	3	1	0	747	80,941
45-49	663	182	57	26	5	0	933	86,564
50-54	667	207	83	41	9	3	1,010	85,600
55-59	515	178	73	25	9	4	804	86,777
60-64	266	88	39	9	4	6	412	90,737
65 and over	74	27	6	4	1	1	113	86,122
<b>All Ages</b>	<b>3835</b>	<b>941</b>	<b>306</b>	<b>111</b>	<b>29</b>	<b>14</b>	<b>5,236</b>	<b>81,141</b>

**Distribution of Terminated Participants with Funds on Deposit by Age and Service**

<b>Attained Age</b>	<b>Years of Service at Valuation Date</b>						<b>Total</b>	<b>Average Salary</b>
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-25</b>	<b>25+</b>		
15-24	120	0	0	0	0	0	120	\$26,470
25-29	518	13	0	0	0	0	531	34,667
30-34	840	86	5	0	0	0	931	38,880
35-39	832	108	14	2	0	0	956	41,920
40-44	856	157	40	18	1	0	1,072	45,742
45-49	788	221	69	22	15	3	1,118	47,610
50-54	779	200	88	36	10	4	1,117	49,775
55-59	617	147	31	20	9	6	830	45,208
60-64	375	95	26	5	3	2	506	42,730
65 and over	208	33	3	4	1	1	250	37,118
<b>All Ages</b>	<b>5933</b>	<b>1060</b>	<b>276</b>	<b>107</b>	<b>39</b>	<b>16</b>	<b>7,431</b>	<b>43,620</b>

# APPENDIX E – PARTICIPANT DATA

## Retired Members and Beneficiaries

Distribution of Retirees and Beneficiaries by Age and Retirement Type\*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	0	0	1	0	10	11
30-34	0	2	0	0	0	7	9
35-39	0	3	3	0	0	3	9
40-44	0	16	10	0	1	14	41
45-49	1	30	12	3	0	13	59
50-54	291	77	20	3	1	19	411
55-59	1196	96	27	10	0	43	1,372
60-64	1975	94	27	16	1	72	2,185
65-69	2038	89	12	7	0	128	2,274
70-74	1243	51	11	8	0	133	1,446
75-79	792	35	3	4	0	146	980
80-84	545	24	1	2	0	149	721
85 and Over	465	18	2	4	0	162	651
<b>All Ages</b>	<b>8546</b>	<b>535</b>	<b>128</b>	<b>58</b>	<b>3</b>	<b>899</b>	<b>10,169</b>

Distribution of Average Annual Amounts for Retirees and Beneficiaries by Age and Retirement Type\*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 30	\$0	\$0	\$0	\$18,036	\$0	\$6,105	\$7,189
30-34	0	9,514	0	0	0	6,402	7,093
35-39	0	9,712	324	0	0	3,743	4,593
40-44	0	4,997	443	0	174	12,775	6,425
45-49	3,796	12,919	5,459	8,016	0	7,431	9,788
50-54	11,673	11,081	909	2,769	1,678	8,835	10,817
55-59	17,162	11,679	4,924	10,671	0	12,711	16,351
60-64	19,767	12,136	3,292	13,565	181	17,686	19,112
65-69	19,371	10,949	1,365	14,205	0	12,881	18,565
70-74	17,209	10,378	9,028	8,909	0	14,243	16,587
75-79	16,819	11,072	2,317	5,528	0	16,262	16,440
80-84	14,693	10,966	248	6,902	0	11,883	13,946
85 and Over	10,915	10,509	13,590	4,678	0	10,330	10,728
<b>All Ages</b>	<b>17,580</b>	<b>11,167</b>	<b>3,602</b>	<b>10,336</b>	<b>678</b>	<b>13,061</b>	<b>16,621</b>

**APPENDIX E – PARTICIPANT DATA**

**Retired Members and Beneficiaries (continued)**

**Distribution of Retirees and Beneficiaries by Years Retired and Retirement Type\***

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	3290	82	22	27	1	344	3,766
5-9	2279	94	39	12	0	231	2,655
10-14	1299	139	20	6	0	161	1,625
15-19	856	111	19	7	1	82	1,076
20-24	419	50	14	2	0	43	528
25-29	280	27	7	2	0	23	339
30 and Over	123	32	7	2	1	15	180
<b>All Years</b>	<b>8546</b>	<b>535</b>	<b>128</b>	<b>58</b>	<b>3</b>	<b>899</b>	<b>10,169</b>

**Distribution of Average Annual Amounts for Retirees and Beneficiaries by Years Retired and Retirement Type\***

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Average</b>
Under 5 Yrs	\$20,472	\$13,546	\$5,104	\$12,546	\$174	\$14,930	\$19,663
5-9	18,315	12,115	2,525	9,929	0	11,698	17,250
10-14	16,218	10,909	6,224	11,815	0	12,747	15,281
15-19	13,575	10,941	2,613	5,950	1,678	13,989	13,080
20-24	11,830	9,167	604	6,925	0	8,795	11,015
25-29	9,702	9,060	3,879	4,262	0	9,481	9,484
30 and Over	6,382	9,098	5,789	3,345	181	7,210	6,843
<b>All Years</b>	<b>17,580</b>	<b>11,167</b>	<b>3,602</b>	<b>10,336</b>	<b>678</b>	<b>13,061</b>	<b>16,621</b>

\* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on page E-2 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## **APPENDIX F**

### **GLOSSARY OF ACTUARIAL TERMS**

## Glossary of Actuarial Terms

**Accrued Liability** *(also called Actuarial Accrued Liability or Entry Age Normal Accrued Liability)*

The total dollars needed as of the valuation date to fund all benefits earned in the past for *current* members.

**Actuarial Assumptions**

Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include mortality, disability and retirement rates. Economic assumptions include discount rate, salary growth and inflation.

**Actuarial Methods**

Procedures employed by actuaries to achieve certain funding goals of a pension plan. Actuarial methods include funding method, setting the length of time to fund the Accrued Liability and determining the Actuarial Value of Assets.

**Actuarial Valuation**

The determination, as of a valuation date, of the Normal Cost, Accrued liability, Actuarial Value of Assets and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change to their plan provisions.

**Actuarial Value of Assets**

The Actuarial Value of Assets used for funding purposes is obtained through an asset smoothing technique where investment gains and losses are partially recognized in the year they are incurred, with the remainder recognized in subsequent years.

This method helps to dampen large fluctuations in the employer contribution rate.

**Amortization Bases**

Separate payment schedules for different portions of the Unfunded Liability. The total Unfunded Liability of a Risk Pool or non-pooled plan can be segregated by "cause", creating "bases" and each such base will be separately amortized and paid for over a specific period of time. This can be likened to a home mortgage that has 24 years of remaining payments and a second on that mortgage that has 10 years left. Each base or each mortgage note has its own terms (payment period, principal, etc.) but all bases are amortized using investment and payroll assumptions from the current valuation.

Generally in an actuarial valuation, the separate bases consist of changes in unfunded liabilities due to amendments, actuarial assumption changes, actuarial methodology changes, and gains and losses. Payment periods are determined by Board policy and vary based on the cause of the change.

**Amortization Period**

The number of years required to pay off an Amortization Base.

**Annual Required Contributions (ARC)**

The employer's periodic required annual contributions to a defined benefit pension plan, calculated in accordance with the plan assumptions. The ARC is determined by multiplying the employer contribution rate by the payroll reported to CalPERS for the applicable fiscal year. However, if this contribution is fully prepaid in a lump sum, then the dollar value of the ARC is equal to the Lump Sum Prepayment.

**Class 1 Benefits**

Class 1 benefits have been identified to be additional benefits which have a significant, ongoing effect on the total plan cost. In some cases, a Class 1 benefit may be an alternate benefit formula. These benefits vary by employer across the risk pool. Agencies contracting for a Class 1 benefit will be responsible for the past service liability associated with such benefit and will be required to pay a surcharge established by the actuary to cover the ongoing cost (normal cost) of the Class 1 benefit.

## **APPENDIX F – GLOSSARY OF ACTUARIAL TERMS**

### **Class 2 Benefits**

Class 2 benefits have been identified to be the ancillary benefits providing one-time increases in benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 2 benefit will be responsible for the past service liability associated with such benefit.

### **Class 3 Benefits**

Class 3 benefits have been identified to be additional benefits which have a minimal effect on the total plan cost. Class 3 benefits may vary by rate plan within each risk pool. However, the employer contribution rate will not vary within the risk pool due to the Class 3 benefits.

### **Classic member (under PEPRA)**

**A classic member is anyone in CALPERS not defined as a new member under PEPRA (see definition of new member below.)**

### **Discount Rate**

The actuarial assumption that was called "investment return" in earlier CalPERS reports or "actuarial interest rate" in Section 20014 of the California Public Employees' Retirement Law (PERL).

### **Entry Age**

The earliest age at which a plan member begins to accrue benefits under a defined benefit pension plan or Risk Pool. In most cases, this is the same as the date of hire.

(The assumed retirement age less the entry age is the amount of time required to fund a member's total benefit. Generally, the older a member is at hire, the greater the Normal Cost. This is mainly because there is less time to earn investment income to fund the future benefits.)

### **Entry Age Normal Cost Method**

An actuarial cost method designed to fund a member's total plan benefit over the course of his or her career. This method is designed to produce stable employer contributions in amounts that increase at the same rate as the employer's payroll (i.e. level % of payroll).

### **Fresh Start**

A Fresh Start is the single amortization base created when multiple amortization bases are collapsed into one base and amortized over a new funding period.

### **Funded Status**

A measure of how well funded a plan or risk pool is. Or equivalently, how "on track" a plan or risk pool is with respect to assets vs. accrued liabilities. A ratio greater than 100% means the plan or risk pool has more assets than liabilities and a ratio less than 100% means liabilities are greater than assets. A funded ratio based on the Actuarial Value of Assets indicates the progress toward fully funding the plan using the actuarial cost methods and assumptions. A funded ratio based on the Market Value of Assets indicates the short-term solvency of the plan.

### **GASB 27**

Statement No. 27 of the Governmental Accounting Standards Board. The accounting standard governing a state or local governmental employer's accounting for pensions.

### **GASB 68**

Statement No. 68 of the Governmental Accounting Standards Board. The accounting standard governing a state or local governmental employer's accounting and financial reporting for pensions. GASB 68 replaces GASB 27 effective for the first fiscal year beginning after June 15, 2014.

### **New member (under PEPRA)**

**A new member includes an individual who becomes a member of a public retirement system for the first time on or after January 1, 2013, and who was not a member of another public retirement system prior to that date, and who is not subject to reciprocity with another public retirement system.**

## **APPENDIX F – GLOSSARY OF ACTUARIAL TERMS**

### **Normal Cost (also called Total Normal Cost)**

The annual cost of service accrual for the upcoming fiscal year for active employees. The required employee contributions are part of the Total Normal Cost. The remaining portion, called the employer normal cost, includes surcharges for applicable class 1 benefits and should be viewed as the long term employer contribution rate.

### **Pension Actuary**

A person who is responsible for the calculations necessary to properly fund a pension plan.

### **PEPRA**

Public Employees' Pension Reform Act of 2013

### **Prepayment Contribution**

A payment made by the employer to reduce or eliminate the year's required employer contribution.

### **Present Value of Benefits (PVB)**

The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for *current* members.

### **Risk Pool**

Using the benefit of the law of large numbers, a risk pool is a collection of employer plans for the purpose of sharing risk. If a pooled plan has active members at the time of valuation, it belongs to the risk pool composed of all other pooled plans with the same benefit formula. If a plan has no active members at the time of valuation, it belongs to the inactive pool.

### **Rolling Amortization Period**

An amortization period that remains the same each year, rather than declining.

### **Side Fund**

At the time a plan joined a risk pool, a Side Fund was created to account for the difference between the funded status of the pool and the funded status of the plan. The plan's Side Fund is amortized on an annual basis, with the discount rate net of, for active plans, the payroll growth rate assumption. The actuarial investment return assumption is currently 7.5%. A positive Side Fund cause the plan's required employer contribution rate to be reduced by the Amortization of Side Fund rate component shown in the Required Employer Contributions section. A negative Side Fund cause the plan's required employer contribution rate to be increased by the Amortization of Side Fund rate component. In the absence of subsequent contract amendments or funding changes, a plan's Side Fund will disappear at the end of the Amortization Period.

### **Superfunded**

A condition existing when a plan's Actuarial Value of Assets exceeds its Present Value of Benefits. Prior to the passage of PEPRA, when this condition existed on a given valuation date for a given plan, employee contributions for the rate year covered by that valuation could be waived.

### **Unfunded Liability**

When a plan or pool's Actuarial Value of Assets is less than its Accrued Liability, the difference is the plan or pool's Unfunded Liability. If the Unfunded Liability is positive, the plan or pool will have to pay contributions exceeding the Normal Cost.



**INFORMATION ITEM**

February 12, 2014

**TO:**           **Administration & Finance Committee**  
(Directors Thomas, Barbre, Osborne)

**FROM:**       Robert Hunter, General Manager

Staff Contact: Lee Jacobi

**SUBJECT:   Monthly Water Usage Data, Tier 2 Projection, and Water Supply Info.**

**STAFF RECOMMENDATION**

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Staff recommends the Administration & Finance Committee receive and file this information.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**REPORT**

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The attached figures show the recent trend of water consumption in Orange County (OC), an estimate of Tier 2 volume for MWDOC, and selected water supply information.

Fig. 1    OC Water Usage, Monthly by Supply   Groundwater was the main supply in December.

Fig. 2    OC Water Usage, Monthly, Comparison to Previous Years   Water usage in December 2013 was above average compared to the previous four Decembers. This is consistent with very dry weather.

Fig. 3    Historical OC Water Consumption   OC water consumption of about 601,000 AF in FY 2012-13 was up about 5% from FY 2011-12 but still below the long-term average of 630,000 AF/yr. Although OC population has increased 20% over the past two decades, water usage has not increased on average. A long-term decrease in per-capita water usage is attributed mostly to Water Use Efficiency (water conservation) efforts.

Fig. 4    MWDOC "Firm" Water Purchases, 2013   "Firm" water above the Tier 1 limit will be charged at the higher Tier 2 rate. Our current projection of Tier 2 purchases is zero in 2013.

Budgeted (Y/N): N	Budgeted amount: N/A	Core <u>X</u>	Choice <u>  </u>
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			

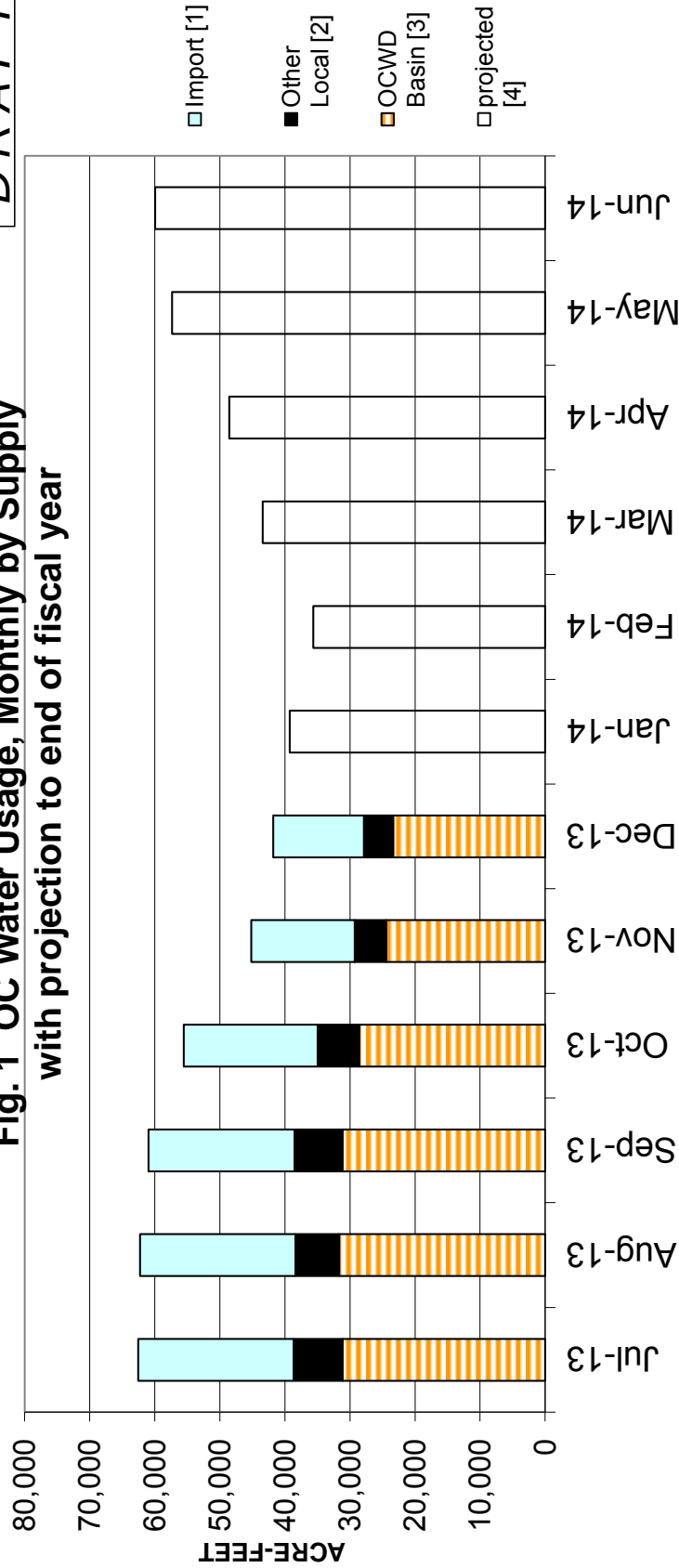


Water Supply Information Includes data on: Rainfall in OC; the OCWD Basin overdraft; Northern California and Colorado River Basin hydrologic data; the State Water Project (SWP) Allocation, and regional storage volumes. The data has implications for the magnitude of supplies from the three watersheds that are the principal sources of water for OC. Note that a hydrologic year is Oct. 1<sup>st</sup> through Sept. 30<sup>th</sup>.

- Orange County's accumulated rainfall in October through January was less than a quarter of the average for this period. This continues the impact of the previous two hydrologic years' below-normal rainfall in reducing those local supplies that are derived from local runoff.
- Northern California accumulated precipitation in October through January was less than a quarter of normal for this period. This follows two below-average hydrologic years. The initial data for Northern California snowpack was only 6% of normal. The Governor declared a Drought, and the State reduced the State Water Project Contractors Table A Allocation to 0% at the end of January. This percentage may rise somewhat if snowfalls occur in the next months, but it appears certain that there will be less State Project water deliveries to MET and the other Contractors than in previous years.
- Colorado River Basin accumulated precipitation in October through January was about 90% of average for this period. However, this follows two below-average hydrologic years, and this watershed is in a long-term drought. Lake Mead and Lake Powell combined have about 62% of their average storage volume for this time of year. If Lake Mead's level falls below a "trigger" limit, then a shortage will be declared by the US Bureau of Reclamation (USBR), impacting Colorado River water deliveries for the Lower Basin states. The USBR predicts that the "trigger" limit could be reached as early as 2015.

**DRAFT**

**Fig. 1 OC Water Usage, Monthly by Supply**  
with projection to end of fiscal year

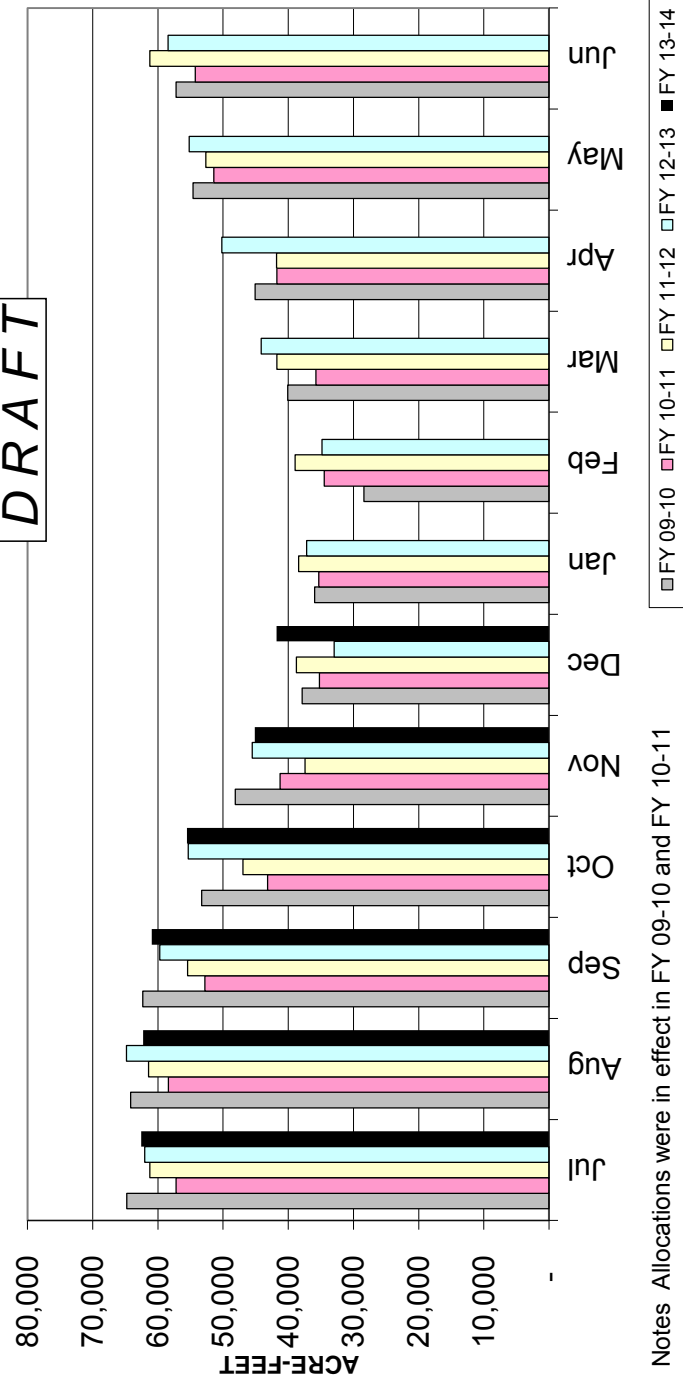


**Note: values shown include some estimation and are subject to change.**

- [1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water, "Barrier Replenishment" deliveries, and deliveries into Irvine Lake.
- [2] Other local includes recycled water, local basin water, Irvine Lake water extraction, and Cal Domestic deliveries. Excludes recycled water used for Barrier recharge. Numbers are estimates until data collection is completed.
- [3] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '13-14 is 70%.
- [4] MWDOC's estimate of monthly demand is based on the projected FY 13-14 "Retail" water demand and historical monthly demand patterns.

Fig. 2A OC Monthly Water Usage [1]: Comparison to Last 4 Fiscal Years

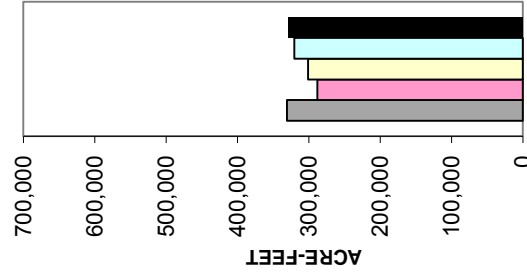
DRAFT



Notes: Allocations were in effect in FY 09-10 and FY 10-11

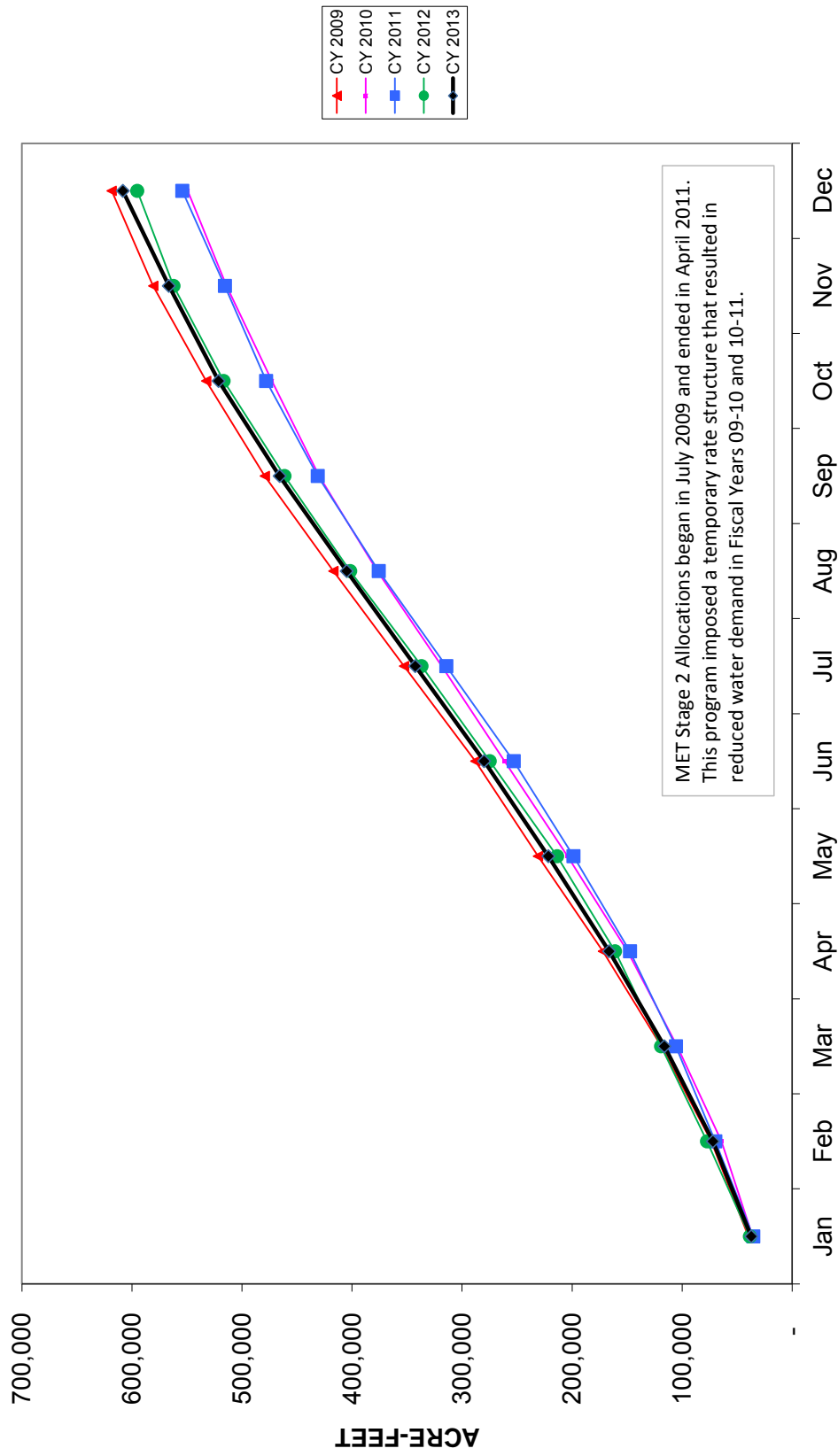
[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water; excludes GWRS production, groundwater pumped to waste, and waste brine from water treatment projects.) Recent months numbers include some estimation.

partial-year  
subtotals

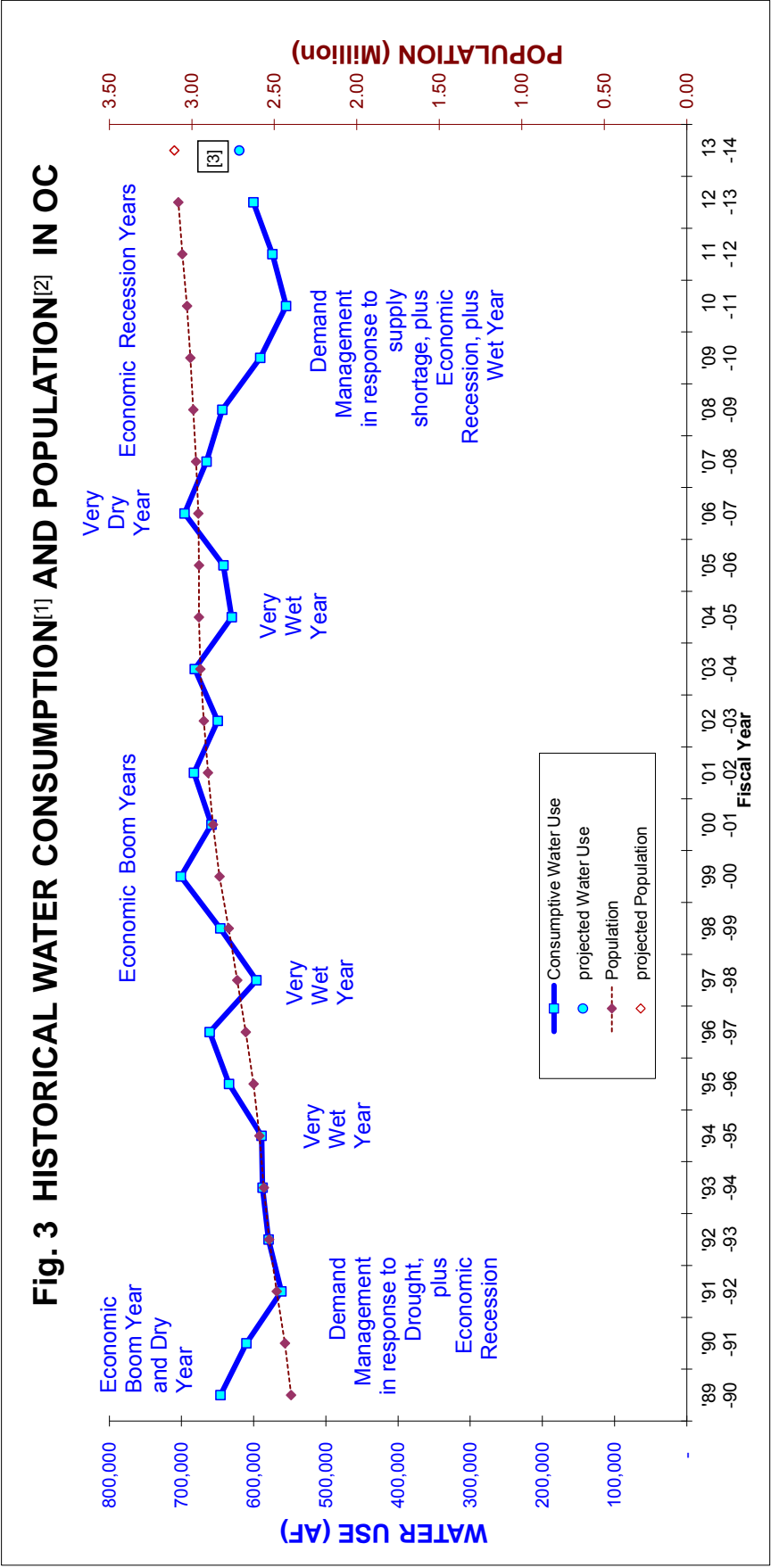


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Fig. 2B Orange County Cumulative Monthly Consumptive Water Usage [1]:  
present year compared to last 4 calendar years



[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water; excludes GWRS production and waste brine from water quality pumping projects).



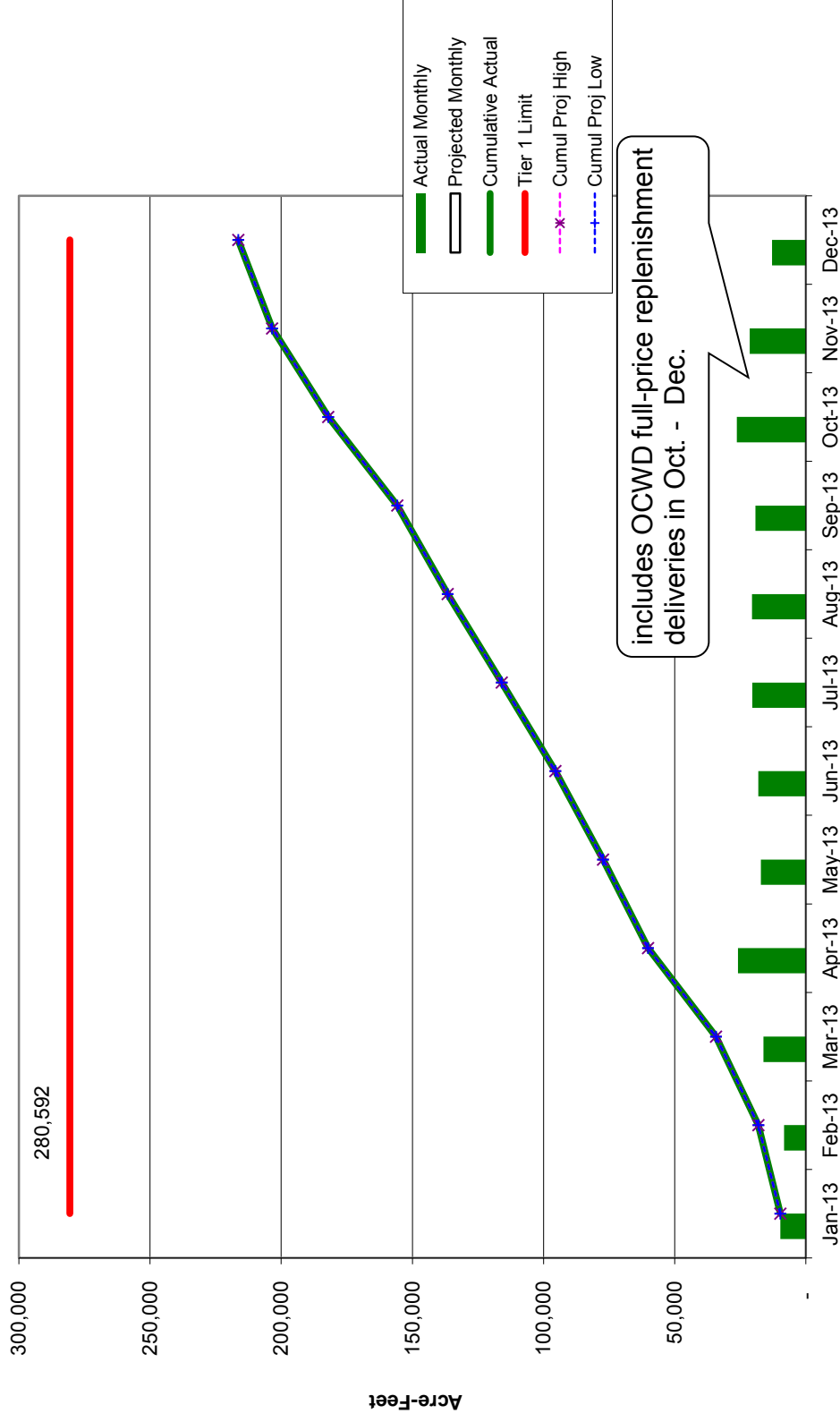
[1] Consumption includes potable, recycled and non-potable usage; excludes Barrier water and Spreading water. The most recent data involve some estimation and are subject to change.

[2] Population estimates in the 2000s decade were revised by the State Dept. of Finance to reflect the 2010 Census counts.

[3] Projection of FY 13-14 water use estimated by MWDOC based on partial-year data.  
 Projection of FY 13-14 population estimated by MWDOC continues historical trend.

**Fig. 4 MWDOC's Firm Water Purchases, CY 2013**

DRAFT



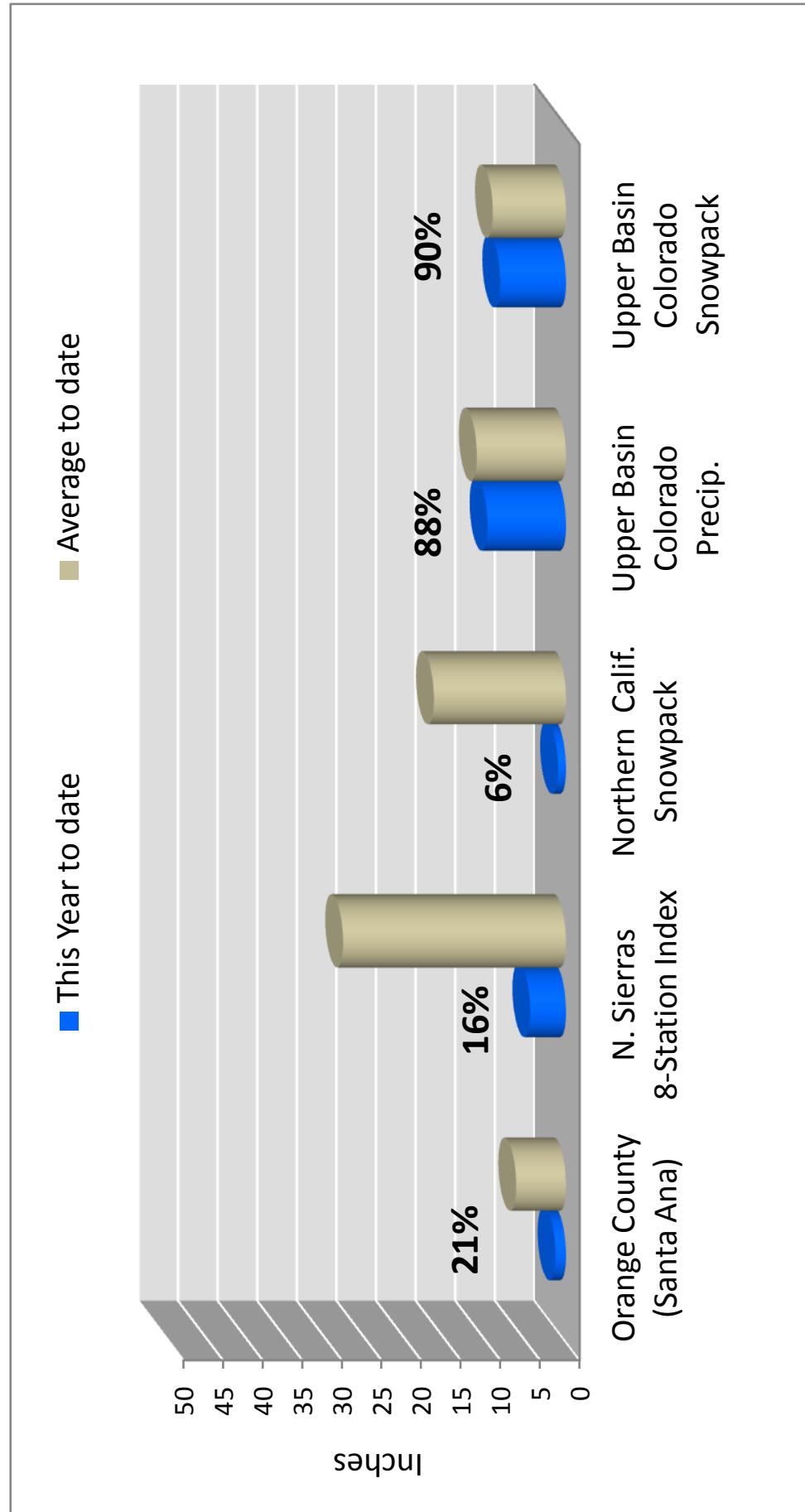
1. "Firm" includes Full and Barrier; excludes Long-Term Replenishment (both In-Lieu and Direct).

2. Basin Pumping Percentage (BPP) is the percentage of a retail water agency's total water demand that they are limited to pump from the OCWD-managed groundwater basin. BPP pertains to Basin agencies only. For example, if a Basin agency's total demand is 10,000 AF/yr and OCWD sets the BPP at 68%, then the agency is limited to 6,800 AF of groundwater that year. There may be certain exceptions and/or adjustments to that simple calculation. OCWD sets the BPP for the Basin agencies, usually as of July 1st. Import demands for Jan.-Jun. were with BPP of 68% for Basin agencies; for Jul.-Dec. they are projected with BPP of 70%.

# Accumulated Precipitation

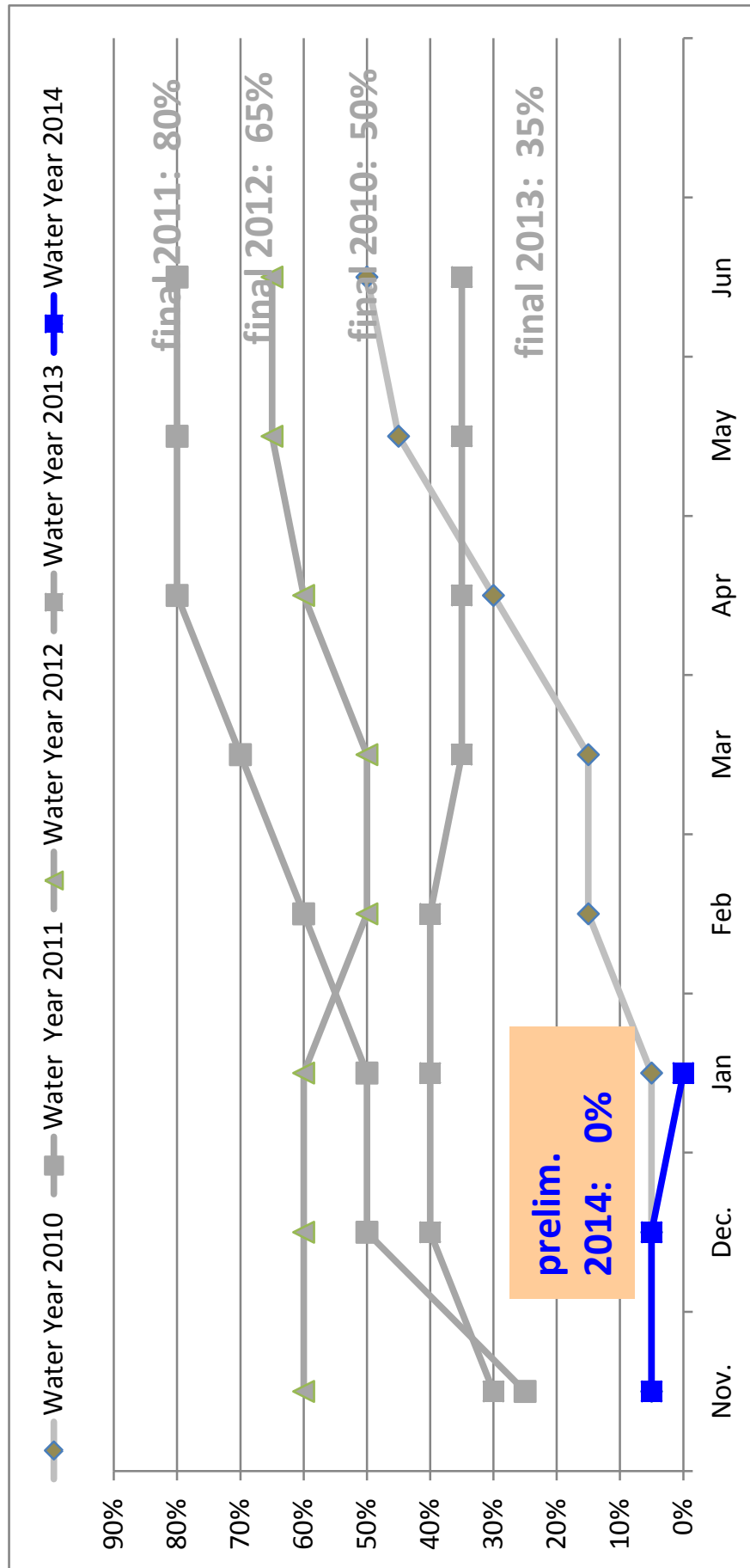
for the Oct.-Sep. water year, through Jan-2014

DRAFT



# SWP Table A Allocation

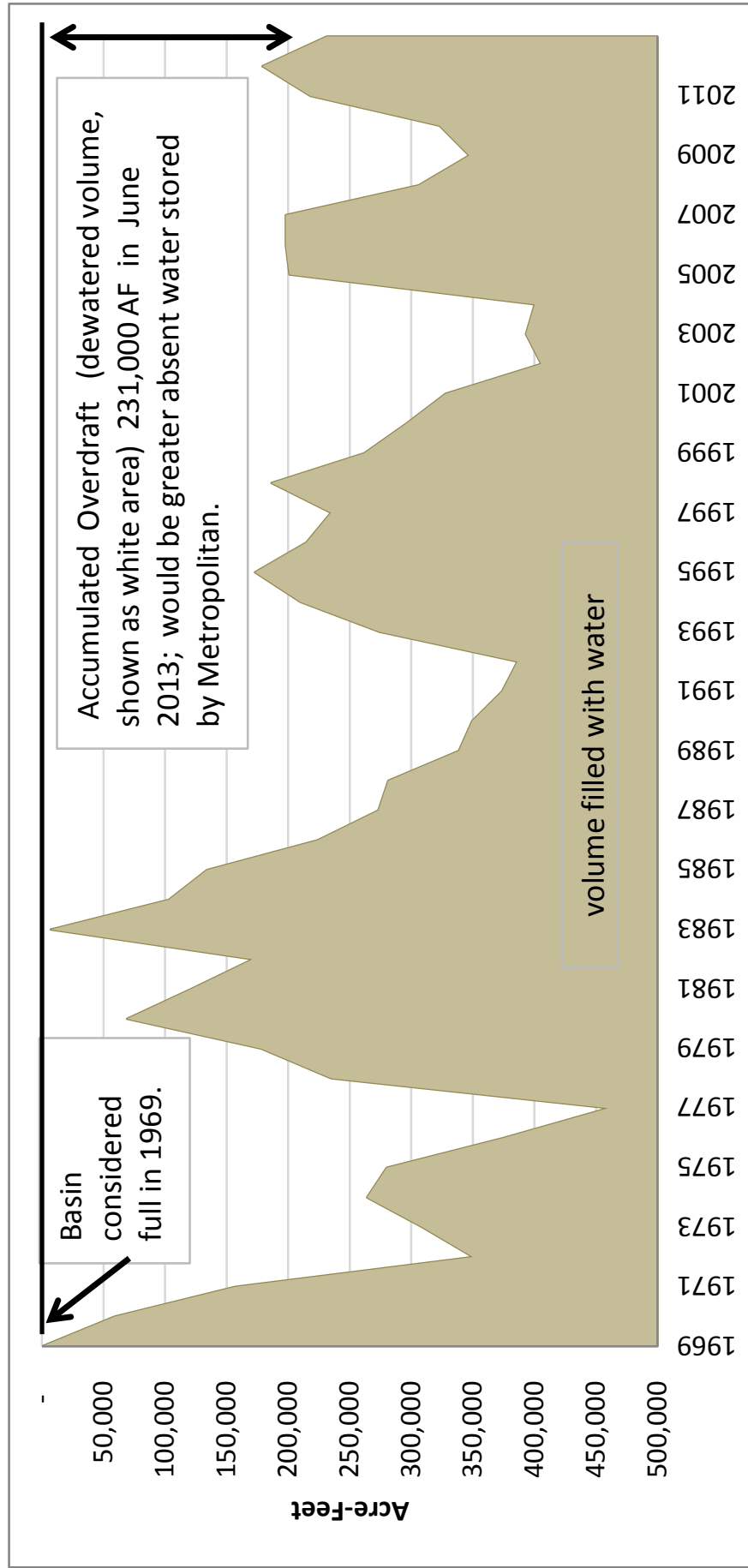
## for State Water Project Contractors





# OCWD Basin Accumulated Overdraft

Annual, 1969 to present



values as of June 30th

source: OCWD

## California, Colorado R., and MET Reservoir Storage

as of end Jan. 2014

**Lake Oroville**  
1.26 Million AF  
36% of Capacity  
55% of Average

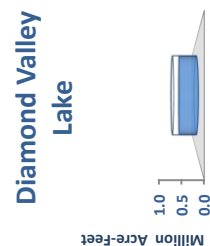
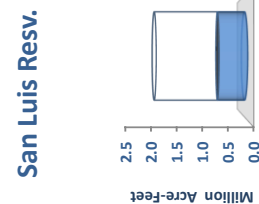
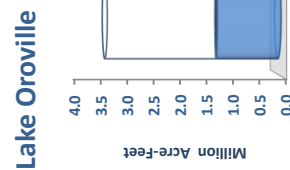
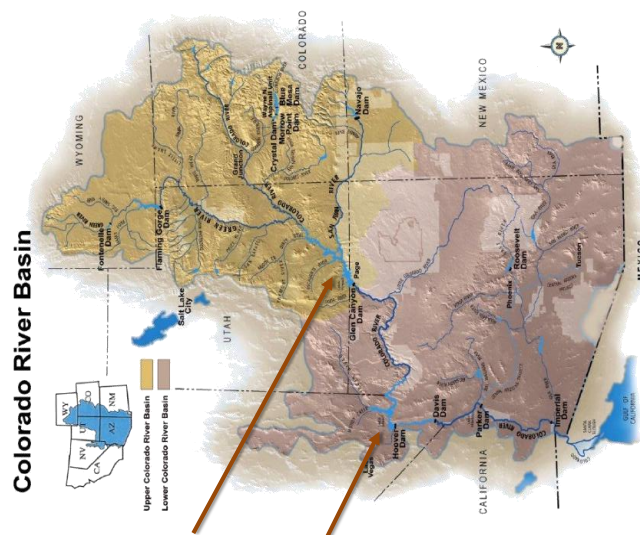
**Lake Shasta**  
1.653 Million AF  
36% of Capacity  
53% of Average

**Lake Powell**  
9.8 Million AF  
40% of Capacity  
58% of Average

**Lake Mead**  
12.5 Million AF  
48% of Capacity  
65% of Average

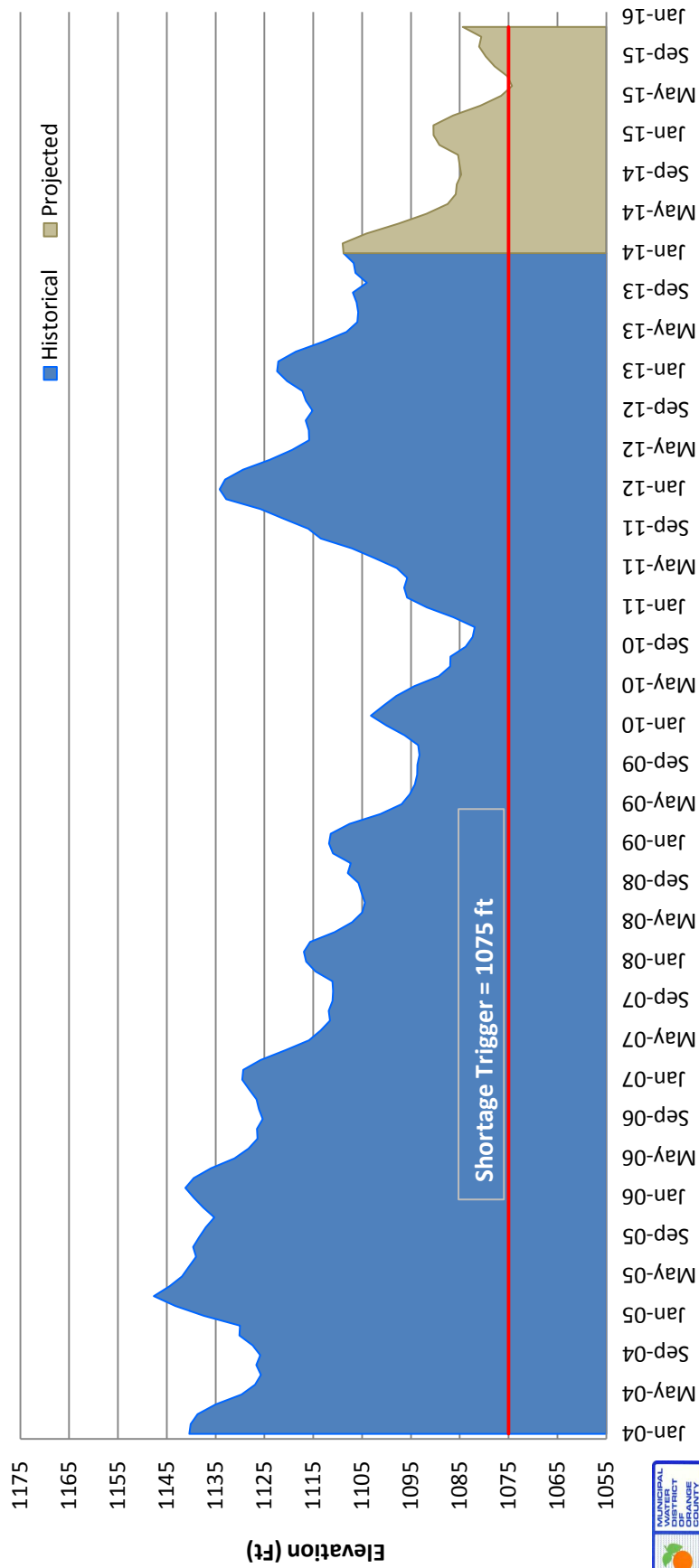
**San Luis Resv.**  
**0.61 Million AF**  
**30% of Capacity**

**Diamond Valley Lake**  
**0.58 Million AF**  
**72% of Capacity**



## Lake Mead Levels: Historical and Projected

projection per USBR 24-Month Study



**Municipal Water District of Orange County**  
**Director's Activity Report**  
**Reporting Period from 07/01/13 to 12/31/13**

Activity Description	MWDOD Directors							Subtotal	MET Director's				Subtotal	Director's Total
	Thomas	Barbre	Clark	Dick	Finnegan	Hinman	Osborne		Barbre	Ackerman	Foley	Dick		
<u>Per Diem (1)</u>														
MWDOD Committee & Board mtg	6,731	11,648	11,769	10,806	1,134	7,673	10,351	60,113	-	1,396	-	698	2,094	62,208
MET Committee & Board mtg	-	-	-	-	-	-	-	-	4,887	3,723	931	4,654	14,195	14,195
Meetings with Member Agencies	2,575	5,301	1,821	558	-	1,740	-	11,994					-	11,994
Other Misc meetings & activities	12,418	4,440	4,231	9,486	1,043	4,607	2,481	38,706	9,075	5,352	465	7,214	22,107	60,812
Benefit Reimbursement by Director	-	-	-	-	(965)	(1,712)	-	(2,677)					-	(2,677)
Subtotal-Per Diem	21,724	21,390	17,820	20,850	1,212	12,308	12,833	108,136	13,962	10,472	1,396	12,566	38,396	146,532
<u>Travel &amp; Conferences (2)</u>														
ACWA	1,080	-	-	40	-	590	-	1,710						1,710
AWWA	-	-	-	-	-	-	-	-						-
CRWUA	1,609	445	-	-	-	-	-	2,054						2,054
CSDA	-	-	-	-	-	-	-	-						-
Bond Buyers Conf	-	180	-	-	-	-	-	180						180
CUWCC	-	-	-	-	-	-	-	-						-
Washington DC Legslat Trips	-	1,435	-	-	-	-	-	1,435						1,435
ISDOC	20	20	-	-	-	-	20	60						60
MET Legislative	-	-	-	-	-	-	-	-						-
NWRA	-	-	-	-	-	-	-	-						-
OCWA	-	-	-	-	-	50	-	50						50
Urban Water Coalition	-	-	-	-	-	-	-	-						-
Urban Water Institute	-	-	-	-	-	-	-	-						-
So Cal Water Committee	-	-	-	-	-	-	-	-						-
Water Education Foundation	-	-	-	-	-	-	-	-						-
Other Travel Expenses	40	-	-	63	-	-	-	103						103
Mileage	910	101	636	982	104	1,535	-	4,268		377			377	4,645
Toll Charges	108	-	-	-	-	281	-	389						389
Subtotal-Travel & Conferences	3,767	2,181	636	1,085	104	2,457	20	10,249	-	377	-	-	377	10,626
<b>Total</b>	25,491	23,570	18,457	21,934	1,316	14,765	12,853	118,385	13,962	10,849	1,396	12,566	38,773	157,158

(1) Per Diem for MWDOD Directors includes benefits

(2) Includes convenience registration, travel, lodging, meals, transportation, mileage and other miscellaneous related costs; does not include Per Diem.

2/6/2014

**Municipal Water District of Orange County**  
**Semi-Annual Comparison for Overtime Hours Worked**  
for the six-month period ending December 2013 and 2012

Employee	7/1/13 - 12/31/13		7/1/12 - 12/31/12	
	Hours Worked	Dollar Equivalent (1)	Hours Worked	Dollar Equivalent (1)
Baca, Tiffany	0.00		11.50	
Davanaugh, Katie	7.00		19.00	
Fahl, Beth	0.00		0.50	
Dinh, Patrick	0.00		16.00	
Goldsby, Maribeth	4.00		0.00	
Gunawan, Lina	14.00		5.00	
Ramirez, Sergio	6.00		0.25	
Baum-Haley, Melissa	29.00		0.00	
Greco, Warren	0.00		9.00	
Ouwerkerk, Jessica	4.00		2.00	
Snow, Mary	0.00		2.00	
McCutchan, Sara	0.00		9.00	
<b>TOTAL</b>	<b>64.00</b>	<b>\$3,520</b>	<b>74.25</b>	<b>\$ 3,367</b>

(1) Dollar equivalent calculated at 1.5 x hourly rate

(2) Overtime at straight time.

**Municipal Water District of Orange County**  
**Legal and Professional Services Open Purchase Orders**  
as of December 31, 2013

Department	Consultant	Purpose	Approval Method	PO #	Date Opened	PO Amount including prior year increases	PO Increase/Decrease	Expensed This Fiscal Year	Total Expensed	Remaining Amount	% Complete
<b>Legal Expenses</b>											
Administration	Aleshire & Wynder LLP	Legal council services	Budget Approval	PO001471	8/13	15,000.00	22,000.00	27,215.69	27,215.69	9,784.31	74%
	Best Best & Krieger	Legal council services	Budget Approval	PO001470	8/13	229,000.00		172,175.55	172,175.55	56,824.45	75%
	Liebert, Cassidy, Whitmore	Legal council for personnel issues	Budget Approval	PO001403	7/13	5,500.00		405.00	405.00	5,095.00	7%
<b>Audit Expenses</b>											
<b>Engineering Expenses</b>											
Planning & Operation	CSU Fullerton Auxiliary Services Corp.	Development of Demographic Data & Support	Budget Approval	PO001541	11/13	39,959.00		19,979.50	19,979.50	19,979.50	50%
	Means Consulting, LLC	Strategic guidance to Engineering Dept.	Budget Approval	PO001444	8/13	12,000.00		6,000.00	6,000.00	6,000.00	50%
<b>Professional Expenses</b>											
Administration	ACCO Engineered Systems, Inc.	HVAC Replacement project	Board Approval 9/18/13	PO001522	11/13	162,600.00			-	162,600.00	0%
	Alliance Resource Consulting	Recruitment service for CFO position	R. Hunter Approval 11/7/13	PO001562	12/13	13,000.00		5,000.00	5,000.00	8,000.00	38%
	Americh Massena, Inc.	Semi-Annual review of Deferred Compensation and Defined Contribution Plan portfolios	Budget Approval	PO001399	7/13	10,000.00			-	10,000.00	0%
	Dissinger	Annual Plan administration	Budget Approval	PO001400	7/13	3,000.00		100.00	100.00	2,900.00	3%
	Raffelis Financial Consultants	Budget Based Tiered Rates grant assistance	Board Approval 5/19/10	PO000265	10/10	36,350.00		-	12,481.15	23,868.85	34%
	Lester A. Rosenberg	Consulting services for HVAC system	Board Approval 7/10/13	PO001433	8/13	15,525.00		11,550.00	11,550.00	3,975.00	74%
	WageWorks	Cafeteria Plan administrative fee	Budget Approval	PO001410	7/13	2,000.00			-	2,000.00	0%
	Aquaticent Consulting	Customized irrigation reports for IRWD	K. Seckel Approval 6/28/13	PO001487	9/13	18,000.00		9,000.00	9,000.00	9,000.00	50%
	Conservation Consulting, LLC	Landscape Performance Certification	R. Hunter Approval 10/29/13 & Budget	PO001515	10/13	108,000.00		34,517.00	34,517.00	73,483.00	32%
	Enterprise Information Systems, Inc.	Development of the California Sprinkler Adjustment Subscription system	Board Approval 10/17/12	PO001221	1/13	69,600.00	6,300.00	11,250.00	68,250.00	7,650.00	90%
Conservation	Mission Resource Conservation District	Field verification for Smart Timer and Rotating Nozzle rebate programs	Board Approval 9/19/12 & 4/17/13	PO001149	10/12	378,000.00	102,000.00	68,251.11	158,993.56	321,006.44	33%
	City of Newport Beach	Smart Timer and Sprinkler Nozzle Direct Installation program	Board Approval 12/18/13	PO001538	11/13	173,616.00		127,166.00	127,166.00	46,450.00	73%
	URS Corporation	Implementation of the Industrial Process Water Use Reduction program	Board Approval 8/6/06	10000039A	9/06	259,820.00		6,725.00	259,365.18	454.82	100%
	URS Corporation	Continuation of the Industrial Process Water Use Reduction program	Board Approval 11/17/10	PO000416	1/11	108,150.00		12,190.00	79,741.92	28,408.08	74%
	URS Corporation	Pilot Testing of wastewater treatment system for Jazz Semiconductor	K. Hunt Approval 2/15/11	PO000455	2/11	6,792.60		2,092.50	6,742.00	50.60	99%
	Waterwise Consulting, Inc.	Hotel Water Use Reduction program	Board Approval 9/17/08 & 2/16/11	100000165	1/09	337,125.00	(85,631.00)	17,430.00	228,924.00	22,570.00	91%
	Carollo Engineers, Inc.	Project Development report for Doherty Desal project	Board Approval 11/7/12	PO001245	1/13	28,400.00		4,867.85	26,675.00	1,725.00	94%
	SDG&E	Electrical services for Doherty Desal project	Board Approval 7/20/09	PO000049	4/10	210,000.00	(52,243.10)	930.59	156,287.49	1,469.41	99%
	SDH Group Inc.	Valuation services for Doherty Desal project	Board Approval 11/20/13	PO001561	12/13	9,800.00		3,500.00	3,500.00	6,300.00	36%
	Ronald R. Gastelum	Strategic analysis and assistance on MET issues	Budget Approval for MWDOC's share of 1/1	PO001445	8/13	90,000.00		45,000.00	45,000.00	45,000.00	50%
Public Affairs	Means Consulting, LLC	Support on MET issues	Budget Approval	PO001444	8/13	42,000.00		21,000.00	21,000.00	21,000.00	50%
	Ackerman Consulting	Consulting on water policy issues	Budget Approval	PO001449	8/13	36,000.00		14,400.00	14,400.00	21,600.00	40%
	Discovery Science Center	School Program	Budget Approval	PO001482	9/13	203,483.06	27,256.44	48,163.25	48,163.25	182,576.25	21%
	Immersiv Media, Inc.	Website support & maintenance	D. Burke Approval	PO001446	8/13	2,100.00		1,050.00	1,050.00	1,050.00	50%
	Lewis Consulting Group, LLC	Strategic consultation on legislative & political issues	Budget Approval	PO001468	8/13	48,000.00		21,562.50	21,562.50	26,437.50	45%
Finance / IT	Union Bank	Custodial bank fees	Budget Approval	PO001496	9/13	2,500.00		1,250.00	1,250.00	1,250.00	50%
WEROC	Steven Andrews Engineering	Engineering services for development of emergency water trailer specs &	Board Approval 11/7/12	PO001246	1/13	15,000.00		300.00	10,437.50	4,562.50	70%
						Totals	19,682.34	693,071.54	1,576,932.29	1,133,070.71	58%



**INFORMATION ITEM**

February 12, 2014

**TO: Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)**

**FROM: Robert Hunter,  
General Manager**

**Staff Contact: Cathy Harris  
Administrative Services Manager**

**SUBJECT: ANNUAL AUTO ALLOWANCE REPORT**

**STAFF RECOMMENDATION**

---

Staff recommends the Board of Directors receive and file as presented.

**COMMITTEE RECOMMENDATION**

---

Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

---

In accordance with the Auto Allowance Policy, the General Manager shall submit an annual report to the Administration and Finance Committee listing employees receiving a vehicle allowance and any exceptions to the provisions of the policy. The following positions are currently receiving monthly auto allowances in the amount of \$500:

Title
Principal Engineer
Water Use Efficiency Programs Manager
Director of Public Affairs
Principal Water Resources Planner
WEROC Programs Manager
Assistant General Manager

The Government Affairs Manager position, currently vacant, is budgeted to include an auto allowance amount of \$500 per month. It is anticipated that based on the nature of the job classification, this position will continue to receive an auto allowance.

<b>Budgeted (Y/N): Y</b>	Budgeted amount:	Core ___X	Choice ___
<b>Action item amount:</b>		Line item: Salaries and Wages	
<b>Fiscal Impact (explain if unbudgeted):</b>			

The Director of Finance position, currently in the negotiation process, will not be receiving an auto allowance at this time, unless the General Manager determines it is justified based on the nature of the job classification.



## **MWDOC FY 2014-15 CORE and CHOICE Budget Preparation Schedule**

### **December 2013**

- Present Budget preparation schedule and solicit initial input from Board and Member Agencies.
- Staff to send out memo to Member Agencies on initiatives for the upcoming year.

### **January 2014**

- MWDOC staff begins preparation of budget hours and costs on program and line-item basis
- Review of five month actuals and fiscal year-end projections
- Review budget adjustments for current fiscal year
- Review changes for upcoming fiscal year
- Discussion on CORE and CHOICE activities with MWDOC Board and Member Agencies.
- Discussion on the Second Lower Cross Feeder as a CORE or CHOICE activity.

### **February 2014**

- Information completed on prior year WUE benefits to member agencies to serve as basis of charging agencies for the upcoming year for WUE activities
- Review budget issues with A&F Committee for feedback.
- Review budget issues with Member Agencies for feedback.
- Member Agencies preliminary indication of participation in CHOICE Services.
- Publish Official First Draft of Budget on or before March 1

### **March 2014**

- Publish Official First Draft of Budget on or before March 1
- Review Full Draft Budget with A&F Committee.
- Formally request comments from all Member Agencies.
- Member Agencies confirm participation in CHOICE Services by March 15 (staff suggestion is to move this date to the end of April, allowing time for the Elected Officials meeting)

### **April 2014**

- Member Agencies' submit Formal Comments about the Budget before April 15.
- Review Final Draft Budget and MWDOC's rates with Member Agencies.
- Conduct meeting with electeds from Member Agencies to discuss budget and other topics before the end of April
- Confirm CHOICE Participation

### **May 2014**

- Final Draft Budget and Rates presented to A&F Committee.
- Member Agencies' Formal Comments presented to A&F Committee.
- Board approval of FY2014-15 Budget and Rates.



**INFORMATION ITEM**

February 12, 2014

**TO:** Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)

**FROM:** Robert Hunter, General Manager

**SUBJECT:** Annual Review of Coastal Municipal Water District Issues

**STAFF RECOMMENDATION**

---

Staff recommends the Administration & Finance Committee: No changes at this time.

**COMMITTEE RECOMMENDATION**

---

Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

---

Below is the excerpt from the Administrative Code relative to outstanding issues involving MWDOC's consolidation with Coastal Municipal Water District. Staff has reviewed the sections and does not recommend any changes at this time.

<b>Budgeted (Y/N):</b> N/A	<b>Budgeted amount:</b>	<b>Core</b> √	<b>Choice</b> __
<b>Action item amount:</b>	<b>Line item:</b>		
<b>Fiscal Impact (explain if unbudgeted):</b>			

## **§12000 INTRODUCTION**

MWDOC and Coastal MWD consolidated effective January 17, 2001. Many factors and issues were evaluated in bringing the two agencies together. MWDOC has documented several of the issues in the event they become important for future consideration. The Administration & Finance Committee shall review these issues on an annual basis until such time as the Administration & Finance Committee determines a review is no longer necessary.

### **§12001 Standby Charge Levied in MWDOC and Coastal Service Areas**

This is an issue has to do with the level of Standby Charge being levied in the MWDOC service area of \$10.09 per acre or per parcel less than an acre and a similar but higher charge of \$11.60 in the Coastal service area. The Standby Charge levied by Metropolitan is higher in the Coastal service area because at the time the Standby Charge was established by Metropolitan (1993), it was partially based on the dependence on imported water to the member agency service area. Since the Coastal service area had proportionally fewer groundwater resources than the MWDOC service area, the charge was higher. Amounts raised by Metropolitan through the Standby Charge are forwarded to each participating Metropolitan member agency (including MWDOC and Coastal) as credits against the amount owing under Metropolitan's Readiness-to Serve Charge. The higher charge in the Coastal service area generates about \$120,000 per year more than if the charge was reduced to \$10.09 to match the MWDOC service area standby charge.

During the consolidation transition period (from 1998-2000), Metropolitan engaged in continued discussions regarding restructuring of its rates and charges, and the continued levy of a Metropolitan Readiness-to-Serve Charge was often in doubt. Consequently, no action was taken by Coastal or MWDOC to request that Metropolitan equalize the two charges. The only reason for retaining this item is to be aware of the different levels of the Standby Charge in the event MET ever changes its rate structure.

### **§12002 Metropolitan Capacity Provided in the EOCF#2 for the Coastal Service Area**

The East Orange County Feeder Number 2 (EOCF#2) is a 25-mile long treated water transmission main, constructed in 1962 by Metropolitan, Anaheim, Santa Ana, MWDOC and Coastal. The purpose of the pipeline was to increase the treated water capacity to southeastern Orange County and to replace capacity to Anaheim, Santa Ana and Coastal that had been used in the Orange County Feeder by the growing MWDOC service area. It should be remembered that upon the formation of the MWDOC service area in 1951 the Anaheim and Santa Ana city service areas from Metropolitan had been frozen and the growing portions of these cities beyond the boundaries as they existed in 1951 was included as part of the MWDOC service area. That has since been changed.

Coastal MWD purchased 10.0 cfs of capacity in the EOCF#2 as it was constructed. This capacity has since been assigned to the retail agencies within Coastal (July 2000). In addition, Metropolitan provided 84 cfs of oversizing capacity in the facility to meet the additional needs of Coastal and the original city areas of Anaheim, Fullerton and Santa Ana. Metropolitan's 84 cfs of capacity provided was designated to the following areas:

<b>Agency</b>	<b>cfs</b>
Anaheim	6
Santa Ana	15
Coastal	63
Met Total	84

In Metropolitan Resolution 6635, adopted January 12, 1965, it was noted that:

"the capacities allocated to Metropolitan in the several reaches of the East Orange County Feeder No. 2 shall be used for delivery of water to said older member cities to meet their requirements for services to areas which were within their boundaries on November 26, 1951, the date of the annexation of Orange County Municipal Water District to Metropolitan and to the Coastal Municipal Water District as it was constituted on January 1, 1955, until such time as like delivery of water can be made to them in whole or in part through other facilities, provided, that until such conveyance capacity is needed for delivery to such older members for such purpose and always subject to the policy declared herein as to such older members, it may be used by Metropolitan for the sale and delivery of water in accordance with the provisions of the Metropolitan Water District Act. . . . "

The exact meaning of this section in today's context given that Metropolitan has provided capacity in the Allen McColloch Pipeline and South County Pipeline facilities to serve both MWDOC and Coastal, has not been fully analyzed or debated with Metropolitan. Rather, the purpose of this section is to raise the issue and provide that the consolidation of MWDOC and Coastal shall not in any manner erode or diminish any rights that the retail agencies within the Coastal service area may have or be able to assert with respect to any or all of the 63 cfs of capacity in the EOCF#2 provided by Metropolitan.

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M-5/2005; M-2/16/11

**Administration Activities Report  
January 2, 2014 January 30, 2014**

<b>Activity</b>	<b>Summary</b>
<b>Administration/Board</b>	<ul style="list-style-type: none"> <li>Pat has been working with Richard on Doheny Desal change orders and close-out letters</li> <li>Pat has been scheduling meetings for Karl, Harvey and Keith</li> <li>Maribeth has been scheduling meetings for Rob Hunter</li> <li>Maribeth met with Rob and Karl to begin the staff review of the Administrative Code.</li> <li>Maribeth has been coordinating with Natalie Wright of BBK on a subpoena for records.</li> </ul>
<b>MWDOC/OCWD Joint Administration</b>	<ul style="list-style-type: none"> <li>No new information to report.</li> </ul>
<b>Property/Liability/Workers Compensation Insurance</b>	<ul style="list-style-type: none"> <li>Katie completed a detailed application packet for submittal to Alliant to solicit bids for the District's General Liability, Property and Workers' Compensation insurance. It is anticipated that information should be received in mid-February for review. Based on receipt of the information, staff will return with additional information in March or April.</li> </ul>
<b>Records Management</b>	<ul style="list-style-type: none"> <li>Sarah continues to enter new documents into the system as well as scan hard copy documents into the system. She also continues to purge and shred documents in accordance with the retention schedule. Sarah coordinated with Maribeth on responding to a subpoena for records and provided assistance with other records requests.</li> </ul>
<b>Office HVAC System</b>	<ul style="list-style-type: none"> <li>The HVAC installation took place December 26 through 30<sup>th</sup>. Balancing of the system and repairs took place during the month of January. The final adjustments to the current system and training of OCWD maintenance staff on the control system are taking place. The Consultant is doing his final inspection of the system prior to sign off. A final report and the total costs will be provided in March.</li> </ul>
<b>Activity</b>	<b>Summary</b>
<b>CalPERS</b>	On January 14 <sup>th</sup> , Rob, Karl and Cathy held a conference call with CalPERS to discuss the District's Valuation Report as of June 30, 2012. Additional information is included in the packet.
<b>Review of 401 and 457 Plan Investment Funds</b>	No new information to report.
<b>Recruitment /Departures</b>	<ul style="list-style-type: none"> <li>Held interviews for Director of Finance position</li> </ul>

	<p>during the week of January 6<sup>th</sup>.</p> <ul style="list-style-type: none"> <li>• Staff has made an offer to the Director of Finance candidate and will make an announcement once the offer has been accepted and the background screening is completed.</li> </ul>
<b>Other</b>	
<b>Agency Requests</b>	No information to report this month.
<b>Projects and Activities</b>	<ul style="list-style-type: none"> <li>• Cathy chaired the Member Agency Human Resources group meeting held on January 23 at the Irvine Ranch Water District.</li> </ul>
<b>Pay Structure Adjustment Survey</b>	In accordance with the Personnel Manual Policy, staff initiated a survey to determine agency COLA's and Merits for 2014/2015. Staff is currently gathering the information and will return with a recommended merit pool amount, to be included in the 2014/2015 budget.
<b>MWDOC Staff Meeting</b>	<p>All Staff Meeting was held on February 6<sup>th</sup> and the following key items were discussed:</p> <ul style="list-style-type: none"> <li>○ Budget Process</li> <li>○ Merit Pool</li> <li>○ Consolidation</li> <li>○ Drought Discussion</li> <li>○ Bay Delta Conservation Plan</li> <li>○ State Water Bond</li> </ul>



## INFORMATION ITEM

February 12, 2014

**TO:** Administration & Finance Committee  
(Directors Thomas, Barbre, Osborne)

**FROM:** Robert J. Hunter, General Manager      Staff Contact: Jeff Stalvey

**SUBJECT:** Finance and IT Pending Items Report

### SUMMARY

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The following list details the status of special projects that are in-progress or to be completed during FY 2013-14.

Description	% of Completion	Estimated Completion date	Status
<b><u>Finance</u></b>			
Further Implementation of WUE Landscape Programs Database and Web Site.	On-going	On-going	In Progress
Implementation of WUE Landscape Programs Database for inspection agencies.	95%	6-30-14	In Progress
Annual financial audit conducted by Vavrinek, Trine, Day & Company	100%	1-31-14	Completed
Preparation of Audited Financial Statement Report	100%	1-31-14	Completed
Upgrade Serenic ERP Software from version 5 to version 7	15%	3-31-14	In Progress
Preparation of documents for FY14-15 budget process.	70%	6-30-14	In Progress

<b><u>Information Technology</u></b>			
Network security protection for the District from Cyber threats, intruders/hackers, and viruses/malwares/spam e-mail attacks.	On-going	On-going	Continuous system monitoring
Upgrade existing Windows Server Operating Systems from 2003 and 2008 versions to 2012 version (software upgrade).	60%	3-31-14	In Progress
Purchase and upgrade 4 Desktop computers.	50%	3-31-14	In Progress
Purchase and upgrade District Record Management Database Server (hardware and software).	20%	6-31-14	In Progress
Purchase and upgrade Finance database Server (hardware and software) to run new version of Serenic application (64-bit).	60%	3-31-14	In Progress
Purchase and upgrade Primary Domain Network Server to Windows Server 2012 64-bit (hardware and software).	100%	1-31-14	In Progress

FY 2013-14 Completed Special Tasks			
Description	% of Completion	Estimated Completion date	Status
<b><u>Information Technology</u></b>			
Upgrade and maintain Disaster Recovery Plan for the District (software and hardware). Install, configure and deploy new Disaster Recovery Server (hardware and software) for Finance Department at the South EOC.	100%	09-31-13	Completed
Purchase and upgrade Overhead projector for Conference room 102.	100%	10-31-13	Completed
Purchase and upgrade MS Office 2007 to 2013 version (5 licenses).	100%	12-31-13	Completed
<b><u>Finance</u></b>			
Preparation of documents for FY13-14 budget process.	100%	06-30-13	Completed
State Tax filing for Water Facilities	100%	11-30-13	Completed
State Controller Report preparation	100%	11-30-13	Completed
Government Compensation in California report	100%	11-30-13	Completed