

# **Series 2014C Water Revenue Bonds**

Board of Directors

April 22, 2014

# Proposed Financings for FY14



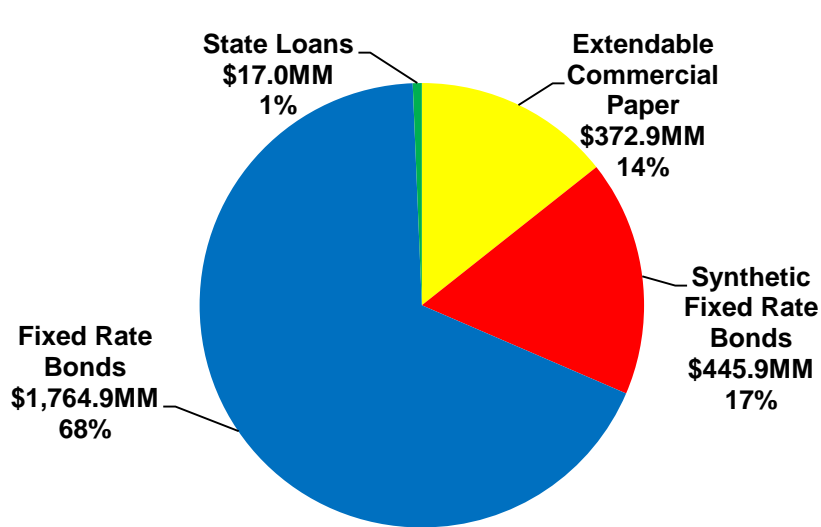
	Description	Issue/Approximate Size	Date of Board Action	Pricing or Issuance Date
1	Replace Royal Bank of Canada and Barclays Bank as remarketing agents for the District's outstanding Water Series 2008A-1, 2008A-2 and 2008A-3 Bonds	W 2008A-1: \$61.7 million W 2008A-2: \$46.3 million W 2008A-3: \$46.3 million	9/24/2013	12/10/2013
2	Authorization for Opportunistic Water and Wastewater Restructurings for De-Risking and Fixed Rate Refundings	Based on Market Opportunities	9/24/2013	TBD
3	Remarket the Water Series 2009A-1 and Series 2009A-2 Securities Industry and Financial Markets Association (SIFMA) Index Bonds to establish a new interest rate period	W 2009A-1: \$41.04 million W 2009A-2: \$41.04 million	10/22/2013	12/3/2013
4	Renew or replace Bank of America (BoFA) and JPMorgan Chase Bank (JPM) as liquidity providers for Water Series 2008A-4, Water Series 2008B-3 and Wastewater Series 2008C Bonds and extend term	W 2008A-4: \$46.3 million W 2008B-3: \$15.1 million WW 2008C: \$51.7 million	10/22/2013	12/10/2013
5	Competitive Sale Refunding of Wastewater Series F (2003) G.O. Bonds	WW \$18.6 million	1/28/2014	2/27/2014
6	Remarket the Water Series 2011A-1 and A-2 SIFMA Index Bonds to establish a new interest rate period or refund with another product	W 2011A-1: \$74.1 million W 2011A-2: \$74.1 million	3/25/2014	5/2014
7	Renew or replace Wells Fargo Bank (WFB) as liquidity provider for Water Series 2008A-1 Bonds and extend term	W 2008A-1: \$61.7 million	10/22/2013	12/10/2013
8	<b>Issue additional "New Money" Water Revenue Bonds</b>	<b>\$170.0 million</b>	<b>4/2014</b>	<b>5 - 6/2014</b>

# Debt Composition



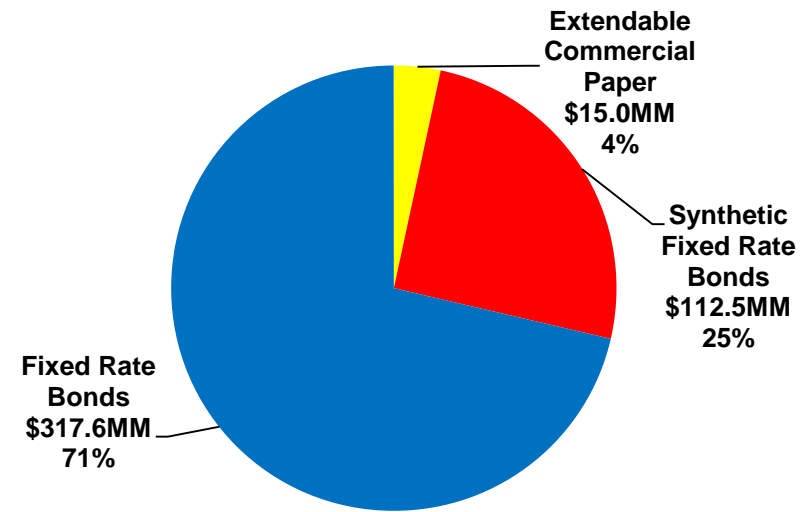
## WATER SYSTEM

Total Outstanding Revenue Debt  
\$2.6 Billion



## WASTEWATER SYSTEM

Total Outstanding Revenue Debt  
\$445.2 Million



# “New Money” Series



## Water System Revenue Bonds, Series 2014C

- \$75 million issue
- Fund a portion of budgeted capital expenditures for FY14 and FY15
- Simple bond structure:
  - Fixed Rate
  - 30-year maturity

# Cost of Issuance



## Estimated Costs of Issuance

Co-Bond Counsels	\$121,000
Financial Advisors	56,000
Rating Fees	68,300
Tax Counsel	40,000
Printer	5,000
Trustee	4,100
Contingency	20,000
	<hr/>
	\$314,400
 <u>Estimated Underwriter's Discount</u>	 \$150,000

# Requested Action



- Adopt resolution providing for issuance of Water System Revenue Bonds, Series 2014C

# Questions







**Ordinance to Amend  
EBMUD Retirement System Ordinance  
No. 40 - Section 6(D)**

Board of Directors

April 22, 2014

# Updates to Ordinance No. 40



- **Section 6(d) of the Retirement Ordinance provides the rates of retirement contributions for retirement system members, and references that subsequent to December 15, 2003 rates shall not be increased or adjusted except pursuant to the terms of a negotiated collective bargaining agreement.**

# Updates to Ordinance No. 40



- **The District completed successor bargaining with the four bargaining units, and completed the implementation of the bargained changes in January 2014.**
- **The bargained changes in retirement system member contributions for members of the 1980 plan were also adopted, by resolution, to apply to managers, confidentials, and non-represented employees of the District.**

# Updates to Ordinance No. 40



- The proposed update to the Retirement Ordinance, Section 6(d) updates language to show the negotiated increase in contributions for 1980 plan members
- And clarifies that these are not the rates for those members otherwise subject to PEPRA (Section 42 of the Retirement Ordinance).

# Updates to Ordinance No. 40



## 1980 Member Contribution Rate Changes Negotiated:

- April 22, 2013 7.33%
- April 21, 2014 7.83%
- April 20, 2015 8.33%
- April 18, 2016 8.75%

# Updates to Ordinance No. 40



- **Action:**

- After today's second reading, vote to approve the Retirement Ordinance changes.

- **Fiscal Impact:**

- There are no fiscal impacts associated with the proposed language changes.

## Steps to Finalize Adoption of Ordinance Amendments:

- Second reading and vote to adopt, April 22, 2104
- The Ordinance amendment must be placed in newspaper for 2 successive weeks
- Adoption of the Ordinance amendment takes effect 30 days after the vote to adopt, May 22, 2014

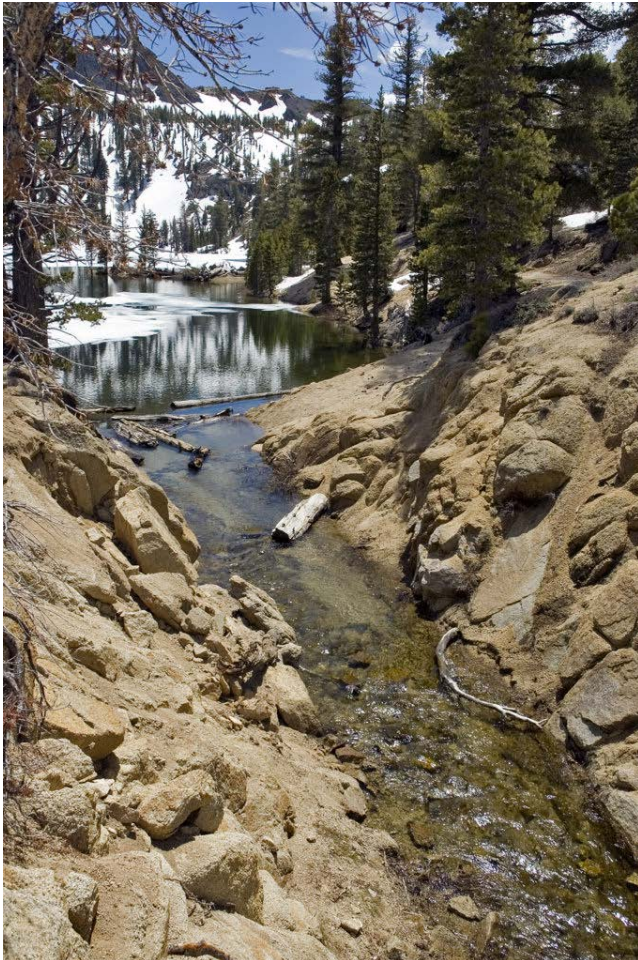
# **Water Supply Availability & Deficiency Report for 2014**

Water & Natural Resources Department  
April 22, 2014



# Supply Outlook for 2014

*(forecast as of 4/22/14)*



## Precipitation to Date

*Mokelumne Basin = 53% of average  
East Bay Watershed = 51% of average*

## Projected Runoff

*WY2014 Runoff forecast = 235 TAF<sup>1</sup>  
(Average year = 745 TAF)*

## Projected Total System Storage

*September 30 forecast = 415 TAF<sup>1</sup>*

## JSA Year Type (Apr-Sept)

*Dry<sup>2</sup>*

<sup>1</sup> Median Condition

<sup>2</sup> Based on DWR Apr 1st Water Supply Forecast of 310 TAF

# Policy 9.03 - Water Supply Availability and Deficiency



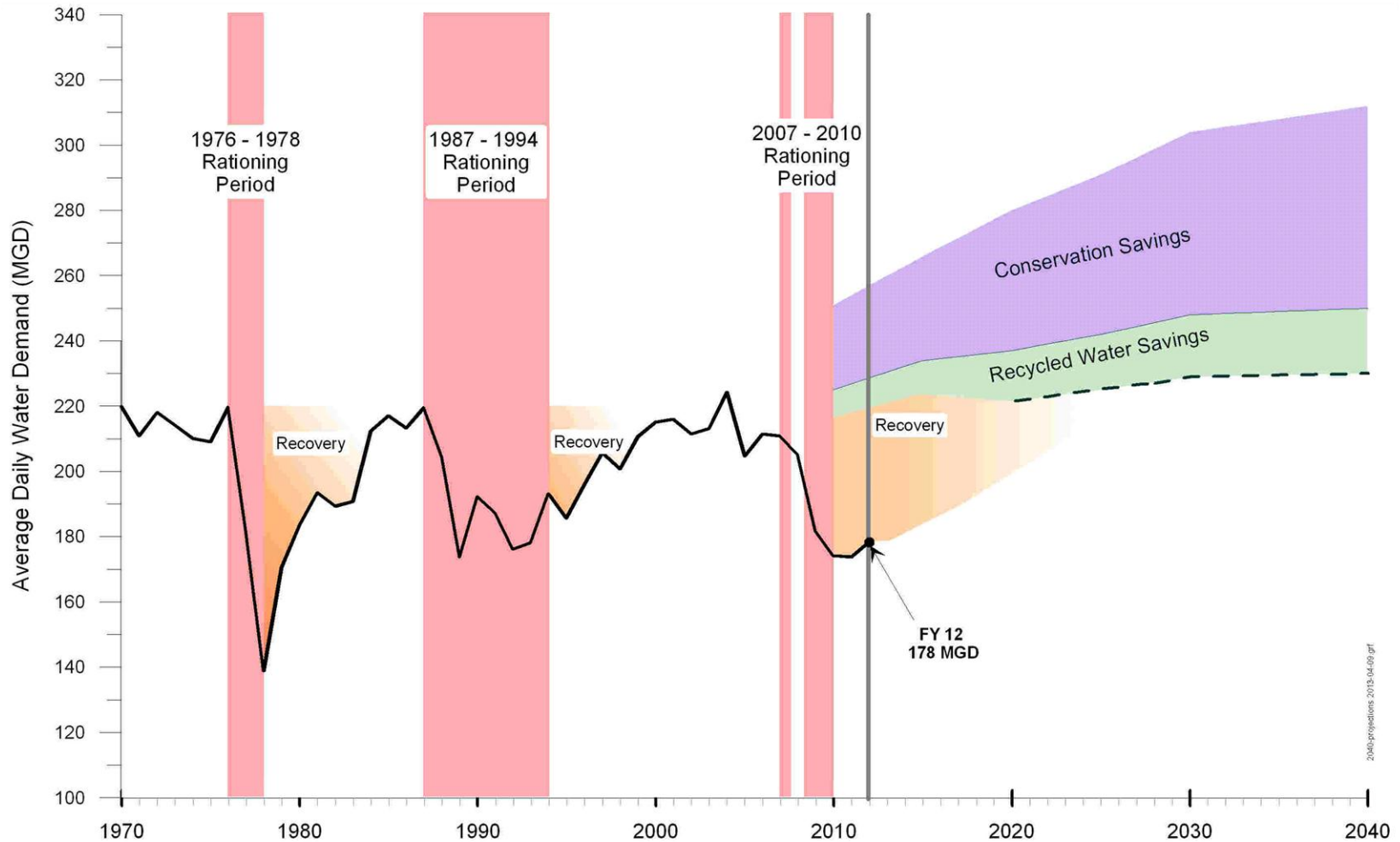
- Evaluates availability of District's water supplies
- Determines Allowable Maximum Level of annual Demand (AMLDD)
  - AMLDD = demand met by existing sources and rationing up to 15%
- Report on the adequacy of District's water supplies in the year 2040

# Conclusions



- District's water supply is deficient for meeting customer demands in 2014.
- Projected runoff requires 'Dry' year flows for fishery protection under the District's Joint Settlement Agreement (JSA)
- The Allowable Maximum Level of Demand (AMLDD) for 2040 is 189 MGD, requiring the District to continue pursuing projects to meet the projected level of demand of 230 MGD.

# Policy 9.03 - Water Supply Availability and Deficiency



Following the ending of voluntary customer demand reductions in Sep 2007, no demand management program was in effect until its adoption in May 2008.



*EAST BAY MUNICIPAL UTILITY DISTRICT*

# **Water Year 2014 Dry Year Planning**

April 22, 2014



# Dry Year Planning



## CONSERVATION



## RECYCLING



## FREEPORT



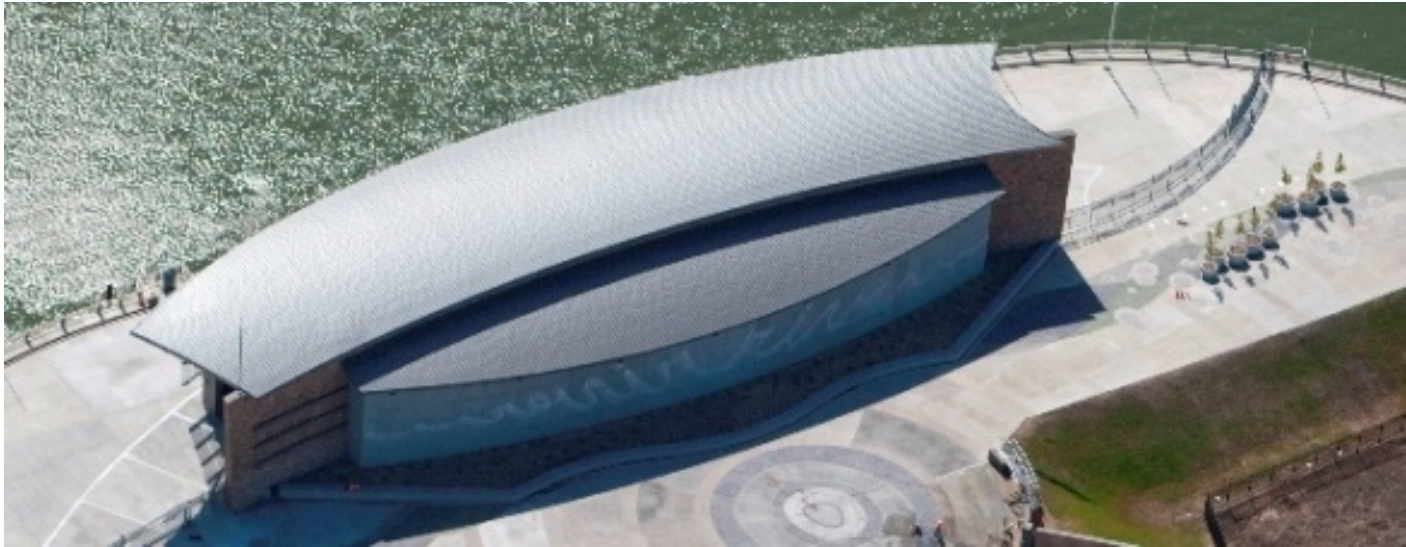
## INTERTIES

# Recommended Actions



- Declare the need to use Freeport in May and June 2014
- Suspend the implementation of the supplemental supply surcharge for FY14
- Reaffirm the 2014 Preliminary Dry Year Response Plan

# Freeport Regional Water Project



FRWA INTAKE

## Players

- Freeport Regional Water Authority (FRWA)
- Sacramento County Water Agency (SCWA)
- East Bay Municipal Utility District (EBMUD)
- US Bureau of Reclamation (USBR)



## Project

- 185 MGD Regional Facility
  - 100 MGD EBMUD
  - 85 MGD SCWA
- 3 Pumping Plants
- 36 miles of transmission pipelines
- Project complete November 2011
- EBMUD share of costs = \$482M



# Freeport Regional Water Project

## Sacramento River to East Bay



# Freeport Regional Water Project

## Water Quality



- All treated water meets or surpasses state and federal regulations
- Increase in customers receiving water from the conventional plants
- Local and supplemental supplies have different chemistry than Mokelumne supply
- Standard practice is to notify in advance those industrial customers that are sensitive to changes in water chemistry



# Freeport Regional Water Project

## Supplemental Supply



- Requested and paid for CVP water in April and May
- 5,000 acre-feet of Placer County Water Agency water approved
- Submitted preliminary request for 66,500 acre-feet of water to U.S. Bureau of Reclamation assuming continuing dry conditions

# April 2014 Systems Testing



- April 2014 Systems Testing
  - Fish Monitoring
  - Hydraulic Evaluation
  - District Systems Testing
- Sacramento River at Freeport to San Pablo Reservoir
- Approximately 130 miles traveled
- Discharge 30 to 90 mgd
- 6,700 acre feet delivery planned for April 2014



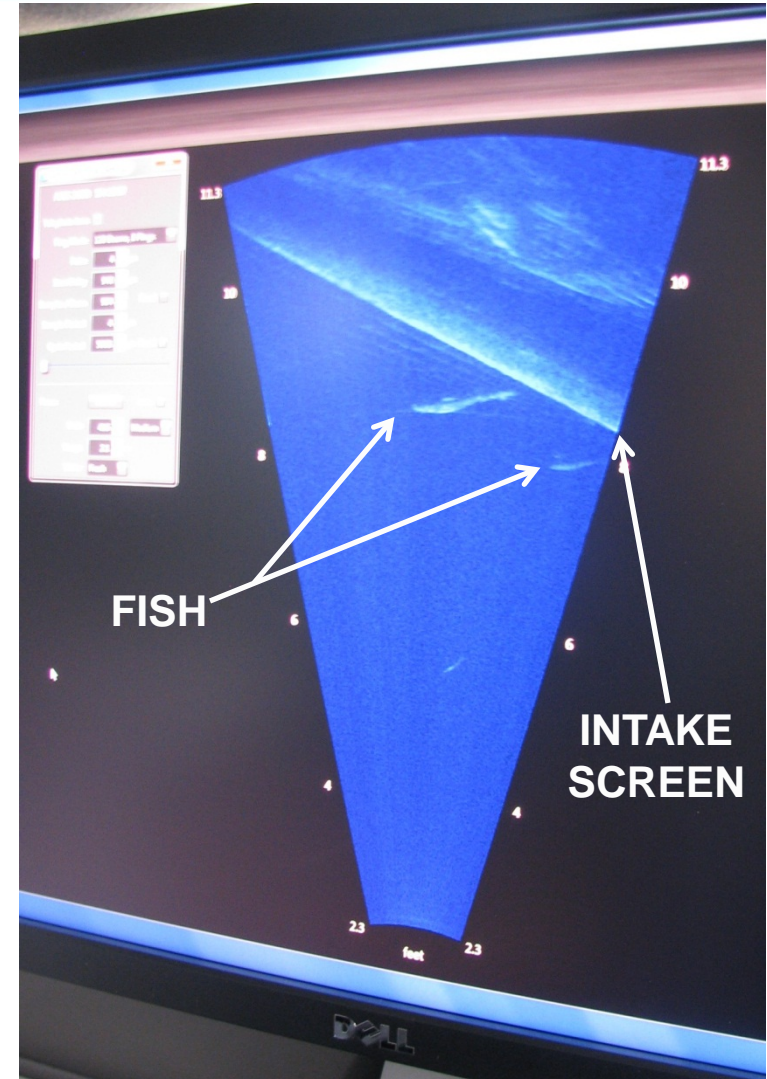


# April 2014 Systems Testing

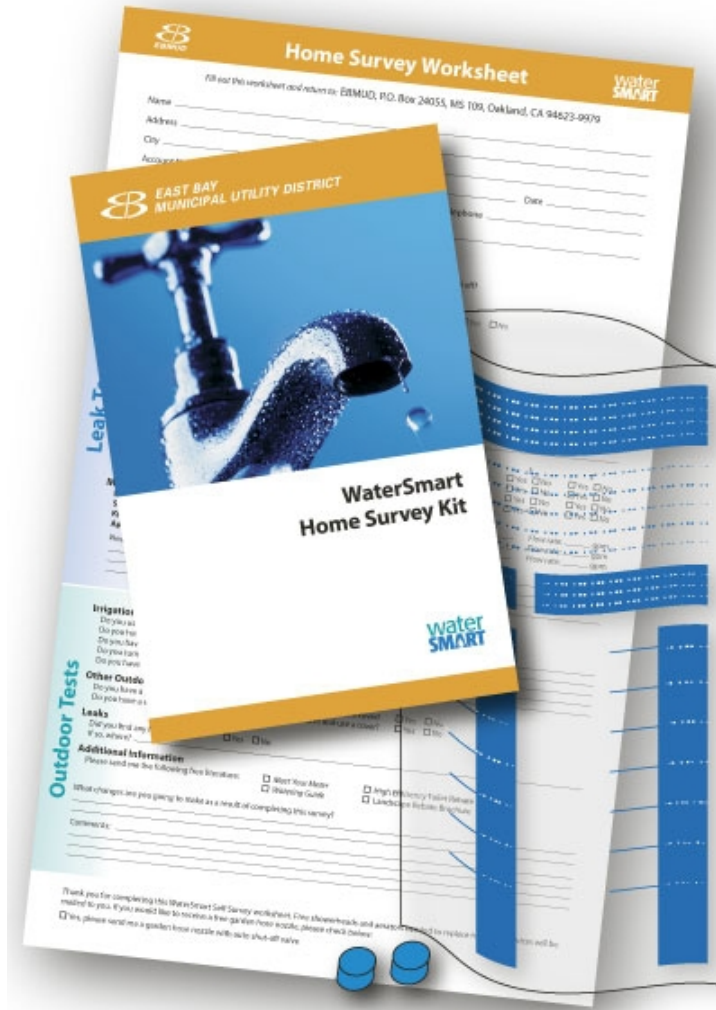
## Fish Monitoring - Impingement



- Scheduled when Delta smelt most likely in vicinity
- 90 million gallons per day per forebay
- Check for impingement onto fish screen



# Water Rationing & Conservation



Our community is in a drought.  
**Water provided upon request.**  
**Agua servida solo si es solicitada.**  
應要求可提供水飲  
Thank you for helping us conserve.



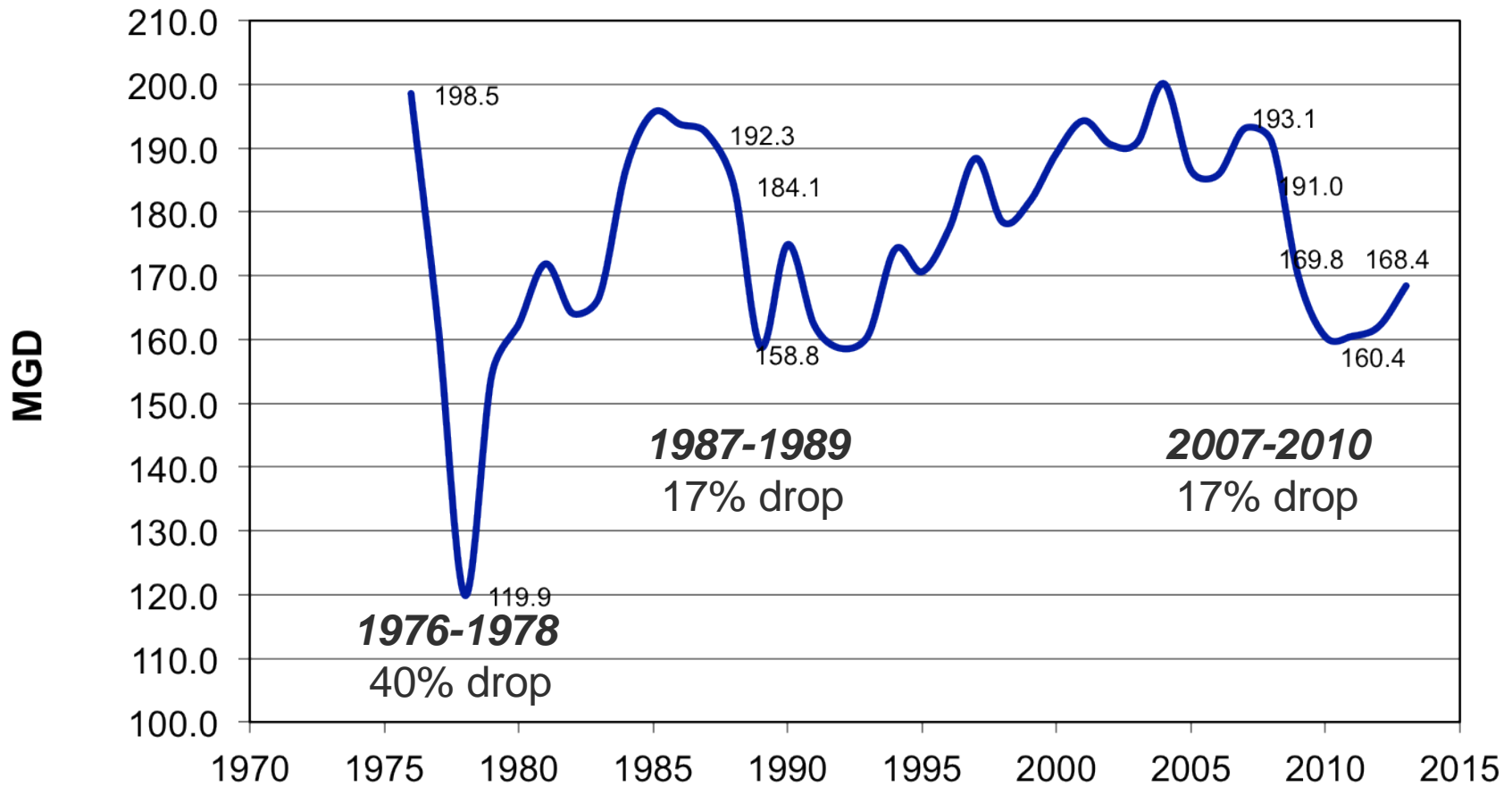
Our community is in a drought.  
**Thank you for not wasting water.**



# Historic Metered Consumption

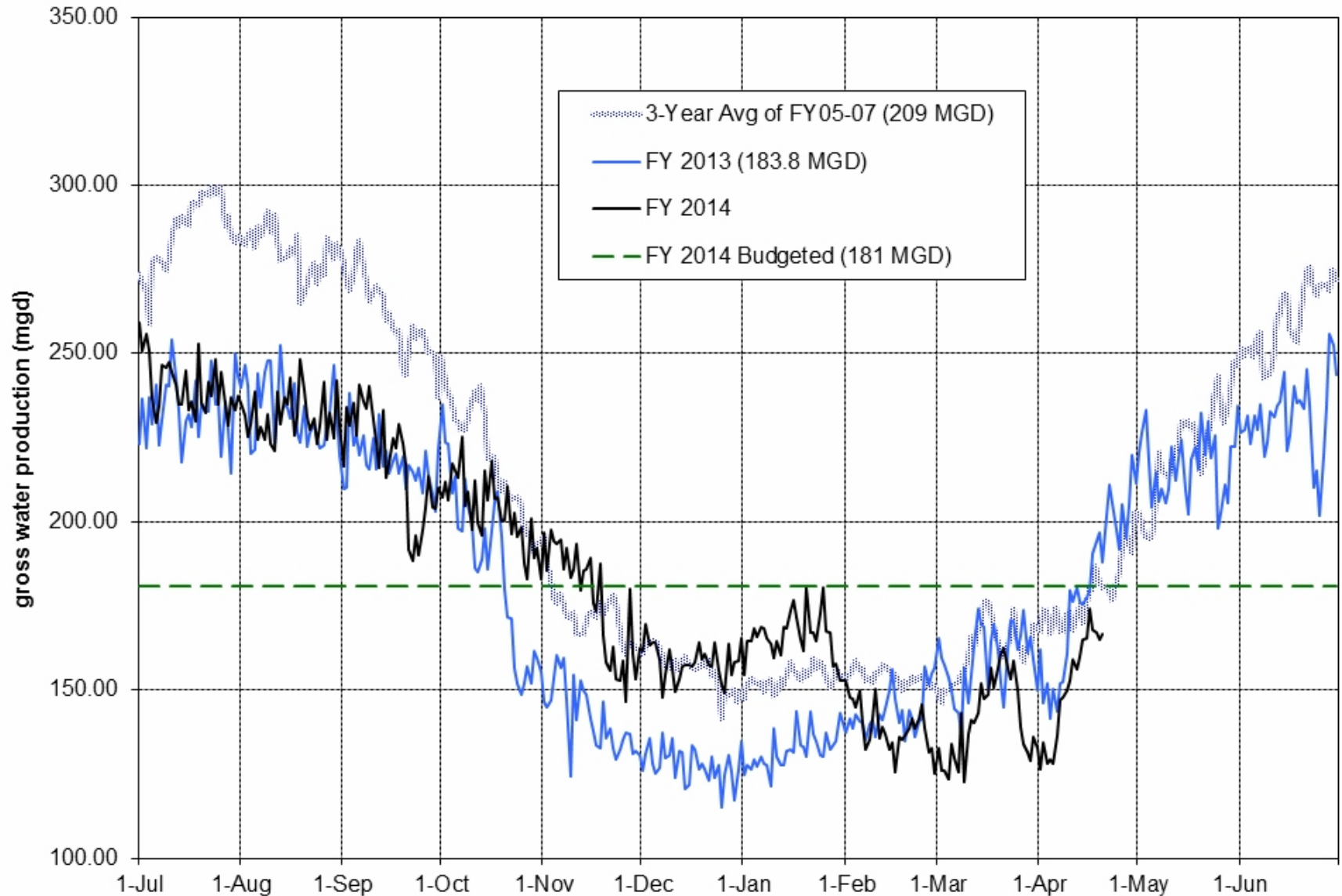


## Metered Consumption





# Current Gross Water Production





# Drought Management Update



	Feb 12-28	March 1-31	April 1-20
Avg Demand - 2013	146 mgd	159 mgd	169 mgd
Avg Demand - 2014	136 mgd	141 mgd	151 mgd
Savings Goal	15 mgd	16 mgd	17 mgd
Actual Savings	10 mgd	18 mgd	18 mgd
Actual Savings Rate	7%	11%	10%

# Next Steps



May 13th

- Final Dry Year Response Plan for Board consideration

Summer

- Ongoing customer outreach
- Regular monitoring and reporting on water supply
- Begin evaluation of actions for 2015 in case dry conditions persist

Fall

- Reassess water supply situation and consider additional actions as necessary

# Recommended Actions



- Declare the need to use Freeport in May and June 2014
- Suspend the implementation of the supplemental supply surcharge for FY14
- Reaffirm the 2014 Preliminary Dry Year Response Plan

# Water Supply Briefing

April 22, 2014

# Water Supply Briefing



- Statewide Water Supply
- Precipitation & Snow
- Reservoir Storage
- Water Supply Forecast



# Statewide Water Supply Status

(Storage in Thousand Acre-Feet)



Reservoir	Capacity	WY 2013	WY 2014	Percent of Capacity	Percent of Average
Trinity	2,448	2,147	1,304	53	67
Shasta	4,552	3,882	2,401	53	62
Oroville	3,538	3,103	1,856	53	70
Folsom	977	667	529	54	76
New Melones	2,420	1,523	979	40	60
Fed. San Luis	966	724	556	58	68
Millerton	520	320	188	36	51
<b>EBMUD System</b>	<b>767</b>	<b>648</b>	<b>471</b>	<b>61</b>	<b>75</b>

As of April 20, 2014



# Statewide Snow Water Content

Updated April 21<sup>st</sup>

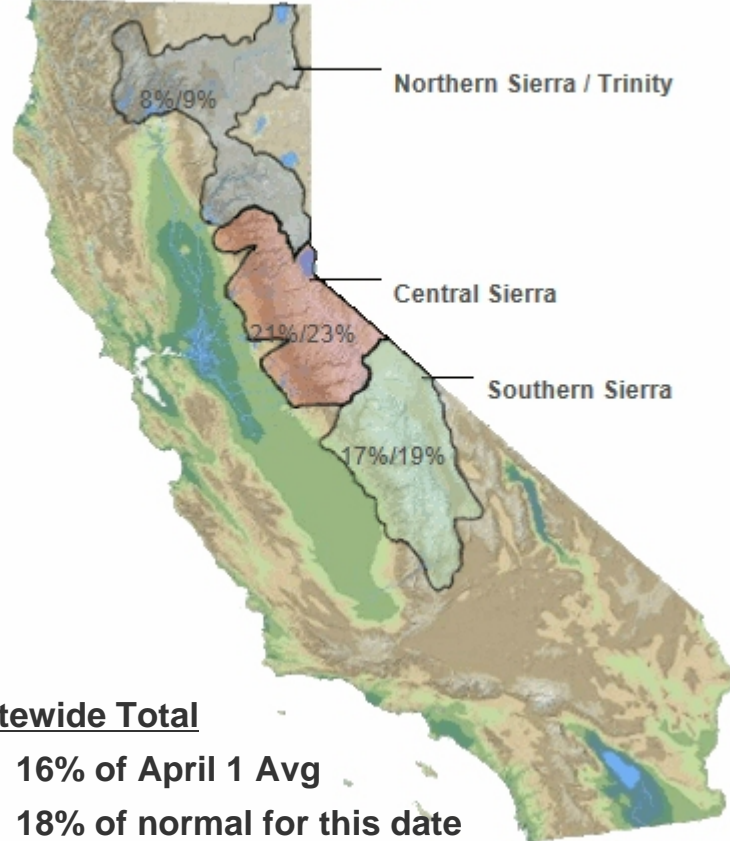


## Snow Water Equivalents

Provided by the California Cooperative Snow Surveys

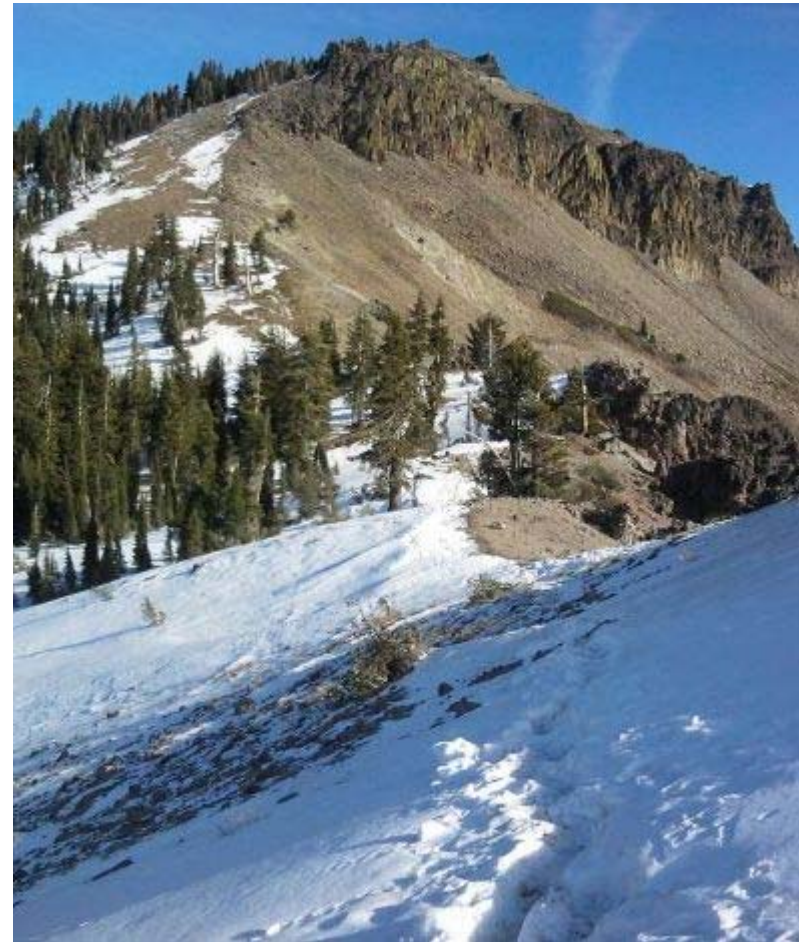
Data For: 21-Apr-2014

% Apr 1 Avg. / % Normal for this Date



### Statewide Total

- 16% of April 1 Avg
- 18% of normal for this date



# DWR – State Water Project (SWP)



Oroville Dam

## State Water Project

- Supplies 29 water agencies (25 million Californians and 750,000 acres of farmland)
- Delivers water to two-thirds of California's population

## Allocation Update (Apr 18)

- Increased to 5% allocation
- Initial allocation on Jan 31, 2014 was 0%
- Still lowest overall allocation in SWP history



# USBR – Central Valley Project (CVP)



## Allocation Update (April 18)

- North of Delta, Municipal & Industrial (M&I) – Water contractor serviced by Folsom Reservoir on American River
- Max annual drought supply = 66.5 TAF (50% of 133 TAF)

CVP Contractor	North of Delta	South of Delta
Agricultural (Ag)	0%	0%
Urban (M&I)	50%	50%
American River (M&I)	50%	
In Delta – Contra Costa	50%	
Settlement Contractors	75%	40%
Wildlife Refuges (Level 2)	75%	40%
Eastside Division	55%	
Friant (Class 1 / 2)	0% / 0%	



Folsom South Canal

# Current Precipitation & Snow

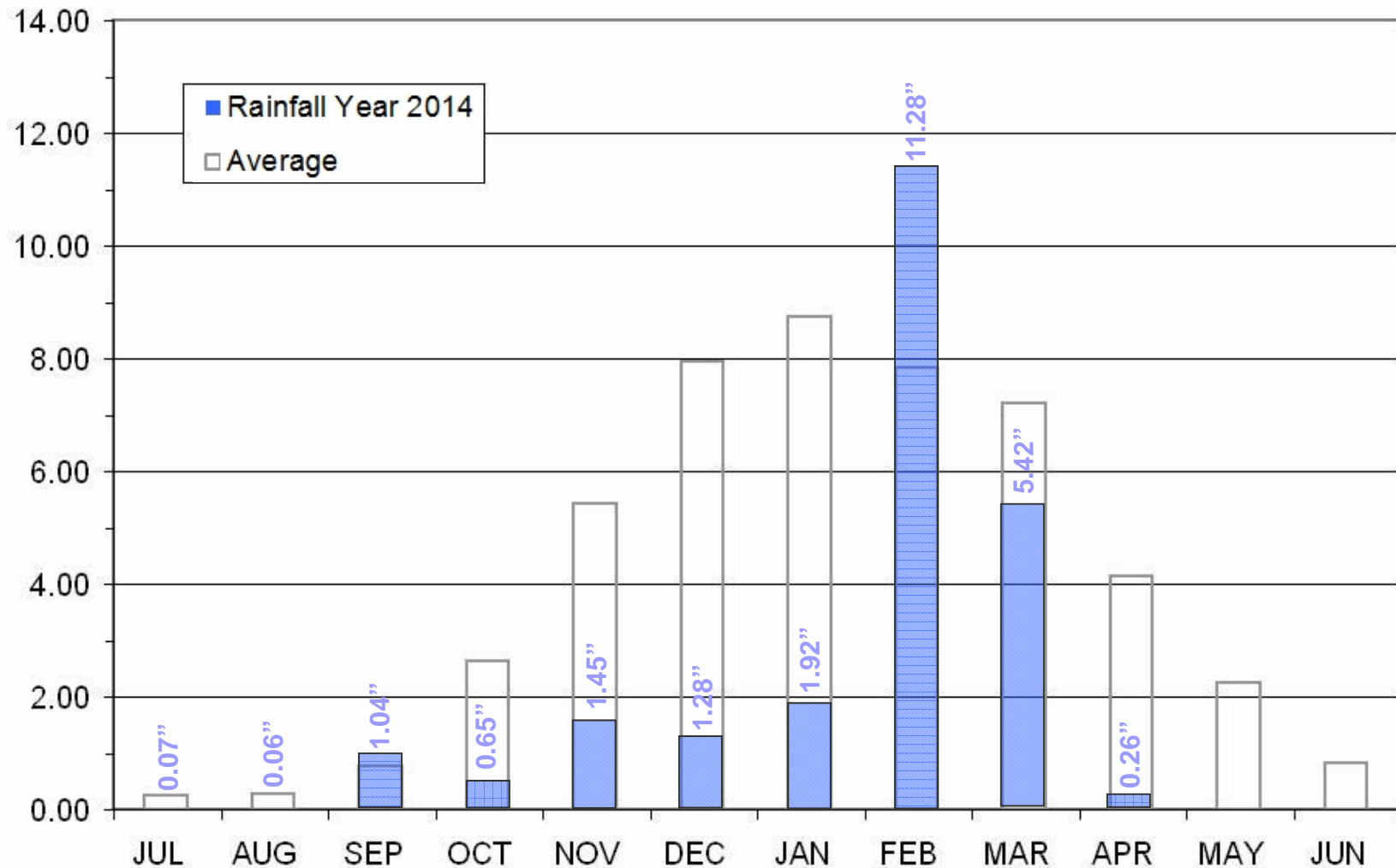


As of 04/20/14	Cumulative Precipitation	% of Average
<b>East Bay</b>		
East Bay Watershed	12.84"	51%
<b>Mokelumne Basin</b>		
4-Station Average	23.43"	53%
Caples Lake Snow Depth	14"	25%
Caples Lake Snow Water Content	9"	36%

# Current Mokelumne Precipitation



## Mokelumne 4-Station Average Precipitation (in)

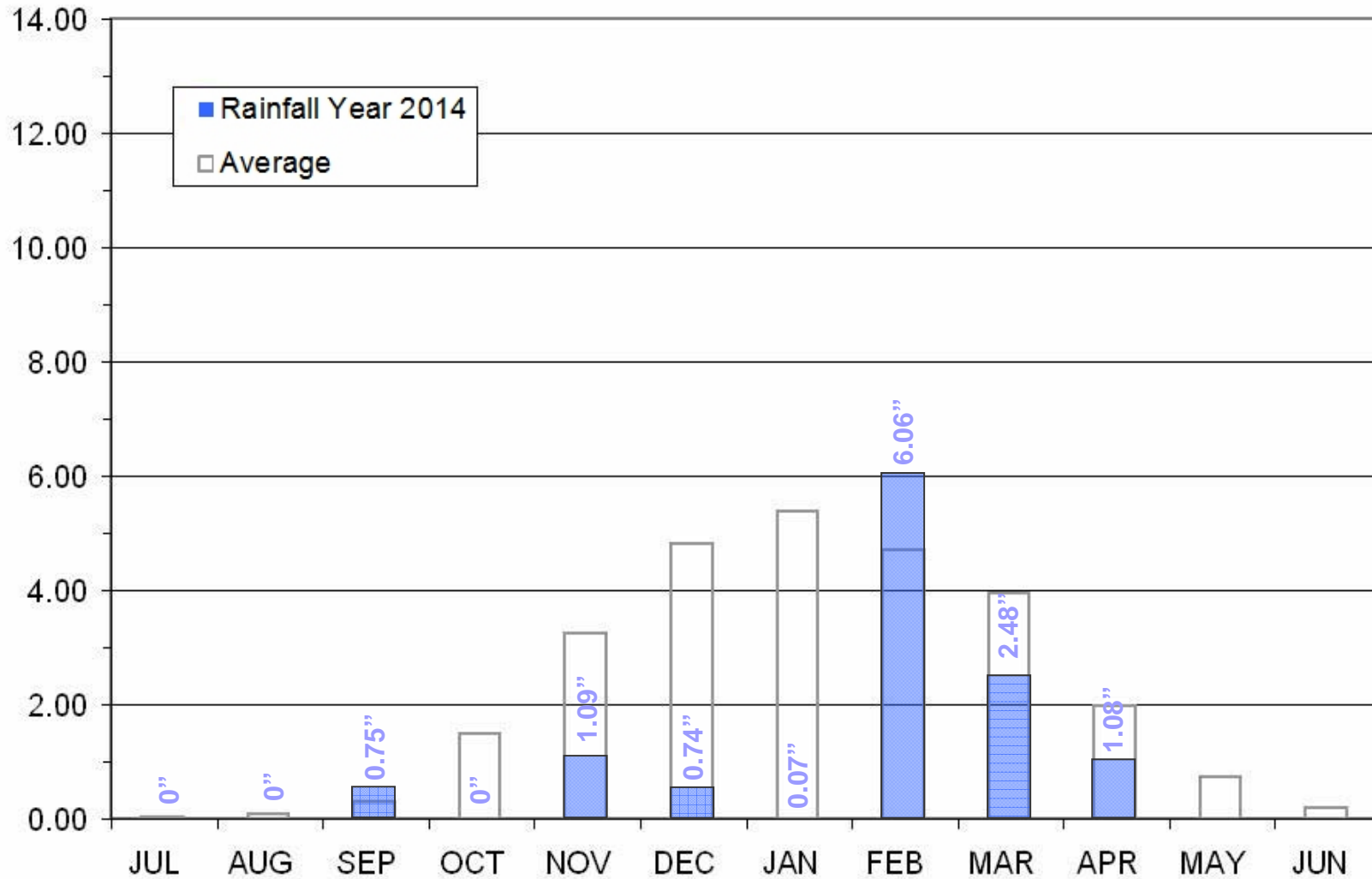




# Current East Bay Precipitation

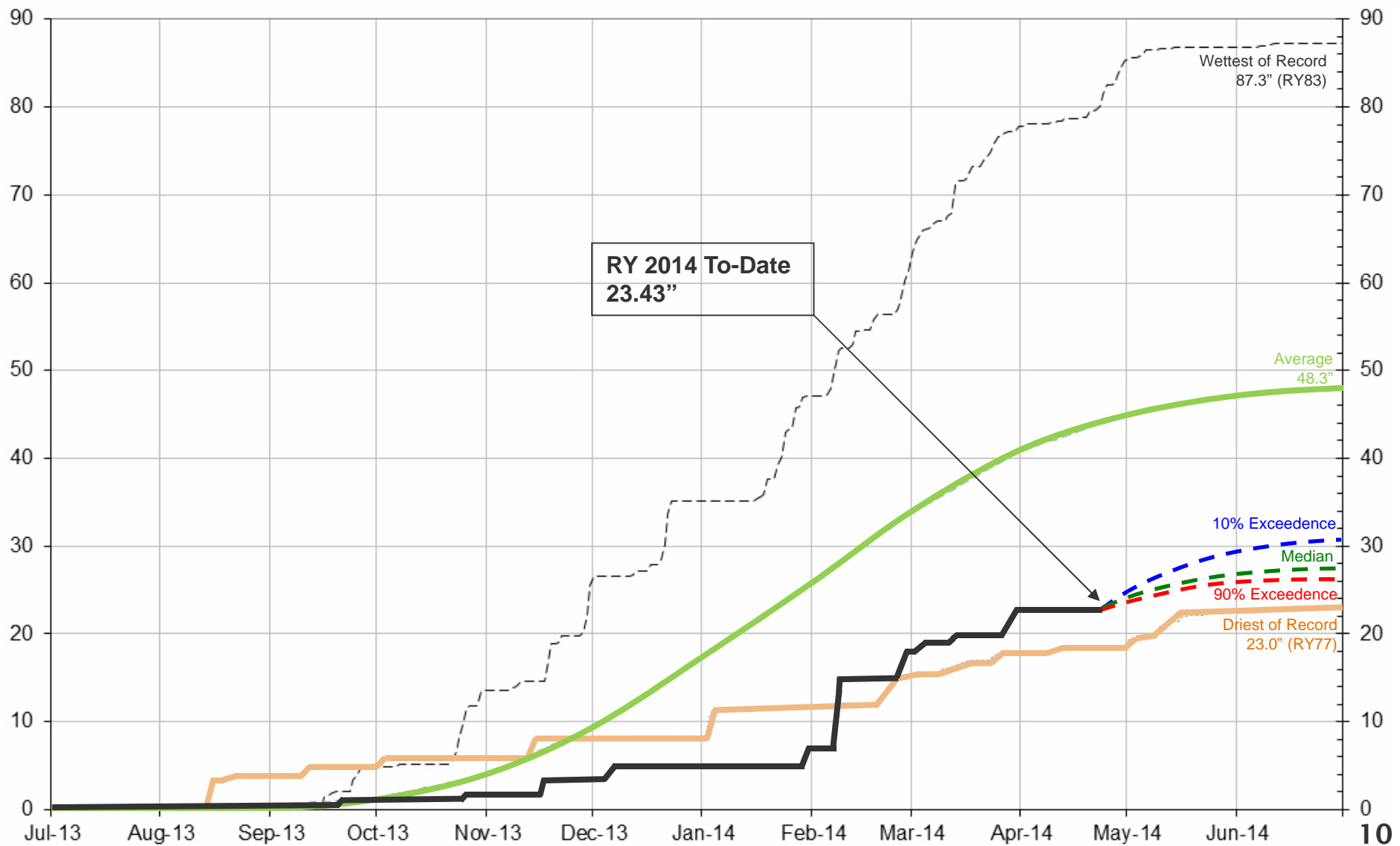


## East Bay Precipitation (in)



# Rainfall Year 2014 Projection

## Mokelumne Precipitation





# Current Reservoir Storage



As of 04/20/14	Current Storage	Percent of Capacity	Percent of Average
Pardee	163,280 AF	82%	89%
Camanche	179,960 AF	43%	59%
East Bay	127,400 AF	84%	90%
Total System	470,640 AF	61%	75%



# Water Supply Runoff Forecast (Projections as of April 22, 2014)

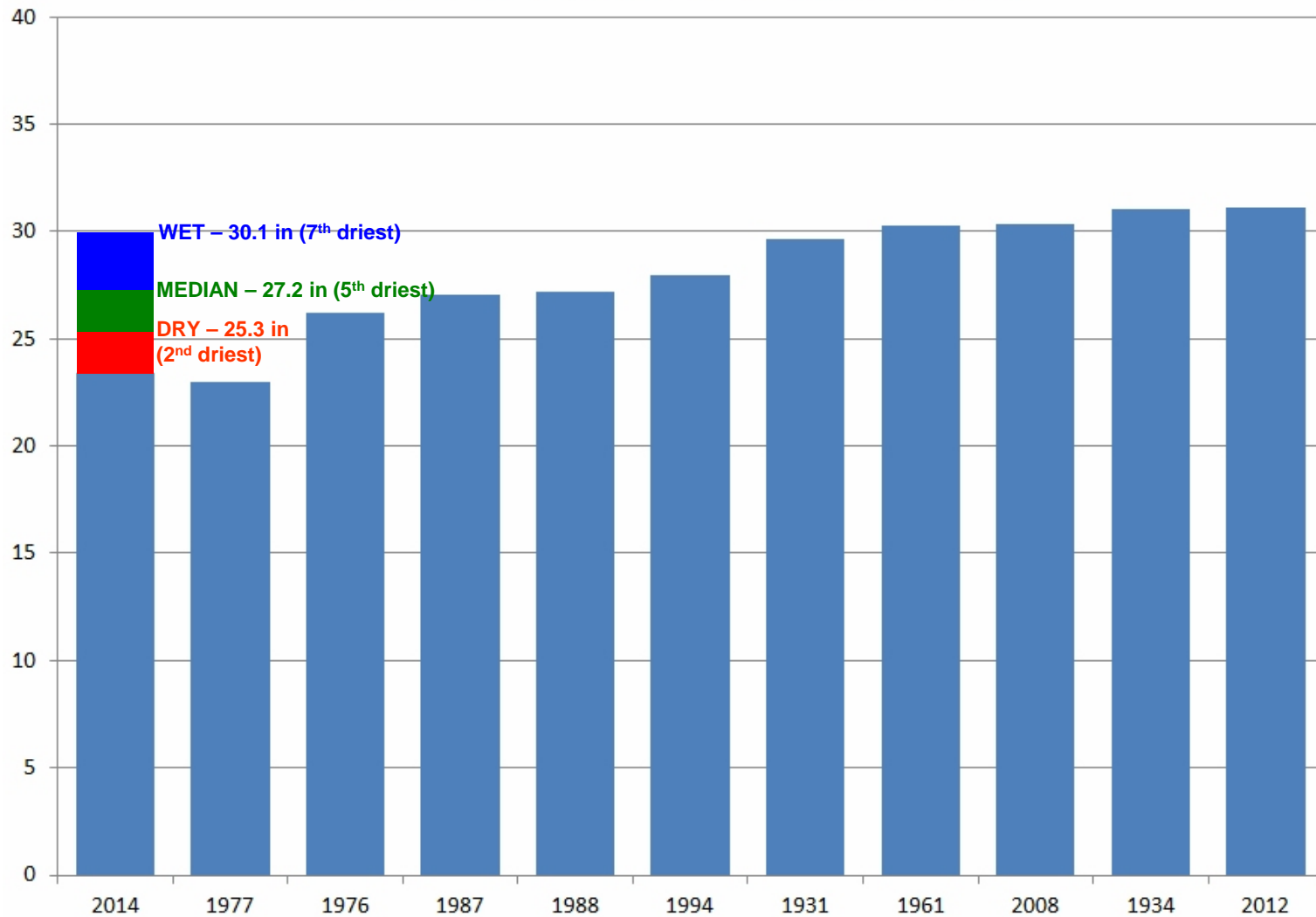


Forecast	Annual Runoff	Total System Storage (on Sept 30, 2014)
90% Exceedence (9 of 10 years are wetter)	190 TAF	370 TAF
50% Exceedence (5 of 10 years are wetter)	235 TAF	415 TAF
10% Exceedence (1 of 10 years is wetter)	300 TAF	490 TAF
Average Year	745 TAF	630 TAF

# Dry Year Comparison



Precipitation (in) - Top Ten Driest Rainfall Years



# Water Year 2014



- Rainfall Year 2014 is the 2<sup>nd</sup> driest year in the Mokelumne watershed
- 9% of the precipitation accumulation season remains
- Received about 140,000 acre-feet of runoff to date
- Projected end of September storage with median precipitation is 415,000 acre-feet





# WATER SUPPLY ENGINEERING DAILY REPORT

Monday, April 21, 2014

## RESERVOIR STORAGE AND ELEVATION

	<u>WATER SURFACE</u>		<u>STORAGE</u>		<u>MAXIMUM CAPACITY</u>		Release <u>Cfs</u>	Spill <u>Cfs</u>
	Elevation <u>Feet</u>	+Gain <u>-Loss</u>	+Gain <u>Ac-Ft</u>	-Loss <u>-Loss</u>	Elevation <u>Feet</u>	Storage <u>Ac-Ft</u>		
<u>MOKELUMNE</u>								
Pardee	551.13	0.03	163,340	60	567.65	197,950	11	0
Camanche	197.18	-0.14	179,290	-670	235.50	417,120	326	0
<u>EAST BAY</u>								
Briones	570.11	-0.33	56,240	-230	576.14	60,510	0	0
Chabot	218.52	-0.02	7,620	0	227.25	10,350	0	0
Lafayette	444.94	0	3,730	0	449.16	4,250	0	0
San Pablo	303.81	0.37	30,860	270	313.68	38,600	0	0
Upper San Leandro	446.75	-0.13	<u>28,910</u>	<u>-80</u>	459.98	<u>37,960</u>	0	0
Total East Bay Res.			<u>127,360</u>	<u>-40</u>		<u>151,670</u>		
<b>TOTAL SYSTEM STORAGE</b>			<b>469,990</b>	<b>-650</b>		<b>766,740</b>		

<b>DISTRIBUTION SYSTEM</b>		
<u>DISTRIBUTION RESERVOIRS</u>		
	Storage <u>MG</u>	Operating <u>Capacity</u>
Today	381	720
Total Previous Day	<u>369</u>	
Total Change	12	
<u>WATER PRODUCTION AND DEMAND</u>		
	Million <u>Gallons</u>	Capacity <u>MGD</u>
Lafayette WTP	12.7	25
Orinda WTP	105	190
San Pablo WTP	0	30
Sobrante WTP	0	50
Upper San Leandro WTP	23.8	45
Walnut Creek WTP	48.7	90
<b>TOTAL SURFACE PRODUCTION</b>	<b>190.2</b>	<b>430</b>
Miscellaneous(Estimated)	<u>0.4</u>	
<b>TOTAL WATER PRODUCTION</b>	<b>190.6</b>	
Change in Distribution System	12	
Wash Water from Distribution Sys.	<u>4.4</u>	
<b>SYSTEM DEMAND</b>	<b>174.1</b>	
East-of-Hills Demand	51.6	
West-of-Hills Demand	122.5	

<b>MOKELUMNE SYSTEM</b>		
<u>AQUEDUCT DELIVERIES</u>		
	<u>MG</u>	<u>Flow Conditions</u>
Line 1	0	Use for CVP Water
Line 2	0	Use for CVP Water
Line 3	<u>102</u>	GRAVITY
<b>TOTAL</b>	<b>102</b>	<b>158 Cfs</b>
<b>FSCC TO MOK AQUEDUCTS</b>		<b>90.2 MGD</b>
<u>RIVER FLOWS AND RELEASES</u>		
		<u>Cfs</u>
Mokelumne River Natural Flow		1737
Pardee Reservoir Inflow		232
Pardee Release to Camanche Res.		11
Pardee Release to JVID		13
Camanche Release to Mokel. River		326
<u>PG&amp;E CO. STORAGE (Acre-feet)</u>		
	<u>Storage</u>	<u>Change</u>
Old Reservoirs	12,419	20
Salt Springs Res.	67,095	2199
Lower Bear Res.	<u>32,724</u>	<u>767</u>
<b>Total</b>	<b>112,238</b>	<b>2986</b>

<b>RAW WATER TRANSMISSION</b>		
	<u>INPUT</u>	<u>DRAFT</u>
Briones Res.	0	202
San Pablo Res.	281	10
U. San Leandro Res.	<u>0</u>	<u>79</u>
<b>TOTAL</b>	<b>281</b>	<b>291</b>
<b>REMARKS</b>		
WID Canal Diversion = 44 cfs		
Mokelumne River below WID = 166 cfs		

<b>PRECIPITATION (Inches)</b>					
<u>STATION</u>	<u>THIS YEAR</u>			<u>AVERAGE YEAR</u>	
	<u>Today</u>	<u>Month</u>	<u>Season to-Date</u>	<u>Season to-Date</u>	<u>Total</u>
USL WTP	0	1.31	13.21	23.82	25.33
Orinda WTP	0	1.56	19.88	30.22	32.06
Lafayette Reservoir	0	0.85	12.47	26.65	28.18
Walnut Creek WTP	0	0.94	12.46	21.89	23.02
Camp Pardee	0	0.72	12.42	19.85	21.56
Salt Springs P.H.	0	0.14	24.65	41.18	45.51

PG&E data as of 4:00 pm previous date.  
 All other data as of midnight.  
 WTP capacities are sustainable rates.

<u>CAPLES LAKE (7,830 FT) DATA</u>		
	<u>Today</u>	<u>Average</u>
Snow Depth	7 Inches	55 Inches
Water Content	8.5 Inches	25.6 Inches