



*EAST BAY MUNICIPAL UTILITY DISTRICT*

# **GM's Report on Water and Wastewater Schedule of Rates and Charges and Setting Public Hearing Date**

May 12, 2015

# Agenda



- Budget and rates calendar
- Prop 218 rates and charges
- Other fees, charges, and regulations
- Next steps

# Budget and Rates Calendar



## **Budget Workshop #1**

March 24

- Biennial Budget FY16 & FY17
- FY16 & FY17 Prop 218 rates and charges

## **Budget Workshop #2**

April 14

## **Mail Proposition 218 Notice**

April 15 - April 24

## **Board Meeting**

**May 12**

- **GM's report on rates & charges**

## **Board Meeting**

June 9

- Public hearing on rates and charges
- Board consideration of budget and rates

## **FY16 Rates & Charges Effective**

July 1

# Prop 218 Rates and Charges

# Rates Based on Recently Completed COS Study



- Strategic plan called for an updated Cost of Service (COS) Study
- Retained leading consultants to conduct and advise study
  - Raftelis Financial Consultants, leading national rates and charges consultant
  - Best Best & Krieger, leading California law firm on Prop 218
- Concluded study in FY15
  - Forms legal and financial basis for rates
  - Particular focus on documenting COS basis for tiered rates, recycled water rates, and drought rates

# Water and Wastewater System FY16 & FY17 Proposed Rate Increases



	Proposed		Projected		
	FY16	FY17	FY18	FY19	FY20
<b>Water</b>	<b>8.0%</b>	<b>7.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>
<b>Wastewater</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>

# Combined Monthly Water and Wastewater Impacts—Average SFR



	FY15 Current	FY16 Proposed	Change		FY17 Proposed	Change	
<b>Water –</b> Normal rates 10 Ccf/mo	\$48.60	\$52.17	\$3.57	7.3%	\$55.83	\$3.66	7.0%
<b>Wastewater –</b> 6 Ccf/mo	\$19.25	\$19.01	-\$0.24	-1.3%	\$19.93	\$0.92	4.8%
<b>Total</b>	\$68.85	\$71.80	\$3.33	4.8%	\$75.76	\$3.96	5.5%

# Staged System of Drought Surcharges Added to Normal Rates



Stage	0	1	2	3	4
Demand Reduction		Voluntary 0-15%	Voluntary 0-15%	Mandatory 15%	Mandatory 15%
Supplemental Supplies			Up to 35,000 acre feet	35,000-65,000 acre feet	> 65,000 acre feet
Rates and Charges	Normal rates	Normal rates	Normal rates  + 8%	Normal rates  + 20%  Supersaver recognition*  Excessive use penalty*	Normal rates  + 25%  Supersaver recognition*  Excessive use penalty*

\*Supersaver recognition and excessive use penalty not subject to Prop 218 requirements.

# Drought Surcharge Bill Impacts— Stage 4—Single Family Residential



Impact of Water Charges and Drought Surcharges on Water Bill									Impact of Surcharge	
	Single Family Residential Use (CCF)	FY15 Bill	FY16 Bill	Increase from FY15	Change	FY17 Bill	Increase from FY16	Change	FY16	FY17
25 <sup>th</sup> Percentile	4	\$29.07	\$34.06	\$4.99	17.2%	\$36.49	\$2.43	7.1%	\$2.92	\$3.16
50 <sup>th</sup> Percentile	7	\$37.80	\$45.10	\$7.30	19.3%	\$48.34	\$3.24	7.2%	\$5.11	\$5.53
75 <sup>th</sup> Percentile	12	\$55.80	\$70.35	\$14.55	26.1%	\$75.39	\$5.04	7.2%	\$10.06	\$10.88
95 <sup>th</sup> Percentile	30	\$132.08	\$183.79	\$51.71	39.2%	\$196.99	\$13.20	7.2%	\$32.22	\$34.76
Average Single Family Residential Use	10	\$48.60	\$60.25	\$11.65	24.0%	\$64.57	\$4.32	7.2%	\$8.08	\$8.74

# Drought Surcharge and Excessive Use SFR Bill Impacts—Stage 4



Impact of Water Charges, Drought Surcharges, and Excessive Use  
Penalty on Water Bill for a Single Family Residential Use of 60  
Ccf/month Who Does Not Cut Back Use

Impact of  
Surcharge &  
Penalty

FY15 Bill	FY16 Bill	Increase from FY15	Change	FY17 Bill	Increase from FY16	Change	FY16	FY17
\$264.68	\$423.59	\$158.91	60.0%	\$451.19	\$27.53	6.5%	\$111.29	\$116.76

In Stage 4, use over 40 CCF/month penalized as Excessive Use at \$2/CCF.

# Monthly Customer Impacts— Wastewater Treatment



	Use (Ccf)	FY15 Current	FY16 Proposed	Change		FY17 Proposed	Change	
Single Family Residential Avg	6	\$19.25	\$19.01	-\$0.24	-1.3%	\$19.93	\$0.92	4.8%
Single Family Residential Max	9	\$21.61	\$22.13	\$0.52	2.4%	\$23.20	\$1.07	4.8%
Multi Family Residential 4 units	25	\$56.41	\$61.21	\$4.81	8.5%	\$64.16	\$2.95	4.8%
Commercial Office	50	\$105.61	\$128.77	\$23.16	21.9%	\$135.03	\$6.26	4.9%
Commercial Restaurant	50	\$229.61	\$246.27	\$16.66	7.3%	\$258.53	\$12.26	5.0%
Industrial	500	\$6,557.61	\$6,915.77	\$358.16	5.5%	\$7,261.03	\$345.26	5.0%

# Annual Customer Impacts— Wet Weather Facilities Charge



## Wet Weather Facilities Charge on Property Tax Bill

	FY15	FY16			FY17		
Single Family Residential	\$89.34						
Multi-Family Residential 2 Units	\$178.68						
Multi-Family Residential 4 Units	\$357.36	\$89.62	\$140.00	\$320.00	\$94.10	\$147.00	\$336.00
Multi-Family Residential 5+ Units	\$446.70	Small Lot 0 – 5,000 sq ft	Medium Lot 5,001 – 10,000 sq ft	Large Lot >10,000 sq ft	Small Lot 0 – 5,000 sq ft	Medium Lot 5,001 – 10,000 sq ft	Large Lot >10,000 sq ft
Commercial	\$134.00						
Industrial	\$134.00						
Parcels with Multiple Accounts	\$223 to \$670 +						

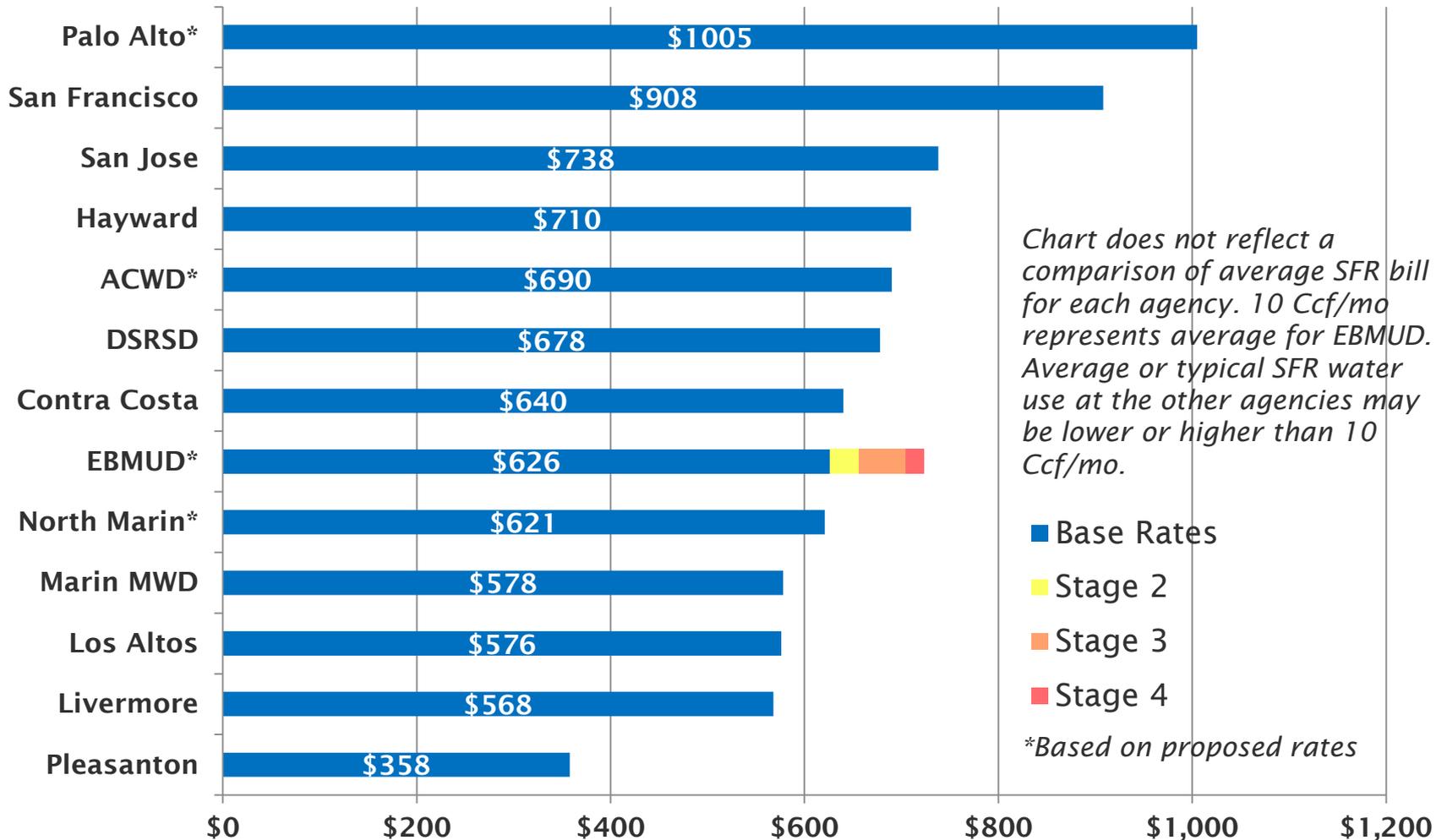
# Agency Comparison Consideration



- Average use varies by agency
  - District average is 10 CCF/month
  - Others may be higher or lower depending on:
    - Housing density,
    - Climate variation, and
    - Demographics
- Some agencies have instituted drought rates
- Schedule for rate changes vary

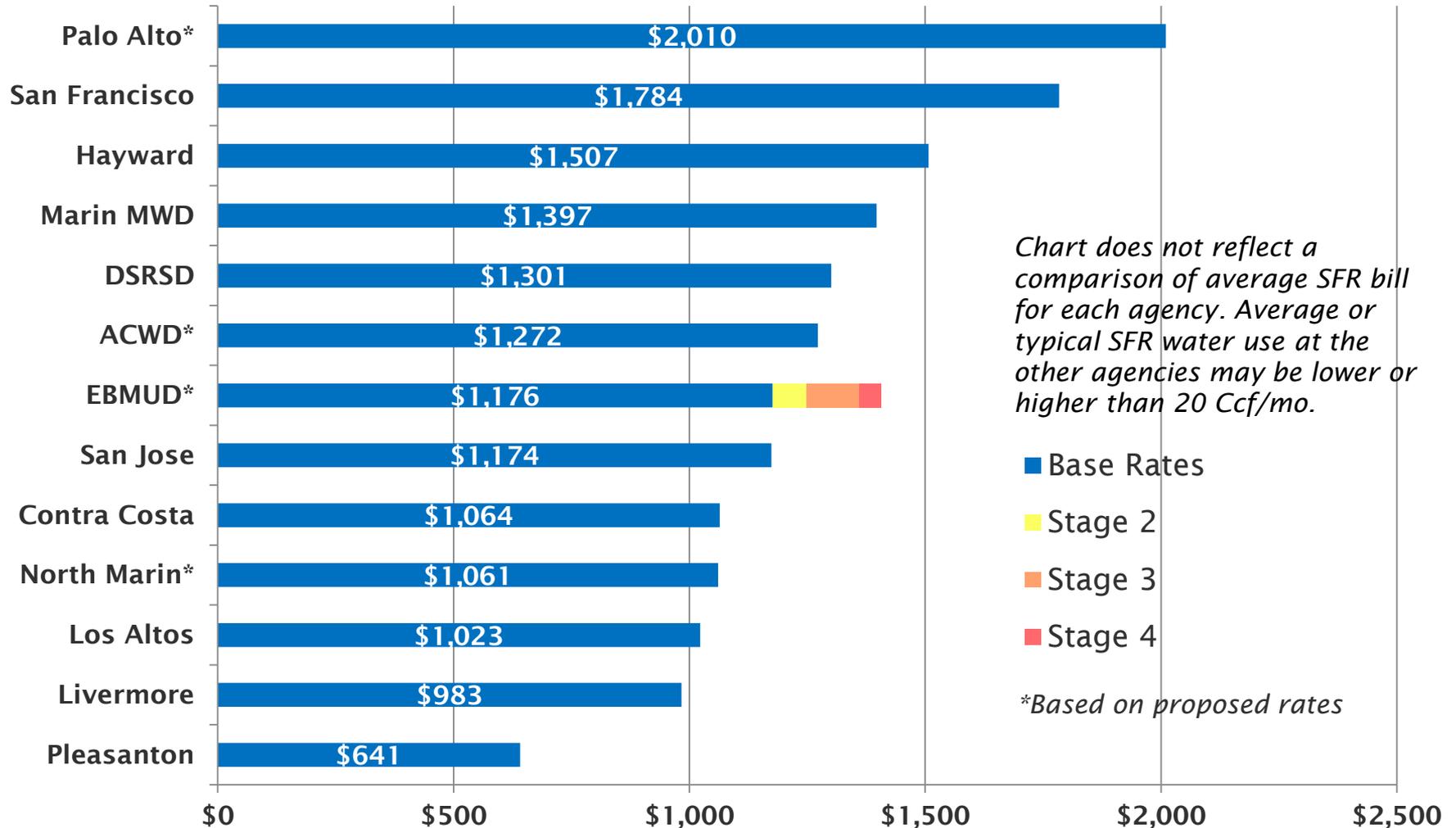
# Water Bills Calculated for 10 CCF/Mo

## Annual Charge for SFR – Effective 7/1/15



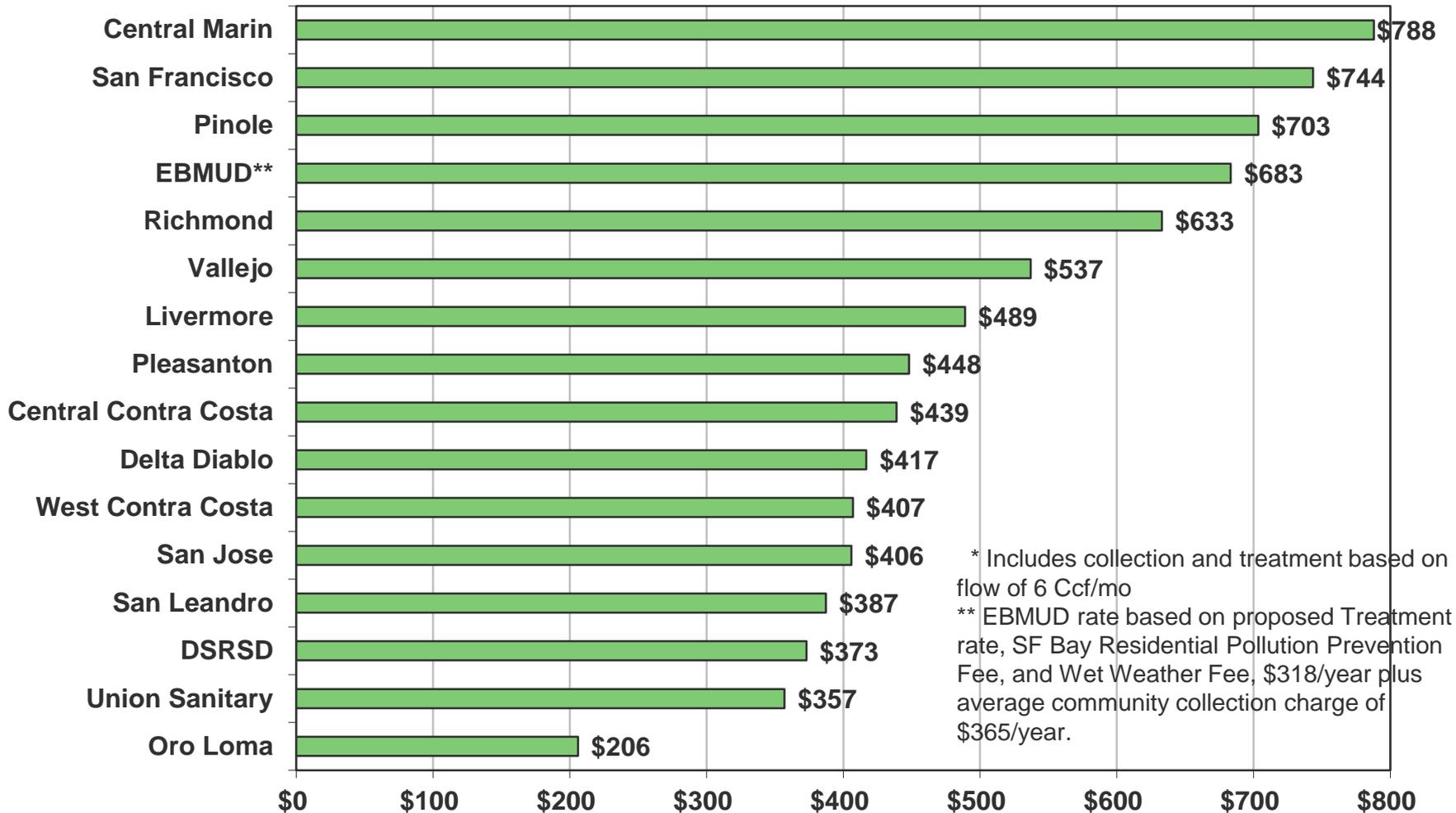
# Water Bills Calculated for 20 CCF/Mo

## Annual Charge for SFR – Effective 7/1/15



# Wastewater Bills Calculated for 6 CCF/Mo Discharge

## Annual Charge for SFR - Effective 7/1/15



# Non-Prop 218 Rates and Charges

# Other Fees, Charges and Regulations



- **Water Fees and Charges**

- Special Services: Service Trip Charge, Service Interruption Charges, and Hydrant Meter Account Site Visit Charge
- Recreation fees and other

- **Water Regulations**

- Minor changes to Explanation of Terms, Applying for Service, Standard Service, Guarantee Deposits, Prohibiting Wasteful Use of Water, Nonpotable Water Service, and Water Efficiency Requirements

- **Wastewater Fees and Charges**

- Increase permit fee for monitoring by 10.3% FY16 and 10.2% FY17

# Charges for Special Services – Field Enforcement Actions for Water Theft



Action	Current Charge	Proposed Charge
Turn-off service/trip charge	\$33	\$43
Pad lock service	\$33	\$43
Remove meter and plug/unplug service	\$199	\$350
Re-install service and lateral	\$6,200 +	\$6,200 +
Hydrant meter account site visit	\$167	\$215

# Proposed Water and Wastewater Capacity Charges Increase



- **Water System Capacity Charge (SCC)**
  - Adjust charges for 2015 ENR Construction Cost Index
  - Updated costs for the Future Water Supply component
  - SFR SCC increase 1.7-2.1% for Regions 1, 2 and 3
- **Wastewater Capacity Fee (WCF)**
  - Adjust charges for 2015 ENR Construction Cost Index
  - Implement 3<sup>rd</sup> year of 5 year phase-in of updated calculations from FY13; FY16
  - SFR WCF increase 15.7% from \$1,607 to \$1,860

# SCC Rates by Region and Sub Region



Current and Proposed SCC for 3/4*-inch Meters (Single Family) and 5/8-inch Meters (Non-Residential)						
CURRENT FY15			PROPOSED FY16		For Single Family Residential	
Region	Single Family	Non-Residential	Single Family	Non-Residential	Increase	% Increase
1	\$16,100	\$23,000	\$16,370	\$24,380	\$270	1.7%
2	27,830	41,360	28,410	42,220	580	2.1%
3	35,610	38,370	36,230	39,040	620	1.7%
3C	80,890	See Note 1	83,830	See Note 1	2,940	3.6%
3D	91,170	91,170	93,850	93,850	2,680	2.9%

\*If a combined fire service is required, a 1" or larger combined meter will be installed; SCC will be based on potable demand ¾" minimum.

Note 1: Calculated based on a 1993 Agreement with HCV & Associates Ltd., Wiedemann Ranch, Inc., and Sue Christensen.

# Recommended Board Action and Next Steps



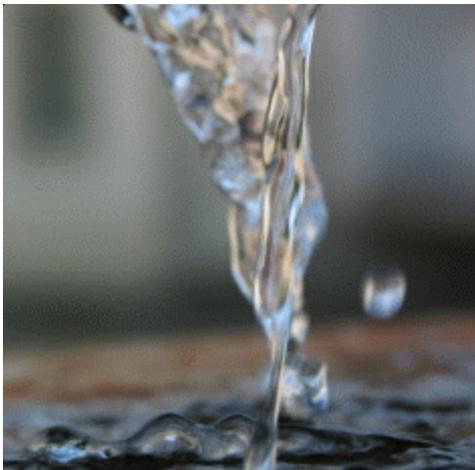
- File GM Report and Recommendation
- Set Public Hearing for June 9, 2015

# **Water Supply Briefing**

Water Operations Department

May 12, 2015

# Water Supply Briefing



- Current Water Supply
- Water Supply Projections
- Drought Operations

# Current Water Supply

## Precipitation & Snow



Mokelumne Precipitation

26.14"

(57% of average)

East Bay Precipitation

19.16"

(73% of average)

5% of the precipitation  
accumulation season remaining

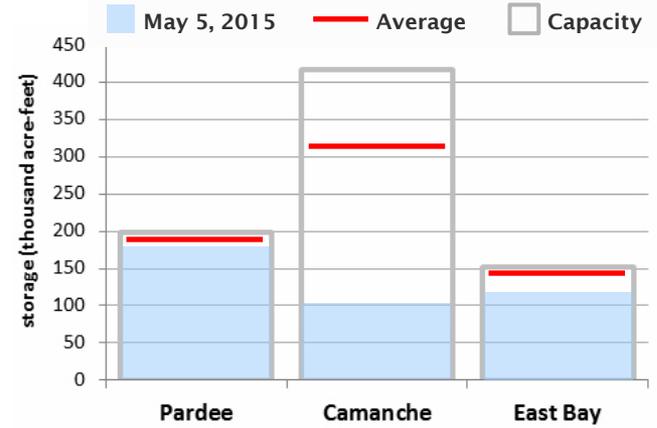


# Current Water Supply

## Reservoir Storage



Total System Storage  
392,480 acre-feet  
(62% of avg, 51% of capacity)



# Water Supply Projections

## Mokelumne Runoff



Actual Runoff Received 185 TAF

+ Projected Runoff To-Come 15 to 45 TAF

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Total WY15 Runoff 200 to 230 TAF



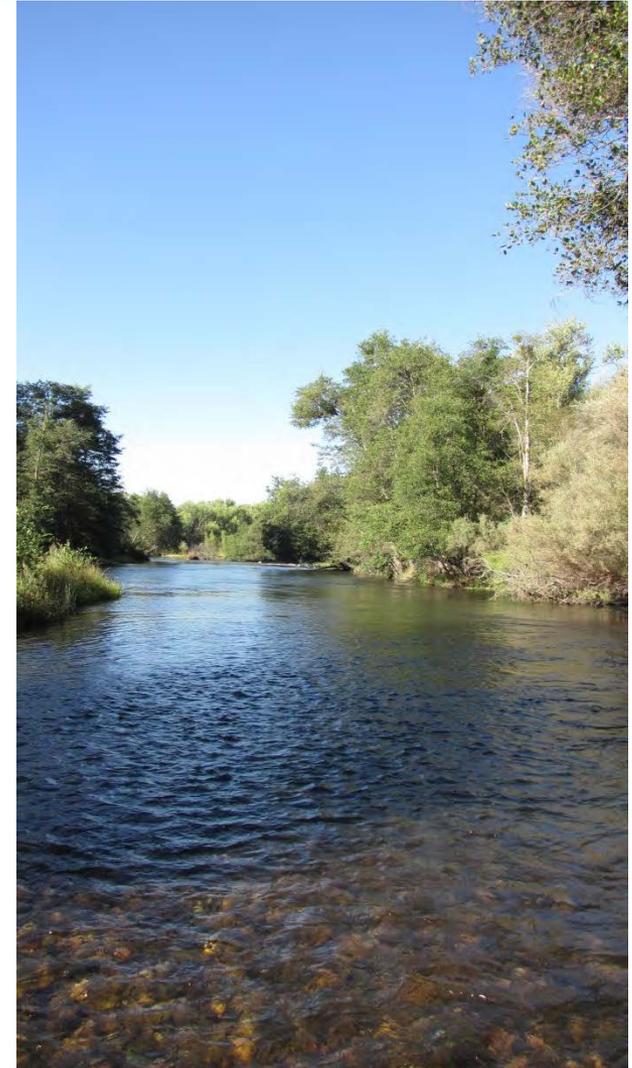
Ernst Schuetz

# Water Supply Projections

## Mokelumne River Curtailment



- State Water Resources Control Board notice posted on April 23, 2015
- Curtailment of post-1914 appropriative right diversions from San Joaquin River watersheds
- Reduces cold water storage for fish habitat preservation
- Could reduce EBMUD storage by 0 to 30 TAF



# Water Supply Projections

## Total System Storage



<b>Runoff</b>	<b>Total System Storage*</b> (no supplemental supply)	<b>Total System Storage*</b> (with CVP supply)
200 TAF	285 TAF	310 TAF
230 TAF	295 TAF	325 TAF

\*Projected storage on September 30, 2015

# Water Supply Projections

## Total System Storage

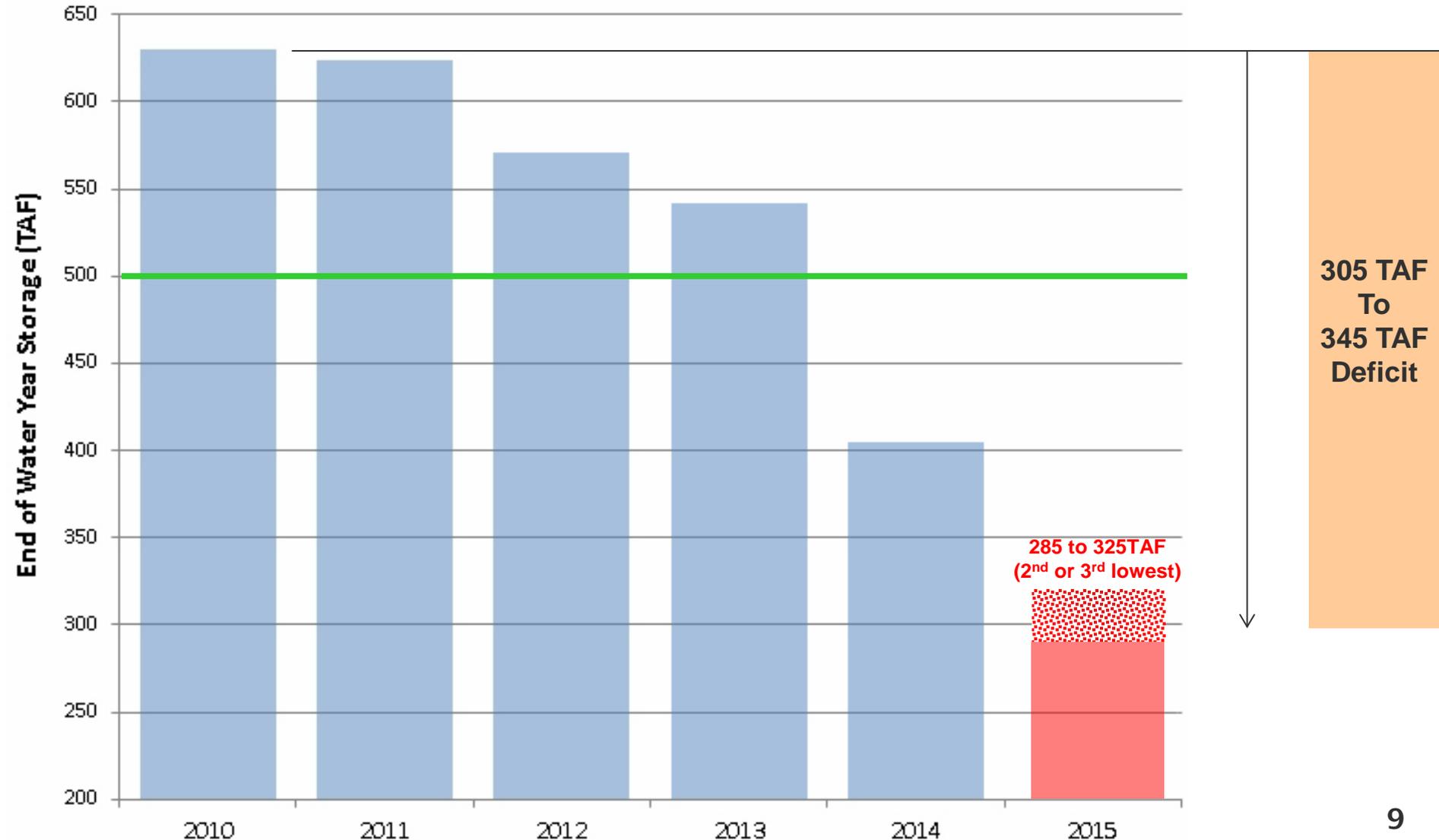


What Factors Affect the End of Water Year Total System Storage?

Factor	Total System Storage Change
Water Transfers	Increase
Diversion Curtailment	Decrease
Upstream Releases	Varies
Customer Demand	Varies
Gainsharing	Varies

# Water Supply Projections

## 4 Year Storage Decline



# WY15 Drought Operations



## CONSERVATION



## FREEPORT

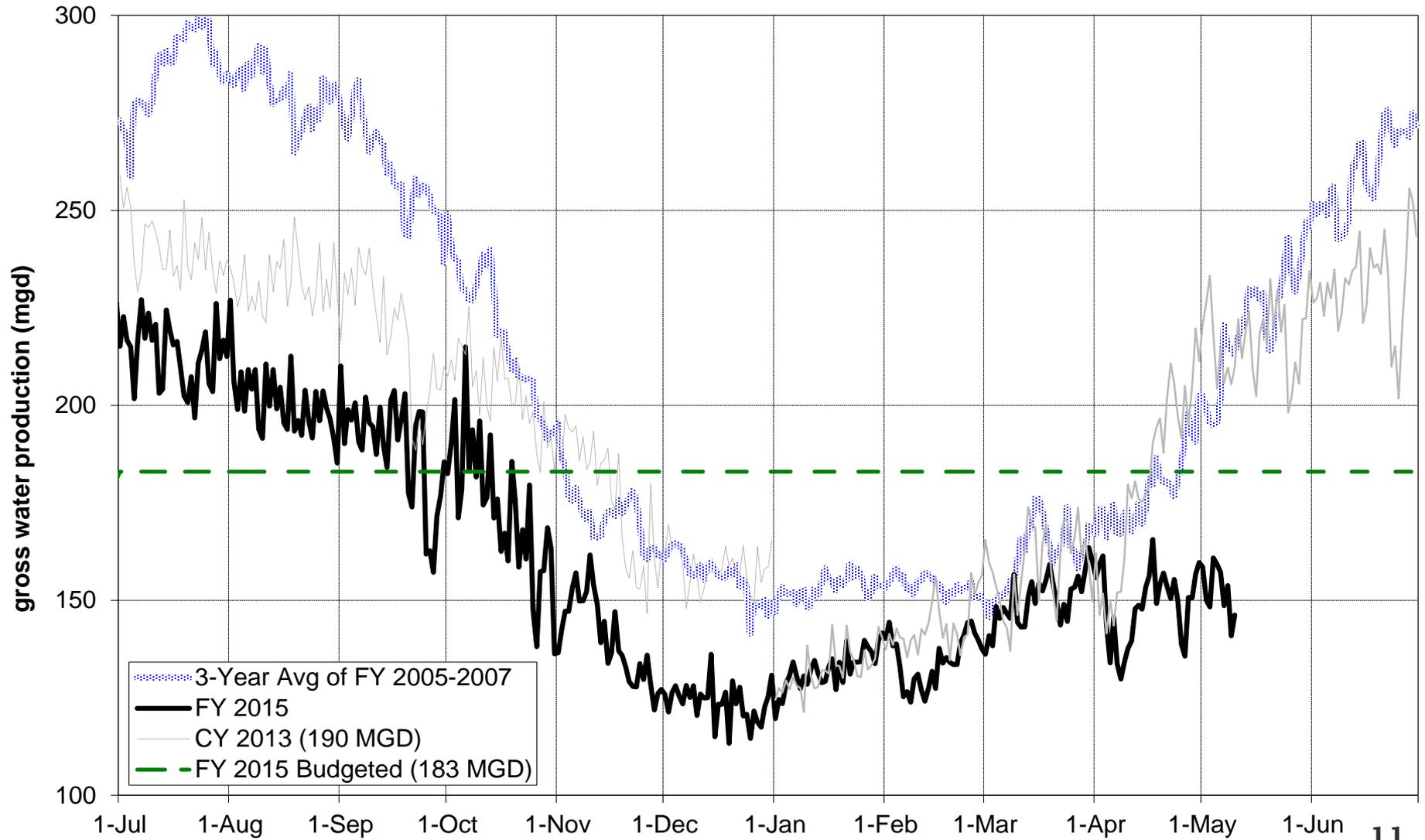
## RECYCLING



## INTERTIES

# WY15 Drought Operations

## Gross Water Production



# WY15 Drought Operations

## Customer Demand Savings



Calendar Year	Savings Rate (2013 Baseline)	Savings Rate (Avg of 2005-2007 Baseline)
2014	13%	20%
2015	10%	15%

# WY15 Drought Operations

## Freeport Regional Water Project



- Initiating 33,250 acre-feet delivery of Central Valley Project water
- Coordinated operation
  - Sacramento County Water Agency
  - U.S. Bureau of Reclamation
- 90 million gallons per day
- Approximately 7,000 acre-feet delivered since April 15



# WY15 Drought Operations

## Supplemental Supply – Transmission

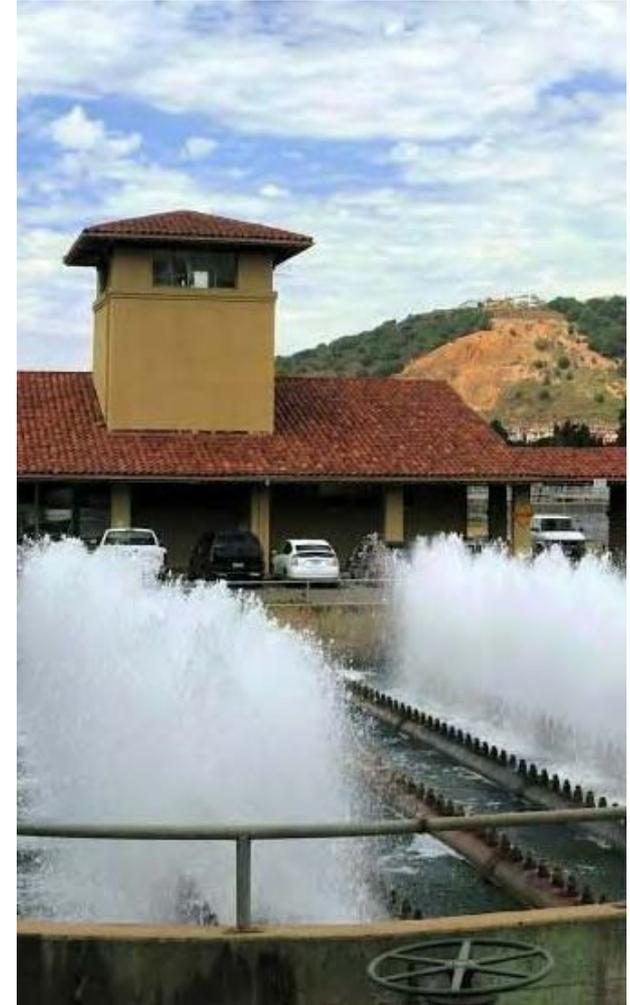


# WY15 Drought Operations

## Supplemental Supply - Treatment & Distribution



- Maximize Sobrante and Upper San Leandro WTP production
- Deliver supplemental supply to about 500,000 customers in northern and southern portions of service area
- Meet all drinking water standards
- Algae blooms in San Pablo and Upper San Leandro Reservoirs
- May experience taste and odor differences in water



# WY15 Drought Operations

## Cold Water Requirements

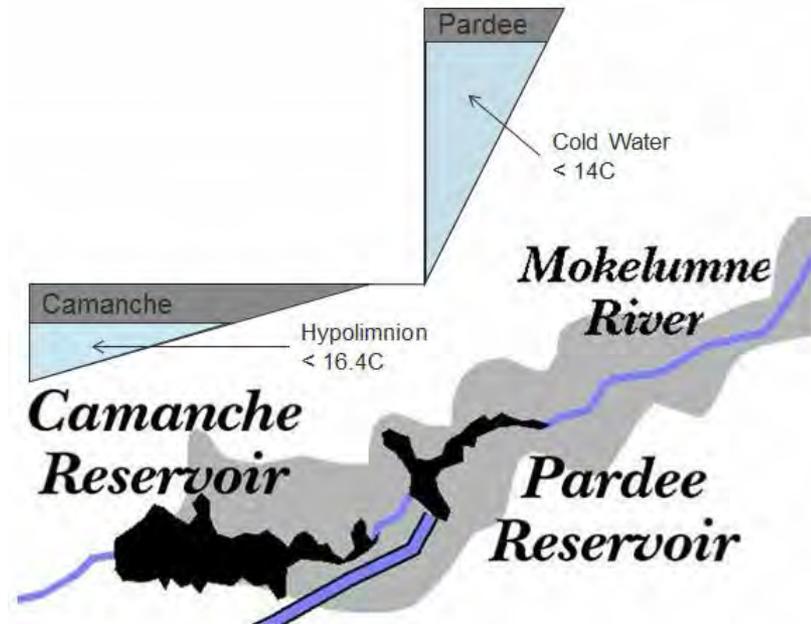


### Joint Settlement Agreement (USFWS, CA DFW, EBMUD)

- Protects fish resources on the lower Mokelumne River ecosystem
- Use best efforts to maintain 28 TAF of cold water ( $16.4^{\circ}\text{C}$ ) in Camanche Reservoir through October

### Current Cold Water Condition

- Camanche Reservoir 30 TAF
- Pardee Reservoir ~90 TAF
- Less runoff and storage in WY15 make it difficult to meet requirement



# WY15 Drought Operations

## Cold Water Management

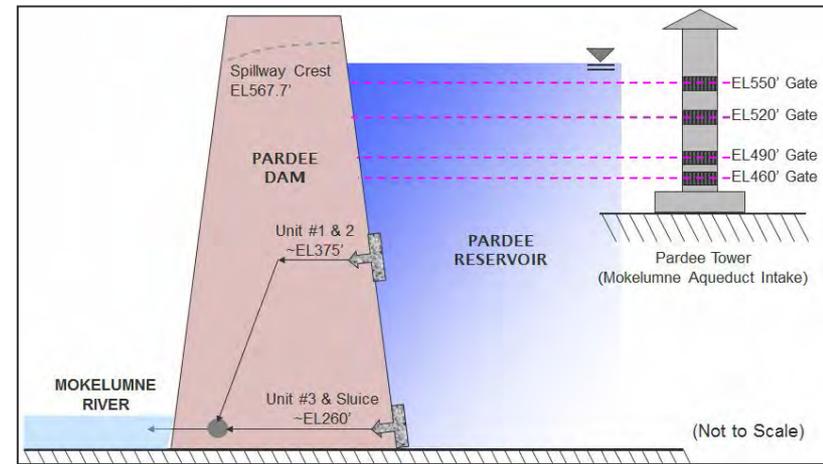
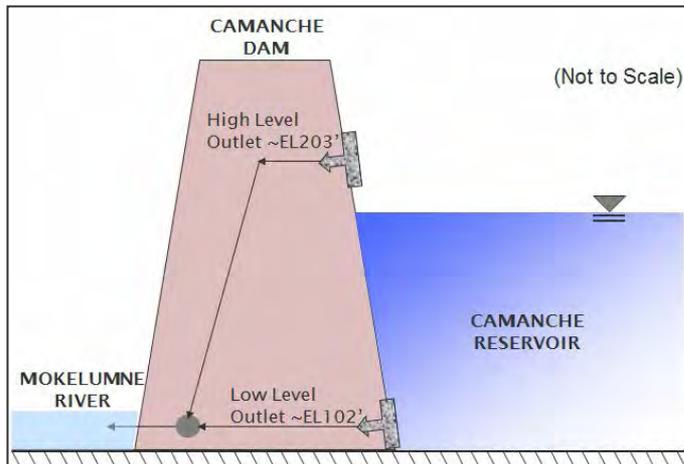


### Cold Water Management Tools

- Maintain Pardee Reservoir storage high in spring/summer
- Pulse cold water releases from Pardee to Camanche Reservoir
- Divert warmer water from Pardee Tower to Mokelumne Aqueducts

### Customer Impacts

- May experience taste and odor differences (warm water diversions may have different water quality)



# Water Year 2015

## EBMUD Water Supply Review



- Mokelumne Precipitation
  - RY2015 = 2<sup>nd</sup> driest year
  - RY2012-2015 = driest 4-year period
  - 5% of precipitation season remaining
- Mokelumne River basin runoff is 185 TAF
- Projected end of water year storage is 310 to 325 TAF (includes CVP and does not include the impact of curtailment)

# The 2015 Drought Plan



Supplemental Supply

+



Customer Rationing

# A Community Effort to Manage the Drought!

# Looking Forward to a Snowy Winter in Water Year 2016!



# WATER SUPPLY ENGINEERING DAILY REPORT

Monday, May 11, 2015

## 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	557.2	0.01	175560	20	567.65	197950	11	0
Camanche	177.9	-0.15	100770	-500	235.5	417120	231	0
<u>EAST BAY</u>								
Briones	572.91	-0.05	58200	-40	576.14	60510	0	0
Chabot	217.99	-0.02	7470	-10	227.25	10350	0	0
Lafayette	443.34	-0.01	3540	0	449.16	4250	0	0
San Pablo	291	-0.07	22300	-40	313.68	38600	0	0
Upper San Leandro	438.41	0.19	<u>24170</u>	<u>100</u>	459.98	<u>37960</u>	0	0
Total East Bay Res.			<u>115680</u>	<u>10</u>		<u>151670</u>		
<b>TOTAL SYSTEM STORAGE</b>			<b>392010</b>	<b>-470</b>		<b>766740</b>		

<b>DISTRIBUTION SYSTEM</b>		
<u>DISTRIBUTION RESERVOIRS</u>		
	Storage <u>MG</u>	Operating <u>Capacity</u>
Today	402	720
Total Previous Day	<u>405</u>	
Total Change	-3	
<u>WATER PRODUCTION AND DEMAND</u>		
	Million <u>Gallons</u>	Capacity <u>MGD</u>
Lafayette WTP	8.2	25
Orinda WTP	52.7	190
San Pablo WTP	0	30
Sobrante WTP	38.1	50
Upper San Leandro WTP	27.8	45
Walnut Creek WTP	37.6	90
<b>TOTAL SURFACE PRODUCTION</b>	<b>164.4</b>	<b>430</b>
Miscellaneous(Estimated)	0.4	
<b>TOTAL WATER PRODUCTION</b>	<b><u>164.8</u></b>	
Change in Distribution System	-3	
Wash Water from Distribution Sys.	1.8	
<b>SYSTEM DEMAND</b>	<b>165.9</b>	
East-of-Hills Demand	52.2	
West-of-Hills Demand	113.7	

<b>MOKELUMNE SYSTEM</b>			
<u>AQUEDUCT DELIVERIES</u>			
	<u>MG</u>	<u>Flow Conditions</u>	
Line 1	0	SHUTDOWN	
Line 2	0	SHUTDOWN	
Line 3	<u>92.4</u>	<u>THROTTLE</u>	
<b>TOTAL</b>	<b>92.4</b>	<b>143 Cfs</b>	
<u>FSCC to MOK AQUEDUCTS (Measured at Brandt), MG</u>			
Mok 1	39.6		
Mok 2	<u>50.3</u>		
	<b>89.9 MG</b>		
<u>RIVER FLOWS AND RELEASES</u>			
		<u>Cfs</u>	
Mokelumne River Natural Flow		660	
Pardee Reservoir Inflow		187	
Pardee Release to Camanche Res.		11	
Pardee Release to JVID		0	
Camanche Release to Mokel. River		231	
<u>PG&amp;E CO. STORAGE (Acre-feet)</u>			
	<u>Storage</u>	<u>Change</u>	<u>Maximum Capacity</u>
Old Reservoirs	15291	17	26560
Salt Springs Res.	62382	805	141857
Lower Bear Res.	<u>31495</u>	<u>116</u>	<u>52025</u>
<b>Total</b>	<b>109168</b>	<b>938</b>	<b>220442</b>

<b>RAW WATER TRANSMISSION</b>		
	<u>INPUT</u>	<u>DRAFT</u>
Briones Res.	0	18
San Pablo Res.	91	121
U. San Leandro Res.	184	92
<b>TOTAL</b>	<b>275</b>	<b>231</b>
<b>REMARKS</b>		
WID Canal Diversion = 113 cfs		
Mokelumne River below WID = 20 cfs		

<b>PRECIPITATION (Inches)</b>					
<u>STATION</u>	<u>THIS YEAR</u>			<u>AVERAGE YEAR</u>	
	<u>Today</u>	<u>This Month</u>	<u>Season to-Date</u>	<u>Season to-Date</u>	<u>Season Total</u>
USL WTP	0	0	20.32	24.65	25.33
Orinda WTP	0	0	23.86	31.26	32.06
Lafayette Reservoir	0	0.01	18	27.53	28.18
Walnut Creek WTP	0	0.01	18.55	22.52	23.02
Camp Pardee	0	0.36	17.76	20.75	21.56
Salt Springs P.H.	0	1.03	25.67	43.18	45.51
<u>CAPLES LAKE (7,830 FT) DATA</u>					
	Today	Average			
Snow Depth	0 Inches	32 Inches			
Water Content	0.0 Inches	15.9 Inches			

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

