

Extend Standby Bond Purchase Agreement For Water Revenue Bond Series 2008 A-1 and A-4

Board of Directors

October 25, 2016

FY17 Proposed Debt Issuance



Category	Description	Issue/ Approximate Size	Date of Board Action	Pricing or Issuance Date
Administration of Existing Debt Portfolio	1. Extend or replace Wells Fargo Bank Standby Bond Purchase Agreement for Water Series 2008A-1 and A-4	Water 2008A-1: \$32.4 million Water 2008A-4: \$24.3 million	10/25/2016	12/1/2016
New Money Needs	2. Issue additional “new money” Wastewater Revenue Bonds	Water: \$111 million Wastewater: \$24 million	4/25/2017	6/2017
Potential Market Opportunities	3. Opportunistic Water and Wastewater restructurings for de-risking and fixed rate refundings	Based on market opportunities	TBD	TBD

Note: Dates are approximate and subject to change.

Liquidity Support Series 2008A Bonds



- As variable rate demand bonds, the District's 2008A bonds require liquidity support
- This support is provided in the form of a standby bond purchase agreement (SBPA)
- The district's SBPA with Wells Fargo is set to expire December 9, 2016
- Wells Fargo has offered to extend the agreement an additional three years with all the same terms
 - This includes a fee of 27 basis points per year that is much lower than recent market comparables

Liquidity Providers for Series 2008A Bonds



- Current SBPA providers: Wells Fargo & US Bank
 - Entered into current agreement with Wells Fargo in 2013
 - Wells Fargo was lowest cost out of 13 RFP respondents

	Liquidity Provider	Principal outstanding (000)	Term End	Liquidity Fee	Liquidity Annual Cost
2008 A-1	Wells Fargo	\$32,395	12/10/16	27 bp	\$87,467
2008 A-2	US Bank	\$24,285	7/2/18	35 bp	\$84,998
2008 A-3	US Bank	\$24,285	7/2/18	35 bp	\$84,998
2008 A-4	Wells Fargo	\$24,285	12/10/16	27 bp	\$65,570

Offer To Maintain Current Fee In Rising Rate Environment



- Wells Fargo's offer of 27 bp annual fee for 3 years is very competitive



- Lower than recent market comparables provided by Financial Advisors
- Lower than bids received Dec. 2015 from RFP for similar liquidity facility
- Each basis point costs roughly \$18,000 over three year term
- Savings over 3-years range from approximately \$81,000 to \$415,000
- Selecting a new provider also adds estimated \$230,500 cost of issuance

Alternative is Costly



- Not extending the SBPA agreement with Wells Fargo may result in penalty interest cost of approximately \$370,000 per month until bonds are refunded
 - District would draw on the SBPA before it expires
 - Wells Fargo would own the bonds
 - Interest on the bonds would be at the estimated penalty rate of 8%
 - The District would also incur costs of issuance for refunding debt
- Drawing on the SBPA could also have a negative impact on the District's reputation with rating agencies, investors, and other market participants

Questions



Water Supply Board Briefing

Water Operations Department

October 25, 2016

Water Supply Briefing

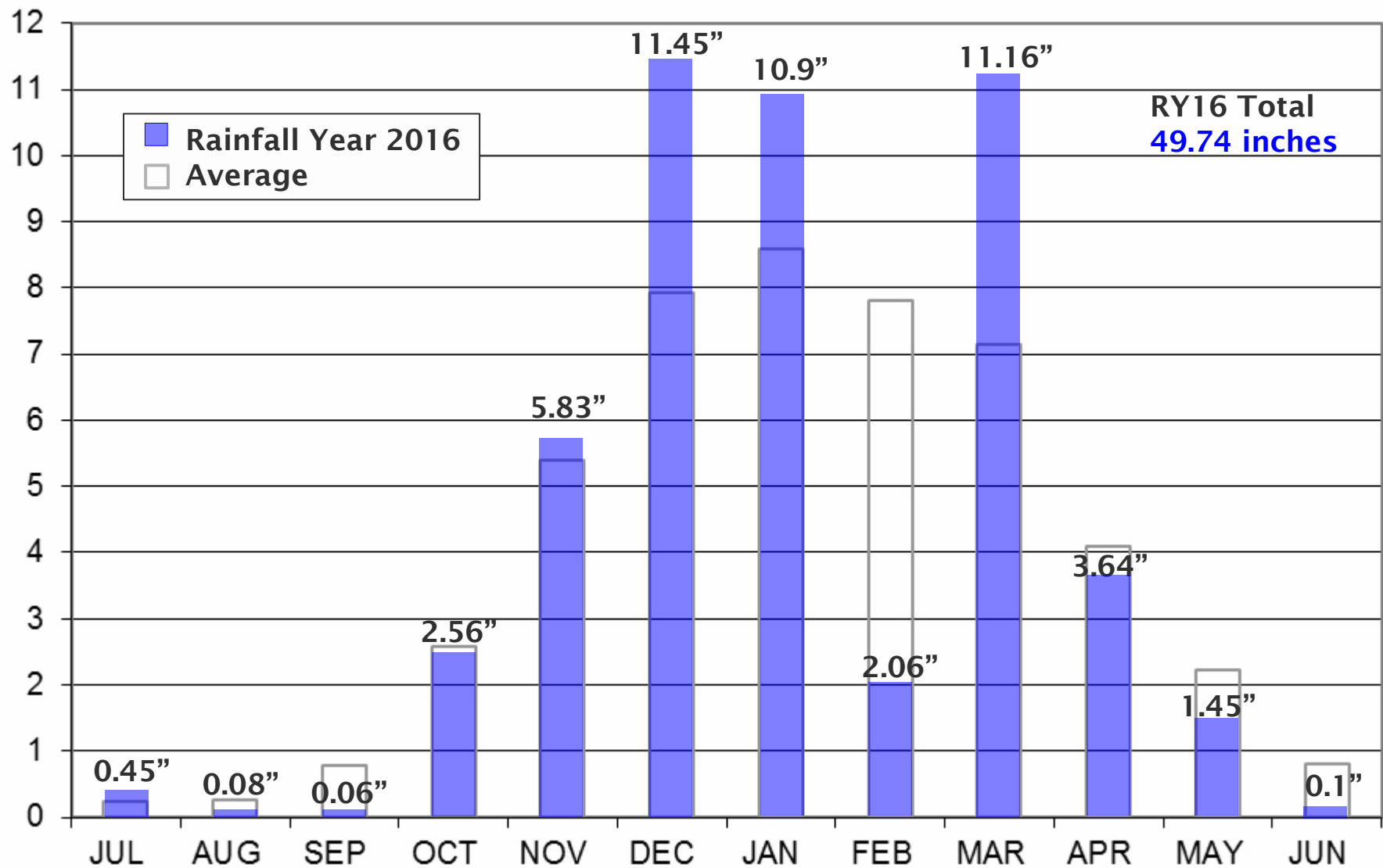


- Water Year 2016 Review
- Current Water Supply
- Water Supply Operations
- Water Supply Projections



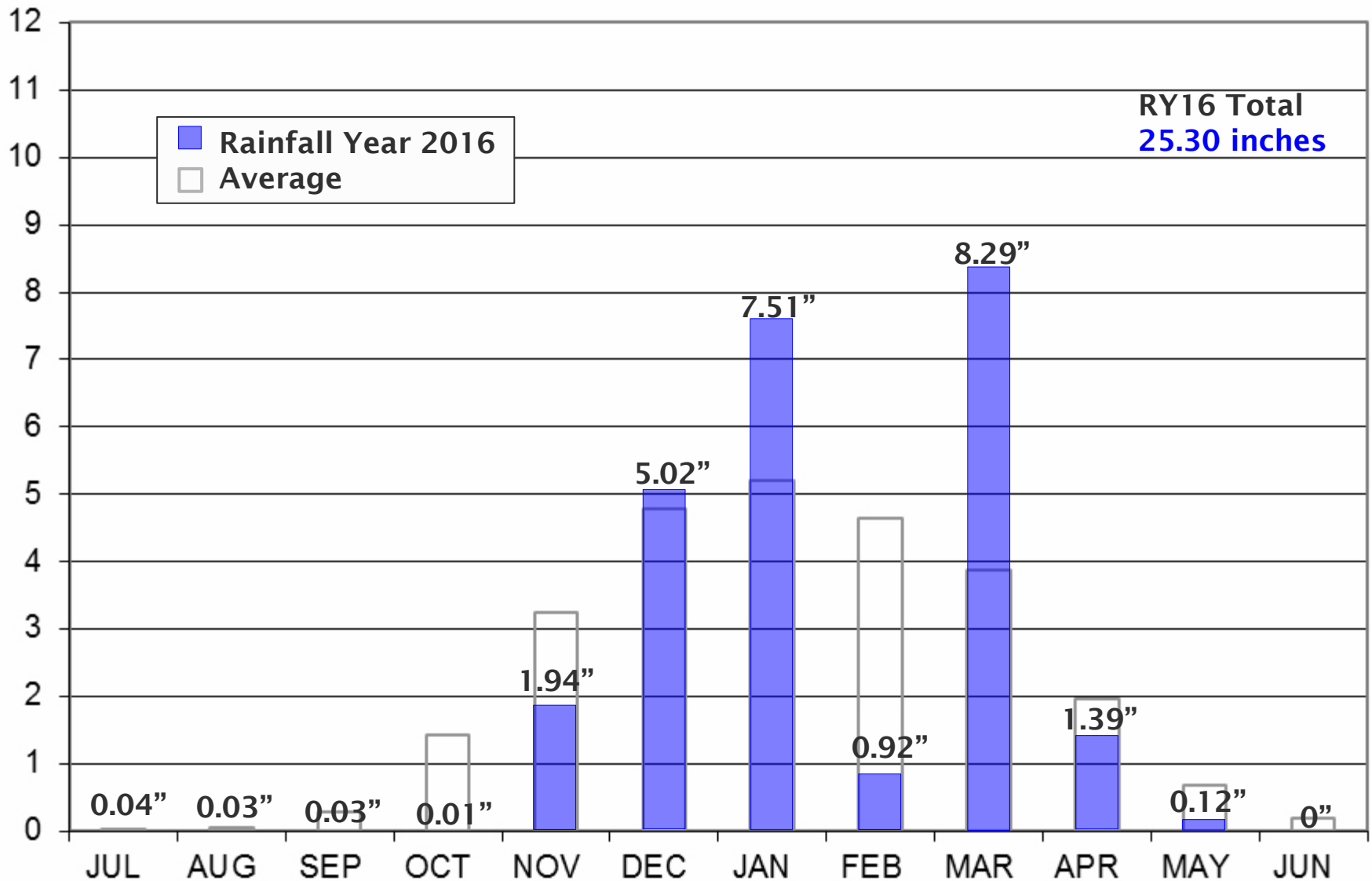
Water Year 2016 Review

Mokelumne Precipitation



Water Year 2016 Review

East Bay Precipitation



Water Year 2016 Review

Runoff and System Storage



Water Year 2016 Runoff and End of Water Year Storage

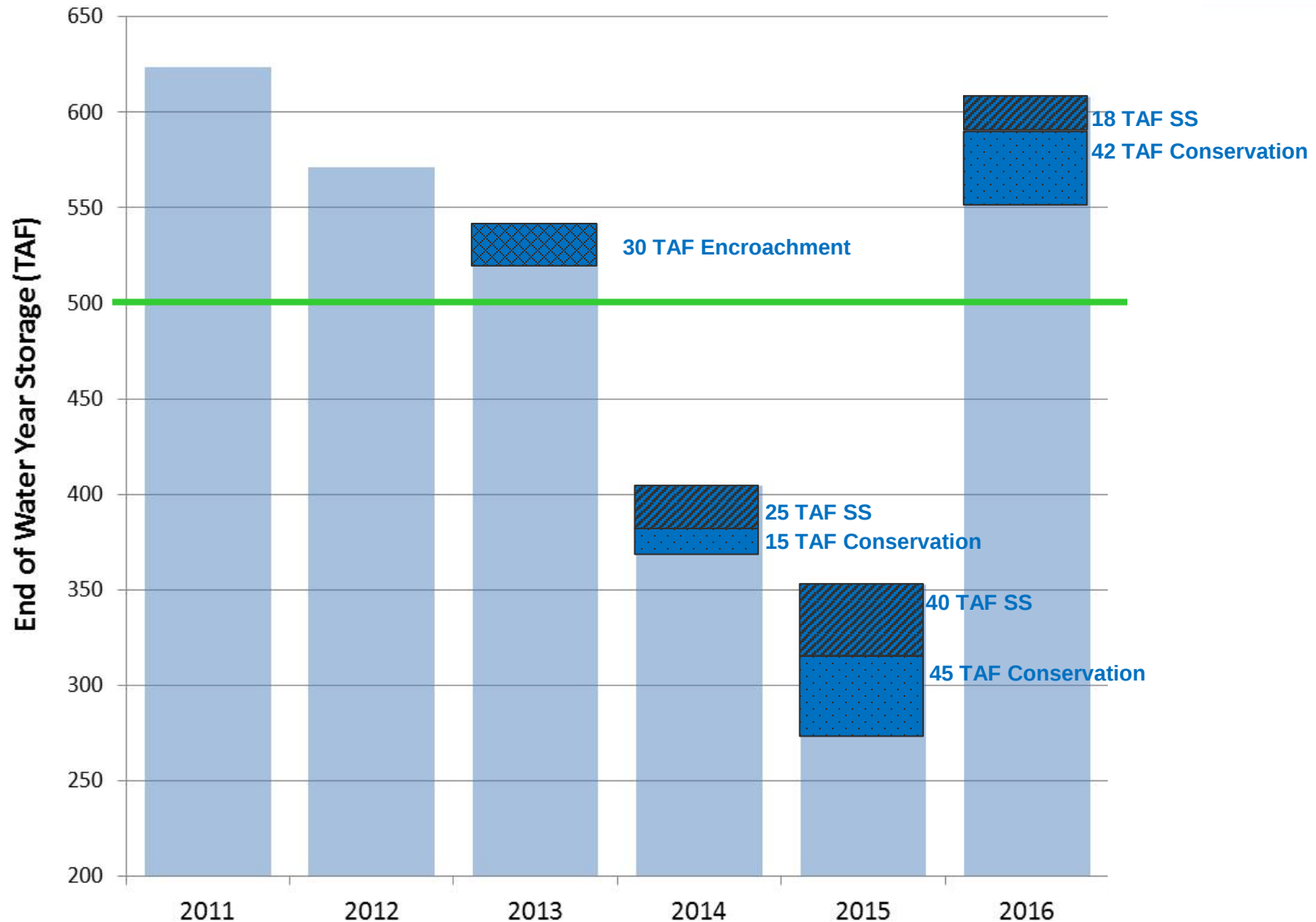
Runoff
WY 2016 Total
(TAF)
695

Total System Storage
September 30, 2016
(TAF)
608



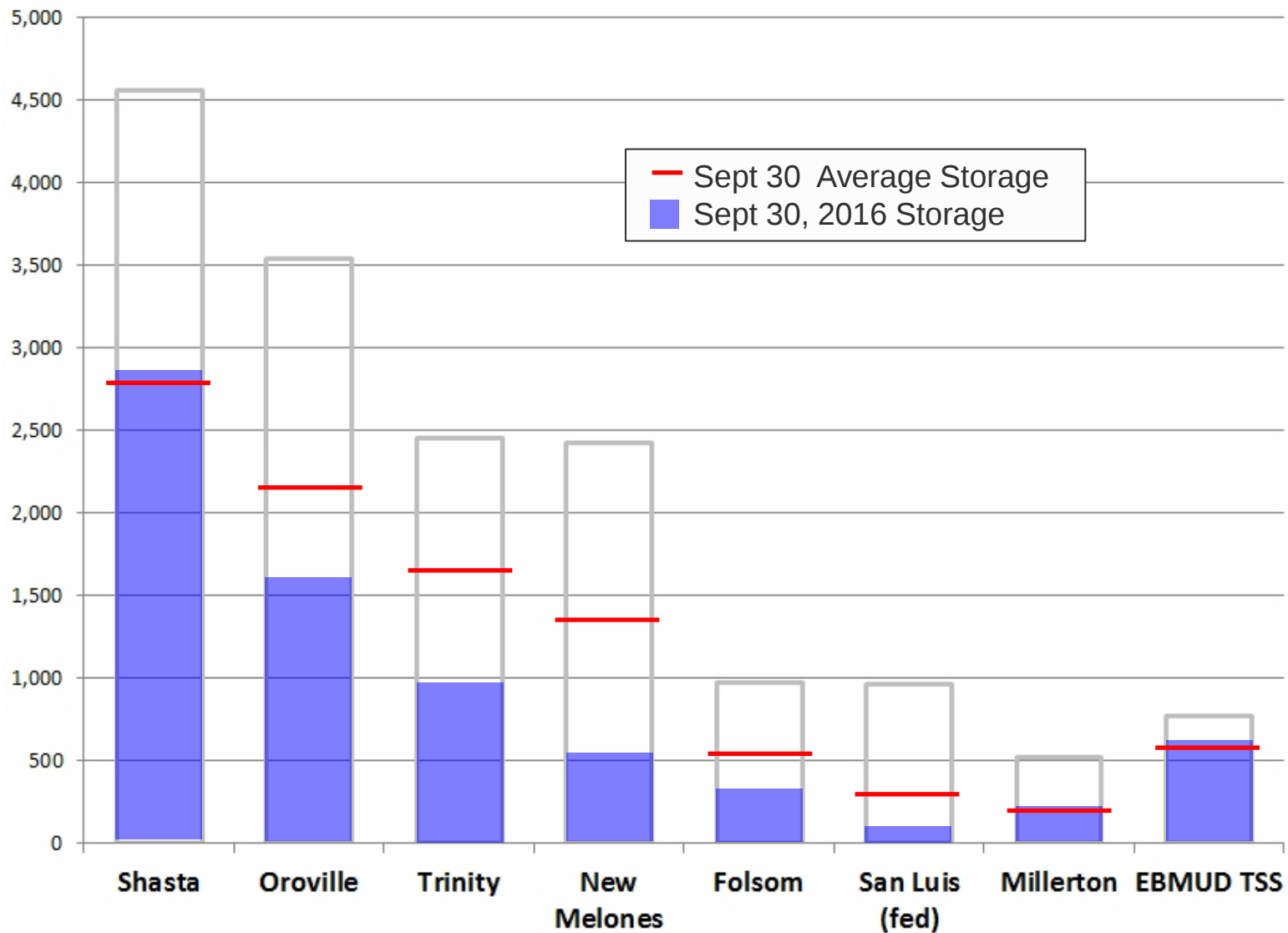
Water Year 2016 Review

End of September Storage



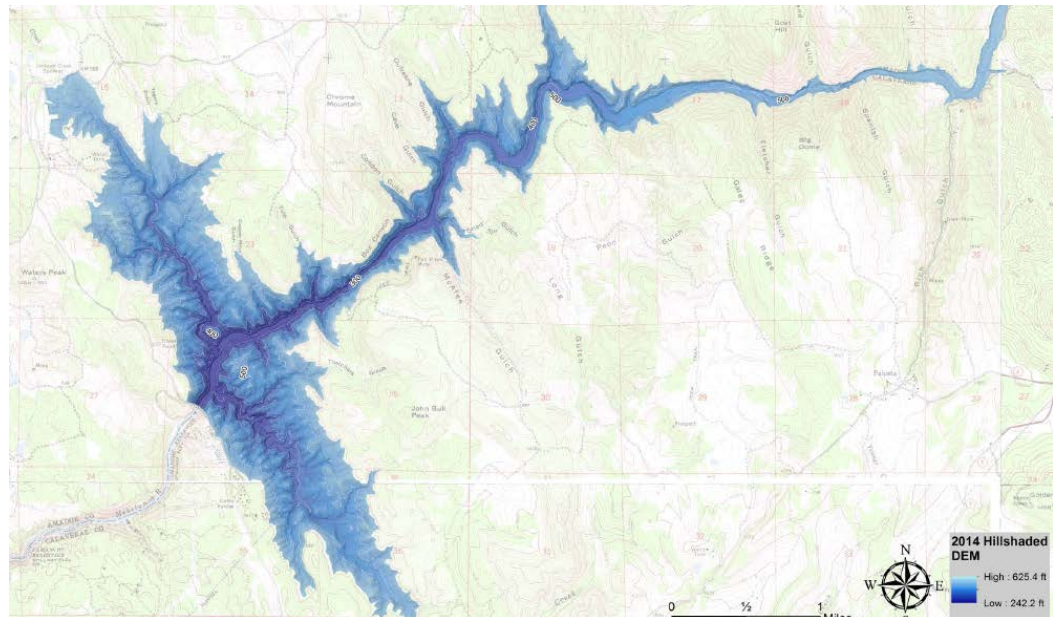
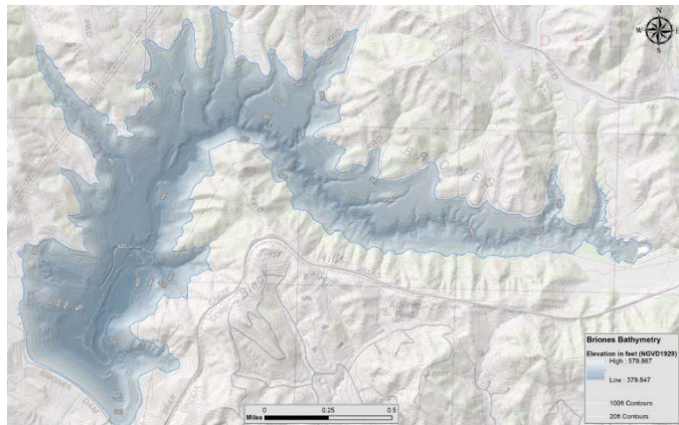
Water Year 2016 Review

California Reservoirs



Current Water Supply

Bathymetric Updates Effective October 1, 2016



	Previous Capacity (AF)	Updated Capacity (AF)	Change in Capacity (AF)
Pardee	197,950	203,795	+5,845
Briones	60,510	58,960	-1,550
USL	37,960	38,905	+945
Total System	766,740	771,980	+5,240

Current Water Supply

Reservoir Storage



As of 10/23/16	Current Storage	Percent of Average	Percent of Capacity
Pardee	185,960 AF	106%	91%
Camanche	282,180 AF	107%	68%
East Bay	140,040 AF	123%	93%
Total System	608,180 AF	110%	79%

Current Water Supply

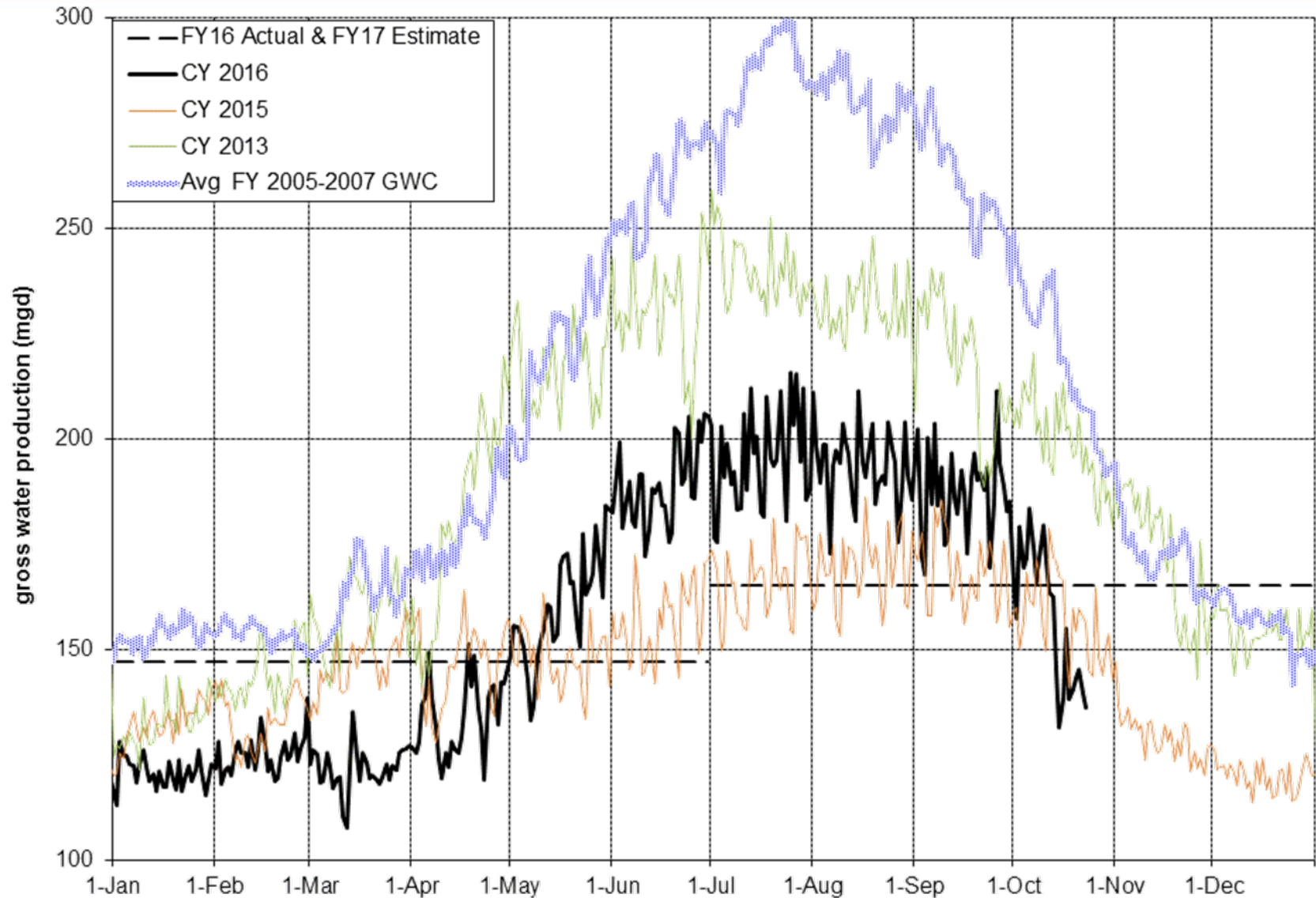
Precipitation



As of 10/23/2016	Cumulative Precipitation	% of Average
East Bay		
East Bay Watershed	2.44"	166%
Mokelumne Basin		
4-Station Average	5.21"	160%

Current Water Supply

Gross Water Production



Water Supply Operations

Mokelumne Operation



- Pulse Flows for Lower Mokelumne Fisheries
 - Gainshare (2.4 TAF)
 - Camanche Permit 10478 Below Normal Year Water (2 TAF)



Water Supply Operations

East Bay Operation



- Orinda Outage
 - November 2016 through February 2017
- Transfer Mokelumne water to East Bay Reservoirs since May 31:
 - San Pablo: 13.2 TAF
 - USL: 2.9 TAF
 - Briones: 7.1 TAF
- Taste and Odor Control
 - Blending of Mokelumne water

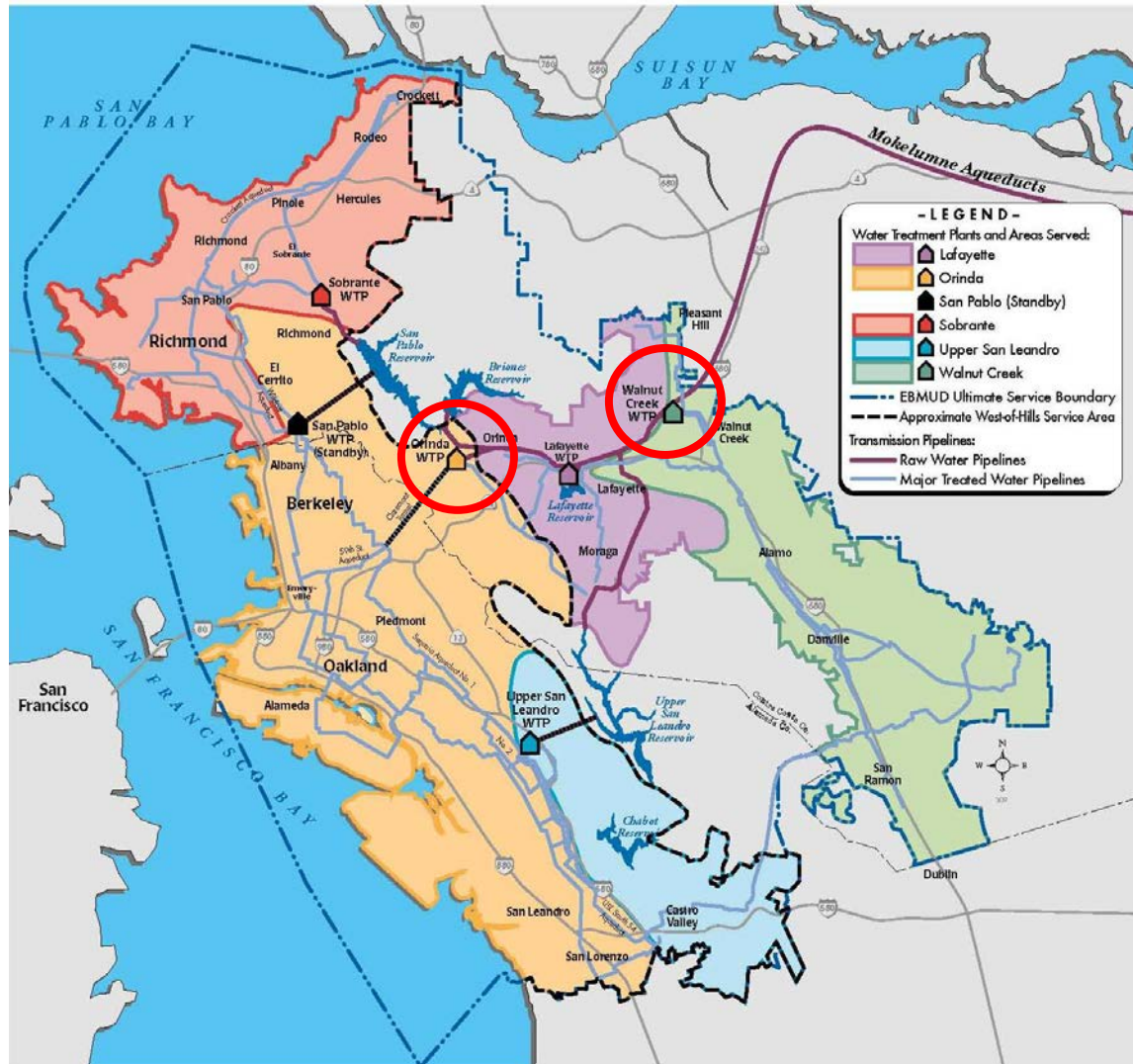
Water Supply Operations



- Completing transfer of water to East Bay for Orinda Outage
- Pulse flows continue through November

Water Supply Operations

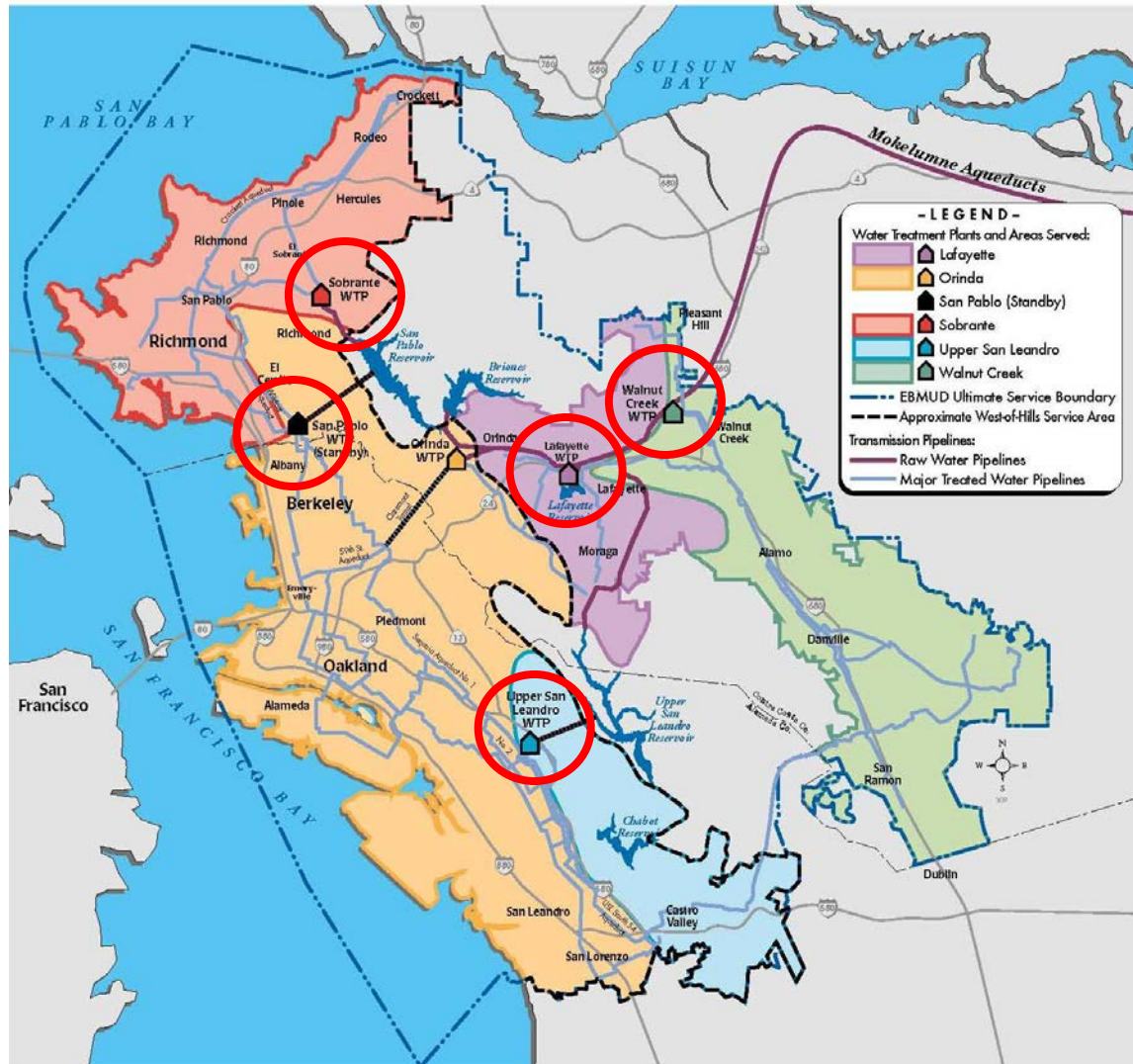
Typical Nov – Feb Configuration



- Walnut Creek WTP
- Orinda WTP

Water Supply Operations

Orinda Outage Configuration



- Walnut Creek WTP
- Lafayette WTP
- USL WTP
- Sobranite WTP
- San Pablo WTP

Water Supply Operations

Future/Potential Drought Operations



- Drought persists in the region
- Supplemental Supply request requires less than 500 TAF projected End of September Storage
- It is very likely that the District would receive enough runoff to exceed 500 TAF End of September Storage

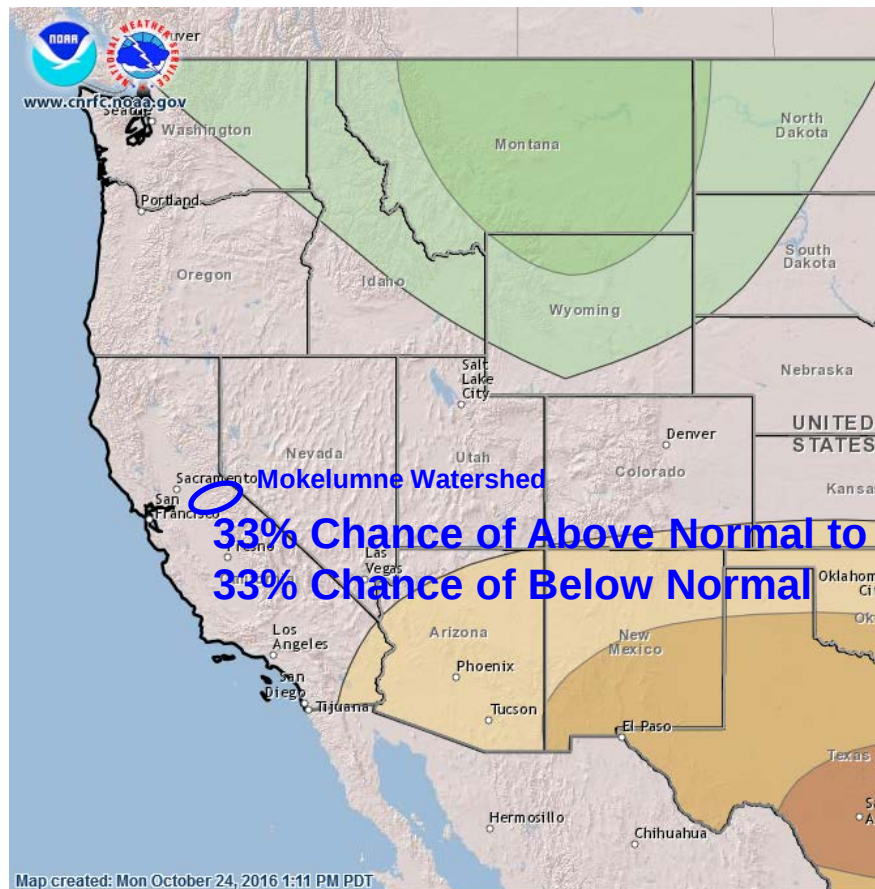


Water Supply Projections

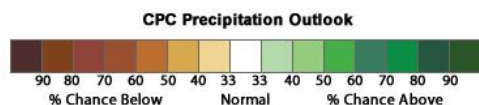
Regional Forecasts for Nov 2016 through Jan 2017



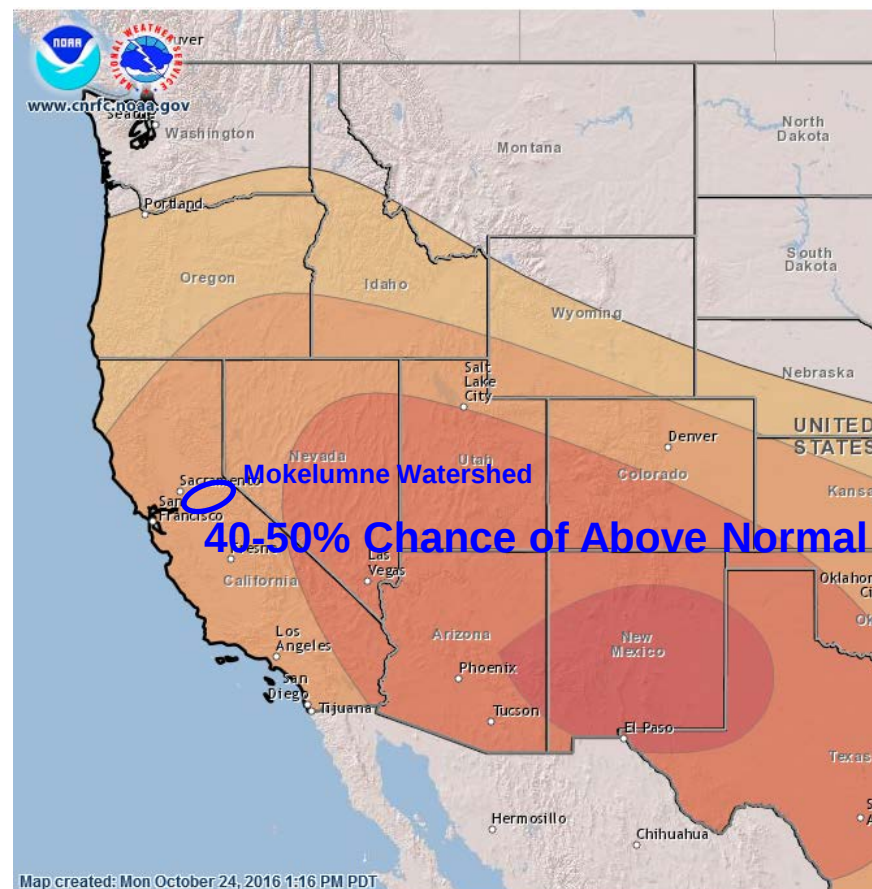
Precipitation



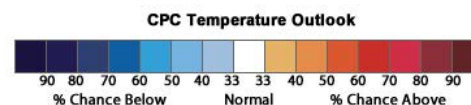
Monthly Precipitation Forecast Created: 10/20/2016 Valid: NDJ 2016-2017



Temperature



Monthly Temperature Forecast Created: 10/20/2016 Valid: NDJ 2016-2017



Looking Forward to a Snowy Winter in Water Year 2017!



WATER SUPPLY ENGINEERING DAILY REPORT

Monday, October 24, 2016

RESERVOIR STORAGE AND ELEVATION

	<u>WATER SURFACE</u>		<u>STORAGE</u>		<u>MAXIMUM CAPACITY</u>		Release	Spill
	Elevation	+Gain		+Gain	Elevation	Storage		
	Feet	-Loss	Ac-Ft	-Loss	Feet	Ac-Ft	Cfs	Cfs
<u>MOKELUMNE</u>								
Pardee	559.32	-0.1	185750	-210	567.65	203795	423	0
Camanche	215.83	0.01	282240	60	235.5	417120	357	0
<u>EAST BAY</u>								
Briones	572.76	0.83	56610	570	576.14	58960	0	0
Chabot	220	0	8040	0	227.25	10350	0	0
Lafayette	442.35	0	3430	0	449.16	4250	0	0
San Pablo	311.48	0.03	36790	30	313.68	38600	0	0
Upper San Leandro	455.7	-0.1	35700	-70	459.98	38905	0	0
Total East Bay Res.			140570	530		151065		
TOTAL SYSTEM STORAGE			608560	380		771980		

<u>DISTRIBUTION SYSTEM</u>			<u>MOKELUMNE SYSTEM</u>		
<u>DISTRIBUTION RESERVOIRS</u>			<u>AQUEDUCT DELIVERIES</u>		
	Storage	Operating		<u>MG</u>	<u>Flow Conditions</u>
	<u>MG</u>	<u>Capacity</u>	Line 1	37.8	GRAVITY
Today	363	720	Line 2	48.8	GRAVITY
Total Previous Day	372		Line 3	90.5	<u>THROTTLE</u>
Total Change	-9		TOTAL	177.1	274 Cfs
<u>WATER PRODUCTION</u>	Million	Capacity	<u>FSCC to MOK AQUEDUCTS (Measured at Brandt), MG</u>		
<u>AND DEMAND</u>	<u>Gallons</u>	<u>MGD</u>	Mok 1	0	
Lafayette WTP	12.2	25	Mok 2	0	
Orinda WTP	44	190		0 MG	
San Pablo WTP	15	30	<u>RIVER FLOWS AND RELEASES</u>		<u>Cfs</u>
Sobrante WTP	15.4	50	Mokelumne River Natural Flow		162
Upper San Leandro WTP	22.5	45	Pardee Reservoir Inflow		632
Walnut Creek WTP	34.3	90	Pardee Release to Camanche Res.		423
<u>TOTAL SURFACE PRODUCTION</u>	143.4	430	Pardee Release to JVID		30
Miscellaneous(Estimated)	0.4		Camanche Release to Mokel. River		357
<u>TOTAL WATER PRODUCTION</u>	143.8		<u>PG&E CO. STORAGE (Acre-feet)</u>		
Change in Distribution System	-9			<u>Storage</u>	<u>Maximum</u>
Wash Water from Distribution Sys.	1.4		Old Reservoirs	10709	<u>Change</u>
<u>SYSTEM DEMAND</u>	151.3		Salt Springs Res.	76770	<u>Capacity</u>
East-of-Hills Demand	43.6		Lower Bear Res.	20063	
West-of-Hills Demand	107.7		Total	107542	

<u>RAW WATER TRANSMISSION</u>			<u>PRECIPITATION (Inches)</u>				
	<u>INPUT</u>	<u>DRAFT</u>	<u>THIS YEAR</u>		<u>AVERAGE YEAR</u>		
Briones Res.	153	0	<u>STATION</u>	<u>Today</u>	<u>This</u>	<u>Season</u>	<u>Season</u>
San Pablo Res.	113	96		<u>Month</u>	<u>to-Date</u>	<u>to-Date</u>	<u>Total</u>
U. San Leandro Res.	0	73	USL WTP	0.11	3.35	3.35	1.58
<u>TOTAL</u>	266	169	Orinda WTP	0.08	3.16	3.16	1.72
<u>REMARKS</u>			Lafayette Reservoir	0.04	1.67	1.67	1.45
WID Canal Diversion = 42 cfs			Walnut Creek WTP	0.06	2.06	2.06	1.15
Mokelumne River below WID = 239 cfs			Camp Pardee	0	2.16	2.16	1.3
			Salt Springs P.H.	0.12	6.2	6.47	3.16
			<u>CAPLES LAKE (7,830 FT) DATA</u>				
PG&E data as of 4:00 pm previous date.				<u>Today</u>	<u>Average</u>		
All other data as of midnight.			Snow Depth	0 Inches	0 Inches		
WTP capacities are sustainable rates.			Water Content	0.0 Inches	0.0 Inches		

EAST BAY MUNICIPAL UTILITY DISTRICT

2016 Statistical Opinion and Customer Outreach Research Plan

October 25, 2016

Survey Overview



Purpose:

- To understand how people access and receive information about the District's continued efforts to manage our natural resources, protect our environment, and provide high-quality water and wastewater services.

Goal:

- To provide statistical data that can be used to better understand the public's opinion of the District, to help guide outreach and messaging to ensure our efforts are known and understood by consumers.

Methodology



- Live interview telephone survey.
- 1,200 completed surveys among EBMUD account holders and non-account holders within the District's service area.
- Overall results will have a margin of error of +/- 2.8% at the 95% confidence level.
- Average length of survey will be between 18 and 20 minutes.
- Survey offered in English, Spanish, and Chinese.
- Sample will include both landlines and cell phones.

Sample Design



- Statistically representative sample of residents within the District's service area.
- Survey results are always anonymous and any District-provided or participant-provided information is held secure and maintained as completely confidential.
- Utilizing multiple District data sources, EMC Research will be able to analyze results and compare responses among different demographic categories.

Data and Analysis



- Research allows us to examine how responses changes across different groups, including but not limited to:
 - Account holders v. non-account holders
 - Single-family v. multi-family residence
 - District rebates, water use audit, or leak adjustment participants v. non-participants
 - Billing categories
 - Contact with EBMUD v. no recent contact with the District
- Utilizing all the data at our disposal will allow EMC Research to provide a more robust and thorough analysis of the survey responses.

Questionnaire Design



The survey instrument (questionnaire) will likely be divided into the following sections:

1. Overall Impressions & District-Specific Ratings
2. Potential District Initiatives
3. Informational Messaging
4. EBMUD Interactions & Demographics

Wherever possible, the questionnaire will utilize similar questions from past EBMUD studies to provide trending data.

Section 1: Overall Impressions & District-Specific Ratings



The opening section of the survey gauges the respondents':

- Overall optimism or pessimism regarding the current state of affairs in the Bay Area.
- General opinions of the District and similar entities.
- Job performance ratings of EBMUD overall and on specific elements of the District's work.
- General perception of various EBMUD brand attributes.

Many of the questions utilized in this portion of the survey come from past studies, so we will learn how opinions of EBMUD have changed over time.

Section 2: Potential District Initiatives



- This section will assess the respondent's willingness to support potential District initiatives.
- To determine more realistic support levels, this section will be delivered to respondents within the context of there being some amount of cost associated with the proposed initiatives.
- This section will help us understand overall levels of public interest and support for the District's work.

Section 3: Informational Messaging



- This section will deliver information about the District, including past successes, history, new initiatives, and plans for the future.
- These statements will help the District understand how such information affects public opinion of the District, and will directly impact what and how the District communicates with the public.

Section 4: EBMUD Interactions & Demographics



The final section of the survey will include:

- Feedback on respondent interactions with the District.
- Ratings of tap water quality.
- Information source assessment.
- General demographic information.

This information will provide for more detailed and robust analysis, as well as ensuring the sample is representative of the District's service area population.

Timeline & Next Steps



- Staff is currently working with EMC Research on the sample design and survey questionnaire.
- Goal is to collect the survey data between November 10 and December 6, 2016.
- Present key findings, results, and analysis to the Board in January 2017.
- Survey information is expected to guide District outreach in 2017, including stakeholder engagement prior to budget adoption in June 2017.

Questions



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