

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	 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

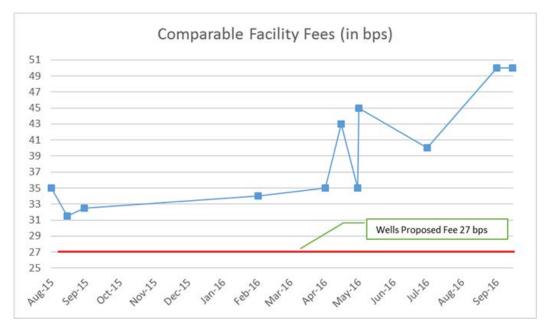
	Liquidity Provider	Principal outstanding (000)	Term End	Liquidity Fee	Liquidity Annual Cost
2008 A-1	Wells Fargo	\$32,395	12/10/16	27 bp	\$87,467
2008 A-1	Wells Fargo	\$52,595	12/10/10	27 bp	\$67,407
2008 A-2	US Bank	\$24,285	7/2/18	35 bp	\$84,998
2008 A-3	US Bank	\$24,285	7/2/18	35 bp	\$84,998
		ĺ	,		
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





Response To Wells Fargo's Banking Practices

Board of Directors October 25, 2016

Agenda



- Overview of Options
 - State of California Actions
 - Peer and Industry Notifications
 - Possible Additional Limitation
- Recommendation

Overview of Options



- 1. Suspend certain business activities consistent with bans enacted by State Treasurer
- 2. Notify water and wastewater peers of any actions selected
- 3. Notify municipal bond market participants of any actions selected
- 4. Preclude banks suspended from underwriting by the State from participating in District competitive sales
- 5. Send letter of approved actions to Wells Fargo

State of California Actions



Consistent with the State of California's actions, the District could suspend for one year:

- 1. Investments in all Wells Fargo Securities
- 2. Use of Wells Fargo as a broker-dealer for purchasing investments
- 3. Use of Wells Fargo as underwriter on negotiated sales of bonds

Peer and Industry Notifications



- In order to communicate with utility peers and municipal market participants, the District could notify the following of the suspensions of Wells Fargo:
 - Association of California Water Agencies (ACWA)
 - California Association of Sanitation Agencies (CASA)
 - The Bond Buyer (the primary municipal bond market periodical)
- In addition, the District could send a letter to the bank communicating the adopted suspensions and its dissatisfaction

Possible Additional Limitation



- The District could decide to disallow bids from Wells Fargo on competitive bond sales
 - Would require that the District ban competitive bids from any bank suspended by the State from acting as underwriter on negotiated sales
- Considerations
 - Ties District action to decisions made by the State
 - Could result in additional cost to ratepayers
 - Could be challenged legally

Recommendation



- A. Suspend Wells Fargo for at least one year from District use of the bank for:
 - i. Investments in all Wells Fargo securities
 - ii. Use of Wells Fargo as broker-dealer
 - iii. Use of Wells Fargo as underwriter on negotiated bond sales
- B. Notify industry peers, through ACWA and CASA, of District actions
- C. Notify market participants through The Bond Buyer
- D. Send letter to Wells Fargo informing the bank of District actions

Questions



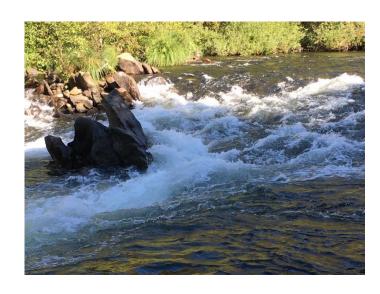
Water Supply Board Briefing

Water Operations Department October 25, 2016

Water Supply Briefing



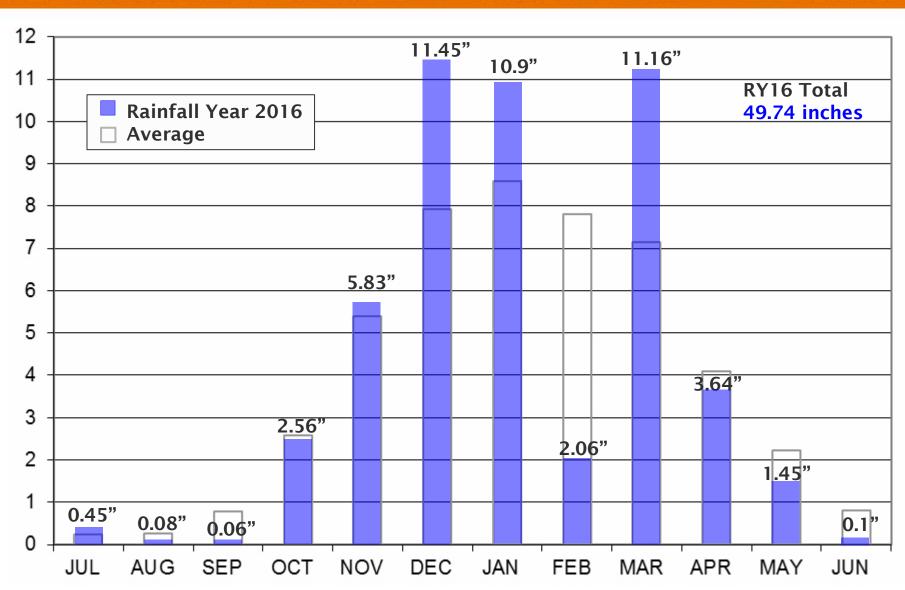
- · Water Year 2016 Review
- Current Water Supply
- Water Supply Operations
- Water Supply Projections



Water Year 2016 Review

EBMUD

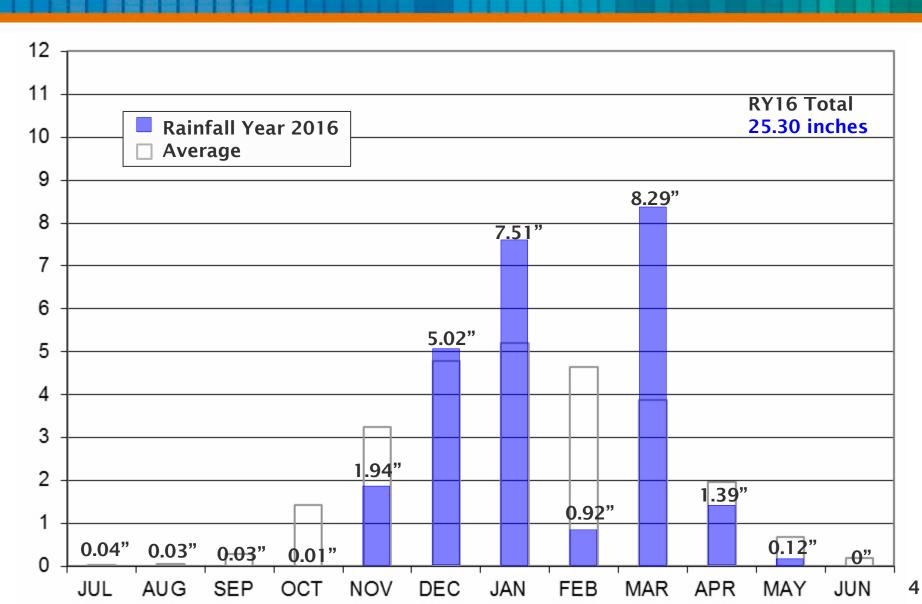
Mokelumne Precipitation



Water Year 2016 Review

EBMUD

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)

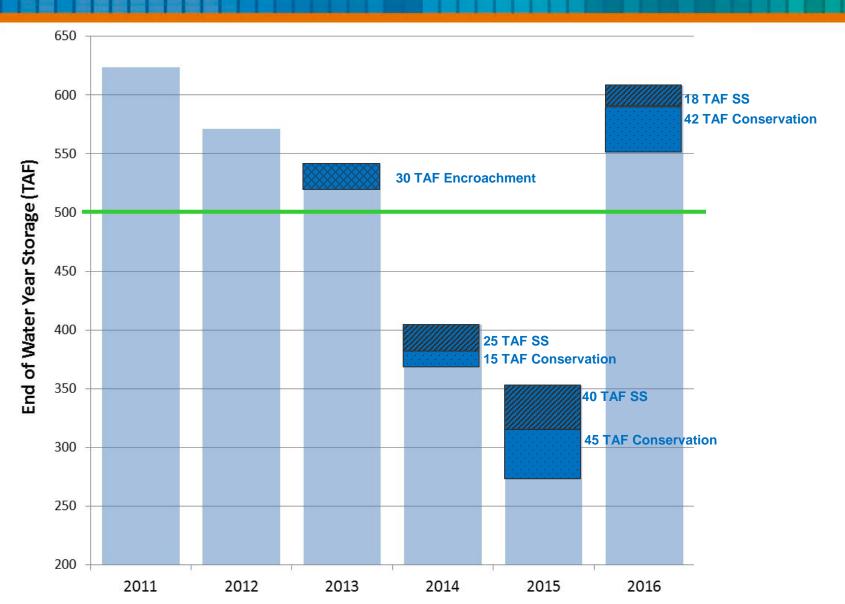
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Water Year 2016 Review

End of September Storage

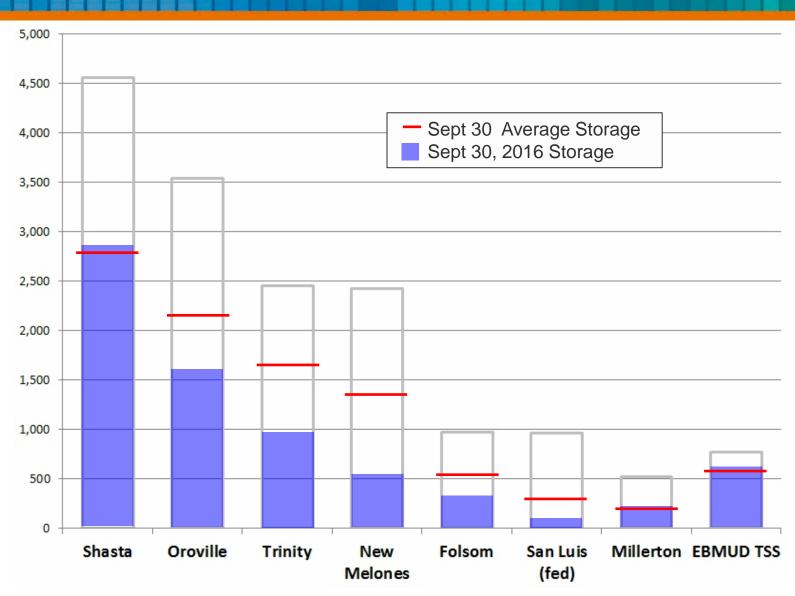




Water Year 2016 Review



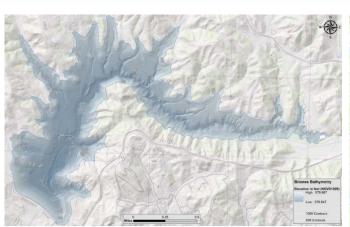
California Reservoirs

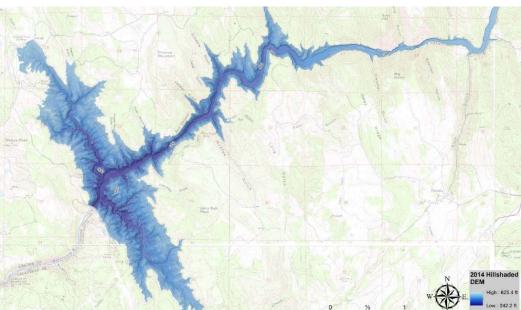


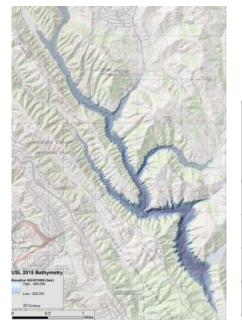
Current Water Supply











	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

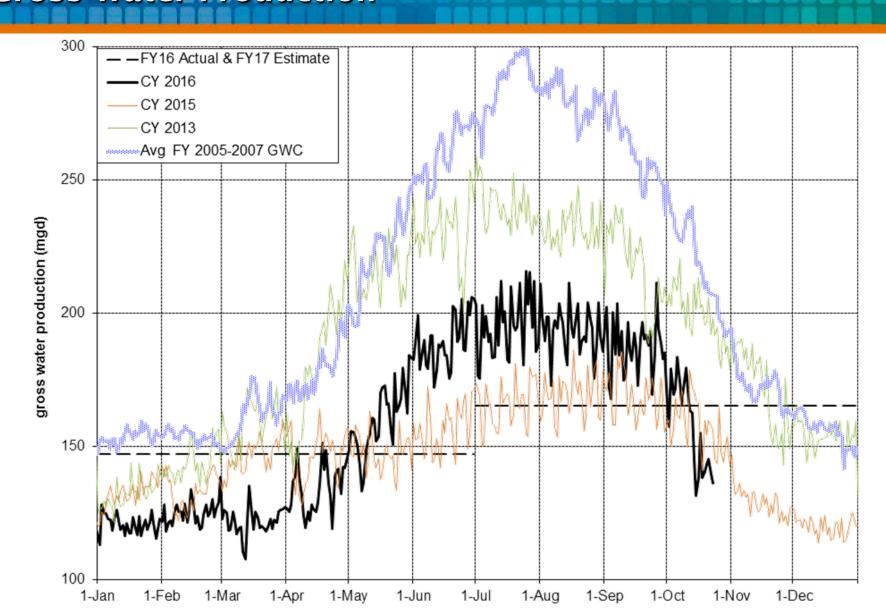




As of 10/23/2016	Cumulative Precipitation	% of Average				
East Bay						
East Bay Watershed	2.44"	166%				
Mokelumne Basin						
4-Station Average	5.21"	160%				

Current Water Supply Gross Water Production





Mokelumne Operation



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



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



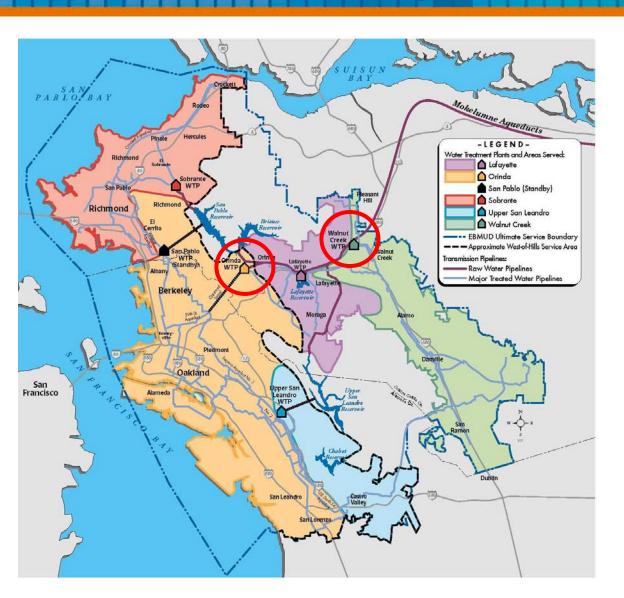




- Completing transfer of water to East Bay for Orinda Outage
- Pulse flows continue through November

Typical Nov - Feb Configuration

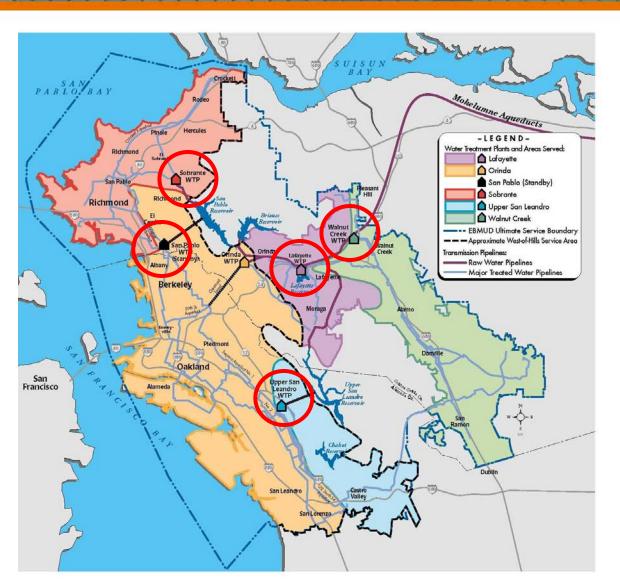




- Walnut Creek WTP
- · Orinda WTP

Orinda Outage Configuration



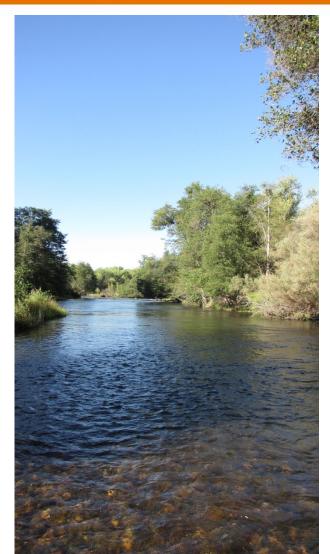


- Walnut Creek WTP
- Lafayette WTP
- USL WTP
- Sobrante WTP
- San Pablo WTP

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



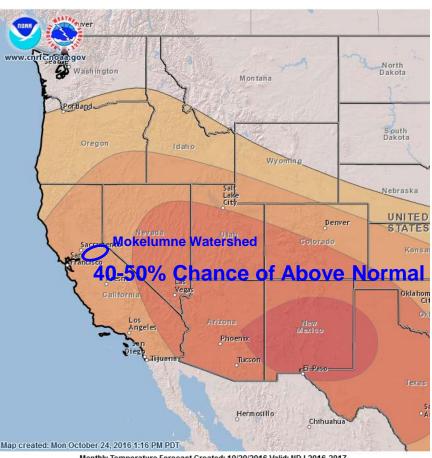


Precipitation

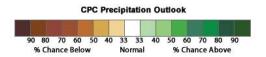
North Montana Portland Oregon Wyoming Salt Nebraska UNITED Denver STATES Nevada Colorado Sacramento Mokelumne Watershed Kansa & Chance of Above Normal to Chance of Below Normal Los Arizona Angeles Phoenix Tucson FI-Paso-Herm osillo Chihuahua Map created: Mon October 24, 2016 1:11 PM PDT

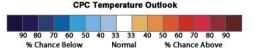
Monthly Precipitation Forecast Created: 10/20/2016 Valid: NDJ 2016-2017

Temperature



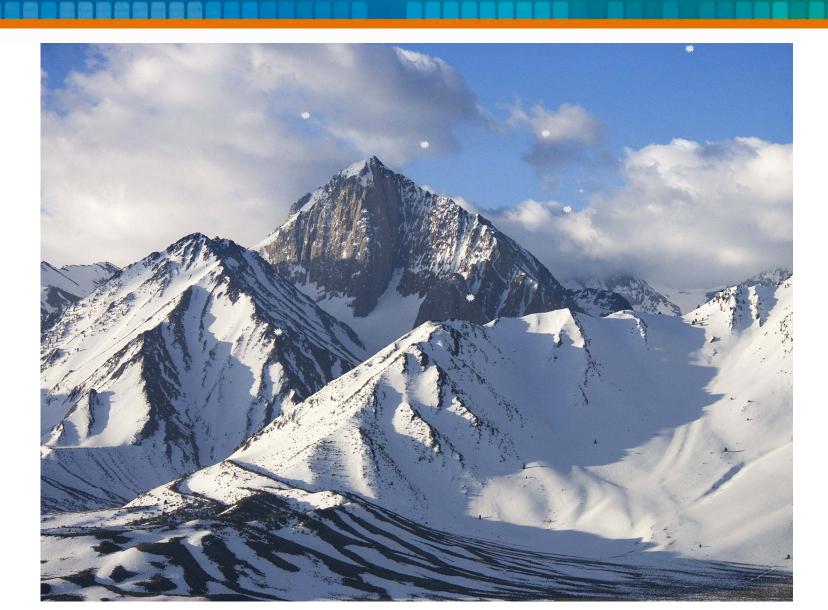
Monthly Temperature Forecast Created: 10/20/2016 Valid: NDJ 2016-2017





Looking Forward to a Snowy Winter in Water Year 2017!





WATER SUPPLY ENGINEERING DAILY REPORT

Monday, October 24, 2016

RESERVOIR STORAGE AND ELEVATION

RESERVOIR STORAGE AND ELEVATION									
	WATER S	SURFACE	STOR.		MAXIMUM (CAPACITY	<u> </u>		
	Elevation	+Gain		+Gain	Elevation	Storage		Release	Spill
<u>MOKELUMNE</u>	<u>Feet</u>	<u>-Loss</u>	Ac-Ft	<u>-Loss</u>	<u>Feet</u>	Ac-Ft		<u>Cfs</u>	<u>Cfs</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
EAST BAY									
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	<u>35700</u>	<u>-70</u>	459.98	<u>38905</u>		0	0
Total East Bay Res.			<u>140570</u>	<u>530</u>		<u>151065</u>			
TOTAL SYSTEM STORA	AGE		608560	380		771980			
DISTRIB	UTION SYS	STEM		MOKELUMNE SYSTEM					
DISTRIBUTION RESERV	/OIRS				<u>AQU</u>	JEDUCT D	ELIVERII	<u>ES</u>	
		Storage	Operating			MG		Flow Con	ditions
		MG	Capacity		Line 1	37.8		GRAV	
Today		363	720		Line 2	48.8		GRAV	
Total Previous Day		<u>372</u>	720		Line 3	90.5		THROT	
Total Change		<u>-9</u>			TOTAL	177.1		274 (
Town Change							JCTS (Mea		
WATER PRODUCTION		Million	Capacity	FSCC to MOK AQUEDUCTS (Measured at Brand Mok 1 0					
AND DEMAND		Gallons	MGD		Mok 2	0			
Lafayette WTP	•	12.2	25				MG		
Orinda WTP		44	190	RIVER FLOWS AND RELEASES				Cfs	
San Pablo WTP		15	30	Mokelumne River Natural Flow				162	
Sobrante WTP		15.4	50	Pardee Reservoir Inflow				632	
		22.5	45				aha Das		423
Upper San Leandro WTP 22.5 Walnut Creek WTP 34.3		90	Pardee Release to Camanche Res. Pardee Release to JVID				30		
Wallut Cleek W 1F		34.3	90		Camanche Rel		kel River		357
TOTAL SURFACE PROD	DUCTION	143.4	430		Camanche Rei	iease to Mo	KCI. KIVCI		331
Miscellaneous(Estimated		0.4	430		PG&E CO. ST	ORAGE (Acre-feet)		
		143.8			1 O&E CO. 51	OKAGE (A	ACIC-ICCI)	Maximum	
TOTAL WATER PRODUCTION 143.8 Change in Distribution System -9					Storage	Change	Capacity		
Wash Water from Distrib		1.4		Old Re	eservoirs	10709	-222	26560	
	oution bys.					76770	-438	141857	
SYSTEM DEMAND East-of-Hills Demand		151.3 43.6			orings Res. Bear Res.	20063	-436 -272	52025	
West-of-Hills Demand		107.7		Total	Bear Res.	107542	- <u>272</u> -932	220442	
RAW WATER TRANSM	TICCION A		<u> </u>		PRECIPITA				
KAW WAIEK IKANSI							ches)		
.		<u>DRAFT</u>			THIS YI	<u>EAR</u>		AVERAGI	E YEAR
Briones Res.	153	0							
San Pablo Res.	113	96	STATION	-	- 1	This	Season	Season	Season
U. San Leandro Res.	0	73			<u>Today</u>	<u>Month</u>	to-Date	to-Date	<u>Total</u>
			USL WTP		0.11	3.35	3.35	1.58	25.33
TOTAL	266	169	Orinda W	ГР	0.08	3.16	3.16	1.72	32.06
<u>REMARKS</u>		Lafayette	Reservoir	0.04	1.67	1.67	1.45	28.18	
WID Canal Diversion = 42 cfs			Walnut Cr	eek WTP	0.06	2.06	2.06	1.15	23.02
Mokelumne River below WID = 239 cfs			Camp Paro	lee	0	2.16	2.16	1.3	21.56
		Salt Spring	gs P.H.	0.12	6.2	6.47	3.16	45.51	
			-	PLES LAKE (7,8					
PG&E data as of 4:00 pm previous date.					Today		Average		
All other data as of midnig	•	·•	Snow Dep	th	0 Inches		0 Inches		
WTP capacities are sustain			Water Cor		0.0 Inches	(0.0 Inches		
						`			

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 Districtprovided 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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