From: Tsui, Sabrina <Sabrina.Tsui@ladwp.com>

Sent: Monday, April 12, 2021 3:46 PM

To: Fandialan, Edgar P < efandialan@mwdh2o.com>

Cc: Pettijohn, David <David.Pettijohn@ladwp.com>; Kwan, Delon <Delon.Kwan@ladwp.com>

Subject: LADWP Comments to MWD's Draft 2020 UWMP

Hi Edgar,

Thank you for the opportunity to review MWD's March 2021 Draft 2020 UWMP. Please see LADWP's comments below.

The methodology that MWD uses to project LAA supplies is different than ours. This is leading to discrepancies between our values and MWD's values. For example, 33 TAF is cited as our low in 2015, which is true for calendar year 2015. However, MWD is not very clear or consistent with the reporting year type (i.e., FY vs CY) and seems to bounce between them. At a minimum, our numbers should be reported on FY or RY basis to be consistent with our reporting in LADWP's UWMP. This would put us up into the 55 TAF range. In addition, we noticed that MWD forecasts higher demand for LADWP despite our active efforts to reduce water demand. Similarly, we noticed other discrepancies in both our projected demands and supplies. We ask that the values of our 2020 UWMP, shown in the tables below, be used for consistency between our two agencies.

Demand and Supply Projections (in acre-feet)	Average Year Fiscal Year Ending (FYE) on June 30					
	2025	2030	2035	2040	2045	
Total Water Demand ¹	642,600	660,200	678,800	697,800	710,500	
Post-Conservation Demand	509,500	526,700	536,100	554,500	565,800	
Existing / Planned Supplies						
Conservation (Additional Active ² and Passive ³ after						
FYE 14)	133,100	133,500	142,700	143,300	144,700	
Los Angeles Aqueduct ⁴	190,400	188,900	187,300	185,800	184,200	
Groundwater						
- Entitlements ⁵	109,400	109,400	109,400	108,800	108,800	
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000	
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000	
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000	
Subtotal	461,200	480,000	495,100	493,700	493,700	
MWD Water Purchases						
With Existing/Planned Supplies	181,400	180,200	183,700	204,100	216,800	
Total Supplies	642,600	660,200	678,800	697,800	710,500	

Demand and Supply Projections (in acre-feet)	Dry Year Fiscal Year Ending (FYE) on June 30					
(iii acie-ieet)	2025	2030	2035	2040	2045	
Total Water Demand ¹	674,700	693,200	712,700	732,700	746,000	
Post-Conservation Demand	509,500	526,700	536,100	554,500	565,800	
Existing / Planned Supplies Conservation (Additional Active ² and Passive ³ after						
FYE 14)	165,200	166,500	176,600	178,200	180,200	
Los Angeles Aqueduct ⁴	70,800	70,200	69,600	69,000	68,500	
Groundwater						
- Entitlements ⁵	121,300	121,300	121,300	120,700	120,700	
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000	
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000	
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000	
Subtotal	385,600	406,200	423,200	423,700	425,400	
MIMO Water Burnhauer						
MWD Water Purchases	200 465	007.000	000 500		000 000	
With Existing/Planned Supplies	289,100	287,000	289,500	309,000	320,600	
Total Supplies	674,700	693,200	712,700	732,700	746,000	

Demand and Supply Projections(in acre-feet)	Multi-Dry Year: Year One (1988) Fiscal Year Ending on June 30					
	2025	2030	2035	2040	2045	
Total Water Demand	657,900	675,800	694,900	714,400	727,400	
Post-Conservation Demand	507,600	526,600	536,100	554,400	565,700	
Existing / Planned Supplies						
Conservation (Additional Active ² and Passive ³ after						
FYE 14)	150,300	149,200	158,800	160,000	161,700	
Los Angeles Aqueduct ⁴	133,700	132,600	131,500	130,400	129,300	
Groundwater						
- Entitlements ⁵	109,400	109,400	109,400	108,800	108,800	
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000	
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000	
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000	
Subtotal	421,700	439,400	455,400	455,000	455,800	
MWD Water Purchases						
With Existing/Planned Supplies	236,200	236,400	239,500	259,400	271,600	
Total Supplies	657,900	675,800	694,900	714,400	727,400	
	Marki Day Varan Varan Tura (4000)					

Demand and Supply Projections(in acre-feet)	Multi-Dry Year: Year Two (1989) Fiscal Year Ending on June 30					
	2025	2030	2035	2040	2045	
Total Water Demand	661,700	679,700	698,900	718,500	731,500	
Post-Conservation Demand	507,600	526,600	536,100	554,400	565,700	
Existing / Planned Supplies Conservation (Additional Active ² and Passive ³ after						
FYE 14)	154,100	153,100	162,800	164,100	165,800	
Los Angeles Aqueduct ⁴ Groundwater	119,500	118,600	117,600	116,600	115,700	
- Entitlements ⁵	109,400	109,400	109,400	108,800	108,800	
 Groundwater Replenishment 	7,000	11,000	11,000	11,000	11,000	
 Stormwater Recharge (Increased Pumping) 	4,000	8,000	15,000	15,000	15,000	
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000	
Subtotal	531,700	557,700	580,900	580,100	581,100	
MWD Water Purchases						
With Existing/Planned Supplies	130,000	122,000	118,000	138,400	150,400	
Total Supplies	661,700	679,700	698,900	718,500	731,500	

Demand and Supply Projections(in acre-feet)	Demand and Supply Projections(in acre-feet) Multi-Dry Year: Year Three (1990) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand	674,800	693,200	712,800	732,700	746,000
Post-Conservation Demand	507,600	526,600	536,100	554,400	565,700
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after	407.000	400.000	470 700	470.000	400.000
FYE 14)	167,200	166,600	176,700	178,300	180,300
Los Angeles Aqueduct	70,800	70,200	69,600	69,000	68,500
Groundwater					
- Entitlements⁵	121,309	121,309	121,309	120,709	120,709
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
 Stormwater Recharge (Increased Pumping) 	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	387,609	406,309	423,309	423,809	425,509
MWD Water Purchases					
With Existing/Planned Supplies	287,191	286,891	289,491	308,891	320,491
Total Supplies	674,800	693,200	712,800	732,700	746,000
		Multi-Dry Y			2.0
Demand and Supply Projections(in acre-feet)	Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand					
Total Water Demand Post-Conservation Demand	2025	2030	2035	2040	2045
Post-Conservation Demand	2025 661,600	2030 679,600	2035 698,900	2040 718,400	2045 731,500
Post-Conservation Demand Existing / Planned Supplies	2025 661,600	2030 679,600	2035 698,900	2040 718,400	2045 731,500
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after	2025 661,600 507,600	2030 679,600 526,600	2035 698,900 536,100	2040 718,400 554,400	2045 731,500 565,700
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14)	2025 661,600 507,600 154,000	2030 679,600 526,600	2035 698,900 536,100 162,800	718,400 554,400	2045 731,500 565,700 165,800
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active ² and Passive ³ after FYE 14) Los Angeles Aqueduct ⁴	2025 661,600 507,600	2030 679,600 526,600	2035 698,900 536,100	2040 718,400 554,400	2045 731,500 565,700
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater	2025 661,600 507,600 154,000 119,700	2030 679,600 526,600 153,000 118,800	2035 698,900 536,100 162,800 117,800	718,400 554,400 164,000 116,800	2045 731,500 565,700 165,800 115,800
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵	2025 661,600 507,600 154,000 119,700 109,400	2030 679,600 526,600 153,000 118,800 109,400	2035 698,900 536,100 162,800 117,800 109,400	2040 718,400 554,400 164,000 116,800 108,800	2045 731,500 565,700 165,800 115,800 108,800
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment	2025 661,600 507,600 154,000 119,700 109,400 7,000	2030 679,600 526,600 153,000 118,800 109,400 11,000	2035 698,900 536,100 162,800 117,800 109,400 11,000	718,400 554,400 164,000 116,800 108,800 11,000	2045 731,500 565,700 165,800 115,800 108,800 11,000
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment - Stormwater Recharge (Increased Pumping)	2025 661,600 507,600 154,000 119,700 109,400 7,000 4,000	2030 679,600 526,600 153,000 118,800 109,400 11,000 8,000	2035 698,900 536,100 162,800 117,800 109,400 11,000 15,000	718,400 554,400 164,000 116,800 108,800 11,000 15,000	2045 731,500 565,700 165,800 115,800 108,800 11,000 15,000
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment	2025 661,600 507,600 154,000 119,700 109,400 7,000	2030 679,600 526,600 153,000 118,800 109,400 11,000	2035 698,900 536,100 162,800 117,800 109,400 11,000	718,400 554,400 164,000 116,800 108,800 11,000	2045 731,500 565,700 165,800 115,800 108,800 11,000
Post-Conservation Demand Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment - Stormwater Recharge (Increased Pumping)	2025 661,600 507,600 154,000 119,700 109,400 7,000 4,000	2030 679,600 526,600 153,000 118,800 109,400 11,000 8,000	2035 698,900 536,100 162,800 117,800 109,400 11,000 15,000	718,400 554,400 164,000 116,800 108,800 11,000 15,000	2045 731,500 565,700 165,800 115,800 108,800 11,000 15,000
Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment - Stormwater Recharge (Increased Pumping) Recycled Water- Irrigation and Industrial Use	2025 661,600 507,600 154,000 119,700 109,400 7,000 4,000 17,300	2030 679,600 526,600 153,000 118,800 109,400 11,000 8,000 29,200	2035 698,900 536,100 162,800 117,800 109,400 11,000 15,000 29,700	718,400 554,400 164,000 116,800 108,800 11,000 15,000 29,800	731,500 565,700 165,800 115,800 108,800 11,000 15,000 30,000
Existing / Planned Supplies Conservation (Additional Active² and Passive³ after FYE 14) Los Angeles Aqueduct⁴ Groundwater - Entitlements⁵ - Groundwater Replenishment - Stormwater Recharge (Increased Pumping) Recycled Water- Irrigation and Industrial Use	2025 661,600 507,600 154,000 119,700 109,400 7,000 4,000 17,300	2030 679,600 526,600 153,000 118,800 109,400 11,000 8,000 29,200	2035 698,900 536,100 162,800 117,800 109,400 11,000 15,000 29,700	718,400 554,400 164,000 116,800 108,800 11,000 15,000 29,800	731,500 565,700 165,800 115,800 108,800 11,000 15,000 30,000

Demand and Supply Projections(in acre-feet)	Multi-Dry Year: Year Five (1992) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand	655,700	673,600	692,600	712,000	724,900
Post-Conservation Demand	507,600	526,600	536,100	554,400	565,700
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after					
FYE 14)	148,100	147,000	156,500	157,600	159,200
Los Angeles Aqueduct⁴	141,900	140,700	139,500	138,400	137,300
Groundwater	80	939	89		-
- Entitlements ⁵	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	427,700	445,300	461,100	460,600	461,300
MWD Water Purchases					1 107 117 79 100
With Existing/Planned Supplies	228,000	228,300	231,500	251,400	263,600
Total Supplies	655,700	673,600	692,600	712,000	724,900

With regards to Appendix 13, Alternative Forecasts for Demand on MWD, it was mentioned at the March 18th MWD UWMP Coordination Meeting that the draft Appendix 13 was to be released in a few weeks. At this morning's WP&S Committee/ MWD's UWMP Public Hearing, I did hear both Brad and Deven acknowledge that the alternate forecasts will no longer be part of MWD's UWMP. In the event that this decision changes, or if it is used in the future, our original question was: Will Appendix 13, Alternative Forecasts for Demand on MWD be available anytime soon and will there be time to comment on it prior to the UWMP going to Board for adoption, or used for planning purposes?

Thank you,

Sabrina Y. Tsui, P.E.

Manager, Resources Development Water Resources Division (213) 367-4131





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To UWMP Member Agency Coordinators:

I hope everyone is doing well and making good progress towards finalizing your agency's 2020 UWMP.

Here are several important announcements:

- 1. Metropolitan will release an updated Public Review Draft 2020 UWMP on March 8, 2021. The latest draft 2020 UWMP will include updated demand and local supply information based on feedback provided by our member agencies received by the requested January 8th deadline for submission of comments. Metropolitan also included additional input and data received by February 5th to accommodate additional member agency submissions. The updated information was incorporated in the reliability assessments contained in March 8th draft UWMP. Any additional information received after February 5th may be incorporated in the final 2020 UWMP scheduled for adoption in May 2021. Also included in the March posting are the updated draft Water Shortage Contingency Plan and draft Appendix 11 Addendum to the 2015 UWMP on Reduced Delta Reliance reporting. The updated March drafts, as well as any further refinements to the documents, will be posted on the same Metropolitan website: www.mwdh2o.com.
- 2. As part of our 2020 UWMP coordination and to assist with your agency's preparation of your plan, Metropolitan will email to each member agency updated draft demand forecasts through 2045 under normal water year, single dry year, and droughts lasting five consecutive years. This information is consistent with the reliability assessments contained in Metropolitan Public Review Draft 2020 UWMP that will be posted on March 8, 2021.
- 3. Metropolitan will host an on-line UWMP Member Agency Coordination meeting on Thursday, March 18, 2021 from 2:30-4:00 pm. Topics of discussion will include a status update of the 2020 UWMP process, draft Appendix 13 (Alternative Forecast of Demand on Metropolitan, included in the March draft 2020 UWMP), and draft Appendix 11 Reduced Delta Reliance Reporting.
 - Please register in advance for this meeting by using the link provided below: https://zoom.us/meeting/register/tJcudeqqqTgtHdcTG3K_GqN5NWdE48YyqRkD

Looking forward to your participation at the meeting and our continued coordination throughout the rest of the 2020 UWMP process. Please email me if you have any questions.

Thanks, Edgar

Metropolitan Water District of Southern California

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