

- Water Surplus and Drought Management Plan on water supply and demand as of December 17, 2007

Summary

Initial allocations of 2008 CRA and SWP base supplies and committed actions total approximately 1.3 MAF. Under current trend projections, Metropolitan is projecting to have approximately 1.72 MAF of storage in its WSDM resource portfolio at the beginning of CY 2008. The available WSDM supplies and management actions for CY 2008 under a 30 percent and 60 percent SWP allocation range from 689 TAF-757 TAF. Under most cases, Metropolitan expects to be able to meet the range of estimated demands in CY 2008. However, the risk in projected supply and demand conditions have led staff to initiate some WSDM actions to mitigate potential deficits in supplies for the year.

Attachments

[Attachment 1: Projected CRA and SWP Supplies for CY 2008](#)

[Attachment 2: Projected WSDM Supplies for CY 2008](#)

[Attachment 3: Conjunctive Use Programs Table](#)

Detailed Report

This letter is the second monthly WSDM Plan report on water supply and demand for CY 2008. These reports will apprise the Board of developing conditions that may impact water supply reliability and any potential WSDM actions that may be required for the year. From January through May, imported supplies from the State Water Project (SWP), Colorado River Aqueduct and Los Angeles Aqueduct, as well as demands, are highly variable due to weather conditions. During the early months of January through March, staff will update the Board monthly on changing conditions affecting both projected supplies and demands. When the precipitation season ends in April-May and water supply conditions become more certain, staff will continue to provide monthly reports.

Water Supply and Demand Balance

Colorado River Aqueduct

Metropolitan has not yet received an approved water order for Colorado River supplies for CY 2008 from the U.S. Bureau of Reclamation. Staff anticipates that the initial approved water order will be approximately 775,000 acre-feet of net diversions. Staff understands the approval will include Metropolitan's Basic Apportionment (550,000 AF), the Imperial Irrigation District conservation program (85,000 AF), the Imperial Irrigation District/San Diego County Water Authority Transfer (71,500 AF), and the Palo Verde Irrigation District Land Management Program (82,000 AF). A detailed listing of the Colorado supplies is included as [Attachment 1](#).

State Water Project

On November 21, 2007 the California Department of Water Resources (DWR) announced a 25 percent initial SWP allocation of the Table A contract amount. At this point of the year, the allocation is conservative with a high likelihood that the final allocation will be increased. DWR formally reviews hydrologic and storage conditions on a monthly basis and updates the SWP allocation, as appropriate, throughout the year. This allocation also includes SWP operational constraints, including Delta export restrictions resulting from the Federal District Court's remedy order to protect Delta Smelt. Under a 25 percent Table A allocation, Metropolitan would receive Table A supplies of 478 TAF. Metropolitan would also take delivery of 63 TAF from Metropolitan's transfer and exchange agreements with the Desert Water Agency and Coachella Valley Water District and the City of Port Hueneme. Total CY 2008 SWP supplies under the initial allocation is projected at approximately 521 TAF. A detailed listing of SWP supplies is listed in [Attachment 1](#).

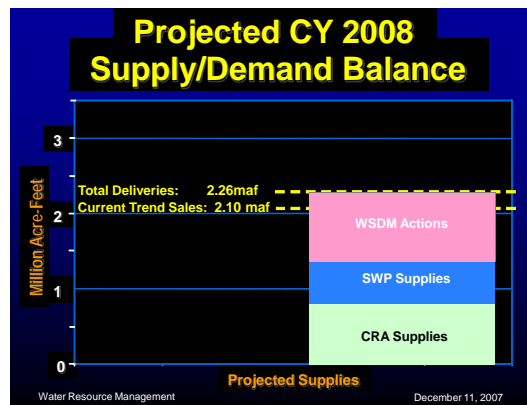
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Sales and Demand for Water Deliveries

Water sales for calendar year 2008 are projected to be 2.10 MAF at the current trend, with a range of 1.66 MAF under wet/cool conditions to 2.30 MAF under hot/dry conditions. This represents the amount of water deliveries associated with Metropolitan’s rates and revenues. It also reflects that replenishment deliveries for the year have been discontinued and will not be sold or delivered, and that deliveries under the Interim Agricultural Water Program will be reduced by 30 percent.

In addition to the 2.10 MAF of estimated sales, Metropolitan is also responsible for delivering water or meeting other delivery obligations. These delivery obligations include the Imperial Irrigation District/San Diego County Water Authority Transfer and the supplies from their canal lining projects, and adjustments for Metropolitan system losses. The total of the additional delivery obligations are approximately 144 TAF. Including these additional delivery obligations, total demands on Metropolitan for CY 2008 are expected to range from a low of 1.80 MAF (1.66 MAF + .144 MAF) under wet/cool conditions to a high of 2.52 MAF (2.37 MAF + .144 MAF) under hot/dry conditions. The total demands do not include the obligation to deliver water as part of the exchange with Desert Water Agency and Coachella Valley Water District (DWCV). At this time, Metropolitan intends to meet the obligation through water stored in the Advance Delivery Account agreement with those two agencies.



WSDM Supplies and Management Actions

Under current trend projections for the remainder of CY 2007, Metropolitan is expecting to have approximately 1.72 MAF of storage in its WSDM resource portfolio at the beginning of CY 2008. The available WSDM supplies and management actions for calendar year 2008 under a 30 percent and 60 percent SWP allocation range from 689 TAF-757 TAF. Detailed program level estimates of operational WSDM supplies for 2008 under those SWP allocations, along with projected storage levels, are shown in [Attachment 2](#). [Attachment 2](#) also shows the programs under development and separates out emergency storage reserves in Metropolitan’s reservoirs and shows the additional emergency storage available through DWR’s storage. This more clearly differentiates dry-year storage availability for 2008 from emergency reserves. At this time, Metropolitan has access to approximately 674 TAF of emergency storage.

At the December 2007 Water Planning and Stewardship Committee meeting, a question was raised regarding the availability of in-region groundwater conjunctive use programs in 2008. The list of Metropolitan’s conjunctive use programs, along with their current storage levels, contractual on-line dates and 2008 take capacities are shown in [Attachment 3](#). It is estimated that Metropolitan will be able to extract about 64 TAF in 2008.

Calendar Year Actions

Estimated impacts from the Federal Court remedy for Delta Smelt and associated supply risks have made it necessary for Metropolitan to initiate some water resource management actions in order to maximize their effectiveness for CY 2008. The following resource actions have been initiated this month to address the hydrologic and weather conditions that Metropolitan faces this year.

- Continue extraordinary conservation and Public Agency incentive program

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- Interrupt IAWP deliveries by 30 percent, effective January 1, 2008
- Continue interruption of Replenishment program deliveries
- Withdraw supplies from Central Valley storage and banking programs
- Withdraw supplies from In-Basin Conjunctive Use Programs
- Enter into voluntary water transfer agreements to acquire additional supplies, up to the Board authorization of 235,000 acre-feet.

If calendar year demands exceed identified WSDM actions, the additional supply needs will be managed through the increased use of surface storage reserves. Conversely, if the demands turn out to be lower than anticipated, the excess supply generated from the actions above will be stored in surface water storage for use in future years.

CY 2008 Projected CRA and SWP Supplies	
Colorado River Supplies	
Basic Apportionment	550,000
IID-MWD Conservation	85,000
SDCWA-IID & canal lining	71,500
San Luis Rey Supplemental Water	4,500
Central Arizona storage recovery	25,000
Lower Colorado Water Supply Project	6,731
PVID Land Fallowing	82,109
MWD Water Budget Adjustment	-49,278
<i>Priority 1,2, and 3b</i>	-45,835
<i>Imperial ID</i>	0
<i>Coachella Valley WD</i>	0
<i>Misc and Indian PPR's</i>	-3,443
Colorado River Supplies Total	775,562
State Water Project Supplies	
Table A (25 percent allocation)	477,875
MWD DWCV turnback pool and Article 21	0
Carryover and 14b	0
Desert Water/Coachella Valley exchange	42,775
Port Hueneme Agreement	463
State Water Project Supplies Total	521,113
Total	1,296,675

Projected WSDM Supplies for CY 2008

Program	Projected 1/1/2008 Storage Levels	Amount Available at 30% SWP Allocation	Amount Available at 60% SWP Allocation	CY 2008 Put Capacity
<i>CRA Storage</i>				
Advance Delivery Account (DWCV) *	119,365	0	0	150,000
Lake Mead ICS Account	3,338	3,338	3,338	200,000
Central Arizona Underground Storage Demonstration Project *	64,105	0	0	0
Subtotal	186,808	3,338	3,338	350,000
<i>SWP Storage</i>				
EWA Wet/Dry Exchange	50,000	50,000	50,000	
Arvin Edison Storage Program	187,071	40,000	40,000	45,000
Semitropic Storage Program	249,839	37,360	56,350	31,675
Kern Delta Storage Program	36,847	2,000	5,000	55,000
SBVMWD Coord. Operating Agmt.	50,000	0	30,000	0
SBVMWD Central Feeder		16,425	16,425	
Mojave Storage Program	19,000	3,250	19,000	0
Castaic Lake (Flex Storage)	138,064	138,064	138,064	15,876
Lake Perris (Flex Storage)	65,000	65,000	65,000	0
Subtotal	795,821	352,099	419,839	147,551
<i>In-Region Dry-Year Storage</i>				
Diamond Valley Lake	393,100	200,000	200,000	210,000
Lake Mathews & Lake Skinner	50,700	50,700	50,700	63,000
Cyclic - USG	48,300	Up to stored volume	Up to stored volume	0
Cyclic - PM (Three Valleys)	15,300	Up to stored volume	Up to stored volume	0
Cyclic - IEUA (Chino Basin)	0	0	0	0
Conj. Use - IEUA/TVMWD (Chino Basin)	88,000	24,750	24,750	12,000
Conj. Use - Long Beach (Central Basin)	9,800	4,300	4,300	3,250
Conj. Use - Long Beach (Lakewood)	1,800	1,000	1,000	900
Conj. Use - Foothill (Raymond Monks Sub basin)	3,400	2,500	2,500	2,250
Conj. Use - Calleguas (N. Las Posas)	59,700	10,000	10,000	-
Conj. Use - MWDOC (Orange County Basin)	49,700	20,000	20,000	15,000
Conj. Use - Three Valleys (Live Oak)	700	700	700	750
Conj. Use - Three Valleys (upper Claremont)	-	-	-	750
Conj. Use - Compton	1,100	300	300	-
Conj. Use - Western	400	400	400	3,000
Supplemental Storage Program (Los Angeles)	10,000	10,000	10,000	-
Supplemental Storage Program (MWDOC)	9,100	9,100	9,100	-
Subtotal	741,100	333,750	333,750	310,900
Total	1,723,729	689,187	756,927	808,451

*Both DWCV and the Central Arizona amounts have been shown as zero because they have been accounted for already in base supplies.

Programs Under Development in 2008

Program	Projected 1/1/2008 Storage Levels	Amount Available at 30% SWP Allocation	Amount Available at 60% SWP Allocation	CY 2008 Put Capacity
<i>CRA Storage</i>				
Hayfield Storage Program	73,000	0	0	0
Conj. Use - Pasadena	21,700	0	0	0
<i>SUBTOTAL</i>	<i>141,700</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>SWP Storage</i>				
MWD '08 Carryover	0	0	0	200,000
DWCV '08 Carryover	0	0	0	85,550
Sac. Valley Transfers Stored in Shasta	47,000	0	0	0
<i>SUBTOTAL</i>	<i>47,000</i>	<i>0</i>	<i>0</i>	<i>285,550</i>
TOTAL	141,700	0	0	285,550

Emergency Storage Reserves

Metropolitan Emergency Storage				
Diamond Valley Lake	206,900	206,900	206,900	N/A
Lake Mathews	78,500	78,500	78,500	N/A
Lake Skinner	33,800	33,800	33,800	N/A
<i>SUBTOTAL</i>	<i>319,200</i>	<i>319,200</i>	<i>319,200</i>	
DWR Emergency Storage				
Castaic Lake	170,600	170,600	170,600	N/A
Pyramid Lake	158,300	158,300	158,300	N/A
Silverwood	20,000	20,000	20,000	N/A
Lake Perris	5,400	5,400	5,400	N/A
<i>SUBTOTAL</i>	<i>354,300</i>	<i>354,300</i>	<i>354,300</i>	
TOTAL	673,500	673,500	673,500	

Conjunctive Use Programs

Program	Contractual on-line date	Current Storage (as of 11/30/07)	2008 Projected Take @ 30% SWP Allocation	Contractual Annual Take Capacity
Long Beach CUP	On-line	8,717	4,300	4,300
Calleguas NLP Phase 1 & 2	fully on-line early 2009	59,200	10,000	47,000
Orange County	March 2008 (possible early extraction of Oct 2007)	49,700	20,000	20,000
Chino basin CUP	March 2008 (possible partial early on-line performance)	88,430	24,750	33,000
Long Beach- Lakewood	March 2008	1,800	1,000	1,200
Compton Cup	September 2008	1,144	300	763
Live Oak CUP	March 2008	687	700	1,000
Upper Claremont Heights	March 2008	-	-	1,000
Foothill CUP	March 2008	3,411	2,500	3,000
Elsinore Valley CUP	March 2008	431	400	4,000
Pasadena Raymond Basin	Agreement in process	21,744	0	18,000
TOTAL		235,264	63,950	137,263