

- Water Surplus and Drought Management Plan on water supply and demand as of May 22, 2008

Summary

This is the monthly report on the CY 2008 regional water supply and demand conditions as of May 22, 2008. As is normal practice, staff will provide updates to this report at the monthly meeting of the Water Planning and Stewardship Committee. The WSDM Plan provides the overall strategy for managing Metropolitan's resources to meet the range of estimated demands for the calendar year. The following are report highlights:

- SWP (35% Table A allocation) & CRA Base Supplies¹: 1.46 MAF
- WSDM Storage as of beginning of CY 2008: 1.73 MAF
- Amount of WSDM Storage that is accessible over the remainder of CY 2008: 743 TAF
- Amount of potential transfer and exchanges for CY 2008: 156 TAF
- Current Trend Total Demand: 2.19 MAF

Attachments

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

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

Detailed Report

This letter is the seventh monthly WSDM Plan report on water supplies and demands for CY 2008. The purpose of this report is to keep the Board apprised of developing conditions that may impact water supply reliability and any potential WSDM actions that may be required for the year.

Water Supply and Demand Balance

Colorado River Aqueduct

Staff's estimate of total Colorado River supplies for CY 2008 is approximately 771 TAF of net diversions, based on Metropolitan's approved water order from the Federal Bureau of Reclamation. The approved order includes Metropolitan's Basic Apportionment (550 TAF) and all other Colorado River supplies, including water transfers, that are diverted at Metropolitan's intake at Lake Havasu. Colorado River base supplies, which are net of water transfers, are approximately 711 TAF. A detailed listing of the Colorado River approved order is included as [Attachment 1](#).

Since last month's report, the estimated CRA supplies have decreased by about 5 TAF. This decrease is attributed to an update of adjustments made for California agricultural priority use.

State Water Project

Since February 1, 2008, the State Water Project (SWP) allocation for Metropolitan has remained at 35 percent of the Table A contract amount. This allocation reflects the dry conditions in March and April and the subsequent low expectation of runoff. This allocation considers conservative assumptions for SWP operational constraints, including Delta export restrictions resulting from the Federal District Court's remedy order to protect Delta Smelt.

¹ This figure does not include 15 TAF of water from the SNWA agreement described under 'Transfers and Exchanges', 25 TAF of Central Arizona Storage Recovery water, and the 20 TAF increase in PVID program since last year.

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Since last month's report, there have been no changes in the projected amount of SWP supplies for CY 2008. Under the current 35 percent allocation, Metropolitan is planning on receiving a total CY 2008 SWP supply of 753 TAF. A detail listing of SWP supplies is listed in [Attachment 1](#).

Water Demands

Metropolitan water demand is projected to be 2.19 MAF at the current trend, with a range of 1.98 MAF under wet/cool conditions to 2.37 MAF under hot/dry conditions. This range of estimated demand is included in Metropolitan's projections of its rates and revenues. It also reflects that the replenishment program has been discontinued, and that the Interim Agricultural Water Program deliveries are reduced by 30 percent. The total demands do not include deliveries of water as part of the exchange with Desert Water Agency and Coachella Valley Water District (DWCV). At this time, Metropolitan intends to recover water stored in the Advance Delivery Account agreement with those two agencies.

Since last month's report, total demand at the current trend has increased by approximately 62 TAF.

WSDM Supplies and Management Actions

WSDM Storage Portfolio

In addition to base CRA and SWP supplies, Metropolitan has approximately 1.73 MAF of storage in its WSDM resource portfolio as of the beginning of CY 2008. The available WSDM supplies and management actions for calendar year 2008 are approximately 743 TAF. This estimate reflects the contractual minimum amounts of the programs and/or the agreed upon increase in minimum contractual amounts with banking partners. Some of the programs also have contract provisions that allow for a supply increase in relation to an increase in SWP allocation. Detailed program level estimates of operational WSDM supplies for 2008 under the current SWP allocation, along with projected storage levels, are shown in [Attachment 2](#). Metropolitan staff will continue to work cooperatively with its member agencies and other partners to ensure coordination and effective program management. [Attachment 2](#) also shows the programs under development and separates out emergency storage reserves in Metropolitan's reservoirs, showing the additional emergency storage available within DWR's storage facilities. At this time, Metropolitan has access to approximately 674 TAF of emergency storage supplies.

Since last month's report, there has been a decrease of approximately 3 TAF in the projected amount of water available to Metropolitan from the Central Valley Storage Programs, a decrease of 10 TAF from Los Angeles' Supplemental Storage Program due to water quality issues, an increase of approximately 3 TAF of Lake Mead ICS water, and a 4 TAF decrease in the projected amount of water available from the conjunctive use programs. These factors decreased the available WSDM storage supplies by approximately 24 TAF for the CY 2008.

Transfers/Exchanges

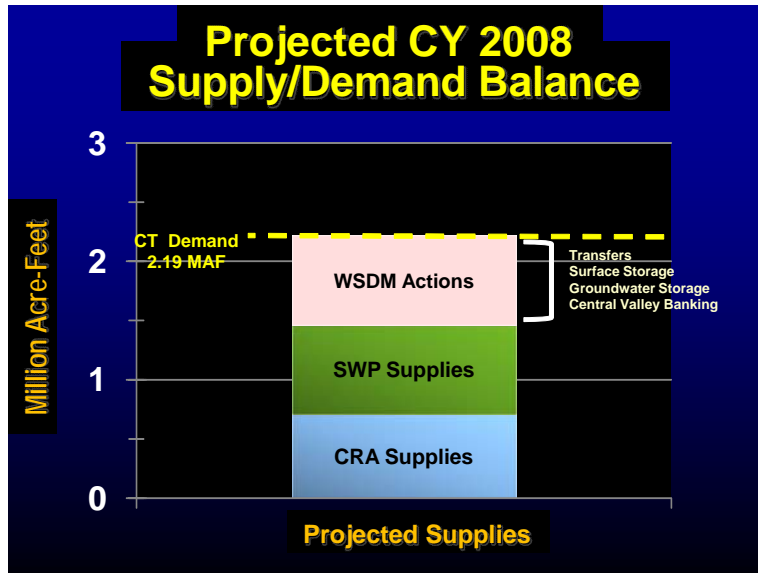
In November 2007, the Board authorized the General Manager to enter into an agreement with the State Water Project Contractors Authority to pursue up to 200 TAF of water transfer agreements with sellers located in the Sacramento and San Joaquin valleys for CY 2008. Staff is currently developing up to 41 TAF in the Sacramento Valley (net of delta conveyance losses), and up to 21 TAF south of the Delta.

In addition to these State Water Project transfers, there is 25 TAF of recovered water from the 1992 Central Arizona groundwater storage program and approximately 20 TAF of increased PVID following from last year that would increase CY 2008 supplies. Furthermore, an exchange agreement that started in 2002 with the SNWA allows Metropolitan to store unused Nevada apportionment of Colorado River water in California. Most recently, an additional 15 TAF acre-feet from this agreement was stored for CY 2008. In subsequent years, Nevada may request recovery of this stored water. In April, the Board approved the joint funding agreement for the Drop 2 Reservoir Project that will result in approximately 34 TAF of new supplies available in CY 2008. These Colorado River actions could produce a combined total of 94 TAF acre-feet in CY 2008, bringing the total amount of transfers and exchanges identified for the year to 156 TAF.

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Water Balance and Actions

With currently allocated supplies on the SWP and CRA of 1.46 MAF, Metropolitan would be required to execute approximately 728 TAF of WSDM actions to meet the current trend total demand of 2.19 MAF.



The table below shows the current estimate of the actions that will be taken to balance the currently allocated SWP and CRA base supplies and demand.

Table of Identified WSDM Actions	Actions Under Current Trend Demand
Transfers	156 TAF
Central Valley Programs	188 TAF
In-Basin Groundwater	50 TAF
Surface Water	334 TAF
TOTAL	728 TAF

In the situation that calendar year demands exceed identified WSDM actions, the additional supply needs will be supplemented by surface storage reserves. Conversely, if the demands turn out to be lower than anticipated, the excess supply will be stored in surface reservoirs, enhancing the flexibility for calendar year 2009.

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The table below shows that Metropolitan has a total of 1.36 MAF in surface water storage, of which 682 TAF is available for dry-year yield. Under the current demand and supply projections, 334 TAF of surface water would be utilized, along with the other WSDM actions, to meet the current trend demand. Based on the table below, a balance of 348 TAF of surface water would still be available in dry year storage.

Storage	Emergency Storage	Dry-Year	Total
Diamond Valley Lake, Lake Mathews, and Lake Skinner	319,200	452,700	771,900
Flex Storage	-	203,600	203,600
Lake Mead ICS	-	25,700	25,700
DWR Emergency Storage	354,300		354,300
Total	673,500	682,000	1,355,500
Projected Take at Current Trend Demand		334,041	334,041
Remaining Balance	673,500	347,959	1,021,459

CY 2008 Projected CRA and SWP Supplies	
Colorado River Approved Order	
Basic Total Apportionment	550,000
IID-MWD Conservation Program	85,000
Water Exchanged with SDCWA (IID Transfer & All American Canal Lining)	71,500
Canal Lining Water to MWD	4,500
Central Arizona storage recovery	25,000
Lower Colorado Water Supply Project	6,679
PVID Land Fallowing	82,109
Southern Nevada Water Authority Water Exchange	15,000
MWD Water Budget Agricultural Adjustment	-68,474
<i>Priority 1,2, and 3b</i>	-69,910
<i>Imperial ID</i>	0
<i>Coachella Valley WD</i>	5,331
<i>Misc and Indian PPR's</i>	-3,895
<i>Colorado River Supplies Total</i>	<i>771,314</i>
State Water Project Supplies	
Table A (35 percent allocation)	669,025
Turnback pool	1,689
Carryover and 14b	0
Desert Water/Coachella Valley exchange (Table A/Turnback Pool)	60,036
San Bernardino Valley MWD Coordinated Operation Agreement	20,000
Port Hueneme Agreement	1,850
<i>State Water Project Supplies Total</i>	<i>752,600</i>
Total	1,523,914

Projected WSDM Supplies for CY 2008

Program	1/1/2008 Storage Levels	Amount Available at 35% SWP Allocation	CY 2008 Put Capacity
<i>CRA Storage</i>			
Advance Delivery Account (DWCV) *	121,400	0	150,000
Lake Mead ICS Account	25,700	25,700	200,000
Central Arizona Underground Storage Demonstration Project *	64,100	0	0
<i>Subtotal</i>	<i>211,200</i>	<i>25,700</i>	<i>350,000</i>
<i>SWP Storage</i>			
EWA Wet/Dry Exchange	50,000	50,000	
Arvin Edison Storage Program	189,400	41,000	45,000
Semitropic Storage Program	250,300	127,700	31,675
Kern Delta Storage Program	31,300	10,000	55,000
SBVMWD Coord. Operating Agmt.	50,000	0	0
Mojave Storage Program	18,900	8,500	0
Castaic Lake (Flex Storage)	138,600	138,600	15,400
Lake Perris (Flex Storage)	65,000	65,000	0
<i>Subtotal</i>	<i>793,500</i>	<i>440,800</i>	<i>147,075</i>
<i>In-Region Dry-Year Storage</i>			
Diamond Valley Lake	390,100	200,000	213,000
Lake Mathews & Lake Skinner	27,200	27,200	86,500
Cyclic - USG	48,300	Up to stored volume	0
Cyclic - PM (Three Valleys)	15,300	Up to stored volume	0
Cyclic - IEUA (Chino Basin)	0	0	0
Conj. Use - IEUA/TVMWD (Chino Basin)	88,000	22,000	12,000
Conj. Use - Long Beach (Cent. Basin)	9,800	2,150	3,250
Conj. Use - Long Beach (Lakewood)	1,800	0	900
Conj. Use - Foothill (Raymond and Monkhill)	3,400	0	2,250
Conj. Use - Calleguas (N. Las Posas)	59,700	6,000	0
Conj. Use - MWD OC (Orange County Basin)	49,700	11,000	15,000
Conj. Use - Three Valleys (Live Oak)	700	700	750
Conj. Use - Three Valleys (upper Claremont)	0	0	750
Conj. Use - Compton	1,100	300	0
Conj. Use - Western	400	400	3,000
Supplemental Storage Program (Los Angeles)	20,000	0	0
Supplemental Storage Program (MWD OC)	7,000	7,000	
<i>Subtotal</i>	<i>722,500</i>	<i>276,750</i>	<i>337,400</i>
Total	1,727,200	743,250	834,475

*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	1/1/2008 Storage Levels	Amount Available at 35% SWP Allocation	CY 2008 Put Capacity
Conj. Use - Pasadena	21,700		
<i>CRA Storage</i>			
Hayfield Storage Program	73,000	0	0
<i>SUBTOTAL</i>	<i>94,700</i>	<i>0</i>	<i>0</i>
<i>SWP Storage</i>			
MWD '08 Carryover *		0	200,000
DWCV '08 Carryover *	-	0	85,550
Sac. Valley Transfers Stored in Shasta	47,000	0	0
<i>SUBTOTAL</i>	<i>47,000</i>	<i>0</i>	<i>285,550</i>
TOTAL	141,700	0	285,550
Emergency Storage Reserves			
<i>Metropolitan Emergency Storage</i>			
Diamond Valley Lake	206,900	206,900	N/A
Lake Mathews	78,500	78,500	N/A
Lake Skinner	33,800	33,800	N/A
<i>SUBTOTAL</i>	<i>319,200</i>	<i>319,200</i>	
<i>DWR Emergency Storage</i>			
Castaic Lake	170,600	170,600	N/A
Pyramid Lake	158,300	158,300	N/A
Silverwood	20,000	20,000	N/A
Lake Perris	5,400	5,400	N/A
<i>SUBTOTAL</i>	<i>354,300</i>	<i>354,300</i>	
TOTAL	673,500	673,500	