

- Water Surplus and Drought Management Plan on water supply and demand as of June 18, 2008

Summary

This is the monthly report on the CY 2008 regional water supply and demand conditions as of June 18, 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) and CRA Base Supplies¹: 1.47 MAF
- WSDM Storage as of beginning of CY 2008: 1.75 MAF
- Amount of WSDM Storage that is accessible over the remainder of CY 2008: 734 TAF
- Amount of potential transfer and exchanges for CY 2008: 158 TAF
- Current Trend Total Demand: 2.21 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 eighth 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 871 TAF of current diversions, based on Metropolitan's most recent schedule submitted to the Federal Bureau of Reclamation. This schedule 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 731 TAF. A detailed listing of the Colorado River's current diversion schedule is included in [Attachment 1](#).

Since last month's report, the scheduled CRA diversions have increased by about 100 TAF. This increase is mainly attributed to USBR's recent inclusion of the recovery of Metropolitan's share of the Drop 2 Reservoir Project and the Lake Mead ICS water which accounts for approximately 80 TAF. These projects have already been accounted for in Transfers and Exchanges and WSDM resources. The remaining 20 TAF increase is due to the update of the projected California agricultural priority use adjustments.

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 resulting low

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, 34 TAF of Drop 2 Reservoir water, and 46 TAF of Lake Mead ICS water.

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projection 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.

Since last month's report, there has been a decrease of 15 TAF due to changes in the projected amount of water available from the San Bernardino Valley MWD Coordinated Operation Agreement. Under the current 35 percent allocation, Metropolitan is planning on receiving a total CY 2008 SWP supply of 738 TAF. A detail listing of SWP supplies is listed in [Attachment 1](#).

Water Demands

Metropolitan water demand is projected to be 2.21 MAF at the current trend, with a range of 2.03 MAF under wet/cool conditions to 2.37 MAF under hot/dry conditions. This range of estimated sales is included in Metropolitan's projections of its rates and revenues. It also reflects that water sales under the replenishment program have been discontinued, and that sales under the Interim Agricultural Water Program 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 20 TAF.

WSDM Supplies and Management Actions

WSDM Storage Portfolio

In addition to base CRA and SWP supplies, Metropolitan has approximately 1.75 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 734 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 29 TAF in the projected supply available to Metropolitan by the Central Valley Storage Programs, an increase of approximately 21 TAF of Lake Mead ICS water, and a decrease of 700 AF from the Live Oak conjunctive use programs due to water quality constraints. These factors decreased the projected available WSDM storage supplies by approximately 9 TAF for the CY 2008.

Transfers/Exchanges

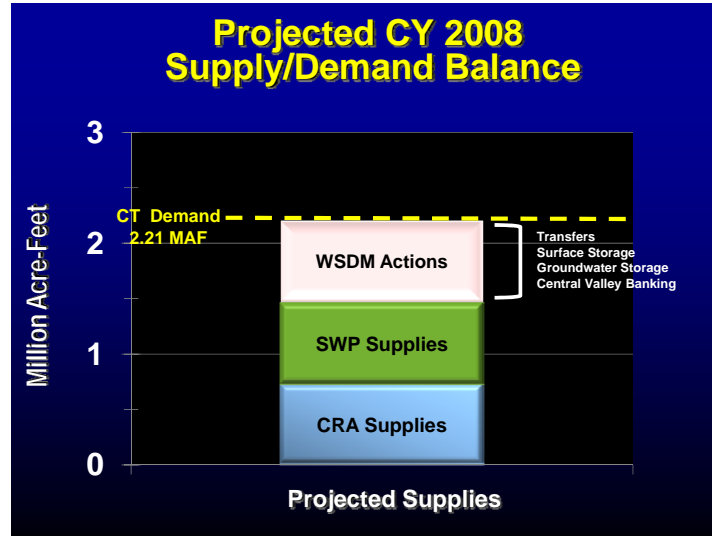
In November 2007, the Board authorized the General Manager to enter into an agreement with the State Water Project Contractors Authority to pursue up to 200 TAF of water transfer agreements with sellers located in the Sacramento and San Joaquin Valleys for CY 2008. Staff is currently developing up to 47 TAF in the Sacramento Valley (net of delta conveyance losses), and up to 17 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 under 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 would result in approximately 34 TAF of new supplies available to Metropolitan 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 158 TAF.

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Water Balance and Actions

With currently allocated supplies on the SWP and CRA of 1.47 MAF, Metropolitan would be required to execute approximately 742 TAF of WSDM actions to meet the current trend total demand of 2.21 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	158 TAF
Central Valley Programs	158 TAF
In-Basin Groundwater	49 TAF
Surface Water	377 TAF
TOTAL	742 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.

The table below shows that Metropolitan has a total of 1.34 MAF in surface water storage, of which 667 TAF is available for dry-year yield. Under the current demand and supply projections, 377 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 290 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	417,300	736,500
Flex Storage		203,600	203,600
Lake Mead ICS		46,170	46,170
DWR Emergency Storage	354,300		354,300
Total	673,500	667,070	1,340,570
Projected Take at Current Trend Demand		377,000	377,000
Remaining Balance	673,500	290,070	963,570

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
System Efficiency ICS (Drop 2 Reservoir)	34,000
Extraordinary Conservation ICS (Lake Mead ICS)	46,170
MWD Water Budget Agricultural Adjustment	-49,276
<i>Priority 1,2, and 3b</i>	-45,834
<i>Imperial ID</i>	0
<i>Coachella Valley WD</i>	0
<i>Misc and Indian PPR's</i>	-3,442
Colorado River Supplies Total	870,682
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	5,600
Port Hueneme Agreement	1,850
State Water Project Supplies Total	738,200
Total	1,608,882

Projected WSDM Supplies for CY 2008

Program	1/1/2008 Storage Levels	Amount Available at 35% SWP Allocation	CY 2008 Put Capacity
SURFACE STORAGE	667,070	476,970	514,900
<i>Lake Mead ICS Account</i>	46,170	46,170	200,000
<i>Castaic Lake (DWR Flex Storage)</i>	138,600	138,600	15,400
<i>Lake Perris (DWR Flex Storage)</i>	65,000	65,000	0
<i>Diamond Valley Lake</i>	390,100	200,000	213,000
<i>Lake Mathews & Lake Skinner (Dry-Year Storage)</i>	27,200	27,200	86,500
CENTRAL VALLEY BANKING PROGRAMS	489,900	158,200	131,675
<i>Arvin Edison Storage Program</i>	189,400	41,000	45,000
<i>Semitropic Storage Program</i>	250,300	100,500	31,675
<i>Kern Delta Storage Program</i>	31,300	8,200	55,000
<i>Mojave Storage Program</i>	18,900	8,500	0
GROUNDWATER STORAGE PROGRAMS	540,700	48,850	187,900
CONJUNCTIVE USE PROGRAMS	214,600	41,850	37,900
<i>IEUA/TVMWD (Chino Basin)</i>	88,000	22,000	12,000
<i>Long Beach (Cent. Basin)</i>	9,800	2,150	3,250
<i>Long Beach (Lakewood)</i>	1,800	0	900
<i>Foothill (Raymond and Monks Hill)</i>	3,400	0	2,250
<i>Calleguas (N. Las Posas)</i>	59,700	6,000	0
<i>MWDOC (Orange County Basin)</i>	49,700	11,000	15,000
<i>Three Valleys (Live Oak)</i>	700	0	750
<i>Three Valleys (upper Claremont)</i>	0	0	750
<i>Compton</i>	1,100	300	0
<i>Western</i>	400	400	3,000
CYCLIC PROGRAMS	63,600	0	0
<i>Cyclic - USG</i>	48,300	<i>Up to stored volume</i>	0
<i>Cyclic - PM (Three Valleys)</i>	15,300	<i>Up to stored volume</i>	0
<i>Cyclic - IEUA (Chino Basin)</i>	0	0	0
SUPPLEMENTAL PROGRAMS	27,000	7,000	0
<i>Supplemental Storage Program (Los Angeles)</i>	20,000	0	0
<i>Supplemental Storage Program (MWDOC)</i>	7,000	7,000	0
OTHER PROGRAMS	235,500	0	150,000
<i>Advance Delivery Account (DWCV) *</i>	121,400	0	150,000
<i>SBVMWD Coord. Operating Agmt. **</i>	50,000	0	0
<i>Central Arizona Storage Demonstration Project **</i>	64,100	0	0
OTHER WSDM ACTIONS	50,000	50,000	0
<i>EWA Wet/Dry Exchange</i>	50,000	50,000	0
TOTAL	1,747,670	734,020	834,475

* DWCV is shown as zero because it has been accounted for in base supplies.

** Central Arizona and SBVMWD COA are shown as zero because they have been accounted for in Transfers & Exchanges.

Programs Under Development in 2008

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