

- **Board of Directors**
Water Planning and Stewardship Committee

May 8, 2007 Board Meeting

9-5

Subject

Water Surplus and Drought Management Plan report on water supply and demand as of April 15, 2007

Description

Each month the Board is apprised of developing water supply and demand conditions that may impact water supply reliability. This report covers conditions through April 15. Conditions impacting imported and local supplies as well as demands are still variable due to weather conditions.

Water Supply*Colorado River Aqueduct*

Staff's current estimate of Colorado River supplies for CY 2007 is approximately 691 thousand acre-feet (TAF) based on Metropolitan's approved water order from the Federal Bureau of Reclamation (Reclamation). This figure includes 550 TAF of basic total apportionment supplies, approximately 72 TAF of additional CRA base supplies from the Imperial Irrigation District Program and IID/San Diego County Water Authority Transfer & Exchange Agreement in CY 2007, and 62 TAF under the PVID Land Fallowing Program. The current estimate has increased about 40,000 AF from last month due to a Reclamation revision of Priority 1, 2, 3B projected water use. A detailed listing of the Colorado River supplies is included in [Attachment 1](#).

State Water Project

Staff's estimate of SWP supplies for CY 2007 is currently 1.47 million acre-feet (MAF). This figure assumes a SWP allocation of 1.15 MAF based on DWR's latest SWP allocation of 60 percent for SWP Contractors. While the final SWP allocation could change as supply conditions develop, this estimate is becoming increasingly more firm as the majority of the water year has passed. In addition to the Table A supplies, Metropolitan has delivered 28 TAF of SWP base supplies from extended carryover supplies stored in CY 2006 and anticipates delivering 167 TAF of Article 21 supplies into the service area through the period covered under this update. Further, Metropolitan's exchange agreement with the Desert Water Agency and Coachella Valley Water District, transfer agreement with the San Bernardino Valley Municipal Water District, agreement with the city of Port Hueneme and acquisition of Turnback Pool A supplies are targeted to produce an additional 134 TAF. A detailed listing of the SWP supplies is included in [Attachment 1](#).

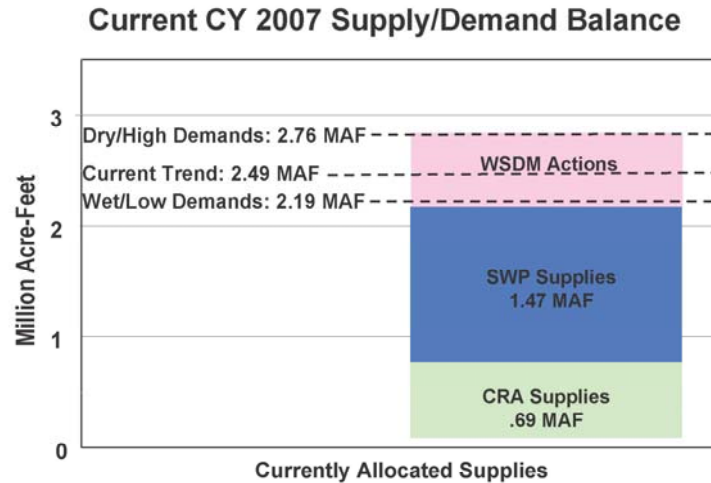
Demand

Current projected total demands on Metropolitan for CY 2007 range from a low of 2.19 MAF under wet/cool conditions to a high of 2.76 MAF under dry-year conditions. Under normal hydrologic conditions, demands are projected to be 2.49 MAF.

WSDM Supplies and Management Actions

In addition to the base CRA and SWP supplies, Metropolitan entered CY 2007 with approximately 2.5 MAF of supplies in its WSDM resource portfolio. These supplies, which include surface storage, groundwater storage, and water transfer agreements, would be utilized to meet deficits in supply and demand under an extremely dry scenario where the CRA and SWP supplies would be insufficient to meet projected high demands. A detailed listing of the WSDM supplies is included in [Attachment 2](#). Staff has identified a maximum deficit in supply and demand of approximately 600 TAF for 2007 (see graphic below). WSDM supplies and management actions that would be needed under that maximum deficit include withdrawal from Central Valley banking programs

(115 TAF), interruption to the Replenishment program (225 TAF), withdrawals from in-basin groundwater programs (30 TAF), and withdrawals from surface storage (230 TAF). As reported at the April board meeting, Metropolitan has initiated calls on its Central Valley storage programs. In addition, if conditions continue to indicate a supply deficit, Metropolitan would initiate replenishment cuts and in-basin groundwater withdrawals in the month of May. Withdrawals from surface storage would be initiated in June.



In the upcoming summer months, Metropolitan, in conjunction with member agencies, will launch a public information campaign with focused messages to be waterwise by conserving indoor and outdoor water uses. This action would help to reduce the peak loads of Metropolitan’s water delivery system.

All identified WSDM Plan and water management actions needed to meet the maximum estimated deficit of 600 TAF will be executed under the authority of the General Manager according to provisions in the Administrative Code. In the event that circumstances result in additional needs, staff would return to the Board for further action. Examples of these actions include water transfers, purchases, additional exchanges not currently under contract, the call for extraordinary conservation measures, and actions requiring amendment to current contracts and programs such as the Interim Agriculture Water Program (IAWP) and the PVID Land Following Program.

WSDM Supplies for CY 2007				
Program	1/1/07 Storage Levels	Capacity Available for Storage	CY 2007 Take Capacity	CY 2007 Put Capacity
CRA Storage *	360,500	575,000	102,660	200,000
SWP Storage **	1,008,300	352,700	514,800	476,500
In-Region Storage ***	1,180,700	567,600	300,000	191,650
Total ****	2,549,500	1,495,300	917,460	868,150

- * CRA storage does not include 70,000 acre-feet of storage in the Hayfield Program
- ** SWP storage includes surface, flex and conjunctive use storage. Does not include SWP southern reservoir storage and extended carryover
- *** In-Region storage includes surface, cyclic storage and conjunctive use storage
- **** This total does not include cuts in replenishment or IAWP deliveries

Looking Ahead

While current storage levels are sufficient to maintain three years at full withdrawal levels, it is still important to continue strategic resource planning and management for subsequent years. The key factors that will significantly

impact next year’s supply outlook are the degree of temperature and precipitation in the upcoming summer months, which impact water demand, and the amount of storage withdrawals necessary to balance potentially higher demands. Storage levels in the SWP system and state contractors’ demands will affect the projected initial allocation for CY 2008. Staff will report on these factors as part of its post-summer report due in October.

Update on CESA

On March 23, 2007, the Superior Court of Alameda County ruled against the Department of Water Resources stating that DWR did not have the appropriate authorization from the California Department of Fish and Game for the “take” of endangered species under the California Endangered Species Act. The order, which could have serious implications on the SWP system, was stayed for 60 days while DWR is allowed to either pursue further legal action or provide the required authorization.

Metropolitan’s current estimate of SWP supplies does not reflect this most recent course of events. However, staff is actively working with both DWR and Department of Fish and Game to ensure a resolution to this matter and will be providing further reports.

Summary

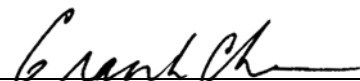
At the beginning of each year, Metropolitan faces a wide range of possible supply and demand conditions. The WSDM Plan provides a strategy to manage Metropolitan’s resources to meet that range of possible hydrologic conditions for the upcoming year. Currently, the projected CRA and SWP base supplies total approximately 2.17 MAF. When combined with the approximately 917 TAF of WSDM supplies and additional WSDM management actions, Metropolitan expects to be able to cover the range of estimated demands in CY 2007. Trends in supply and demand conditions for the year have led staff to initiate actions to mitigate deficits in supplies for the year. Changes in conditions after the posting of this report will be provided at the Water Planning and Stewardship Committee.

Policy

By Minute Item 43514, dated April 13, 1999, the Board adopted the Water Surplus and Drought Management Plan.

Fiscal Impact

None



Grace Chan 4/18/2007
Date
for Stephen N. Arakawa
Manager, Water Resource Management



Roger K. Patterson 4/19/2007
Date
for Jeffrey Kightlinger
General Manager

Attachment 1 – CRA and SWP Supplies Allocated as of April 15, 2007

Attachment 2 – WSDM Supplies for CY 2007

CRA and SWP Supplies Allocated as of April 15, 2007	
Colorado River Supplies	
Basic Total 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	16,804
Lower Colorado Water Supply Project	4,957
Restore Reregulated water	(21,649)
Adjustments for USBR System Conservation in PVID	(7,000)
PVID Land Fallowing *	62,381
MWD Water Budget Adjustment	(75,317)
<i>Priority 1,2, and 3b</i>	<i>-70,412</i>
<i>Imperial ID</i>	<i>0</i>
<i>Coachella Valley WD</i>	<i>0</i>
<i>Misc and Indian PPR's</i>	<i>-4,9056</i>
<i>Colorado River Supplies Total</i>	<i>691,176</i>
State Water Project Supplies	
SWP Table A	1,146,840
DWCV Entitlement	102,660
SBVMWD	20,000
MWD/DWCV Turnback Pool & Article 21 (including Special Art 21)	176,281
Port Hueneme	1,110
Carryover & 14b	28,098
<i>State Water Project Supplies Total</i>	<i>1,474,989</i>
Total	2,166,165

* In the April board letter, the PVID Land Fallowing number was included in the Priority 1,2,and 3b total.

WSDM Supplies for CY 2007				
Program	1/1/07 Storage Levels	Capacity Available for Storage	CY 2007 Take Capacity	CY 2007 Put Capacity
<i>CRA Storage</i>				
Advance Delivery Account (DWCV)	224,000	376,000	102,660	150,000
Lake Mead Storage Demonstration Program	47,500	199,000	0	50,000
Central Arizona Underground Storage Demonstration Project	89,000	0	0	0
<i>Subtotal</i>	<i>360,500</i>	<i>575,000</i>	<i>102,660</i>	<i>200,000</i>
<i>SWP Storage</i>				
Sac. Valley Transfers Stored in Shasta	47,000	0	47,000	0
EWA Wet/Dry Exchange	50,000	100,000	50,000	100,000
Arvin Edison Storage Program	212,500	37,500	61,000	37,500
Semitropic Storage Program	346,000	4,000	80,000	4,000
Kern Delta Storage Program	38,800	211,200	4,000	50,000
SBVMWD Coord. Operating Agmt.	50,000	0	19,400	0
Mojave Storage Program	45,000	0	34,400	0
Castaic Lake (Flex Storage)	154,000	0	154,000	0
Lake Perris (Flex Storage)	65,000	0	65,000	0
MWD Carryover 07/08*	0	0	0	200,000
DWCV Carryover 07/08*	0	0	0	85,000
<i>Subtotal</i>	<i>1,008,300</i>	<i>352,700</i>	<i>514,800</i>	<i>476,500</i>
<i>In-Region Storage</i>				
Diamond Valley Lake	740,000	80,000	200,000	70,000
Lake Mathews & Lake Skinner	173,000	53,000	60,000	44,000
Cyclic - USG	48,300	51,700	Up to stored volume	Varies
Cyclic - PM (Three Valleys)	12,800	27,200	Up to stored volume	Varies
Cyclic - IEUA (Chino Basin)	1,700	98,300	Up to stored volume	0
Conj. Use - IEUA (Chino Basin)	48,000	52,000	0	25,000
Conj. Use - Long Beach (Cent. Basin)	13,000	0	4,300	0
Conj. Use - FM (Live Oak Basin)	500	2,500	0	750
Conj. Use - Calleguas (N. Las Posas)	51,000	159,000	16,700	33,000
Conj. Use - MWDOC	28,000	32,000	0	15,000
Conj. Use - Three Valleys	3,400	0	0	0
Conj. Use - Foothill	2,400	6,600	0	2,500
Conj. Use - Compton	600	1,700	0	500
Conj. Use - Long Beach (Lakewood)	0	3,600	0	900
Conj. Use - Pasadena	22,000	0	0	0
Supplemental Storage Program (MWDOC)	20,000	0	5,000	0
Supplemental Storage Program (Los Angeles)	16,000	0	14,000	0
<i>Subtotal</i>	<i>1,180,700</i>	<i>567,600</i>	<i>300,000</i>	<i>191,650</i>
Total	2,549,500	1,495,300	917,460	868,150

* CY'06 Carryover amounts are included in SWP base supplies*