



• Water Surplus and Drought Management Plan

Summary

This report provides a summary of demand and supply conditions for calendar year (CY) 2012, and an accounting of actions taken under the Water Surplus and Drought Management Plan (WSDM) to date.

Shortly following the May 2012 report, the Department of Water Resources (DWR) increased the CY 2012 State Water Project (SWP) Table A allocation for the final time, from 60 to 65 percent. The increase was due to favorable hydrologic conditions in the Northern Sierra and a relatively full Lake Oroville. Under a 65 percent Table A allocation, Metropolitan anticipates 1.267 million acre-feet (MAF) from the SWP system. Supplies from the Colorado River Aqueduct (CRA) system for CY 2012 are expected to total 824 thousand acre-feet (TAF). This brings the total water supply available to Metropolitan from both the SWP and CRA systems to 2.091 MAF. Member agency demands, obligations, and losses for CY 2012 are based on actual deliveries from January through August 2012 and an estimate for September through December, assuming normal weather conditions for those months. Member agency demands, obligations, and losses for CY 2012 are expected to be 1.845 MAF. The balance between the allocated water supplies and estimated demands results in a range of potential storage activity in CY 2012. Based on the allocated supplies and the estimated demands, Metropolitan will put 246 TAF into storage by the end of CY 2012.

2012 Supply and Demand Balance	
CRA Supply	824,000
SWP Supply	1,267,000
Total Supply	2,091,000
Member Agency Demand	1,768,000
Obligations and Losses	77,000
Total Demand	1,845,000
Net to Storage	246,000

Attachments

[Attachment 1: WSDM Storage Levels](#)

Detailed Report

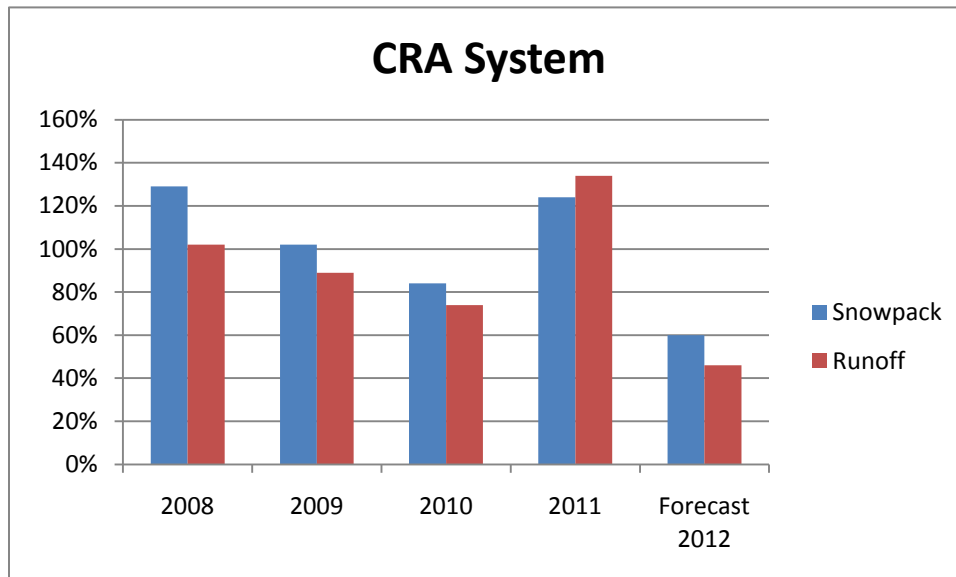
This report provides the Board with an update on developing WSDM conditions, and identifies potential actions that may be required to balance water supplies and demands. All data contained in this report is current as of September 21, 2012. The report is structured to show:

- the major factors affecting water supply and demand conditions;
- current estimates of water supplies available to the service area from the CRA and SWP systems;
- current estimates of total demands on Metropolitan, including member agency demands, obligations, and losses;
- the amount of additional water supply need, or potential water available for storage, resulting from the balance between supplies and demands; and
- the capability of Metropolitan storage resources to manage the projected conditions.

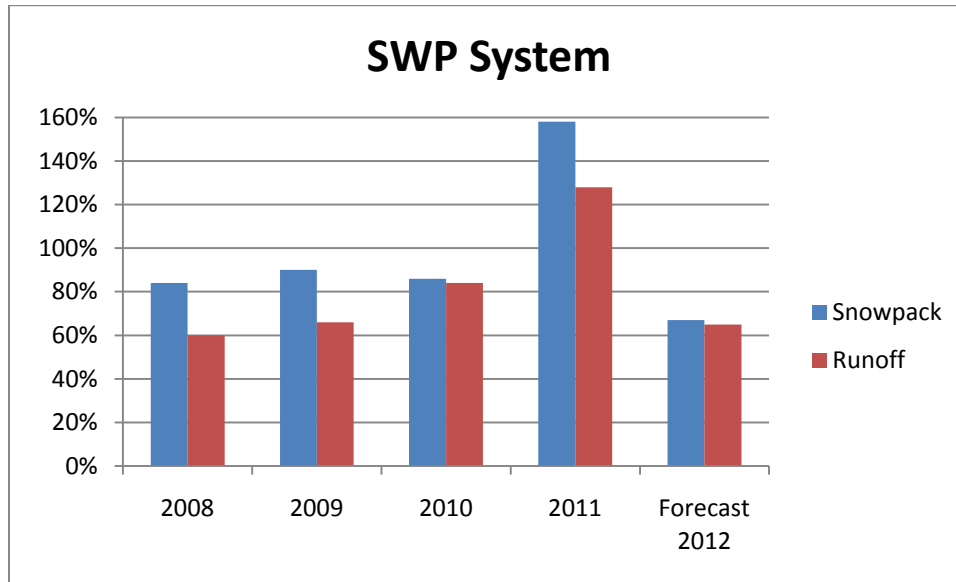
Factors Affecting Water Supply and Demand Conditions

There are a number of factors that impact Metropolitan’s water supply and demand balance each year. One of the primary drivers affecting both water supplies and demands is hydrology. Throughout the year, Metropolitan staff monitors hydrologic conditions such as precipitation, snowpack and the resulting runoff in the Colorado River Basin, the Sierra Nevada Mountains, and in Metropolitan’s service area.

On the CRA system, precipitation and snowpack in the Upper Colorado Basin are the primary indicators of water supply conditions. Precipitation is measured at 118 stations located throughout the basin. The 2012 water year precipitation is 74 percent of normal to date. On April 1, the date historically considered as the peak of snowpack accumulation and the beginning of the snowmelt season, the Upper Colorado Basin snowpack measured 60 percent of normal. As a result of these dry conditions, runoff from the basin is forecasted to be only 46 percent of normal, the lowest since 2008. Due to the way that Colorado River Supplies are apportioned, these dry conditions do not impact Metropolitan water supplies in the current year. However, impacts will be seen to storage levels in Lake Powell and Lake Mead, which in turn affect the likelihood of surplus or shortage conditions in the future.



On the SWP system, precipitation and snowpack in the Northern Sierra Nevada Mountains are the primary indicators of water supply conditions. Metropolitan tracks precipitation conditions in the Northern Sierra through the Northern Sierra 8-Station Index. The 8-Station Index is a composite of eight weather stations located within the region’s major watersheds: The Upper Sacramento, Feather, Yuba, and American Rivers. For the current water year, the 8-Station index is currently at 41.6 inches, or about 85 percent of normal. On April 1, the Northern Sierra snowpack, which is measured at Donner Summit, was 67 percent of normal. The resulting runoff for the water year is forecast to be 65 percent of normal.



In southern California, variation in weather conditions can have a large impact on water demands on Metropolitan. Local climate conditions impact both water use at the retail-customer level, and member agency local supply production. Two key weather stations located at the Los Angeles Civic Center and the San Diego Airport serve as indicators of the climate conditions of Metropolitan’s service area. In water year 2012, precipitation at the Los Angeles and the San Diego weather stations were 58 and 74 percent of normal respectively.

This section is meant to provide a summary recap of the hydrologic conditions impacting Metropolitan’s supplies in 2012. Because this report was posted before the end of the water year, some small changes may still occur. Over the next few months, staff will return with a final water year recap and transition into reporting conditions for the new water year.

Colorado River Aqueduct

The current estimate of CRA supplies for CY 2012 is 824 TAF. The CRA supplies consist of Metropolitan’s Basic Apportionment (550 TAF), and other CRA supply programs such as the Palo Verde Irrigation District (PVID) Land Fallowing program. Agricultural overuse is estimated at 78 TAF, resulting in negative adjustments.

2012 Colorado River Aqueduct Supply	
Basic Apportionment	550,000
IID/MWD Conservation Program	85,000
PVID Land Fallowing	77,000
Transfer to SDCWA (IID Transfer and Canal Lining)	168,000
Canal Lining Water to MWD	16,000
Lower Colorado Water Supply Project	6,000
Agricultural Adjustments	-78,000
CRA Supply	824,000

State Water Project System

In May 2012, DWR increased the CY 2012 State Water Project Table A allocation from 60 percent to 65 percent. The increase was due to favorable hydrologic conditions in the Northern Sierra with March registering in as the fifth wettest March ever recorded and Lake Oroville operational full (at more than 80 percent capacity). Lake

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Oroville is a key reservoir operated by DWR to regulate supplies for the SWP. Under 65 percent Table A allocation, Metropolitan anticipates 1.267 MAF from the SWP system.

2012 State Water Project Supply	
Table A	1,242,000
Turn-Back Pool A	4,000
SBVMWD Minimum Purchase	20,000
Port Hueneme	1,000
SWP Supply	1,267,000

Demands, Obligations, and Losses

Member agency demands on Metropolitan include water deliveries to the member agencies, as well as water exchanged with the San Diego County Water Authority. Losses for 2012 are an estimate of Metropolitan distribution system losses and evaporative losses from storage of around 77 TAF. Currently, there are no outstanding obligations for 2012 that would place an additional demand for supplies on Metropolitan.

Member agency demands, obligations, and losses are based on actual deliveries in January through August and an estimate for September through December 2012, assuming normal weather conditions for those months. Currently, agency demands, obligations, and losses for CY 2012 are expected to be 1.845 MAF.

Supply and Demand Balance

Under the current SWP Table A allocation of 65 percent, the total estimated water supply from the CRA and SWP systems is 2.091 MAF. The current estimate of Metropolitan's demands, obligations, and losses are 1.845 MAF. If weather conditions continue to be near normal for the remainder of the year, the balance between currently allocated water supplies and estimated demands is 246 TAF. Metropolitan anticipates putting 246 TAF into storage by the end of 2012.

2012 Supply and Demand Balance	
CRA Supply	824,000
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Storage

Metropolitan's dry-year storage balance at the beginning of CY 2012 was approximately 2.4 MAF. Based on currently allocated supplies and estimates of demands, Metropolitan anticipates adding 246 TAF to storage in CY 2012. This would increase Metropolitan's dry-year storage balance to 2.646 MAF; the highest level in Metropolitan history. [Attachment 1](#) details the initial 2012 storage balances, storage actions, and estimated ending 2012 balances for each of Metropolitan's storage programs. The approved budget for FY 2012/13 provides funding to store available supplies under these forecasted conditions.

Program	Initial Balance 1/1/2012	Put (+) or Take (-)	Estimated Ending Balance 12/31/2012
SURFACE STORAGE	2,195,000	-74,000	2,121,000
<i>Lake Mead ICS Account</i>	434,000	68,000	502,000
<i>MWD Article 14 B</i>	43,000	-43,000	0
<i>MWD SWP Carryover</i>	200,000	35,000	235,000
<i>SWP Non-Project Carryover</i>	0	0	0
<i>Castaic Lake (DWR Flex Storage)</i>	154,000	0	154,000
<i>Lake Perris (DWR Flex Storage)</i>	65,000	0	65,000
<i>Diamond Valley Lake</i>	786,000	-121,000	665,000
<i>Lake Mathews</i>	142,000	-13,000	129,000
<i>Lake Skinner</i>	37,000	0	37,000
<i>Other Emergency Storage</i>	334,000	0	334,000
CENTRAL VALLEY BANKING PROGRAMS	591,000	154,000	745,000
<i>Arvin Edison Storage Program</i>	164,000	53,000	217,000
<i>Semitropic Storage Program</i>	245,000	41,000	286,000
<i>Kern Delta Storage Program</i>	137,000	45,000	182,000
<i>Mojave Storage Program</i>	45,000	15,000	60,000
GROUNDWATER STORAGE PROGRAMS	240,000	166,000	406,000
CONJUNCTIVE USE PROGRAMS	31,000	35,000	66,000
<i>IEUA/TVMWD (Chino Basin)</i>	0	0	0
<i>Long Beach (Cent. Basin)</i>	6,000	0	6,000
<i>Long Beach (Lakewood)</i>	1,000	0	1,000
<i>Foothill (Raymond and Monkhill)</i>	0	0	0
<i>Calleguas (N. Las Posas)</i>	0	0	0
<i>MWDOC (Orange County Basin)</i>	17,000	31,000	48,000
<i>Three Valleys (Live Oak)</i>	2,000	0	2,000
<i>Three Valleys (upper Claremont)</i>	1,000	1,000	2,000
<i>Compton</i>	0	0	0
<i>Western</i>	4,000	3,000	7,000
OTHER PROGRAMS	209,000	131,000	340,000
<i>Advance Delivery Account (DWCV)</i>	209,000	131,000	340,000
TOTAL	3,026,000	246,000	3,272,000

Emergency	626,000	0	626,000
TOTAL WSDM Storage	2,400,000	246,000	2,646,000