



● **Water Surplus and Drought Management Plan**

Summary

Weather conditions in the Northern Sierra region have been exceptionally wet. As of December 31, 2012, precipitation measured at the 8-Station Index was 182 percent of normal to date. The 8-Station Index is a composite of eight weather stations located within the Northern Sierra watersheds. Snowpack at Donner Summit was 189 percent of normal to date. Snowpack measurement at Donner Summit is used to determine the eventual water content and runoff. In the Upper Colorado Basin, snowpack was measured at 76 percent of normal to date.

On December 21, 2012, Department of Water Resources (DWR) announced an increase in the 2013 State Water Project (SWP) Table A allocation from 30 percent to 40 percent. Under the current allocation, the total supply from the SWP system is 786 Total Acre Feet (TAF). Supplies from the Colorado River Aqueduct (CRA) system for 2013 are expected to be 867 TAF, bringing the total water supply available to Metropolitan from both the SWP and CRA systems to 1.653 Million Acre Feet (MAF).

Assuming demand levels are similar to what was seen over the last 12 months, member agency demands, obligations, and losses are estimated to total 1.857 MAF for CY2013.

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 December 31, 2012. The report is structured to show:

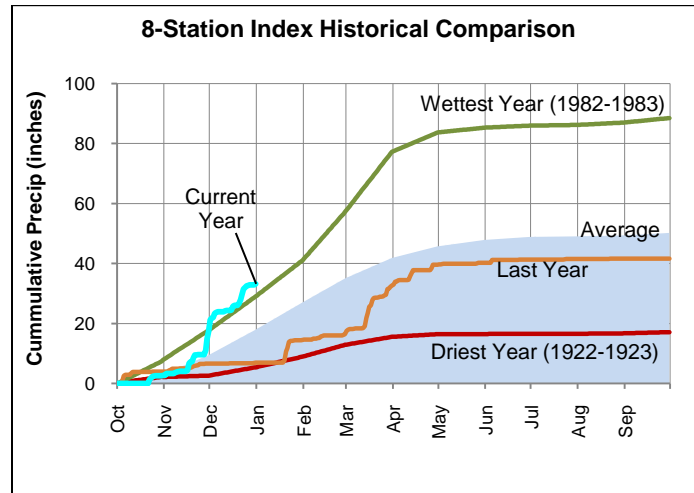
- the major factors affecting water supply and demand conditions;
- current estimates of water supplies available to the service area from the CRA and SWP systems;
- current estimates of total demands on Metropolitan, including member agency demands, obligations, and losses;
- the amount of additional 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

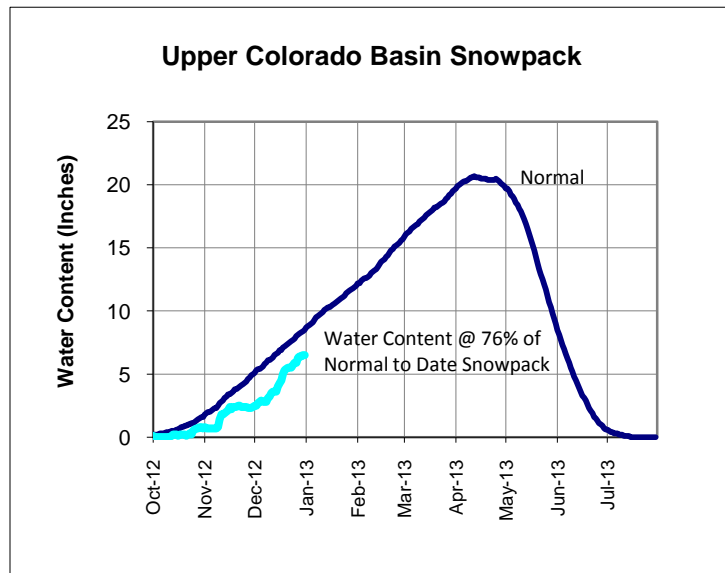
There are a number of factors that impact Metropolitan's water supply and demand balance each year. One of the primary drivers affecting both water supplies and demands is hydrology. Throughout the year, Metropolitan staff monitors hydrologic conditions such as precipitation, snowpack and the resulting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

On the SWP system, weather conditions in the Northern Sierra region have been exceptionally wet. As of December 31, 2012, snowpack at Donner Summit was 189 percent of normal to date. Snowpack measurement at Donner Summit is used to determine the eventual water content and runoff. Precipitation measured at the 8-Station Index was 33.1 inches or 182 percent of normal to date. The graph below tracks cumulative precipitation measured by the 8-Station Index. The 8-Station Index is a composite of eight weather stations located within the Northern Sierra watersheds.

Board Report (Water Surplus and Drought Management Plan)



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. As of December 31, 2012, snowpack was measured at 76 percent of normal to date, with a snow-water content of 6.5 inches. Due to the way that Colorado River Supplies are apportioned, weather 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.



Colorado River Aqueduct

Total supply from the CRA system is estimated at 867 TAF for 2013. Unlike supplies from the SWP system, Metropolitan does not anticipate supplies from the CRA system to change or fluctuate in large quantity beyond Metropolitan's Priority 4 Basic Apportionment and the established exchange programs.

Board Report (Water Surplus and Drought Management Plan)

The table below shows Metropolitan’s estimate of diversions from the Colorado River for CY 2013.

2013 Colorado River Aqueduct Supply	
Basic Apportionment	550,000
IID/MWD Conservation Program	85,000
PVID Land Following	31,000
Transfer to SDCWA (IID Transfer and Canal Lining)	181,000
Canal Lining Water to MWD	16,000
Lower Colorado Water Supply Project	4,000
Agricultural Adjustments	0
CRA Supply	867,000

State Water Project System

On December 21, 2012, DWR announced an increase in the 2013 SWP Table A allocation from 30 percent to 40 percent. The SWP Table A allocation is determined based on a number of factors, including storage levels in Lake Oroville and San Luis Reservoir, as well as rain and snowfall. As conditions change during the course of the next five months, DWR is expected to adjust the Table A allocation accordingly. The table below shows the supply from the SWP system based on the current 40 percent allocation.

2013 State Water Project Supply	
Table A Allocation @ 40%	765,000
Turn-Back Pool A	0
SBVMWD Minimum Purchase	20,000
Port Hueneme	1,000
SWP Supply	786,000

Demands, Obligations, and Losses

For CY 2013, the initial member agency demands are assumed to be 1.8 MAF, which reflects conditions similar to the last 12 months. However, weather conditions, economic activity, and local supplies will impact this estimate. Staff will continue to track member agency demands as the year progresses.

2013 Member Agency Demand	
Member Agency Demand (based on last 12 months)	1,800,000

Losses and obligations for 2013 are estimated at 57 TAF. This estimate consists entirely of Metropolitan distribution system losses; at this time Metropolitan has no outstanding obligations for 2013.

2013 Obligations and Losses	
System and Storage Losses	57,000
Obligations	0
Obligations and Losses	57,000

Storage

Metropolitan’s WSDM storage reserves at the beginning of CY 2013 are estimated to total 2.739 MAF. The estimated 2013 take capacity based on current conditions is approximately 1.652 MAF. Factors affecting take capacity include facility capacities, contractual terms, and the SWP Table A allocation. The Central Valley banking and the CRA groundwater programs take capacities are based on the current SWP Table A allocation of

Board Report (Water Surplus and Drought Management Plan)

40 percent. **Attachment 1** provides a discussion of storage capacities and major considerations for Metropolitan's storage programs.

2013 WSDM Storage	1/1/2013 Storage Levels	Maximum CY 2013 Take Capacity*	CY 2013 Put Capacity*	Total Capacity
Colorado River Aqueduct Delivery System	570,000	300,000	200,000	1,590,000
Lake Mead Extraordinary Conservation ICS	480,000	300,000	200,000	1,500,000
Drop 2 Reservoir and Yuma Desalting Plant	90,000	0	0	90,000
State Water Project System	1,248,000	680,000	91,000	1,829,000
MWD SWP Carryover	286,000	286,000	-16,000	270,000
Castaic Lake (DWR Flex Storage)	154,000	154,000	0	154,000
Lake Perris (DWR Flex Storage)	65,000	65,000	0	65,000
Arvin Edison Storage Program	218,000	40,000	45,000	350,000
Semitropic Storage Program	285,000	56,000	32,000	350,000
Kern Delta Storage Program	180,000	62,000	30,000	250,000
Mojave Storage Program	60,000	17,000	0	390,000
In-Region Supplies and WSDM Actions	887,000	594,000	235,000	1,491,000
Diamond Valley Lake	686,000	506,000	124,000	810,000
Lake Mathews	101,000	22,000	81,000	182,000
Lake Skinner	34,000	0	10,000	44,000
IEUA/TVMWD (Chino Basin)	0	0	0	100,000
Long Beach (Cent. Basin)	6,000	6,000	0	13,000
Long Beach (Lakewood)	1,000	1,000	0	4,000
Foothill (Raymond and Monks Hill)	0	0	0	9,000
MWDOC (Orange County Basin)	49,000	49,000	16,000	66,000
Three Valleys (Live Oak)	2,000	2,000	0	6,000
Three Valleys (Upper Claremont)	1,000	1,000	1,000	3,000
Compton	0	0	0	2,000
Western	7,000	7,000	3,000	12,000
Cyclic - Upper San Gabriel	0	0	0	100,000
Cyclic - Three Valleys	0	0	0	40,000
Cyclic - Inland Empire Utilities Agency	0	0	0	100,000
Other Programs	660,000	78,000	229,000	1,134,000
Other Emergency Storage	334,000	0	0	334,000
DWCV Advance Delivery Account	326,000	78,000	229,000	800,000
Total	3,365,000	1,652,000	755,000	6,044,000
Emergency	626,000	0	0	0
Total WSDM Storage**	2,739,000	1,652,000	755,000	6,044,000

*Put and take capacity assumed under a 40% SWP Table A Allocation.

**Total WSDM Storage level is subject to change based on accounting adjustments.