THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: November 17, 2010

TO: Natural Resources and Culture Committee – Agenda of December 1, 2010

FROM: Roger Bailey, Director of Public Utilities

SUBJECT: Monthly Update on Conservation and Water Use Restrictions

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Since the first month of implementation of mandatory use restrictions in San Diego in June 2009, the Public Utilities Department staff has provided the City Council's Natural Resources and Culture Committee with monthly updates on compliance efforts and resulting reductions in water use. For Fiscal Year 2010, water usage citywide was 11% lower than usage during the previous year, meeting the 8% reduction target set by the San Diego County Water Authority (CWA). In Fiscal Year 2011, the CWA called for the same usage reduction target of 8%. This update summarizes water usage in the City of San Diego for this Fiscal Year through October 31, 2010. It also includes the current water supply outlook and the latest information on water waste compliance.

Water Supply Outlook

Attached is the latest CWA staff report on water supply conditions presented to their Board of Directors last month. Highlight of the report includes:

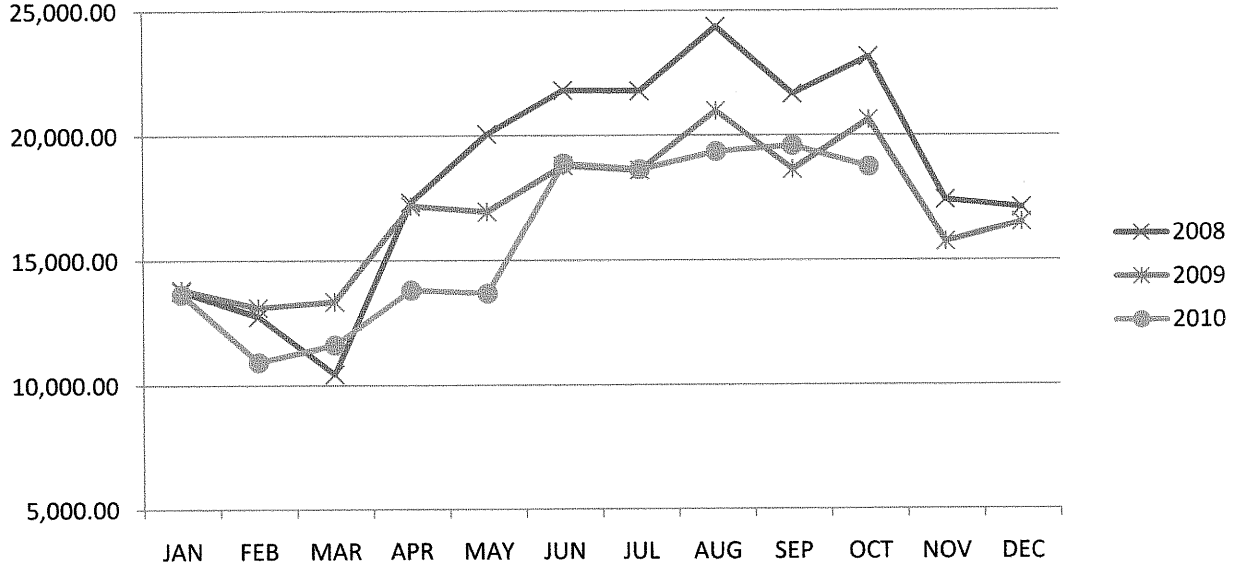
- Storage levels at California Department of Water Resources reservoirs have increased slightly, compared to the previous year.
  - Oroville is at 50% of capacity compared to 38% last year.
  - Shasta is at 73% of capacity compared to 39% last year.
- Metropolitan Water District of Southern California has added 200,000 acre-feet (AF) of water in Diamond Valley Lake, now at 72% of capacity.
- According to the United States Bureau of Reclamation, inflow into Lake Powell is a useful barometer of drought conditions in the Colorado River Basin. Lake Powell inflow has been below average every year since 1999, excluding water years 2005 and 2008.
  - Lake Mead is 39% full (at 1,082 feet elevation)
  - Lake Powell is 63% full
  - Precipitation is 89 % of average

San Diego benefited from approximately two inches of rain in the month of October, and as of November 11, 2010, recorded rainfall is at 2.3 inches for the season, an inch above normal.

Water Use Reduction

Chart A shows how overall usage in the City has trended. Since mandatory water conservation messaging began in May 2009, monthly usage has been significantly lower than the prior year, through May 2010. If usage in Fiscal Year 2011 followed the trend from the previous year, San Diego will achieve the 8% reduction goal just like it did last year.

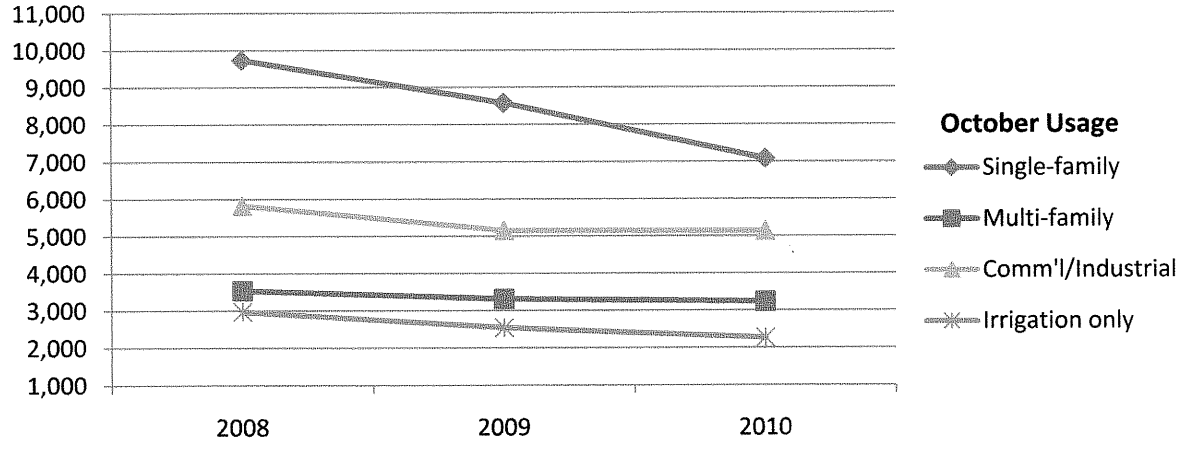
Chart A – Total Consumption (AF)



Water usage in June and July 2010 has been about the same compared to usage in June and July 2009, which still reflects a significant drop from 2008 usage. While usage in September was higher compared to last year (San Diego experienced several hot days that month), August and October water consumption was lower than last year.

Chart B – Billed Consumption in August (AF)

Chart B below shows how the major customer categories used water in October 2010, as compared to October from previous years. Usage in the month of October has continued to decline over the last three years, with commercial/industrial and multi-family residential customers showing about the same consumption level from last year.

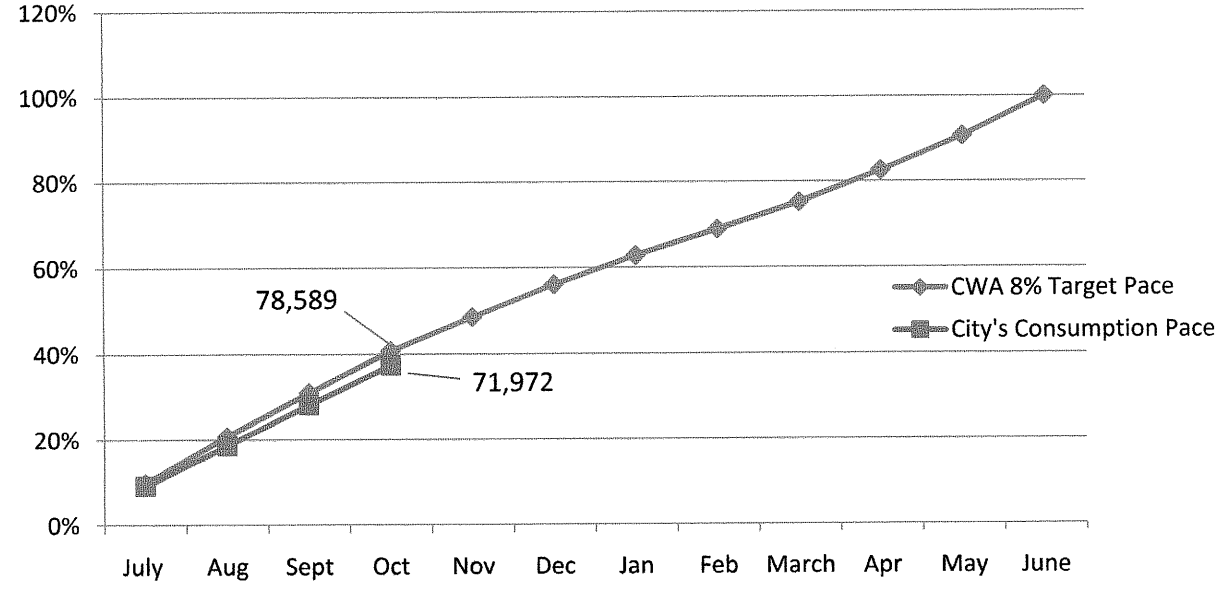


October water usage by City departments was about the same when compared to October 2009, but down 13.4% from October 2008.

Meeting the CWA Allocation

The City of San Diego's Fiscal Year 2011 total allocation from the CWA is 220,143.8 acre-feet (AF) in water deliveries. After accounting for reservoir storage and other system usage, staff anticipates this allocation to amount to a 192,626 AF billed consumption target. Chart C shows this annual target broken down into monthly targets and, when comparing the actual billed consumption through September to the month targets, the City is 8.4% below its target.

Chart C – Consumption Pace



Water Waste Enforcement

With regards to water waste enforcement, more than 6,749 complaints were received through October 31, 2010, since the restrictions began 16 months ago. A total of 104 cases have been referred to Code Enforcement Officers due to non-action, and one citation carrying a $100 fine was issued.

Roger S. Bailey
Director of Public Utilities

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Attachment

cc: J. Brent Eidson, Assistant Director, Intergovernmental Relations
Alex Ruiz, Assistant Director, Public Utilities
Marsi Steirer, Deputy Director, Long Range Planning and Water Resources
Mike Vogl, Deputy Director, Customer Support
Luis Generoso, Water Resources Manager

San Diego County Water Authority

October 20, 2010

Attention: Water Planning Committee

Water supply conditions. (Information)

Purpose
To provide a summary of water supply conditions in Water Year 2010.

Background
Drought Management Plan: Stage 3 "Mandatory Cutbacks"
Drought Response Level: Level 2 "Drought Alert"

The water year extends from October 1 through September 30 and is used to report hydrologic conditions. Above average precipitation statewide in water year 2010 due to El Niño conditions ended three consecutive dry years in California. La Niña conditions are now present, and the National Weather Service forecasts La Niña will strengthen and last through the spring 2011. La Niña is associated with an increased likelihood of below average precipitation for the majority of California, and above precipitation in the Pacific Northwest.

Discussion
State Water Project
The California Department of Water Resources (DWR) final State Water Project (SWP) Table A allocation for calendar year 2010 is 50 percent of the State Water Contractors requested amounts. The final allocation was increased several times from the initial allocation in November 2009 of five percent, which is the lowest initial allocation in the history of the SWP. The 2009 calendar year allocation was 40 percent. The average SWP allocation over the past 10 years is 68 percent of contractor requests.

The 2010 water year type index was classified by DWR as below normal for the Sacramento Valley and above normal for the San Joaquin Valley. A summary of statewide water conditions is provided in the table below.

Summary of Statewide Water Supply Conditions – Percent of Average

Hydrologic Indicator	Water Year 2009	Water Year 2010
Northern Sierra 8-Station Precipitation Index	93%	107%
Northern Sierra Snowpack Maximum Accumulation	93%	143%
Sacramento River unimpaired runoff	70%	86%
Statewide Reservoir Storage	79%	105%

Reservoir storage at the end of water year 2010 compared with 2009 is shown for Shasta, Oroville, and San Luis reservoirs in the following table.

	Shasta*		Oroville		San Luis	
	WY 2009	WY 2010	WY 2009	WY 2010	WY 2009	WY 2010
Storage in MAF	1.77	3.32	1.34	1.76	.421	.789
Percent of Capacity	39	73	38	50	21	39
Percent of Average	63	118	59	78	42	79

*Shasta reservoir is part of the Central Valley Project, not the State Water Project.

Colorado River

The multi-year drought on the Upper Colorado River Basin persisted through water year 2010. According to the United States Bureau of Reclamation (Reclamation), inflow to Lake Powell is a useful barometer of drought conditions in the Colorado River Basin. Lake Powell inflow has been below average every year since 1999, excluding water years 2005 and 2008.

Water supply conditions on the Colorado River for water year 2010 were as follows:

- Lake Mead: 39 percent full
- Lake Powell: 63 percent full
- Total System contents: 56 percent full
- Precipitation: 89 percent of average
- Unregulated inflow to Lake Powell: 73 percent of average

California will continue to receive its full apportionment of water from the river in calendar year 2011. Reclamation has forecasted that there could be shortages on the river in 2012 under certain hydrologic conditions, with Arizona and Nevada experiencing these shortages first.

Metropolitan Water District of Southern California

Metropolitan Water District of Southern California (MWD) will continue implementation of its Water Supply Allocation Plan at a Level 2 through June 30, 2011. Due primarily to conservation savings, increased SWP allocation, and northern California water transfers, MWD has approximately 200,000 acre-feet (AF) more water in Diamond Valley Lake storage in September compared to the same time last year.

Local Conditions

Hydrologic conditions also improved locally. Accumulated precipitation throughout the county is provided in the table below.

Water Year 2010 Precipitation at Various Locations in San Diego

Location	Inches	Percent of Normal
San Diego, at Lindbergh Field	10.60	98
Lake Cuyamaca	38.81	108
Lake Henshaw	32.41	116

Total local reservoir storage (including the Water Authority's carryover storage) at the end of September 2010 was at approximately 289,000 AF, which was about 32,000 AF greater compared with this time last year. Storage levels reflect increases primarily due to runoff, along with withdrawals that occurred during this period.

The Water Authority had the following dry-year supplies in storage through September 30, 2010:

- Water Authority local carryover storage: 38,600 AF
- Water Authority Semitropic groundwater storage bank: 16,117 AF

Summary

Hydrologic conditions improved in water year 2010 for the SWP, but not in the Colorado River Basin. Precipitation and snowpack were above average in northern California. However, runoff to the Sacramento River remained below average due to the previous three dry years. Locally, conditions improved, with precipitation at or above normal throughout the region and reservoir levels higher than the previous year. There are still a number of uncertainties associated with the water supply situation for water year 2011, including weather conditions and regulatory pumping restrictions on the SWP. Staff will continue to monitor and report on water supply conditions throughout the upcoming year.

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