

Monthly Report

To: David Dickson, General Manager
From: Cathleen Brennan, Water Resources Analyst
Agenda: January 10, 2012

Subject: Water Resources Report

This report includes the following items:

- Bay Area Water Supply and Conservation Agency (BAWSCA) Grant Funding Update
- California Department of Water Resources Snow Survey
- District's Water Supply Outlook for Calendar Year 2012

□ **BAWSCA Grant Funding Update**

BAWSCA is working toward securing grant funding to subsidize water use efficiency rebate programs through the San Francisco Bay Area Integrated Regional Water Management Program (Prop 84 funding) and the California Department of Water Resources.

BAWSCA has requested \$863,000 on behalf of its member agencies and their customers. The earliest the grant funding would be available is July of 2012 (fiscal year 2013). BAWSCA has applied for the grant funding to support the following regional rebate programs:

Rebate Program	Grant Distribution	Projected Grant Cost Share	Current District Rebate Amount
Lawn Be Gone!	\$150,000	\$0.375/ft ²	\$0.50/ft ²
High Efficiency Toilets	\$353,000	\$75/toilet	\$100/toilet
High Efficiency Clothes Washers	\$360,000	\$37.50/washer	\$50/washer

□ **California Department of Water Resources Snow Survey**

Attached is the press release for the January 3rd snow survey performed by the California Department of Water Resources. The results show that the statewide water content is at 19% of average for January. It is slightly better for the southern Sierra with water content at 26% of average for January. Fortunately, current statewide water storage is adequate to meet demand in 2012 even if this winter and spring continues to be dry.



□ **District's Water Supply Outlook for Calendar Year 2012**

The District monitors local precipitation and hydrological conditions of the San Francisco Public Utilities Commission's (SFPUC) regional water system in order to adequately prepare for potential water shortages and to manage production sources. The District relies on both imported and local water to meet the water demand of its customers. Production from any one source can vary from year to year depending on infrastructure improvement projects, water availability and regulatory restrictions.

On average, 72 percent of the District's water production is supplied from imported water purchased from SFPUC. Last fiscal year imported water was 90 percent (602.97 MG/1.65 MGD) of our total water production due to the Denniston Water Treatment Plant being taken offline. These imported water sources include Pilarcitos Lake and Crystal Springs Reservoir, which are part of SFPUC's regional water system. While the Denniston Water Treatment Plant is under renovation, the District is relying on Pilarcitos Creek Infiltration Wells, Pilarcitos Lake and Crystal Springs Reservoir for water production in 2012. The current SFPUC Hydrological Conditions Report declared that Pilarcitos Lake is at 65.4 percent of maximum storage and Crystal Springs Reservoir is at 71.1 percent of maximum storage. Total water storage in SFPUC's regional water system is at a healthy 86.2 percent of maximum storage due to a wet 2011 water year (October 2010 through September 2011) and a mild summer with low water demand.

Therefore, based on the information available at this time, there should be adequate water supply (2.18 MGD) through calendar year 2012 from imported sources to meet the District's production demand.

Two consecutive dry years (WY 2012 and WY 2013) with normal to above normal demand would lead to the depletion of available water storage and require voluntary or mandatory water demand management measures to be implemented by the District and its customers in 2013. These concerns are highlighted when we experience extremely dry periods. Weather records, dating back to the year 1948, show that December of 2011 was the second driest December in Half Moon Bay. December of 1990 had 0.03 inches of rain and was during a period (1987 to 1992) of dry conditions that resulted in a water shortage and mandatory rationing.



News for Immediate Release

January 3, 2012

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First Snow Survey of 2012 Shows Dry Conditions

SACRAMENTO – Snow surveyors today reported that California’s mountain snowpack is among the driest for the date on record.

Manual and electronic readings today record the snowpack’s statewide water content at 19 percent of the January 3 average. That is only 7 percent of the average April 1 measurement, when the snowpack is normally at its peak before the spring melt.

Despite today’s dry conditions, however, water managers remain cautiously optimistic about this year’s water supply.

“Fortunately, we have most of winter ahead of us, and our reservoir storage is good,” said DWR Director Mark Cowin.

Results of today’s manual readings by the Department of Water Resources (DWR) off Highway 50 near Echo Summit are as follows:

Location	Elevation	Snow Depth	Water Content	% of Long Term Average
Alpha	7,600 feet	0	0	
Phillips Station	6,800 feet	4	.14	1
Lyons Creek	6,700 feet	7.1	2.4	20
Tamarack Flat	6,500 feet	inches	inches	Missing

Electronic readings indicate that water content in the northern mountains is 21 percent of normal for the date and 8 percent of the April 1 seasonal average. Electronic readings for the central Sierra show

13 percent of normal for the date and 5 percent of the April 1 average. The numbers for the southern Sierra are 26 percent of average for the date and 9 percent of the April 1 average.

Statewide, the snowpack water content is 19 percent of normal for today's date and 7 percent of April 1.

DWR and cooperating agencies conduct manual snow surveys around the first of the month from January to May. The manual surveys supplement and check the accuracy of real-time electronic readings from sensors up and down the state.

DWR's initial estimate is that the State Water Project (SWP) will be able to deliver 60 percent of the slightly more than 4 million acre-feet of water requested by the 29 public agencies that supply more than 25 million Californians and nearly a million acres of irrigated farmland.

The 60 percent delivery estimate is largely based on the known quantity of carryover reservoir storage. Unknown is how much snow and rain the state will get the rest of this winter.

Calendar year 2011 illustrates how weather-driven water supply conditions can dramatically change. The initial 2011 estimate was that the SWP would be able to deliver 25 percent of the slightly more than 4 million acre-feet requested. As winter took hold and storms swept the state, a near-record snowpack and heavy rains resulted in deliveries of 80 percent of requests in 2011. The final allocation was 50 percent in 2010, 40 percent in 2009, 35 percent in 2008, and 60 percent in 2007. The last 100 percent allocation – difficult to achieve even in wet years because of Delta pumping restrictions to protect threatened and endangered fish – was in 2006.

Lake Oroville in Butte County, the SWP's principal storage reservoir with a capacity of 3.5 million acre-feet, is still 72 percent full thanks to last winter's heavy storms. That is 114 percent of average for the date. Lake Shasta north of Redding, the federal Central Valley Project's (CVP) largest reservoir with a capacity of 4.5 million acre-feet, is 68 percent full (106 percent of average). San Luis Reservoir in Merced County, an important reservoir south of the Delta, is 95 percent full (137 percent of average for the date). San Luis, with a capacity of 2, 027,840 acre-feet, is an important source of water for both the SWP and the CVP when pumping from the Delta is restricted or interrupted.

(An acre-foot is 325,851 gallons, enough to cover one acre to a depth of one foot.)

Mountain snow that melts into reservoirs, streams and aquifers in the spring and summer provides approximately one-third of the water for California's households, farms and industries.

Statewide snowpack water content readings are available at:

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Electronic reservoir level readings may be found at:

<http://cdec4gov.water.ca.gov/cdecapp/resapp/getResGraphsMain.action>

Historic readings from snowpack sensors are posted at these sites:

<http://cdec.water.ca.gov/cgi-progs/rpts1/DLYSWEQ>

http://cdec.water.ca.gov/cgi-progs/rpts_archived1/DLYSWEQ

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The Department of Water Resources operates and maintains the State Water Project, provides dam safety and flood control and inspection services, assists local water districts in water management and water conservation planning, and plans for future statewide water needs.

Contact the DWR Public Affairs Office for more information about DWR's water activities