HYDROLOGIC CONDITIONS

As of May 24, the 8-Station Index is at 48.9 inches, or 107 percent of average to date. Note the precipitation for the 8-Station is currently about 90 percent of an average annual precipitation, which is 50 inches. During April, the precipitation total for the 8-Stations was 8.2 inches, or about 210 percent of average. Last year on May 1, 2009, the seasonal total for the 8-Stations to date was 39.6 inches, or about 87 percent of the seasonal average to date. The below Figure shows the current data points compared to other Water Years.



As of April 30, 2010, statewide hydrologic conditions were as follows:

- Precipitation, from Oct through April was about 110 percent of average to date (compared to 80 percent this time last year);
- Runoff, 75 percent of average to date (compared to 60 percent this time last year);
- Reservoir storage, 95 percent of average for the date (compared to 80 percent this time last year). Total storage is about 70 percent of capacity.

The below table compares average statewide precipitation by month with statewide precipitation values from Water Years 2009 and 2010 (to date). In Water Year 2009, January, April, July, August, and September were exceptionally dry while February, May, and June, were well above average. Water Year 2009 finished at 76 percent of an average water year. Water Year 2010 through April stands at 105 percent of average. In Water Year 2010, November was exceptionally dry while October, January, and April were well above average.

Month of Water Year	Avg CA Precip (inches)	WY 2009 Observed	% of Average	WY2010 Observed	WY 2010 % of Avg
October	1.22	0.73	60%	2.16	177%
November	2.80	2.49	89%	0.79	28%
December	3.91	3.05	78%	3.43	87%
January	4.35	1.26	29%	6.75	155%
February	3.66	5.06	138%	3.66	99%
March	3.12	2.13	<mark>68%</mark>	1.92	61%
April	1.64	0.59	36%	3.21	196%
May	0.89	1.47	165%		
June	0.35	0.46	133%		
July	0.18	0.02	11%		
August	0.28	0.06	20%		
September	0.48	0.09	19%		
Total	22.88	17.40	76%	21.93	105%

Average statewide precipitation by month with statewide precipitation values from Water Years 2009 and 2010. Data from California Climate Tracker (Western Region Climate Center): <u>http://www.wrcc.dri.edu/monitor/cal-mon/frames_version.html</u>

Normally the snowpack water content decreases about 20 percent as the melting season gets underway. This year, due to a series of cold Pacific storms, the pack actually gained about 5 percent in April, thereby significantly boosting the late season water supply outlook. The spring runoff forecast is now well above average statewide and the most since the very wet year 2006.



CURRENT RUNOFF DATA AND RESERVOIR STORAGE LEVELS

Sacramento River unimpaired runoff observed through April 30, 2010 was about 9.9 million acre-feet (MAF), which is about 72 percent of average. For comparison, on April 30, 2009, the observed Sacramento River unimpaired runoff through that date was about 8.6 MAF, or about 63 percent of average.

Statewide reservoir storage on May 1 was 95 percent of average statewide, much better than the 80 percent one year ago. Total storage is about 70 percent of capacity. This next figure shows the condition of the state's larger reservoirs as of May 31, 2010.





GROUNDWATER ELEVATIONS

Groundwater elevations in the Sacramento Valley were monitored by DWR Northern District the third week of March. Of the 108 wells measured, data indicated that compared to 2009 Spring, the greatest decline was 6.2 feet in an irrigation well in the 0-200 feet below ground surface. The data also shows that the greatest increase was 6.6 feet in an irrigation well located in the 200-600 feet below ground surface range. On average, groundwater levels were up by about 0.2 feet in the northern Sacramento Valley. The next set of groundwater elevations measurements will be taken in Butte County during the first week of July.

The 2010 Basin Management Objective (BMO) report was adopted by the Board of Supervisors at their 2010 website April 13. meeting. Please visit the to review the report; http://www.buttecountv.net/Water%20and%20Resource%20Conservation/BMO/2010%20BMOS.aspx. The annual groundwater status report is intended to serve as an accompanying document to the annual Basin Management Objectives (BMO). Together, these documents provide a comprehensive reference for understanding groundwater level trends, and associated aguifer conditions in Butte County. The report is to be submitted to Butte County by February 21st each year, and is then sent to the Water Commission for their review. The current report in its entirety and all past versions of the report are available for review at: http://www.buttecounty.net/Water%20and%20Resource%20Conservation/Reports.aspx.