

Town of Star Valley Ranch
Water Status Report
 March, 2008

2008 No.4

April 7, 2008

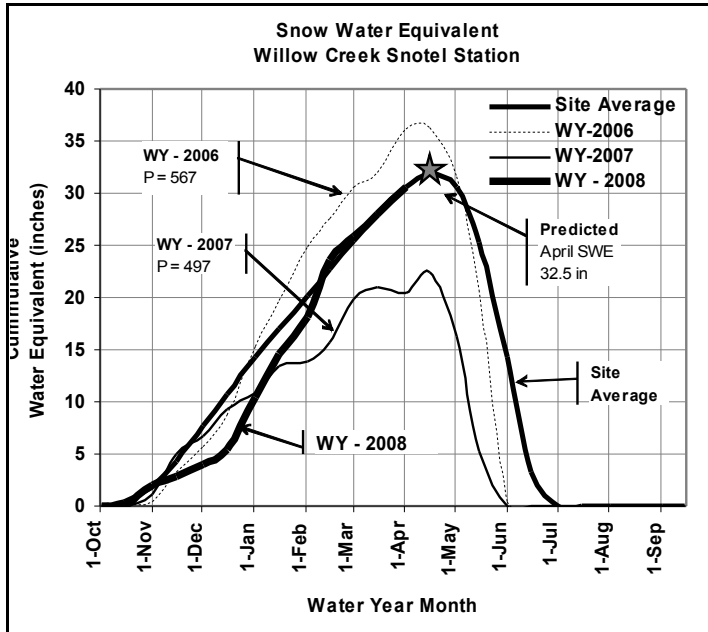


Figure 1. Accumulation of snow water equivalent for this water year (2008) compared to previous water years for the Willow Creek Snotel Station at 8380 feet southeast of Bedford, WY.

Water Status Reports

This water status report is based on snow moisture data from the automated Willow Creek Snotel station located at an elevation of 8380 feet in the Salt River Range near Bedford. Snow depth, air temperature, water stored in snow (snow water equivalent - SWE), and precipitation are measured hourly and reported here for the 1st and 15th of each month. Special Report No. 1 (December, 2006) describes methods to interpret the SWE data presented here.

March

We now have an average winter, which is better than last year when the snow water equivalent was seven inches below average at this time! I know many persons are saying this is the most snow EVER but two concepts are being confused with this statement -- the actual amount of water in the snow and the depth (thickness) of the snow cover. The actual amount of water in the snow is average this year and only 85% of our wettest year (2006-07). The historical average snow depth at Bedford is 29 inches, which is far less than the 36 to 48 inches being observed, and so snow depth is unusually great. However, it is DRY snow - a powder with little moisture.

The predicted discharge from Prater Spring this summer remains around 550 gpm.

About the Graph

The graph shows the monthly snow water equivalent for various water years (WY). A WY begins in October (the month with the lowest stream flow) of one calendar and continues to September of the following calendar year; it is named for the second calendar year. The **Site Average** line shows the average monthly SWE for the site since 1982. The **heavy black line** is the measured SWE for the current water year (WY-2008). The **WY-2006** and **2007** lines show the data for the last two water years. The **callouts** present the June discharge in gallons per minute (gpm) as measured at Prater Spring in 2006 and 2007.

Date	Water Year Snow Water Equivalent (inches)				
	Site Av.	2005-06	2006-07	2007-08	Site Av.
1-Oct	0.0	0.0	0.0	0.0	0%
15-Oct	0.4	0.1	0.0	0.0	0%
1-Nov	1.9	0.5	1.2	2.0	105%
15-Nov	4.3	3.3	5	2.9	67%
1-Dec	7.7	5.7	6.7	4.0	52%
15-Dec	10.7	8.7	9.3	5.5	51%
1-Jan	14.3	15.3	10.9	10.5	73%
15-Jan	17	19.7	13.4	14.6	86%
1-Feb	20.2	24.9	13.8	18.1	90%
15-Feb	22.7	27.6	15.7	23.6	104%
1-Mar	25.4	30.6	19.9	25.9	102%
15-Mar	28	32	21.2	28	100%
1-Apr	30.6	36.1	20.4	30.6	100%
15-Apr	31.9	36.3	0.0		
1-May	30.6	31.6	0.0		
15-May	25.3	20.7	0.0		
1-Jun	14.3	0.5	0.0		
15-Jun	3.3	0.0	0.0		
1-Jul	0	0	0	0%	0%