

**Town of Star Valley Ranch
Water Status Report
February 2007**

2007 No. 4

March 1, 2007

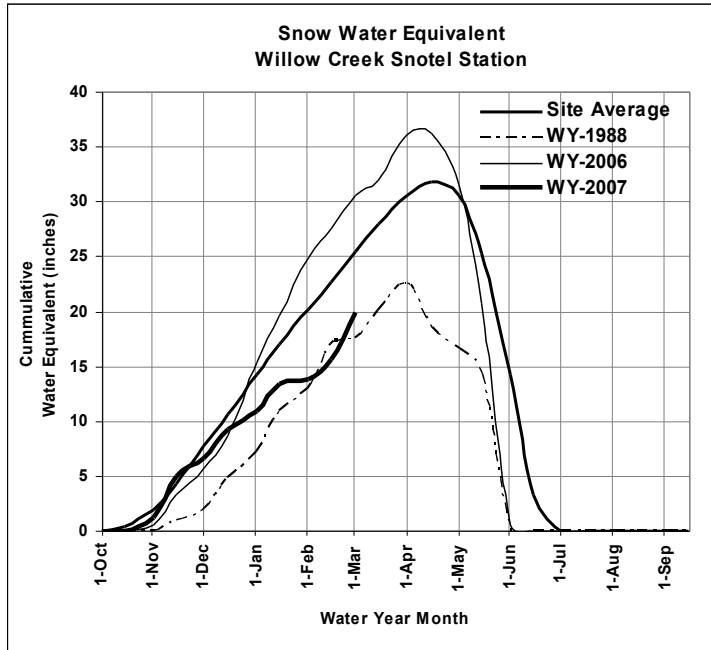


Figure 1. Accumulation of snow water equivalent for this water year (2007) compared to selected other water years.

Water Status Reports

A water status report is distributed each winter month to inform the Town about the availability of irrigation and culinary water during following summer. It is based on snow moisture data from the automated Willow Creek Snotel station at an elevation of 8380 feet in the Salt River Range. 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.

February

The winter continues to be dry but the late February snow brought the monthly SWE into the "above average" range with 6.1 inches of water equivalent, which places this February just below the 75% quartile of 6.4 inches (Special Report No. 2)!

Based on the 19.9 inches of SWE on March 1, the predicted April SWE is around 25.4 inches using the equations in Special Report No. 2. As shown in the adjacent table, the observed April SWE was 36 inches in 2007 and 32 inches for the site average. The predicted April SWE is 70% of last year and the predicted July discharges for Prater and Green Canyon Springs are 370 and 1180 gpm, respectively, or about 65% of their observed July discharge in 2007.

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-2007). The **WY-1988** and **WY-2006** lines show the data for two of the six water years for which spring discharges were measured. The **callouts** present the July discharge in gallons per minute (gpm) as measured at Green (G) and Prater (P) springs during 1988 and 2006 and estimated for the site average and Prater Spring in 1988 using the relationships in Special Report No 1.

Date	Water Year Snow Water Equivalent (inches)			Reference Water Year (Percent)	
	Site Av.	2005-06	2006-07	Site Av.	2005-06
1-Oct	0	0	0	0%	0%
15-Oct	0.4	0.1	0	0%	0%
1-Nov	1.9	0.5	1.2	63%	240%
15-Nov	4.3	3.3	5	116%	152%
1-Dec	7.7	5.7	6.7	87%	118%
15-Dec	10.7	8.7	9.3	87%	107%
1-Jan	14.3	15.3	10.9	76%	71%
15-Jan	17	19.7	13.4	79%	68%
1-Feb	20.2	24.9	13.8	68%	55%
15-Feb	22.7	27.6	15.7	69%	57%
1-Mar	25.4	30.6	19.9	78%	65%
15-Mar	28	32	0	0%	0%
1-Apr	30.6	36.1	0	0%	0%
15-Apr	31.9	36.3	0	0%	0%
1-May	30.6	31.6	0	0%	0%
15-May	25.3	20.7	0	0%	0%
1-Jun	14.3	0.5	0	0%	0%
15-Jun	3.3	0	0	0%	0%
1-Jul	0	0	0	0%	0%