STATE OF COLORADO

Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 721
Denver, Colorado 80203
Phone: (303) 866-3441
Fax: (303) 866-4474
www.cwcb.state.co.us

November 10, 2009

Mr. Alan Martellaro
Division Engineer
Water Division No. 5
P.O. Box 396
Glenwood Springs, CO 81602

Dear Mr. Martellaro:

As you are aware, the Colorado Water Conservation Board (CWCB) modified its Snowmass Creek instream flow water right in 1995. As a part of that modification, it was determined that the Board's wintertime instream flow right within the middle segment of Snowmass Creek, from West Snowmass Creek downstream to Capitol Creek, would be allowed to vary between years based on a defined streamflow trigger. The streamflow trigger was defined as the average daily streamflow over the 5-day period from October 11 through October 15 of each year.

Since the modification, the CWCB staff has worked with the Division 5 Engineer's Office to install and help maintain a newer satellite monitoring station within the middle reach of Snowmass Creek. This station is located near the Snowmass Water and Sanitation District (SWSD) diversion structure. Of course, the purpose of this gage is to help in the administration of the Board's instream flow right on Snowmass Creek.

The CWCB's streamflow trigger was based on a hydrologic model of Snowmass Creek that was depleted by 2.0 cfs to reflect historic diversions at SWSD's East Snowmass Creek diversion structure. The average diversions at the SWSD's East Snowmass Creek diversion structure during this year's 5-day trigger period appear in Column 2 of the table below. Column 3 of the table reflects an adjustment to the measured flows to account for the hydrologic model and East Snowmass Creek diversions. The trigger flow arrived at by this method is based on adding the actual amount of water diverted from East Snowmass Creek back into the measured flows to obtain a "natural hydrograph" and then subtracting out the 2 cfs historic diversion that was assumed in the model. Therefore, the average daily streamflow in Snowmass Creek during the trigger period was calculated as 26.25 cfs.

	(1)	(2)	(3)
	Measured Discharge (cfs)	East Snowmass Creek Diversions * (cfs)	Adjusted Discharge [1] (cfs)
Averages	25.89	2.36	**26.25**

1 Column 3 = Column 1 + Column 2 – 2cfs
2 *East Snowmass Creek Ditch and Pipeline average diversion over the 5 day period

The CWCB staff concludes that the best available data indicates that the average daily streamflow for the 5-day period from October 11, 2009, through October 15, 2009, as adjusted for diversions on East Snowmass Creek, was 26.25cfs. This trigger flow falls within the range of the flows indicating a "10th to 25th Percentile Stair step". Based on this analysis, the CWCB requests that its winter instream flow water right within the middle segment of Snowmass Creek be administered as follows:

Flow (cfs)	Date
12	10/16 - 10/31
10	11/1 – 11/14
9	11/15-12/21
8.5	12/22-12/28
8	12/29 – 12/31
9	1/1-3/31

Sincerely,

Jeff Baessler, Deputy Section Chief
Stream and Lake Protection Section
Colorado Water Conservation Board

cc: Linda Bassi
James Kellogg
Craig Bruner
Mark Uppendahl
Sue Helm
Dean Wieser
Ken Hamby