Upper Bear Creek Flows Nearing Record Low

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As wildfires burn across the State, drought conditions persist, and temperatures along the Front Range reach record-breaking highs, we realize the value of every drop of rain (and snow) that falls in our watershed. Since our water-year began on October 1, 2017, I have measured 81% of the average precipitation at my CoCoRaHS* station at 7700' in the Upper Bear Creek Watershed. The higher elevations (above 10,000') are even further behind. The SNOTEL gauge east of Echo Lake has recorded 69% of average precipitation since Oct 1: the peak snowpack was 62% of average in late April.

The combined effects of lower than normal precipitation and our recent hot weather are reflected in the early peak runoff and extremely low flows in Upper Bear Creek (Figure 1). On July 1 the creek was flowing at 12.2 cfs which is 19% of the 33-year average. The record low flow for July 1 was 4.4 cfs set in 2002. The Upper Bear Creek Watershed Association reported that no water is flowing into the creek's headwaters at Summit Lake, If these low flows continue there could be adverse impacts to the creek's aquatic life throughout the watershed.

In June the 1.40" of rain at my station was 59% of the 30-year average.. We've had several dry Junes in the recent past, but the arrival of the North American Monsoon, which brings subtropical moisture up from the south, has often resulted in very wet Julys. For example, in 2006 a very dry June was followed by the historic wettest July. And in 2012, the historic driest June was followed by a much above average July. I'm hoping we'll see this pattern occur again in the upcoming month. If you would like more detailed data on my precipitation measurements please email me at <u>llarrywhite@msn.com</u>.

We are all concerned about the fire danger and the effects from drought on our precious water supply, vegetation and wildlife. In the current newsletter, the Upper Bear Creek Watershed Association has included useful information and tips for homeowners about water conservation and wildfire mitigation. See:

https://www.evergreenmetrodistrict.com/pdf_files/Newsletter%20V16.pdf

Let's hope a wet monsoon starts soon!

*Community Collaborative Rain, Hail and Snow Network

See http://www.cocorahs.org

