

## Flows of the Llano

Last week's edition of the newsletter contained an article about the annual flows of the Llano at both Llano and Junction. First, an update: At the time, USGS had not calculated the annual flow of the Llano at Junction for 2014. They have since done so and the 2014 annual flow of the Llano at Junction is 63 cfs, (cubic feet per second) down from the 2013 annual flow of 79 cfs. Quite the opposite, Llano at Llano had a larger 2014 annual flow in 2014 (102 cfs) than in 2013 (88 cfs).

Second, a reader noted that the Llano gage currently has almost twice the flow of the Junction gage and wondered if this is normal. Perhaps the easiest way to explore this question is to again look at the annual flows between the two gages. The above figure shows these values from 1980 to 2014 (note that Junction gage was not operating in the early 1990s).

During wet years, it makes sense that the Llano gage has more flow than the Junction gage, as the downstream gage drains a larger area of watershed. During dry years, however, the two gages have similar flows, with the Llano gage having slightly more flow. This also makes sense as most of the flow during dry periods is from spring flow and evaporation rates are higher, resulting in less flows making it to Llano. In 2011, the Llano gage annual flow was 62 cfs and the Junction gage was 61. In 1984, the annual flow of the Junction gage was actually higher (72 cfs) than the Llano gage (61 cfs). This is the only year this has happened since records have been kept at both locations.

Next week, we will compare the monthly data for the two sites and see what we learn.