

May 24, 2013

COMPACT STREAM FLOWS IMPACT US

Letters were sent out last year to senior and junior surface water right holders along the Blue River because of low water flows. On the Little Blue River the mean daily stream flow at the Hollenberg Station was below the compact target flow for 69 days. The mean value of 24 cfs (cubic feet per second) was the lowest in the 38 years of records at that location. The Big Blue River fell below its compact target for 79 days.

Daily stream flows at USGS stations in Nebraska can be found at <http://waterdata.usgs.gov/ne/nwis/rt>

This year on May 24th, the Blue River flow was 194 cfs at Crete and at Barneston it was 554 cfs. Producers can track the river levels at the NOAA website. There is a procedure you can use the website for custom water alerts to you by text messages or email. This can help producers that have irrigation equipment that needs to be taken care of when river water levels are rising or when river water levels are falling to anticipate water restrictions. You can find this area on the Internet at <http://water.usgs.gov/wateralert/> The U.S. Geological Survey WaterAlert service sends e-mail or text (SMS) messages when certain parameters, as measured by a USGS real-time data-collection station, exceed user-definable thresholds. Real-time data from USGS gages are transmitted via satellite or other telemetry to USGS offices at various intervals; in most cases, once every 1 or 4 hours. Emergency transmissions, such as during floods, may be more frequent. Notifications will be based on the data received at certain site-dependent intervals.

The Kansas-Nebraska Big Blue River Compact sets forth stream flow targets. The current law has the Little and Big Blue River at 45 cfs in May and 45 cfs in June. With the Big Blue River, the July agreement is 80 cfs, August 90 cfs and September 65 cfs. With the Little Blue, the July agreement is 75 cfs, August 80 cfs and September 60 cfs so it is slightly lower than the Big Blue. Last year, senior right holders along the Little and Big Blue basins were closely regulated. The entire Big Blue basin was affected in July last year and ran through the end of September or the regulation period.

This spring I had a question from a senior rights holder who received a letter in the mail a couple weeks ago from the Department of Natural Resources (DNR). The letter explained what the original 1949 senior right was for on his land. In this case it was 215 gallons per minute on 65 acres. This producer uses gated pipe but being restricted to that amount sure cuts down on the gates that can be open at one time and if it was a pivot you could not even operate it. Did you know producers can ask for permission from the Department of Natural Resources to irrigate above their allocation? For example, you may be granted permission to double the allocation if you are irrigating for 12 hours and turn off 12 hours to properly run their equipment. In other words, the 215 gallons per minute is over a 24 hour period.

The Big Blue River basin is huge. It extends from Hastings to the state line south of Beatrice and is 4,450 square miles of drainage area and parts of 15 counties. There are 822 surface water irrigation permits and 346 storage permits on this river system. On July 9th of last year, closing



notices were issued in the basin to 385 junior right holders and 346 storage rights. The 437 senior appropriators were closely regulated. That's where the letter that was mailed this spring becomes very important.

Flows in both river basins this year are hovering around 50% of long-term averages. With advance water management planning and use of the Internet, producers can better manage and anticipate water shortage issues.

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