

From: [Marvin Swanda](#)
To: [Aaron Thompson](#)
Subject: Barfield Response
Date: Friday, December 09, 2011 10:59:20 PM

Aaron--Here is proposed response.

Dave

Not sure which statement is the bold one, but I would offer this. The 16,000 acre-feet additional storage needed to reach 119,000 acre-feet of irrigation supply in Harlan County Lake (HCL) was based on the storage in HCL on March 13th. The shut off elevation for HCL was established in January as 1933.24 feet or content of 171,050 acre-feet. This meant that the total storage in HCL at the end of June would need to be 290,050 acre-feet to supply 119,000 acre-feet of irrigation water. On March 13th the storage in HCL was 274,168 acre-feet.

The latest measurement taken by the USGS on the Republican River at Orleans was 130 cfs. If present hydrological conditions continue over the next three and half months, the storage gain would surpass the 16,000 acre-feet needed to reach the 119,000 acre-feet needed to move out of the "Water Short Year Administration".

The 16,000 acre-feet gain is not a given as was proven in 2004 and again in 2006 when storage gain was less than 5,000 acre-feet from mid-March to the end of June. However, inflows over the first two and a half months of the year are considerably better than in previous years. For the years 2003 through 2006, the average gain in storage at HCL during the first two and half months of the year was only 3,800 acre-feet (maximum of 6,900 acre-feet) compared to 18,800 acre-feet this year. In 2007, the storage gain in HCL during the first two and half months was 26,800 acre-feet. The other unknown is how much evap will occur from the Lake. If May and June are hot and windy the value may exceed the amounts we use for our projection. It looks good at this point but no guarantee just yet.

In regards to water purchases I can tell you what I know. I believe that DNR have talked to Fr. Valley and Riverside about a similar deal as the last 2 years. No diversions to their canal. DNR has had discussions with Frenchman-Cambridge concerning a proposal to delay the diversion of their natural flows to the Cambridge Canal until Mid to late June to ensure as much of the flows make it to HCL to try and avoid another Water Short Year situation in 2008. In my view if we are talking just natural flows it seems like they would be treated as other water reaching HCL, ie split with the Bostwick Districts. As far as I know there have been no deals reached yet and we have been involved to the extent of ensuring that there are no issues from Reclamation's viewpoint. When and if that happens the details will need to be addressed. I believe Reclamation is committed to keeping Ks. informed as much as possible in a timely manner in regards to these issues.

Give me a call if I haven't addressed your questions.

