

Yolanda Sandoval

From: William Peck <WPECK@gp.usbr.gov>
Sent: Friday, March 02, 2007 1:40 PM
To: kbid@courland.net; bostwick@gpcom.net
Cc: Craig Scott; Mark Rouse; Marvin Swanda
Subject: Update On Harlan County Lake Projected Irrigation Supply

Mike and Kenny,

The end of February projected irrigation supply from Harlan County Lake was 20,162 acre-feet. The water split for the projected supply is as follows:

Bostwick in Nebraska: 12,504 acre-feet
Kansas Bostwick: 7,658 acre-feet

We estimate this to be a 2.0 inch supply for both districts. A more detailed water delivery estimate could be developed if the districts were to provide us with an expected delivery efficiency for each of the canals.

The shutoff elevation at Harlan County Lake will be 1928.86 feet (content of 132,467 acre-feet).

[This shutoff elevation was the estimated end of May elevation computed in the January estimate and was based on December 31, 2006 storage plus the last 5-year average inflow less the average evaporation loss (1993 level of development) for the January through May period. This elevation correlated to a zero irrigation supply and therefore established the shutoff elevation at 1928.86 feet for the 2007 irrigation season.]

The 20,162 acre-feet projection was computed using the amount of storage available in Harlan County Lake at the end of February (141029-132467 = 8562 acre-feet), adding the last 5-year average inflow for March through May (approximately 19,000 acre-feet), and subtracting the average evaporation loss (approximately 7,400 acre-feet based on 1993 level of development).

The well above normal temperatures that we experienced the week of February 18th rapidly melted the snow cover that existed upstream of Harlan County Lake resulting in an unexpected increase in reservoir storage of 21,400 acre-feet from February 19th through February 28th.

Current inflows remain well above the last 5-year average for the time being and will result in an additional supply in the short term. It remains to be seen what the next few months inflows will be. Hopefully the current weather pattern that we are in will continue and we will see even greater recharge into Harlan County Reservoir. On the plus side, the same melt down that influenced the inflows into Harlan County Lake also substantially increased the reservoir storage in Harry Strunk Lake.

Projections are that Harry Strunk Lake may begin spilling by mid to late March further enhancing the inflows to Harlan County Lake. Things are looking up.

Bill