

MEMORANDUM

TO: Water Right Files 36-2381A and 36-12043
FROM: Daniel A. Nelson
DATE: December 12, 2011
SUBJECT: Gary B Garner and Beverly Garner Water Supply Bank Lease Application

I was asked to review the possibility of irrigation of the lands to be placed into the Water Supply Bank for the Water Supply Bank lease for water rights 36-2381A and 36-12043. The applicant's consultant supplied crop records from the Farm Service Agency (FSA), stating that 304 acres of the 308 acres in the water right description were actually irrigated in 2005. A previous review of the LandSat aerial photography suggests that only approximately 265.2 acres were actually irrigated.

Although I would agree with the initial assessment of the LandSat aerial photography, the FSA crop records does suggest that some irrigation did actually take place. The FSA crop records state that Hard Red Spring Wheat was planted on these fields. Typically Hard Red Spring Wheat requires a minimum amount of water, but if this crop was being grown for production purposes, it should have shown up as being irrigated on the LandSat aerial photos. Many farmers use a grain or wheat crop to plant with grass seed to establish a cover crop on ground that is not going to be irrigated in the future to avoid erosion of the soil. Although Hard Red Spring Wheat is not normally used to establish a cover crop for non-farmed land, it does appear from the 2004 and 2006 NAIP aerial photography that a cover crop could have been planted in 2005. If a cover crop was planted with the Hard Red Spring Wheat, then some irrigation would have been needed to establish the grain and cover crop.

I have re-reviewed the LandSat aerial photography for 2005, and there is a suggestion that sporadic irrigation could have taken place up to June of 2005. This would coincide with the harvest of the grain crop, which is typically harvested in mid July or green chopped in mid to late June. Judging from the aerial photography, it is highly doubtful that this crop was grown for production purposes, but it is highly likely that the crop could have been used to establish a cover crop.

From the information I have available to me, I cannot confirm or deny whether or not irrigation has occurred. However, the information does suggest that at least some form of irrigation did occur to at least establish the grain/cover crop. Whereas the Water Supply Bank lease was submitted in 2008, there simply isn't enough evidence to confirm forfeiture of this water right. I would recommend moving forward with the processing of the Water Supply Bank lease based on the information that is available.