

Flex Your Water Right Muscles With a Flex Account Term Permit

The Kansas Department of Agriculture's Division of Water Resources has done a very good job in recent years of informing and educating water users with their electronic newsletter, *DWR Currents*. This weekly publication provides basic water rights information, news, and a calendar of upcoming meetings and events. The newsletter also attempts to notify the water using public of important deadlines. One deadline mentioned in the newsletter every year is the final date to file an application for a term permit to establish a flex account. This date is October 10 of the year preceding the proposed five-year period of use. Is a flex account term permit a tool that public water systems should consider?

What's a "flex account"?

To better understand the flex account term permit, a review of the Kansas Water Appropriation Act and the regulations concerning these special permits is needed first. K.S.A. 82a-736 is the section authorizing multi-year flex accounts. The details of this section, paraphrased, allow for a five-year quantity of groundwater to be authorized by a term permit, with no annual limit on the quantity, in lieu of using the permanent water right already owned. The five-year quantity is a quantity equal to ninety percent of the average annual use, diverted legally and not including any water use in excess of the authorized quantity, during the period of 1992 through 2002, multiplied by five. The existing water right to be used for the basis of the five-year term permit must be a vested or certified groundwater water right.

At first look, most people would not see the benefit of taking an overall reduction of the average quantity used



The Mills Building, which was built in 1910-11, houses the Division of Water Resources and other divisions of the Kansas Department of Agriculture. It is located on the corner of Kansas Avenue at 9th Street in downtown Topeka. The Kansas Water Office and the State Conservation Commission also have their offices here.

Inset credit: <http://skyways.lib.ks.us/orgs/schs/preservation/downtown.html>

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by ten percent, when the average use of water is equal to the authorized quantity. For those with a "base average usage" less than the authorized quantity, water right owners would experience an even greater "reduction" of the quantity.

As discussed in previous articles, all individual appropriation water rights in Kansas had a period of development called the perfection period. Before a

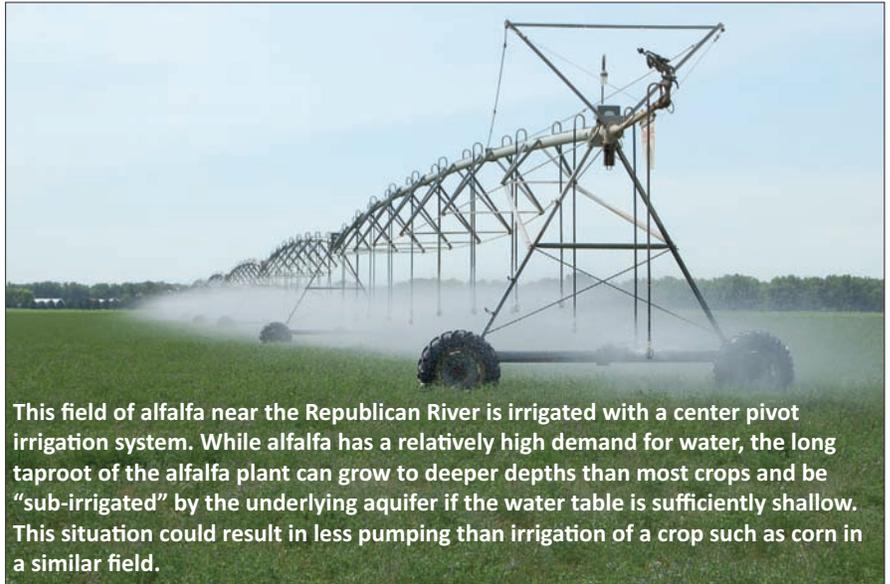
water right is documented in a Vested Right Order of a Certificate of Appropriation, the maximum water use over the period of a calendar year is used as the basis for the authorized quantity of water. Because actual use determines the right's authorized annual quantity of water, a water right can have a significantly smaller or larger quantity than a nearby water right. Irrigation water rights are influenced by their geography, size of the field irrigated, rate of diversion from the well or stream or reservoir, soil characteristics, water quality, drought and availability of water, the irrigation system used, planting density and water demand of the crop grown, slope of the land, the owner's knowledge of water law and water use reporting accuracy, etc. With so many variables, it is not surprising that some water rights have different authorized

quantities than other water rights. When changes of any of the above occur, it is also not surprising that the water demand changes. Sometimes a water right is not capable of meeting the new demands placed upon it by these changes.

So what circumstance would exist to make a water right owner seriously consider this water right management tool? Primarily, irrigation users would take a look at this, for the reasons listed in the previous paragraph. Because the climate of Kansas provides quite a bit of variability from year to year, irrigators may believe that in one or more of the wet years, irrigation may be unnecessary and they will be able to carry-over the “unused” water right quantity to the next year. If the authorized quantity under the water right is less than the typical water right for the region and it is difficult for the owner to stay within the authorized annual quantity in most years, having the flexibility to carry-over water unneeded from the previous year may help meet crop demands in the following years. A crop rotation plan utilizing a crop that doesn’t need irrigation may also make this program attractive. The legislature accepted this change to the Water Appropriation Act because it had the potential to help some irrigators comply with their annual quantities while at the same time having the potential to reduce the total quantity of water pumped.

Implications for public water systems

What about public water systems? Is there a circumstance that exists to help the management of a city’s or rural water district’s water rights? For most water systems, this section of Kansas water law does not offer much advantage. While almost every public water system can review their annual water diversion totals for a period of years and accurately pick the years that may have been dryer and/or hotter than average, the need to pump a larger-than-authorized quantity from a particular well rarely exists. Municipal



This field of alfalfa near the Republican River is irrigated with a center pivot irrigation system. While alfalfa has a relatively high demand for water, the long taproot of the alfalfa plant can grow to deeper depths than most crops and be “sub-irrigated” by the underlying aquifer if the water table is sufficiently shallow. This situation could result in less pumping than irrigation of a crop such as corn in a similar field.

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use water rights are, and were historically, granted perfection periods of twenty years, with the possibility of extensions of time. During a period of this duration, at least one significantly dry year existed to show the actual high demand. Public water systems for the most part already have some flexibility in that most have more than one well, whereas irrigation systems typically do not. Public water systems also don’t



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Flex account

experience the same radical swings of water demand that irrigators typically experience. While the statistical evidence may not be readily available, it appears to me that municipal water systems in eastern Kansas pumped higher than average quantities during the wet summer of 1993, when there was nearly no demand by irrigation users.

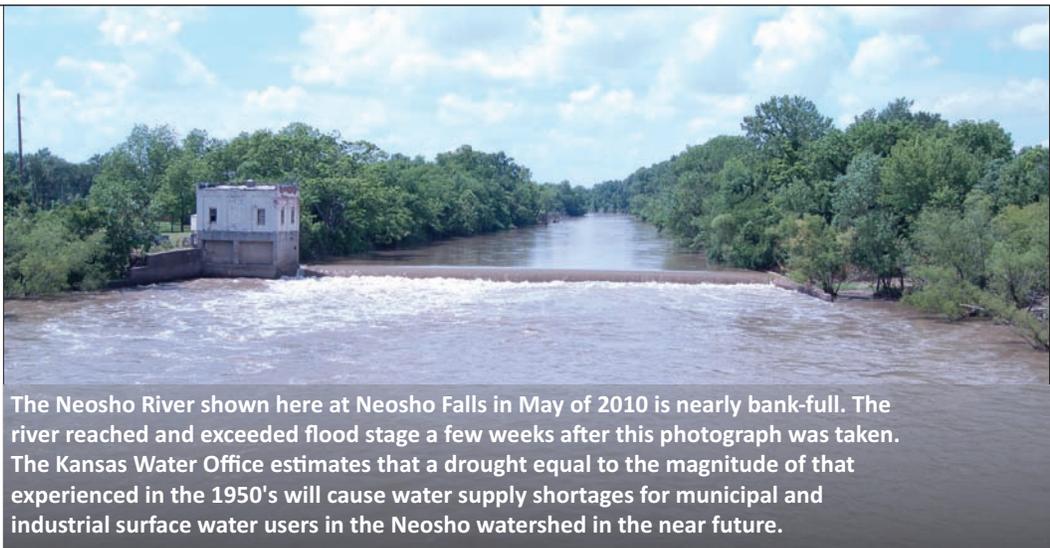
Water systems that have both surface water and groundwater rights may have some desire to look deeper at this tool. There could be a public water system that once relied on groundwater rights throughout the 1990's and early 2000's and has established a sizeable base average usage. Since that time, this same water system has shifted its reliance to new surface water rights because of increasing demand. Imagine

that this successful water system, with its greater demand, experiences a severe drought and the surface water supply can't supply the new demand. While the old groundwater water rights have remained available in reserve, they

don't have the necessary quantity to meet all of the new demand. A "temporary" reduction of the authorized five-year total, to ninety percent of the 1992 - 2002 average times five, might be just the ticket that the water system needs to get through a two- to three-year drought. Public water systems may want to review their water rights in this or a similar scenario, if their surface water supplies are vulnerable to drought. It could be that the authorization to legally pump more groundwater than normally allowed will allow a water system to worry about other more critical items created by a severe drought than their water rights.

Regardless of the status of the debate over human-induced climate change, there is little argument that the climate as we know it has measurable cycles. One cycle that's overdue is one of drought. Please don't ignore the ramifications of a long-term drought on your water system. If a flex account term permit interests you, let us know and we'll help you investigate how and if it will work in your water system.

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The Neosho River shown here at Neosho Falls in May of 2010 is nearly bank-full. The river reached and exceeded flood stage a few weeks after this photograph was taken. The Kansas Water Office estimates that a drought equal to the magnitude of that experienced in the 1950's will cause water supply shortages for municipal and industrial surface water users in the Neosho watershed in the near future.

For more information visit these Web sites:

DWR Flex Account Brochure:

www.ksda.gov/includes/document_center/appropriation/DWR_forms/brochure2.pdf

Kansas Water Appropriation Act: www.ksda.gov/appropriation/statutes/id/99

Water Appropriation Rules and Regulations: www.ksda.gov/appropriation/statutes/id/163

DWR Currents: www.ksda.gov/dwr/content/314

U.S. Drought Monitor (Kansas): www.drought.unl.edu/dm/DM_state.htm?KS,HP

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