

The Consequences of Overpumping Water Rights

Kansas law states that it is a violation of state law to use a water right in a manner contrary to its terms and conditions. What are those terms and conditions? In addition to dates and locations, all water rights have a maximum instantaneous rate of diversion and a maximum annual quantity of water. There can also be restrictions on the time of year when pumping can occur and to when the amount of flow in the stream or height of the water table is above a certain value. Other conditions may include a water meter, etc.

Now that the weather has turned cooler, it's a great time to check the amount of water a water system has pumped in 2020, before the end of the

year closes the books on this challenging year. If you find that you are close to using the full amount of water authorized on a well, stop using that well (or intake) now and use those wells that haven't been used as much this year. If your system has already exceeded the annual quantity of water authorized, or think that overpumping can't be avoided, please keep reading.

When are (and why are) water users fined?

When the Kansas Water Appropriation Act was adopted in 1945, it was a voluntary program. A water user that qualified to develop a water right for an authorized use (other than domestic use), could apply for a permit from the Chief Engineer of the Division of Water Resources. All water users had the option of foregoing the formal process of developing a water right which established the priority of the water right and protected that right from other water users that might come later and reduce the supply of water. The law also replaced the common law method of developing a water right. It wasn't until 1978 that a new section was added to the Water Appropriation Act requiring that water users have a water right or a permit to develop a water right (with some exceptions).

This new section, K.S.A. 82a-728, states in part "it shall be unlawful for any person to appropriate or threaten to

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Taking advantage of the natural topography within the community, Chapman has placed a light green colored standpipe on the top of Indian Hill. This hill is just short of 100 feet above the downtown area of Chapman, which is located on the banks of the Smoky Hill River. Another larger diameter standpipe is located on West 9th Street.



This wellhouse is approximately one city block from the center of the EF3 tornado that hit Chapman just after 10:00 p.m. on June 11, 2008. The limestone structure was able to withstand the strong wind with minimal damage.



Chapman uses digital displays for the meters on their water wells. The large digital displays help provide accurate records of water diversions.

appropriate water from any source without first applying for and obtaining a permit to appropriate water in accordance with the provisions of Chapter 7 of Article 82a of the Kansas Statutes Annotated and acts amendatory thereof or supplemental thereto or, for any person to violate any condition of a vested right, appropriation right or an approved application for a permit to appropriate water for beneficial use.” Later in the law, it says, “The violation of any provision of this section by any person is a class C misdemeanor.”

As alluded in the previous paragraphs, a water right is similar to a diploma. It takes time, effort, and attention to detail to develop a water right. Unlike a diploma where a C+ student can receive a diploma at the end of the course of study just as an A-student can, a water right can be developed with less rate and quantity than the permit authorized. This is true if the well couldn’t pump the permitted rate, and if the water user, demonstrating with actual use, that the permitted quantity either was not needed or could not be supported by the well, the aquifer, the distribution system, etc. For irrigation water rights, the weather during the prescribed years of development (perfection period), the

crops chosen to be irrigated, etc., can affect the amount of water put to beneficial use. Knowing the “rules of the game”, a person developing a water right could operate his or her well in a manner to fully perfect the authorized quantity in the first year of water use. This diversion of water up to the

permitted quantity would lock in the permitted quantity on the water right certificate, forever. After perfecting the full quantity, the water user could focus on the efficiency of his or her water using project, whether it was for irrigation, industrial uses, or even municipal use.



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Penalties for overpumping explained . . .

The Division of Water Resources adopted a penalty matrix, formally identified as K.A.R. 5-14-12, which became effective in 2017. The first column of this matrix provides four levels of penalty severity, based on the number of previous violations that occurred in the previous five calendar years. Level 1 are violations that occur after no violations were recorded in the previous five years. Level 2 is for water rights with one previous violation. Level 3 is for two violations in the previous five years. Level 4 is for three or more violations. Columns 2 through 4 describe the severity of the violation. The second column is for violations where the quantity overpumped is equal to or less than the amount that can be pumped in 24 hours at the authorized rate of diversion. The third column (Severity Level B) is for water rights with an overpumped quantity greater than 24 hours of pumping at the authorized rate up to 72 hours (three days) of pumping. The Severity Level C column is for overpumped quantities of more than 72 hours. It is important to know that the language in the regulation states that the Chief Engineer **may** impose these penalties, not shall impose. Reductions of the penalties are possible for extenuating circumstances.

If a water user diverts more than the authorized quantity under a water right, but stops pumping in time to avoid pumping more than the amount that can be pumped in 24 hours at the authorized rate, and no other overpumping violations were recorded in the previous five years, then the penalty is a letter of non-compliance. Effectively, it's a just warning ticket. After that, violators should hang on to their hat.

According to the matrix, if there are one or more violations of overpumping in the previous five years, there can be a monetary penalty, starting at \$1,000 per day, based on the 24 hours of pumping at the authorized rate calculation. Penalty Level 2 (one previous violation) can result in a reduction of the authorized quantity for one year equal to two times the overpumped quantity. Penalty Level 3 - Severity Level A provides for \$1,000 fine plus a one-year suspension of the water right. A Penalty Level 4 - Severity Level A provides for a \$1,000 fine plus a three-year suspension of the water right. A Penalty Level 1 - Severity Level C (which is where there are no violations of overpumping in the last five years, but the overpumped quantity is greater than the quantity that could be pumped in 72 hours of pumping at the authorized rate) provides for a possible penalty of \$1,000 per day with a reduction of the water right in the next year at three times the overpumped quantity, not to exceed the authorized quantity. That's at least a \$3,000 fine!

	Overpumping Less than 24 hours at Authorized Rate	Overpumping More than 24 hours but Less than 72 Hours (3 Days) at Authorized Rate	Overpumping More than 72 hours (3 Days) at Authorized Rate
Penalty Level	Severity Level A	Severity Level B	Severity Level C
1 (No Violations in Previous 5 Calendar Years)	Written Notice of Non-Compliance (NONC)	\$1,000/Day + Reduction of Quantity equal to 2 Times the Overpumped Quantity, not to Exceed Annual Quantity.	\$1,000/Day + Reduction of Quantity equal to 3 Times the Overpumped Quantity, not to Exceed Annual Quantity.
2 (1 Violation in Previous 5 Calendar Years)	\$1,000/Day + Reduction of Quantity equal to 2 Times the Overpumped Quantity, not to Exceed Annual Quantity.	\$1,000/Day + One Year Suspension of Water Right.	\$1,000/Day + Three Year Suspension of Water Right.
3 (2 Violations in Previous 5 Calendar Years)	\$1,000/Day + One Year Suspension of Water Right.	\$1,000/Day + Three Year Suspension of Water Right.	\$1,000/Day + Four Year Suspension of Water Right.
4 (3 or More Violations in Previous 5 Calendar Years)	\$1,000/Day + Three Year Suspension of Water Right.	\$1,000/Day + Four Year Suspension of Water Right.	\$1,000/Day + Five Year Suspension of Water Right.

When conservation of water resources was less of a concern, water users starting the perfection process were encouraged to fully perfect their water rights, without any regard for exceeding the maximum quantity. As mentioned earlier, there was a 33-year period where there was no incentive to not overpump the authorized quantity. Warnings to avoid exceeding the permitted amount were not given because there was no penalty. It would take another seven or eight years before the installation and maintenance of water flow meters on wells would be required to know with some certainty what was diverted. Only in the last decade has every water well with a non-domestic water right in Kansas been required to have a meter.

With the accomplishment of the Kansas goal of having all diversions of water metered with robust water use reporting requirements, equal enforcement of overpumping violations is now possible. Initial attempts to achieve compliance was conducted with penalties that were believed to be sufficient to get the attention of water users with their non-compliance condition. While those penalties gained the attention of most overpumpers, a smaller group of water right holders, it

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was rumored, considered the small penalties – as compared with the increased financial return of overpumping – as “the cost of doing business”. More needed to be done to make these blatant overpumpers change their attitude.

While cities and rural water districts are not motivated by profits to overpump their water rights, the monetary penalties are most likely to be used against public water supply systems, as temporary reductions of quantities and out-right suspensions of water rights could jeopardize the health and safety of the water systems’ customers.

City of Chapman makes proactive request

Overpumping can easily happen, but with just a little recognition of the quantities authorized, overpumping can be easily avoided with proper planning. Water system personnel who are confused by their water rights because of multiple water rights on an individual well and/or multiple wells under a water right (or both) are invited to request assistance from KRWA to

establish annual goals for water diversion.

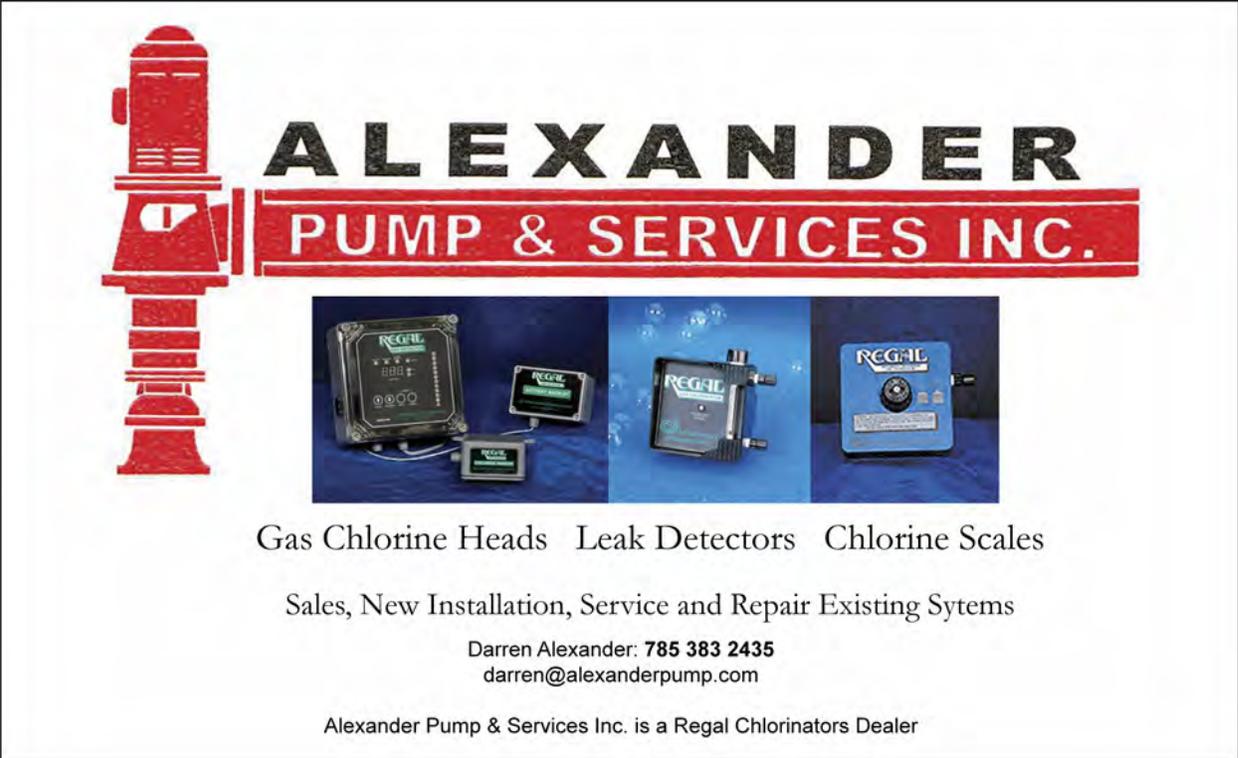
The city of Chapman is being highlighted in this article, not because the city has a problem, but because the city recently asked KRWA for assistance; the city’s situation is relatively easy to explain.

The city of Chapman has three active water wells. The city also has three water rights. One of the water rights authorizes two wells and designates an authorized quantity for each one. Following this logic means one well has two water rights.

For simplicity, I refer to the water rights as File No. 1, File No. 2 and File No. 3, and the wells as Well A, Well B

and Well C. For this explanation, the authorized rates of diversion are not necessary to list. File No. 1 authorizes Well A to pump up to 20 million gallons per year (MGY) and Well B to pump 60 MGY. File No. 2 allows Well A to pump an additional 5.0 MGY, but when combined with File No. 1, the total quantity is limited to 80 MGY, which is equal to the total quantity authorized by File No. 1. File No. 3 authorizes Well C to pump up to 20.3 MGY, with a limitation on the total quantity to 92.02 MGY when combined with File Nos. 1 & 2. So, in summary, the total quantity authorized for use in the city of Chapman and by their wholesale customers is 92.02

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MGY, with Well A authorized 25 MGY, Well B authorized 60 MGY and Well C authorized 20.30 MGY

In August 2020, the city called Kansas Rural Water Association to gather advice regarding the operation of their wells. The city had been monitoring their water use (not just recording numbers) and noticed that Well B was approaching 20 million gallons of water diverted. The operator contacted me and said that it appeared that overpumping would occur if something wasn't done soon. An appointment was made for the following week, which allowed time to gather copies of the water right documents, to review their water conservation plan, etc.

Upon arrival, we visited all three wells to get up-to-date water flow meter readings. With this information in hand, we returned to the city office to compare the readings taken at the beginning of the year with the latest readings and to discuss the options available to the City. As the 2020 values were being calculated, they were compared to the authorized quantities. When we looked at the water usage for Well B, I mentioned that it was authorized 60 million gallons. Before I could continue, I was interrupted with, "Are you sure?"

A few years earlier, the city of Chapman, not unlike a number of public water systems, was penalized monetarily for overpumping one of

their water wells. As it was their first violation, it was either a Severity B or a Severity C penalty to have had a fine assessed. The city staff was not going to let that happen again. When this happened the last time, the staff (or previous staff) had had discussions with the Division of Water Resources to better understand the violation. They were obviously unfamiliar with the water rights, and being in a stressful situation with the regulators, they remember hearing that they could not pump more than 20 million gallons from any of the three wells. What they were probably told was that they would be in compliance if they didn't pump more than 20 million gallons from any of the three wells. Those two similar statements have quite different meanings. I'm not sure I have ever experienced someone else's relief like I did that morning when they learned that 20 million gallons was not the limit on Well B.

Take time now

I encourage all water right holders to do a quick review of their water diversions for 2020 and compare those values against the authorized quantities now. If this year's diversions are approaching the authorized quantities, make adjustments now to use alternative sources that aren't in danger of going over their authorized quantities. If overpumping has, or likely will occur, please let Kansas Rural Water Association confirm that a problem exists, and if it does, let us assist you in finding a solution before the situation worsens.

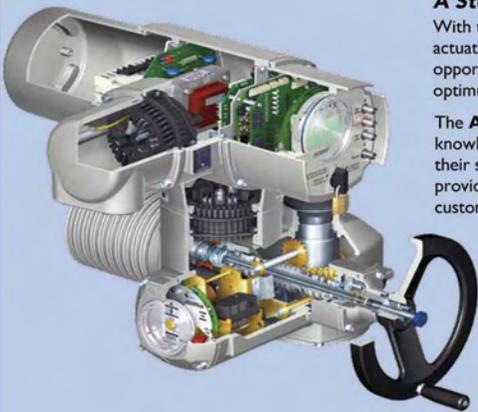
Douglas S. Helmke has been the Water Rights Tech at KRWA since June 2000, and also a Wellhead / Sourcewater Protection Tech since 2003. He holds professional geologist certification in Kansas and Missouri. Doug received a bachelor degree in geology from Kansas State University.





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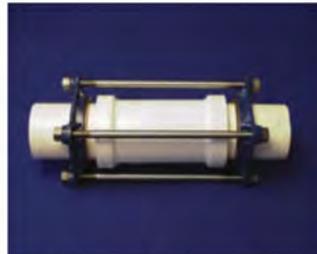
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