

# Are You Having a Domestic Dispute?

*Water system operators and city councils are becoming increasingly uneasy with private water wells within and near their communities.*



K.A.R. 5-1-1(gggg)(4) describes waste of water as, in part, “the application of water for a beneficial use in excess of the needs of this use”. The 2007 Kansas Municipal Water Conservation Plan Guidelines, while not having the same authority as a regulation, suggests that waste occurs when more than 50 percent of applied irrigation water evaporates, which can happen during the hottest and windiest time of the day.

**W**ith the recent drought and high temperatures, and continuing petroleum exploration, there has been an increase in demand for water wells. The Kansas Geological Survey (KGS) maintains the records of drilled water wells that are required to be filed under Kansas Department of Health and Environment (KDHE) regulations. These records are available to the public on the Internet at [www.kgs.ku.edu/Magellan/WaterWell/](http://www.kgs.ku.edu/Magellan/WaterWell/). According to the KGS, the number of water wells drilled or reconstructed nearly doubled from the first quarter of 2011 to the second quarter. The number of wells drilled and reconstructed dipped in the last quarter of 2011 and the first quarter of 2012 but rebounded in the warmer months of the year. In 2011, 4,766 wells were reported to be drilled and 66 reconstructed. In 2012, there were

5,518 wells drilled and 53 were reconstructed. Only 840 wells were reported to be drilled or reconstructed in the first quarter of 2013. Is that a sign that demand is dropping or did the relatively wet (snowy) winter weather keep the drilling rigs at the shop?

Many of the reported wells were drilled for oilfield use, and some were likely replacement wells for irrigation. Undoubtedly, many of these wells were drilled for domestic purposes too, where drinking water is already

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supplied to the property by a public water system. Close-up, some water utilities see a loss of revenue. On a broad scale, the concern being expressed is the rejection of traditional community utility

services. If city residents forgo water service, or a portion thereof, could a move to reject sewer service be next? What about electricity? Will personal wind turbines or solar units become

popular? Nearly everyone has a cellular telephone now; when will traditional landlines become extinct? Satellite television service has been competing very strongly with traditional cable in recent years, too. Will all of our news and entertainment only be available wirelessly?

It must be some kind of innate human quality that a green, well-manicured lawn is pleasing to the eye. Psalm 23:2 states, “He makes me lie down in green pastures. He leads me beside still waters.” From ancient times, humans recognized that green grass and water were keys to survival. While some might accurately argue that city officials like green lawns because of the revenue that is generated from water sales, there are other reasons why private water wells irrigating lawns are a threat to public water systems.

Persons willing to pay for the drilling and installation of a private well and pumping equipment usually install in-ground lawn irrigation systems too. If these irrigation systems are installed in a manner where the only connection for water is made to the well, there can be less concern for cross connections to

The grass shown in this photograph is located between a sidewalk and a major Topeka thoroughfare. It is irrigated with an in-ground sprinkler system. At the time this photograph was taken, the property was in the process of being sold, and no on-site manager was present to have the irrigation schedule adjusted or the malfunctioning sprinkler heads repaired. The right lane of the street was being sprayed with water and water was running off the grass and sidewalk (not shown) into the street. This is an obvious waste of water.



the public system. However, there is no guarantee that a connection to the public water system will never be made. Every in-ground irrigation system installed in a city increases the responsibility of the city to enforce its cross connection ordinance. It is nearly impossible for a city to regulate the backsiphonage of water from the irrigation system to the aquifer or the drainage of surface water through a damaged well casing or abandoned private well. If the city's wells use the same aquifer, these private wells have the potential in the future to impact the city's water quality. Finally, if enough private wells are drilled and used, there is the potential that the water table could be lowered and the city's water rights could be impaired.

### Kansas Department of Agriculture – Division of Water Resources regulates water use

Can cities do anything to control private water wells? The Kansas Water Appropriation Act states in part, "The Chief Engineer shall enforce and administer the laws of this state pertaining to the beneficial use of water and shall control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all of its inhabitants in accordance with the

rights of priority of appropriation." In other words, no one but the Chief Engineer can determine who can and who can't develop a Kansas water right. Cities cannot regulate the water use of their residents using private wells, except as explained later. The Kansas Legislature has granted the rights and responsibilities of water resource management to the Chief Engineer, who has been the head of the Division of Water Resources, within the past Kansas State Board of Agriculture and now Kansas Department of Agriculture. The Kansas

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Water Appropriation Act, specifically K.S.A. 82a-705a, allows all beneficial domestic use after June 28, 1945, to constitute an appropriation right. There is no requirement to file an application for review and approval. There are no regulations regarding well spacing for domestic wells, or metering, etc. The Chief Engineer, however, can require any person using water for any purpose to furnish information with regard to such use thereof. This is to determine such things as priority (or seniority), the amount of the water right developed, etc. Domestic use is defined as the use of water for household purposes, or for the watering of livestock, poultry, farm and domestic animals used in operating a farm, and for the irrigation of lands not exceeding a total of two acres in area for the growing of gardens, orchards and lawns.

### Controlling private wells

Some cities and counties have found a way to indirectly control private wells. A number of counties have determined that it is beneficial for new residences to have a safe and dependable water supply and have

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written certain requirements into their sanitation code. Some water is needed to keep a residence and its inhabitants clean and healthy. Foremost, if a public water supply has a water line within a specified distance, or if the system can extend the line and provide service, the new home must use this supply. In those cases where a public water supply is not available, the homeowner must be able to show that a groundwater well can be drilled and used, and meet spacing requirements from property lines and sources of pollution such as septic tanks and lateral fields. This same logic should be available for city ordinance adoption, where it is

necessary for the protection and safety of public health and property. At least two cities in Kansas, Mulvane and Ellis, currently have ordinances requiring permits for private wells. The application fee for a permit in Mulvane is \$25. The stated purpose of the permit is to confirm that no cross connection with the public water system occurs. The application fee for a permit in Ellis is \$5 and the stated purpose of the ordinance is to ensure that well construction meets state guidelines, that public infrastructure is not damaged, that cross connections are prevented and adverse effects to the city's water wells are prevented.

The Division of Water Resources has not ignored the conflict between cities and domestic water rights owners, as demonstrated by the establishment of an Intensive Groundwater Use Control Area (IGUCA) in and around Hays, Kansas. In a letter dated February 15, 1985, an official with the city of Hays notified the Chief Engineer that the city commissioners had voted to ask for the establishment of an IGUCA to control the waste of water from private wells used for discretionary purposes. After a hearing, the Chief Engineer concurred that water was being wasted and issued an order on July 3, 1985, establishing the IGUCA. In the order, the Chief Engineer reserved the right to ban the use of any water well for irrigation from 12:00 Noon to 7:00 PM any time between June 1 and September 30 of each year. Now, nearly every summer if not all, private water well irrigation is banned in the 9.9 square mile area of the IGUCA.

The Division of Water Resources has been careful not to get between any more cities and their residents since the adoption of the Hays IGUCA, though. There will likely never be another IGUCA established that regulates private domestic water wells in the same manner as those in Hays. This is especially true with modifications (or reinterpretations) of water conservation law.

Since 1991, a statute has existed which gave the Chief Engineer the authority to delegate some of his duties



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to cities, when certain conditions exist. K.S.A. 82a-733(i), allows the Chief Engineer to delegate, to any city that has a conservation plan meeting state guidelines, the authority to require domestic (private well) water users in their city to follow the same water use restrictions as the residents without a private water well. Page No. 10 of the 2007 Kansas Municipal Water Conservation Plan Guidelines developed by the Kansas Water Office has an excellent narrative on the use of this statute. You can download a copy of the guidelines here:

[www.kwo.org/reports\\_publications/Reports/rpt\\_2007%20WCP\\_Guidelines\\_081507.pdf](http://www.kwo.org/reports_publications/Reports/rpt_2007%20WCP_Guidelines_081507.pdf)

A city wanting to restrict all lawn watering during a declared water warning or water emergency will need to adopt or modify their water drought/-emergency ordinance that implements their water conservation plan. The most important component to receive the Chief Engineer's delegation of domestic water well regulatory authority is to demonstrate that the domestic wells share the same source of supply as the city's wells. As of May 15, 2013, only the city of Ellis has

received this delegation of authority. The city of Ellis developed its water system with a number of water wells located throughout the city, and there are probably no private wells that don't share the same source of supply with at least one of the city wells. Cities with their municipal (PWS) wells located outside the corporate boundaries will have a much more difficult time of demonstrating the shared supply condition.

Communities that already have a large number of private domestic water wells located within their boundaries will probably not accomplish much by crafting an ordinance that discourages new wells. Cities with the potential to have a significant number of wells drilled within their boundaries, spurred by increasing municipal water rates and drought conditions, should seriously consider their options. City leaders, especially those who appreciate the future of their communities, should seriously consider the legacy that will be left by hundreds, if not thousands, of small cased holes drilled into the aquifer that underlies their communities. Will these wells become environmental liabilities and reduce

property values? Will we let someone else worry about their fate? At a minimum, water systems should consider restricting domestic water wells to be a specified distance from their municipal wells. Restrictions of domestic wells to a maximum well depth to prevent contamination of the aquifer supplying the city may be beneficial if the geologic conditions provide multiple aquifers. Such restrictions may prevent the need for additional water quality treatment or water source replacements.

If your community would like to have further discussions on this topic or sourcewater protection planning in general, I am available to attend council meetings or work sessions. Just email me at [dhelmke@krwa.net](mailto:dhelmke@krwa.net).

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