

# DWR's Online Water Use Reporting System Successful

**W**ater use reporting has been an annual function in Kansas for 70 years. It is a fundamental part of Kansas water law. Since 1945, permits to develop water rights were conditioned that reports of water usage were to be filed to document the extent of the development. After the permit was changed to a water right with the issuance of a certificate of appropriation, continued reporting was strongly encouraged to make a record of regular water use to avoid investigations of abandonment and forfeitures of the water right.

The Kansas Water Appropriation Act dedicated all of the water within the state to the use of the people of the state, subject to the state's control and regulation. Without data regarding streamflow, groundwater levels, and amounts of withdrawal and return, regulation and control would be



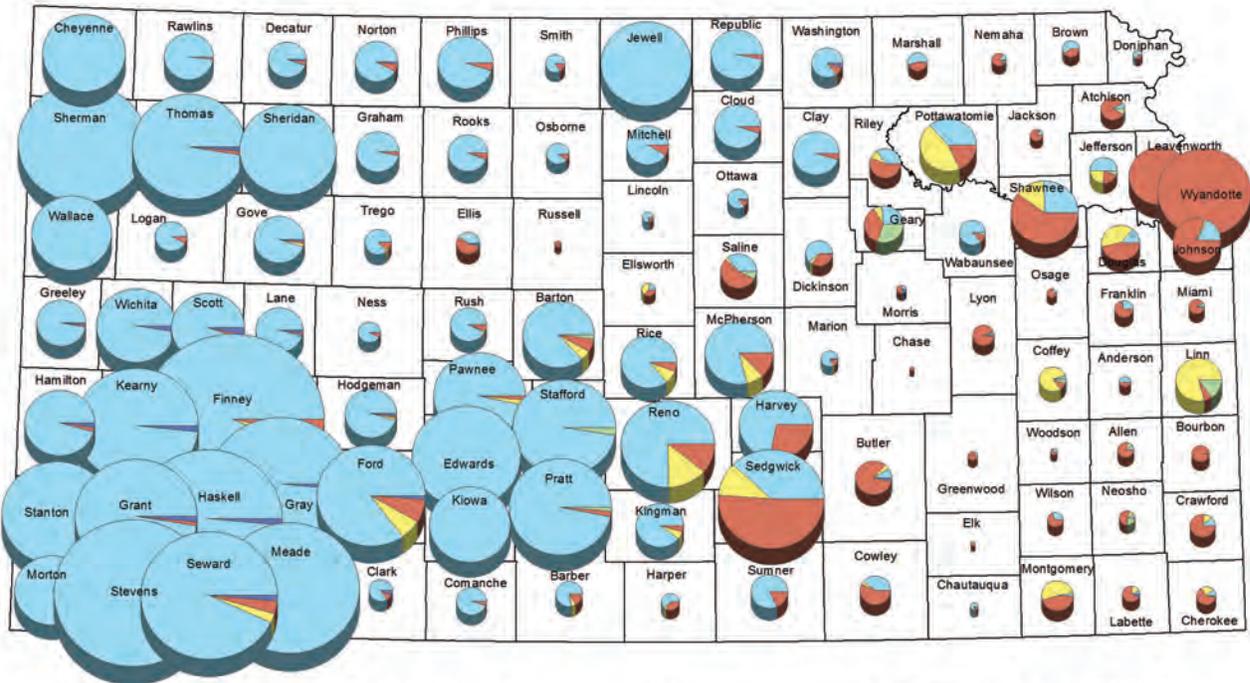
**If the year's beginning and ending water meter readings are made at the wells and recorded, completion and filing of the annual report with the state is a snap with the online reporting system. Water systems can avoid the cost of mailing the report and the uncertainty that the report was received by the Division of Water Resources.**

haphazard, if even possible. And while much data has been collected through the years, the timeliness and format of this collected and transmitted data is also important. A U.S. computer equipment company is marketing themselves to be the provider of the tools to deliver the "internet of everything". What is everything? Education, entertainment, investing? Sure. Irrigation system operation, water storage monitoring and notifications, and customer meter readings? Uh-huh. Kansas water use reporting? You guessed it - Yes!



**The Kansas Department of Agriculture moved into this new building on the northeast corner of the Kansas State University campus in 2014. There is a strong desire to keep the amount of paper that is used and stored in the agency files to a minimum by storing most records digitally.**

## 2012 Reported Water Use for Kansas Counties

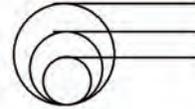


Disclaimer: Features on this map represent conditions as of the date of the map and are subject to change. The user is referred to specific policies, regulations and/or orders of the Chief Engineer.

Percentages of 1.5% or less do not show up in the pie charts.

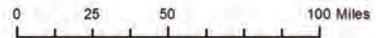
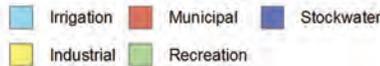
This map is intended for planning purposes only.

Kansas Department of Agriculture  
Division of Water Resources  
Water Use Unit  
October 7, 2013



Pratt: 113,915 AF  
Harvey: 58,183 AF  
Lane: 24,071 AF

### Use Made of Water



The graphic above, produced by the Division of Water Resources, shows the amount of 2012 water use by Kansas county, with the type of use indicated by color. Notice the use of water for irrigation in northwest and southwest Kansas, and the use of water for municipal and industrial use in northeast and south-central Kansas.

In the mid-1980's, water use reporting was required of permits being developed into water rights, but only recommended for certified water rights. The Board of Agriculture's Division of Water Resources (DWR) wanted everyone to report their usage, but had no authority to require the reports. That changed when accusations were being made that farmers, by injecting liquid fertilizer into their irrigation water, were causing a spike in the number of nitrate violations in public water systems. The legislature wanted to know to what extent "chemigation" was being employed in Kansas, but no one really knew. When it was learned that the Division of Water Resources was the only agency that regularly corresponded with the irrigation community (once a year), the policy

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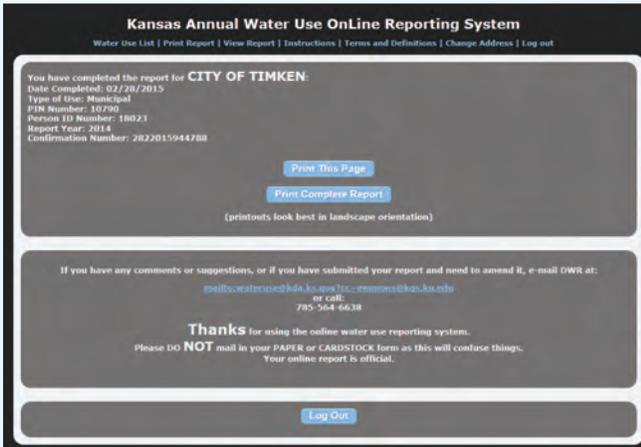
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The last screen that the water use reporter will see is the Confirmation Page. It will provide a short summary of the reported water use and when, and will provide a confirmation number showing that the report was received. Keep this receipt with your water use records.

streamflow properties and conditions. One product produced by the USGS is a report published every 5 years regarding the condition of the water resources in the United States. Staff from the USGS have stated publicly that the quality of the Kansas data is by far the best in the country, and this credit belongs to the water using and reporting public.

In about 1997, DWR recognized that efficiencies could be gained by using technology to gather water use data more accurately and have it ready for evaluation sooner. At the current time, owners of water rights, or their designated agents, are sent a paper card or letter by U.S. mail to the address on record in the water rights database, on the first

working day after January 1st. If the person receiving this card chooses to file the report in the traditional way, the beginning and ending meter readings are written down along with the calculated total water quantity diverted. Other information about the rate of diversion, acres irrigated, type of water distribution system, depth to the water table, etc. are also requested. The report is signed and dated, a stamp is affixed, a copy of the report is (hopefully) made and the card is mailed back. The deadline to mail the report is March 1st. When it is received at DWR, it is date-stamped, recorded in the database as received, and placed in a box for further data entry and evaluation at a later date. When the actual data is entered into the database, a person reads the information on the card as best as he or she can, and enters the numbers. At a later date, all of the municipal use water use reports are reviewed for accuracy, and to make a determination that the amount of water diverted is at least as much as the amount of water shown to be sold to the customers. Exceptionally large differences in the amount pumped (or purchased) and the amount sold get further review. Approximately 12,500 report forms are mailed to water users every year.

If the number of times data is written by hand can be reduced, the chance for errors is reduced considerably. The amount of time spent reading the written reports and transferring it to a new medium is also reduced. To accomplish this, DWR offered an online water use reporting pilot program in 2013. The results of the pilot were successful enough to open it to everyone this year to report their 2014 water use. The Water Use Unit staff are very happy with the participation rates. A total of 1,127 Kansas

water use reports, or nearly nine percent, were completed online this year. Of these reports, 666 were for irrigation and 202 were for municipal water use. The 1,127 reports were for 3,377 water rights with 4,624 wells, dams, pumpsites and intakes.

Every person who is mailed a water use report has an identification number in the DWR database. This number is provided on the report form with the water right information. In addition to the permanent identification number, a new, unique PIN (personal identification number) is provided every year with the report form. These two numbers are the user identification and password to access the water use reporting system. The reporting system is ready to accept data when the reports are mailed in January and closes after the March 1st deadline. The step-by-step procedure is very similar to the steps to complete the written, mail-in report. When the final submission of the water use data is confirmed, the user of the online system receives a printable receipt on their screen, acknowledging that the water use data has been received and accepted. To those who have had their report "lost in the mail" sometime in the past, this is surely a comforting reassurance that a letter assessing a penalty for non-reporting won't be received in March or April.

After years of off-and-on conceptualization and evaluation, and finding the proper developer to design the reporting Web site to securely link to the water use database, DWR believes that they have made a major breakthrough in

**Give the online reporting system a try for reporting your 2015 water diversions.**

providing a safe, convenient and simple to use online reporting system. DWR is hopeful that the expertise that is being developed will allow them to do more internet based data-collection and sharing. One enhancement that isn't available yet is the ability to report and save

monthly water produced-and-sold data throughout the year. Other DWR actions that may have a future online presence is the reporting of replaced well meters and the filing of completion forms for new diversion works (wells, dams, intakes, etc.). The filing of applications for new permits and applications to change existing water rights is also conceivable.

For 2016, make a resolution that you can keep and complete early. Give the online reporting system a try for reporting your 2015 water diversions. If you find that it doesn't work for you or your system, you can always put a stamp on your reporting form and mail it in. You've got nothing to lose except that odd feeling that you're never really sure the paper form gets to the place it was sent.

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