Kansas Department of Agriculture's Division of Water Resources

DWR CURRENTS

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David Barfield appointed chief engineer

Kansas Secretary of Agriculture Adrian Polansky has appointed David Barfield chief engineer of the Division of Water Resources.

"The depth and breadth of Mr. Barfield's understanding of Kansas water issues make him the most logical choice to fill this important position," Polansky said. "He has the experience and historical perspective needed to ensure continuity and the expertise to address new challenges so our state's water resources are equitably managed for the benefit of all Kansans."

Barfield started working for the Division of Water Resources in 1984. He has worked in all areas of water resource management, including municipal and industrial water use, dam safety and interstate water compacts. He was exclusively involved in interstate water issues from 1992 to June 2007, when he was appointed acting chief engineer. He has a Bachelor of Science in civil engineering and a Master of Science in water resources, both from the University of Kansas. He is a licensed professional engineer.

"I am honored by my appointment to this challenging position. I appreciate Secretary Polansky's confidence in me, and I look forward to working with him and Division of Water Resources staff to fulfill our statutory responsibilities," Barfield said. "My immediate plan is to ensure we continue to provide current levels of service while building on the solid foundation left by my predecessor."

Barfield was preceded by David Pope, who retired in June after 24 years of service as chief engineer.

"Mr. Barfield is a good selection from my standpoint," Pope said. "I worked with him for many years, and I have full faith in his ability to carry out the duties of the position."

The chief engineer is responsible for managing the state's water supply in the public's interest, for ensuring public safety related to the construction and maintenance of dams and representing Kansas' interests in interstate water compacts. The division's work is divided into four areas:

The water appropriation program manages the state's water supplies through a system of permits, reviews and inspections. It issues water rights, maintains data about water use and administers water rights during times of shortage.

The water structures program inspects and regulates the safety of dams that could, if they failed, endanger lives and property. The program also monitors activities affecting the flow of rivers and streams, and their floodplains, to ensure these activities are properly planned, constructed, operated and maintained.

The water management services program administers the four interstate river compacts and the subbasin water resources management program, which develops plans in conjunction with local agencies and stakeholders to address resource issues in identified subbasins.

The state water plan program encompasses activities from other programs, including interstate water, and basin and floodplain management. ♦

Water use reports mailed in January

Staff with the Division of Water Resources are prepared to help water right holders complete the water use reports. Office locations and phone numbers are shown below:

Division of Water Resources

Headquarters Office
(785) 296-1054

Topeka Field Office
(785) 368-8251

Stafford Field Office
(620) 234-5311

Stockton Field Office
(785) 425-6787

Garden City Field Office
(620) 276-2901

It's about that time of year for the Division of Water Resources to mail annual water use report forms. The target mail date is the first working day in January, and completed forms are due back to the division's Topeka office by March 1.

Anyone who has a water right issued by the Kansas Department of Agriculture's Division of Water Resources is required to file a complete and accurate water use report. This report documents how much water was put to beneficial use during the previous calendar year. Water use reports due March 1, 2008, document water use during 2007.

Water is a resource owned by all the people of Kansas. To properly manage the resource, we must know how it is being used. Water use reports also serve to establish a water right. Water rights are real property rights and are associated with the place where they are established. Water rights will become more valuable as large areas of the state are closed to new permits. It is very important that water use reports be complete and accurate. Even if no water was used, the report should indicate the reason for nonuse.

There are different ways to determine the amount of water used during the year. The most important thing is to provide accurate information, which means you must keep accurate records for each point of diversion.

For detailed information on reporting water use, visit www.ksda.gov/appropriation.

Parsons office serves southeast Kansas

Water right holders in southeast Kansas can get customer service a little closer to home now that a Division of Water Resources satellite office is open in Parsons.

The office, an extension of the Division of Water Resources Topeka field office, opened for business Oct. 22 at 300 North 17th.

"Previously, water right holders who wanted help with their water rights had to either travel to Topeka or try to conduct their business by mail or telephone," said David Barfield, chief engineer of the Division of Water Resources. "This satellite office makes our services more accessible to water right holders in this area."

The Parsons office is presently staffed with one environmental scientist, so appointments are strongly encouraged. They can be scheduled by calling the office at (620) 421-2697.

The Division of Water Resources looks to add an engineer from their water structures program at some point in the future.

The types of services to be offered by the satellite office include:

- water right reviews
- compliance checks
- field inspections
- well monitoring
- water right education
- help with water right applications and water use reporting

The full contact information for the office is:

Kansas Department of Agriculture
Division of Water Resources
300 North 17th
PO Box 893
Parsons, KS 67357
(620) 421-2697 (voice)
(620) 421-2742 (fax)

Floodplain mapping expands statewide

Since Kansas launched its flood mapping initiative in 2003, Congress directed that FEMA's map modernization program include digitizing flood maps for the entire country within five years. Only 20 percent of the map panels will be updated with new flood analysis.

As the map modernization project reached the halfway point, FEMA conducted a midprogram evaluation that considered input from Congress, the U.S. Government Accountability Office, the Department of Homeland Security's inspector general and other stakeholders. This midprogram evaluation prompted adjustments that will result in better targeted, more accurate flood data while providing digital flood maps for a significant portion of the nation.

Multistage Process
Mapping takes place in stages, include scoping, approximate Zone A analysis, incorporating detailed study analysis, redelineation and/or digital conversion, workmap production, preliminary flood insurance rate map (FIRM) distribution, and effective digital flood insurance rate maps (DFIRM) distribution.

Scoping
Scoping helps define and prioritize mapping needs in a county, and it gives communities an opportunity to share detailed information regarding their topography, hydrology or hydraulics that may not be readily available through state channels. This detailed information enhances the quality of the final map. Scoping can be done at any time and it does not have to be tied to a mapping activity. It allows the Division of Water Resources and FEMA to identify needs and estimate their costs to prepare for when funding becomes available. Scoping is under way in Jackson, Marion, Pottawatomie, Republic, Leavenworth and Osage counties.

Map Production
Map production includes flood zone analysis (approximate, detailed analysis, redelineation, and digital conversion) and workmap production.

- Approximate Zone A analysis looks at stream basins that drain more than one square mile. The Zone A analysis allows the Division of Water Resources to identify inundation areas in a 1 percent flood. While it does not show a base flood elevation on the flood insurance rate map, a layer in the GIS system identifies the water surface elevation.
- Detailed analysis of the 1 percent flood includes developing hydrology and hydraulics based on detailed topography. A detailed study is typically performed when there is evidence that current mapping efforts are inaccurate or when the community is growing toward areas at risk of flooding.
- Redelineation is the process where existing base flood elevations are accurate, but the community has better topography to delineate the flood risk area.
- Digital conversion involves converting the detailed study area on the map and into a digital format that can be used in a GIS system.
- Workmap distribution happens after the flood risk analysis has been performed. The map is submitted to FEMA for final review, and the Division of Water Resources also provides an unofficial map to the community to elicit feedback on technical and nontechnical issues. Nontechnical issues cover such things as road names and corporate boundary errors. Workmaps have been provided to Neosho, Butler, Douglas, Allen, Harvey, Wyandotte, Crawford and Reno counties.

Preliminary
FEMA preliminary maps are early work maps that a community can protest or appeal. Preliminary maps have been delivered to Ellsworth, McPherson, Cherokee, Johnson, Bourbon, Miami and Labette counties.

Effective DFIRM
Digital Flood Insurance Rate Maps (DFIRM) are used to identify rates for flood insurance. A community gets a letter of final determination in which the effective date for the DFIRM is given. The community then has six months to adopt the maps through a local ordinance.

Sedgwick County effective February 2, 2007
Linn County effective November 2, 2007
Lyon County effective February 20, 2008
Wabaunsee County effective March 19, 2007
Edwards County effective January 18, 2008

For more information on floodplain mapping, visit www.ksda.gov/structures/content/196.

Dam Safety conference scheduled in Manhattan

Dam owners interested in extending the life and safety of their dams, and professionals interested in expanding their technical knowledge of dam safety issues, are invited to attend the Dam Safety Conference 2008 sponsored by the Kansas Department of Agriculture's dam safety program.

The conference will begin with an evening social at the KSU engineering complex on February 18. The formal conference program will be February 19 and 20 at the Holiday Inn Campus, 1641 Anderson, in Manhattan.

The two-day conference will feature nearly 40 presenters covering inspections, maintenance, water quality and design related to embankment dams. Activities include a field trip to Tuttle Creek Dam (reservations required), a breakfast and a luncheon.

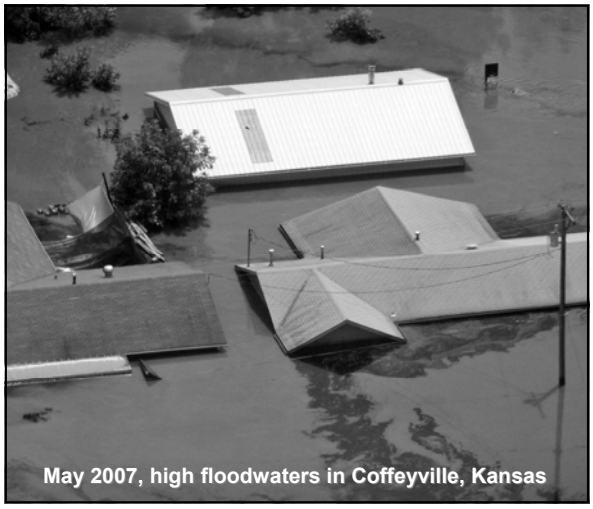
Registration information is online at www.ksda.gov/structures or contact Beth Cooper at (785) 296-0573.

Funds help with disaster recovery and hazard mitigation planning

The estimated economic impact of all disasters in Kansas in the last year is more than $500 million.

As a result, it is estimated that $65 million will be placed in the state-administered Hazard Mitigation Grant Program. Kansas officials have expressed a desire to return most of these funds to the communities impacted by the disasters through mitigation grants.

Guidelines for administering these funds are in the Disaster Mitigation Act of 2000, an act by the U.S. Congress. A jurisdiction that does not have an approved hazard mitigation plan is not eligible for HMGP funds.



May 2007, high floodwaters in Coffeyville, Kansas

It is possible for a county or city jurisdiction to apply for grant funds to use to create a hazard mitigation plan. In 2007, the Kansas Legislature approved legislation that will help communities pay the match needed to secure a grant for mitigation planning. This means that a community can get a grant to have a mitigation plan written by an outside contract firm and have it 100 percent funded.

When a community experiences a disaster and fails to ask for HMGP funds, that money is made available for any city, county, or tribal jurisdiction that has an approved hazard mitigation plan and a worthwhile grant project. For floodplain managers, this means there are millions of dollars that can be used for grant projects to mitigate flood damage. Some of the HMGP funds are going to be used to buy substantially damaged homes in cities like Independence and Iola that experienced flooding last July.

A hazard mitigation plan will include a section on flooding. The section on flooding qualifies as a flood mitigation plan. A flood mitigation plan makes a community eligible for grants from the FEMA Flood Mitigation Assistance program and from the Pre-Disaster Mitigation Grant program.

For each dollar spent on mitigation efforts, taxpayers save up to four dollars. Buying and removing a flood-prone structure eliminates the need to pay flood insurance claims every time there is a flood. Removing a house from a flood area means that emergency responders will not be put at risk to rescue people from flooded dwellings. Removing a business from a flood area and relocating it to a new location outside the floodplain will allow the business to expand and create jobs. By removing a structure from a flood area, that location can become green space. Green spaces can be used as parks and to help absorb flood waters in the future. Buyouts are just one example of how mitigation dollars can be used to protect the public and promote their safety, and welfare.

For more information on how to get funding for your community to develop a hazard mitigation plan, contact Brad Moeller, state hazard mitigation officer, at (785) 274-1840.

Now is the time to maintain water flowmeters

Water flowmeters are important for managing water use and to meet the terms of a water right or permit to appropriate water. However, flowmeters are effective only when they are accurate, so they must undergo periodic maintenance.

Late winter into early spring typically is a good time for water meter maintenance. If the water meter has made any grinding or growling sounds while operating, it could mean it is about to fail. Another sign of possible impending failure is if the flow rate indicator fluctuates erratically. If the meter lens is fogged, there could be a leak in the meter register. If your meter has a battery-powered electronic register, now is a good time to test the battery and replace it if needed.

A simple test for meters with a flow rate indicator is to operate the meter at a steady, relatively high flow rate. The indicator should give an indication of the flow rate, not fluctuate erratically. You can also use the totalizer wheel and a stop watch to record the time it takes for a specified volume of water to pass through the meter. For example, if it takes two minutes and 15 seconds for 1,000 gallons to pass through the meter, the flow rate is determined by dividing 1,000 gallons by 2.25 minutes (15 seconds is a quarter of a minute); the result is about 444 gallons per minute (gpm). The flow rate indicator should show a rate between roughly 420 gpm and 470 gpm, or the meter may not be recording the flow passing through it within plus or minus 6 percent.

If your meter is inaccurate, or you suspect it is about to fail, you should contact your meter vendor or the meter manufacturer to have it evaluated. Annual maintenance may correct the problem. However, if it does not, you will have time to replace the meter before it is needed again.

Collaboration essential to environmental efforts

Successful collaboration encourages greater levels of interaction among agencies, community groups, interest groups and private landowners, by creating working groups and coordinators. These relationships help create a shared sense of ownership of a problem. Ownership is important because people take care of and remain committed to what they own.

There are several areas across Kansas where the Kansas Department of Agriculture's Division of Water Resources is working collaboratively with local stakeholders, state and federal agencies, and groundwater management districts to better manage water resources by constructing groundwater models.

In northwest Kansas, Groundwater Management District No. 4, the Kansas Water Office, KDA-DWR and the U.S. Bureau of Reclamation are working on refining the Republican River Compact model that will be used to make management decisions in this area of the Ogallala-High Plains aquifer. These same efforts will begin next year in southwest Kansas, in Groundwater Management District No. 3, to construct a district wide groundwater model, and the initiative will include the Kansas Geological Survey.

The Rattlesnake Creek hydrologic model provides an example of what can happen when there is little collaboration during model construction. That model is not being used for management decisions. However, the Rattlesnake Creek Partnership has been invited to collaborative on an update and refinement to the model so it can be used to evaluate management of the basin's water resources.

Building a collaborative relationship between local stakeholders and government agencies allows for common concerns to be addressed creatively even if their approaches are different. As a result, mutual goals are identified and conflict is minimized, which allows for increased trust and communication within the community.

Successful collaboration helps people realize their need to work together by focusing on shared goals, common problems and a sense of crisis.

Why Collaborate?

- Collaboration is critical to any management approach.
- Collaboration is part of life in a diverse society. We either find ways to deal with our differences creatively, or decision-making institutions will bog down in familiar impasses.
- Collaboration can produce better decisions than adversarial processes. Building an understanding of shared and individual concerns promotes information sharing as well as creative win-win solutions. In contrast, adversarial processes like litigation create a win-lose dynamic, and regulatory programs tend to promote one-size-fits-all strategies.
- Collaboration can improve the chances that decisions are implemented. When people are not involved in change, they resist it. When they are involved, they are committed both to a plan of action and to sharing resources to get things done.