



# KRWA Partnerships Help Communities Stay on Course

**T**he Kansas Rural Water Association (KRWA) staff has worked hard to assist water and wastewater systems in 2013 with all sorts of issues. They range from the host of water quality concerns, helping more than 800 systems through the development of their Stage 2 monitoring plans, to smoke testing wastewater collection systems. Scores of systems are involved with GPS mapping, several KAN STEP projects were completed. Daily, the phones ring, often two or three lines are on; Elmer and I typically deal with 100 to 200 emails every day.

I want to explain to readers some of the aspects about KRWA that are not typically touted.

## Membership supports KRWA

Membership in KRWA at the end of 2013 included 439 municipal members and 266 rural water and public wholesale members. In addition, more than 200 Associate Members also provide financial support. But KRWA doesn't exist to gloat about memberships; KRWA's mission is to provide training and technical

assistance to public water and wastewater systems and help communities. The support by membership helps KRWA fulfill that mission.

KRWA has an unparalleled history of providing training sessions for water and wastewater systems. In 2013, KRWA conducted 90 training sessions.

**From July 1976 to December 31, 2013, KRWA conducted or sponsored 2,108 training sessions, attended by 142,762 people!**

Those sessions were attended by 5,982 people. From July 1976 to December 31, 2013, KRWA conducted or sponsored 2,108 training sessions, attended by 142,762 people! The annual conference continues to be recognized as one of the best state association conferences in America. In 2014, all 327 exhibit spaces have been reserved and will be filled with the latest products and services.

## Systems benefit from state and federal contracts

Thanks to contracts with the National Rural Water Association, the Kansas Water Office and KDHE and the Kansas Department of Commerce, KRWA has been able to provide services to help water and wastewater systems at no direct cost to those utilities. KRWA also operates a small contract funded through Indian Health Services to provide assistance to tribal systems in Kansas.

## National Rural Water affiliation

Water and wastewater systems in Kansas have benefited as a result of KRWA being an affiliate of the National Rural Water Association (NRWA). KRWA was a charter member of the NRWA in 1976. KRWA presently receives funding for five staff positions to provide help for water and wastewater systems through NRWA programs. Funding for those programs originates with EPA and USDA Rural Development. The EPA funding for a training and technical assistance program ended however last

August 31. Thanks to recent approval of the Appropriations Bill, funding should become available again about March 1. It's been "Rural Water" that has pleaded to Congress to provide funding assistance for water and wastewater systems. The funding for training and tech assistance was put out to bid by EPA last year. NRWA received \$6.5 million of the \$15 million that was appropriated. The job performance by "Rural Water" should be positive in the eyes of EPA in future contracts.

USDA Rural Development and "Rural Water" have a long-standing partnership. First, USDA provides loans and grant funding for water and wastewater systems and other community facilities. The investment in technical assistance to help those and other systems has been prudent to ensure that systems are operated as efficiently as possible and that help is available when necessary. The funding KRWA receives provides for two circuit riders, one wastewater tech position and a source water protection program. Staff member Doug Helmke also provides extensive assistance concerning water rights as a component of the source water program.

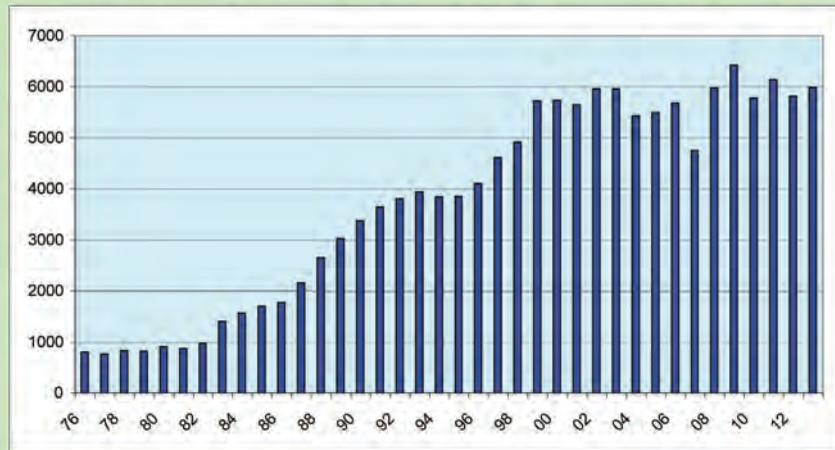
### Kansas Water Office funding

A contract with the Kansas Water Office operated by KRWA has funding as a benefit of the Clean Drinking Water Fee. The contract provides technical assistance with a focus on water conservation and general operation and maintenance of public water systems. Specific services provided under this contract include the following aspects:

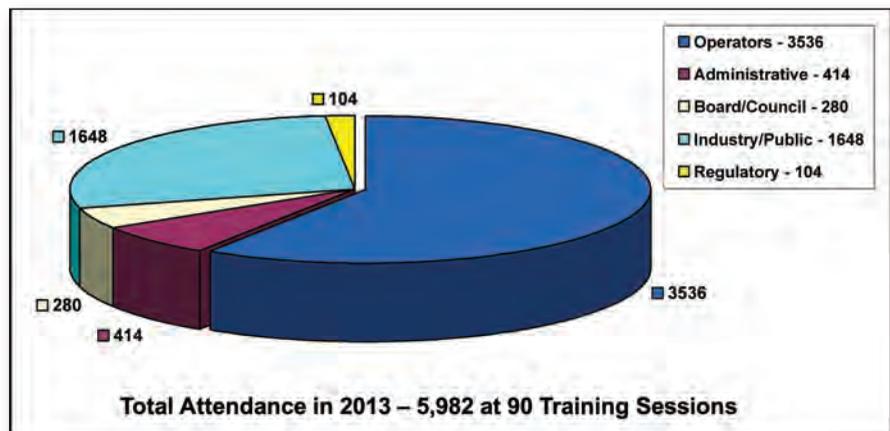
- ◆ Requests for assistance by public water supplies
- ◆ Reduction of unaccounted for water loss
- ◆ Development of Water Conservation Plans
- ◆ Conducting water loss surveys
- ◆ Regional public water supply activities

Assistance is provided on-site as needed to personnel on the operation, maintenance, finance, management, regulatory requirements, water quality and public health concerns or other critical concerns based on severity of the problem and as time

History of Training Attendance - Kansas Rural Water Association: 1976 - 2013



Number of Training Sessions held from 1976 to December 31, 2013: **2,108**  
 Total Attendance 1976 to 2012: **142,762**



Total Attendance in 2013 – 5,982 at 90 Training Sessions

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and resources permit. KRWA provides this assistance any time day or night.

### Reducing water loss

The Kansas Water Office annually identifies those water systems that have thirty percent or greater unaccounted for water. KRWA visits each system to try to determine the contributors for the high losses. Assistance that results from the initial review of recordkeeping and billing practices likely will include testing of master meters and a sampling of the customer meters, and leak detection. It's somewhat ironic that when system operators and members of the governing bodies hear about high water loss, they immediately want to go look for leaks. Really, that's the last step. If the master meters aren't registering accurately, the unaccounted for water cannot really be determined. KRWA works with the high loss systems until unaccounted for water is reduced to twenty percent or less for two consecutive quarters.

When searching for leaks, KRWA staff have been out late at night, on

**KRWA works with the high loss systems until unaccounted for water is reduced to twenty percent or less for two consecutive quarters.**

weekends, sometimes in emergencies, sometimes when the system is already drained which makes searching for leaks next to impossible. In one system, the underbrush was so thick that KRWA staff crawled on hands and knees to follow the pipelines.

KRWA staff are very proficient in the use of sonic listening devices, leak correlators, data loggers, shovels, probes and other tools. One system in southeast Kansas had a significant leak under a sidewalk but was surfacing more than 200 yards away. There was no line close to where it was surfacing. By using the correlator the leak was pinpointed and minimal excavation

was needed. Another leak was recently located under the concrete floor of a fire station. I think one of the most unusual leak locates by a KRWA staff member was under the concrete floor of the sanctuary of a church. The leak was in the hot water pipe of the heating system. That's where the water was going.

In calendar year 2013, KRWA staff worked on 85 water loss surveys, locating what amounts to 335 gpm. The cost of that loss on an annual basis is nearly \$450,000 for those systems.

### Water Conservation Plans

Throughout the year the Kansas Water Office assigns water conservation plans to public water supplies and refers them to KRWA for help. Typically KRWA provides on-site assistance in completing the plan and a review is conducted at the KRWA office to ensure all minimum requirements are met. KRWA then provides the revised plan to the public water supply. In order for the plan to be approved by the State, the governing body must have already approved the revised plan and provide a signed copy of the ordinance or resolution with the plan to the State. In 2013, KRWA helped on Water Conservation Plans in the follow manner:

- ◆ 204 Water Conservation Plans were assigned
- ◆ 78 Plans were approved
- ◆ 6 systems declined revisions
- ◆ 50 Plans were revised and returned to systems
- ◆ 70 Plans are in progress as of 12/31/13

### Contracts administered through KDHE

In November 2013, KRWA was awarded a contract funded through the PWS Capacity Development Program, State Revolving Fund Set-aside. That funding originates with US EPA. The work includes dealing with water quality issues but also allows KRWA staff to help on the myriad of operational issues. The work under this contract is to cover assistance with

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KRWA has tracked every leak that Association staff have located since July 1, 1991 when the Kansas Water Office first provided funding to allow KRWA to provide help to reduce unaccounted for water loss. Since that time until 12/31/2013, KRWA has been involved in 1,257 water loss surveys that (conservatively) located nearly 10,000 gpm on an annual basis. Here is a history of that experience by Fiscal Year.

<b>Water Loss Surveys conducted, FY 92 - 12/31/2013</b>				
	<b>FY 92</b>	<b>FY 93</b>	<b>FY 94</b>	<b>FY 95</b>
Surveys	64	55	38	26
GPM detected	530.25	285.25	457.5	137.5
GPY detected	278,699,400	149,927,400	240,462,000	72,270,000
\$ Cost Savings	\$280,981	\$270,011	\$340,610	\$92,176
	<b>FY96</b>	<b>FY 97</b>	<b>FY 98</b>	<b>FY 99</b>
Surveys	23	29	25	54
GPM detected	268.25	238	151.75	632.75
GPY detected	140,992,200	125,092,800	79,759,800	332,573,400
\$ Cost Savings	\$180,985	\$192,555	\$150,771	\$572,037
	<b>FY 00</b>	<b>FY 01</b>	<b>FY 02</b>	<b>FY03</b>
Surveys	50	49	49	38
GPM detected	393.25	448.75	454	275
GPY detected	206,692,200	235,863,000	238,622,400	144,540,000
\$ Cost Savings	\$339,137	\$607,989	\$423,858	\$225,522
	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
Surveys	40	44	40	53
GPM detected	246	256.5	261	463
GPY detected	129,297,600	134,816,400	137,181,600	243,352,800
\$ Cost Savings	\$421,953	\$278,814	\$253,846	\$650,564
	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>
Surveys	65	87	136	129
GPM detected	674	1009.5	1121.5	654.25
GPY detected	354,254,400	530,593,200	589,460,400	338,118,480
\$ Cost Savings	\$888,549	\$1,497,122	\$1,405,972	\$863,177
	<b>FY12</b>	<b>FY13</b>	<b>7-13 to 12-13</b>	<b>Total FY 92-12/13</b>
Surveys	128	74	46	1,382
GPM detected	653	612	117	10,340
GPY detected	343,216,800	321,772,320	61,495,200	5,434,704,000
\$ Cost Savings	\$757,802	\$705,659	\$129,718	\$11,659,525

drinking water regulations by interpreting drinking water rules, including monitoring requirements, with emphasis on Stage 1 DBP, Stage 2 DBP, LT1 SWTR, LT2 SWTR, and GWR. KRWA is supposed to investigate MCL and treatment technique violations and assist with corrections. Concerning operation and maintenance issues, KRWA is supposed to investigate and help resolve water quality complaints, including taste and odor problems, low pressure problems, water shortages, and provide hands-on training with operation of pumps, valves, motors, chemical dose calculations, chemical feed systems,

storage tanks, wells, meters, and chlorination systems. And KRWA is to provide assistance to new operators. KRWA is also supposed to work with surface water systems including regulations, water quality, filter operations, etc.

In early 2013, KRWA also was awarded a smaller contract to provide assistance to wastewater systems. KRWA staff member Jeff Lamfers is supported by Delbert Zerr and Charlie Schwindamann in working with those systems that are referred by KDHE. KRWA staff members do a lot of “multi-tasking” – that’s necessary because it’s the only way to cover an entire state.

## KRWA is your Association

KRWA is transparent. KRWA prints the records of attendance at every training session. Those are posted on the calendar on the KRWA Web site at [www.krwa.net](http://www.krwa.net). The record was also printed in a recent KRWA magazine. KRWA also posts follow-up letters to systems online for public access. Those can be found at [www.krwa.net](http://www.krwa.net), then under “Technical Assistance”, then “Letters To Systems”. This is a pretty unique feature – and no other organization that I know of provides that level of transparency.

Water and wastewater system operators and staff work hard to keep their systems operating. However, there are times when problems occur that system personnel are not familiar with. KRWA staff can usually help with these situations, either through on-site assistance or by providing referrals. With KRWA, systems get the benefit of more than 400 years of experience from KRWA staff.

## Attend the conference

One event that I hope readers will consider is the annual KRWA Conference & Exhibition. It’s March 25 – 27 at Century II Convention Center in Wichita. Help your system “Set Sail for the Future” by attending. It’s one of the best investments of time that I think can be made. I encourage board and council members to attend to. They are the ultimate decision-makers. Attend the conference, get the facts, meet people and exchange ideas. Take the information home and put it to use. You’ll be glad you did.

*Greg Duryea has worked for KRWA since 1993 as Technical Assistant. He presently manages the Emergency Operator Program, with a variety of other responsibilities. He holds a Class I water certification and is the certified operator for Sycamore Springs Resort in Brown County.*

