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Volume X — Summer 2013



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MISSION STATEMENT

"Protecting and preserving the water and wastewater resources of Rural Illinois through education, representation and on-site technical assistance".

On the Cover:

A picture of a sunrise taken on the east side of Sullivan shortly before it started to rain.

by Circuit Rider, Chuck Woodworth.

Water Ways is the official publication of the Illinois Rural Water Association, P.O. Box 49, Taylorville, Illinois 62568, and is published quarterly for distribution to members as well as other industry associations and friends. Our website is www.ilrwa.org. Articles and photographs are encouraged. Advertising and submissions should be mailed to the above address or e-mail us at ilrwadb@ilrwa.org.



E What?

It seems nowadays you cannot complete a sentence in our industry without at least one or two acronyms being thrown in for good measure. In this edition's article I would like to introduce some of you to a new one – eMOR. This relatively new acronym stands for the Electronic Monthly Operating Report and has been a long time in coming. As we look around ourselves we find that we are surrounded by computers and yet (for most) those monthly operating reports are still being completed on paper forms and by hand. You can bet that come the first few days of every month you can usually find the system operations

specialists sitting at their desks filling in all of those “itty bitty” boxes with numbers that never seem to quite fit. And usually sitting right on top of the desk in a prominent spot is the all-important Whiteout – a very necessary commodity (usually purchased in bulk) for those inevitable mistakes. I for one would find it much easier to hit the backspace key on the keyboard to correct an error than breaking out the Whiteout.

The Illinois State Water Survey (ISWS) has been working with the IEPA (see, there we go with those acronyms again) in an effort to eliminate the submission of paper copies by replacing

them with an on-line submittal. To accomplish this goal ISWS has first been working on developing an Excel spreadsheet that would be used by Class C or Class D water treatment facilities. Over the past few weeks, this standardized Excel template has been undergoing some beta testing (trial runs for us that don't know what beta testing is) in an

by Frank Dunmire,
IRWA Executive Director



effort to identify and work out the bugs. Many volunteers have been submitting data along with suggestions on how to improve the design and functionality of the template. Throughout this testing phase many changes were made and, as of this writing, the Class C and Class D templates are pretty well ready for distribution.

One of the other goals of the eMOR program is that eventually the water use data you submit in your monthly operating reports will replace the annual water use data that all facilities are required to submit to the ISWS as part of the Illinois Water Inventory Program (IWIP). This added benefit will help tremendously in cutting down on the duplication of reporting efforts as well as lighten the workload of the IEPA and ISWS. Eventually all water systems will be required to migrate to this electronic format and you still have an opportunity to help make it as user-friendly as possible. If you would like to participate in the early stages please contact Kathy Rodgers at rodgersk@illinois.edu. IRWA will also be making available information about this new reporting system at its upcoming training sessions. 💧



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Where Do You Plan to Be in 5 Years?

by Bill Dowell,
IRWA Wastewater Technician

It's been almost 5 years since we posed that question here. Sure doesn't seem that long ago! During that time there have been a **lot** of people that pursued their retirement opportunities, some planned, some spontaneous. But the pace of retirements is still going to accelerate, and the next 5 years will see tremendous changes in the water and wastewater fields.

The newer generation(s) entering these fields appears to be, (finally), on the up-tick as well. It seems that, just in the last 2 years or so, significant numbers of talented new-comers have appeared in these facilities. This transformation

looks to be occurring across the board in the industry; not just in plants, but in the support fields, (commercial, contractors, engineers, etc.), as well. That's a good thing, as the communications and interaction between these integrated fields can continue to be improved on an even plane. All of these indications are beginning to allay our initial concerns about the future of these critical segments of our nation-wide infrastructure.

Along with these changes and activities, comes the need for more study opportunities. To progress through the licensing steps for a given certified position requires considerable time and



effort. We at IRWA always encourage operators to acquire the maximum license tier for their particular field, and even cross-train, if at all possible. And to make that effort as the opportunities

continued on page 7



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Where Do You Plan to Be in 5 Years?

continued from page 6

present themselves. If no classes are available in your immediate area, then there are a variety of correspondence courses and/or online courses to choose from. These courses can range in price from "FREE" to about \$150 for 30 study hours. If we can help you find some, give us a call. Don't put it off, go for it!

Continuing education hours are required for the 3 years of each water license period. IRWA has provided an excellent selection of training sessions to ease that search for CEUs. These sessions, both FREE and Fee-based, will continue to be offered throughout Illinois, so keep your eyes on the mailbox or <http://www.ilrwa.org>.

At this point in time, no CEUs are required in the Wastewater world, but

training sessions will continue to be offered by IRWA. 💧



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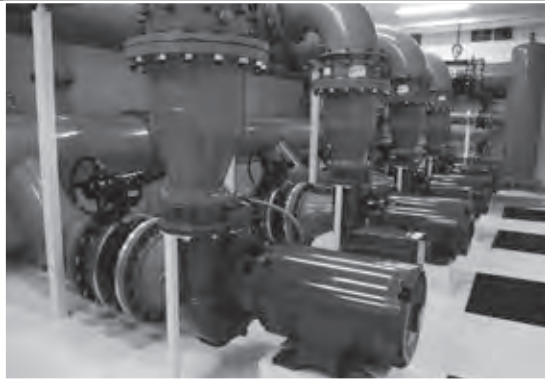
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The Numerous Benefits of Time Management Skills

by Ann Marie

It's normal to hear time management discussed in business circles; yet, it is a topic that can be of great benefit to everybody. Time is a challenge for all of us, whether we're business people, workers, students or stay at home moms or dads. There seems to be less time in today's world, and that's why it's a lot more important to learn how to properly manage our time. In this article, we are going to be discussing a few key reasons why time management is so important.

A big benefit of time management is just how that it boosts your productivity. It is something that almost everybody hopes to be able to do. Seldom do you hear of individuals who feel that they've got adequate time to do the things they need and wish to do. In lots of instances, the problem is not not enough time but rather the fact that you do not have an efficient way of managing your time. Time management shows you how to set priorities, and to focus on how much time you're wasting every day. The idea is not really to put yourself under more pressure to try and do more, but to utilize your time more wisely so you appear to have more of it.

One positive advantage of time management is decreased levels of stress. Not having enough time is one of the main reasons we experience stress. Think about how tense you feel if you are worrying about being late for a scheduled visit or if you're stuck in traffic. These issues relate to time, and if you have this type of situation often you could probably benefit from some training in time management. Learning how to control schedule so that overwhelmed

us and become an issue indicates that you are supervising your time efficiently. We often believe that the solution to our problems is doing things faster, but it could be even better and more relaxing if we learn how to manage our time better.

Time management doesn't just include boosting your productivity and efficiency; you also want to feel more pleasure and a better quality of life. Time is an important component of life and so we feel better about our lives when we have the ability to control our time. Conversely, feeling that we're running out of time can create an overall feeling that we aren't good in some part of life. Those who are genuinely successful are aware that time management is a crucial skill they have to get good at. It could be the one determining factor that lets you live in the moment and appreciate

your life instead of feeling that time is a merciless boss.

Time management is very significant in our present times, even more so than in previous decades. Existing technology allows us to do things faster than before and yet we feel forced to continually increase the pace. As an example, we continue to have difficulty keeping track of the large number of available information even with computers and other gadgets that are extremely powerful. Time management is the component that can give us a sense of control over time so we can quit rushing and loosen up.

About the Author

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Stress at Work

by Jay Bell,
IRWA District 4 Board Member

After attending one of our conferences I heard the suggestion that we should have a class on stress in the work place. That got me thinking about how much stress is involved in our jobs. With some and alot more with others. My predecessor had a gun pulled on him one time while trying to do a water shutoff.

While some workplace stress is normal, excessive stress can interfere with your productivity and impact your physical and emotional health. And your ability to deal with it can mean the differences of success or failure. You can't control everything in your work environment, but that doesn't mean you're powerless- even when you're stuck in a difficult situation. Finding ways to manage workplace stress isn't about making huge changes or rethinking career ambitions, but rather about focusing on the one thing that's always within your control: you.

Every employee should have a specific, written job description. Simply negotiating one dose more to dispel a sense of powerlessness than anything else we know. It is a contract that you help write. You can object to what and insist on what you do want. If there is a compromise, it's because you agreed to it. With a clear job description, your expectations and spelled out, as are your boss's. A good job description is time limited. Set a specific date for a review and revision based on your mutual experience with this initial

job description. If you and your boss can't agree on what your job description should be, look for another job either with the same company or outside. Even in these tough economic times, it's important that your job be a source of satisfaction and respect.

Remember the old saying, "Find a job you love and you'll never work another day in your life." Most people spend about 25 percent of their adult lives working. If you enjoy what you do, you're lucky. But if you're the proverbial square peg and your job is a round hole, job stress hurts you productivity and takes a serious toll on your mind



and body. There are many reasons for staying in a job that doesn't fit you or that you particularly like. one reason can be the "golden handcuff" –having salary, pension, benefits, and "perks "that keep one tied to a job regardless of stress consequences. Many people are in jobs they don't like or aren't good at. The quick answer is to get a job they like or one that better matches their skills, abilities, and interest—easier said than



done. Some clients have no idea what kind of job they would like or what kind of job would be better. Worse, they don't have a clue on how to go about finding out this information.

Act through labor or employee organizations to alter stressful working conditions. If that doesn't work, try the courts, which have become increasingly receptive to complaints of stressful work conditions. Recent rulings created pressure for employers to provide working environments that are as stress free as possible. There are federal and state agencies in charge of monitoring the work environment in the

interest of work safety and health. If you think that your work is dangerous to your health and safety form a physical standpoint, give them a call. If nothing helps and the work environment remains stressful, exercise your avoidance options and get a new job. Job hunting can be stressful, particularly in times of high unemployment, but being ground down day after day by work is far worse. 💧

80's Trivia

1. Who had the trademark saying "*Nanno Nanno*"?
2. What was E.T.'s favorite candy?
3. What commercial was **Michael Jackson** filming when his hair caught on fire?
4. What was the name of the first woman to ever go into space (June 18, 1983)?
5. Who was the frontman of Wham who went on to have a successful solo career?
6. What group sang "*Come on Eileen*"?
7. In the movie "*Back to the Future*", what speed did Marty have to reach in order to activate the flux capacitor?
8. Name this star of television commercials that was called the "*original party animal*".
9. What late 80s pop sensation band had their grammy revoked for allegedly not singing the vocals on their album?
10. What was the name of the *Dukes of Hazzards* car?
11. What was the very first video ever to play on *MTV*?
12. What was *Wendy's* famous tag line from the 80s?
13. What was the **ONLY** way to wear denim in the 80s?
14. What is the #1 **Atari** game of all time?
15. What craft toy involved cutting plastic figures, coloring them in, and then baking them in the oven?

answer key on page 23

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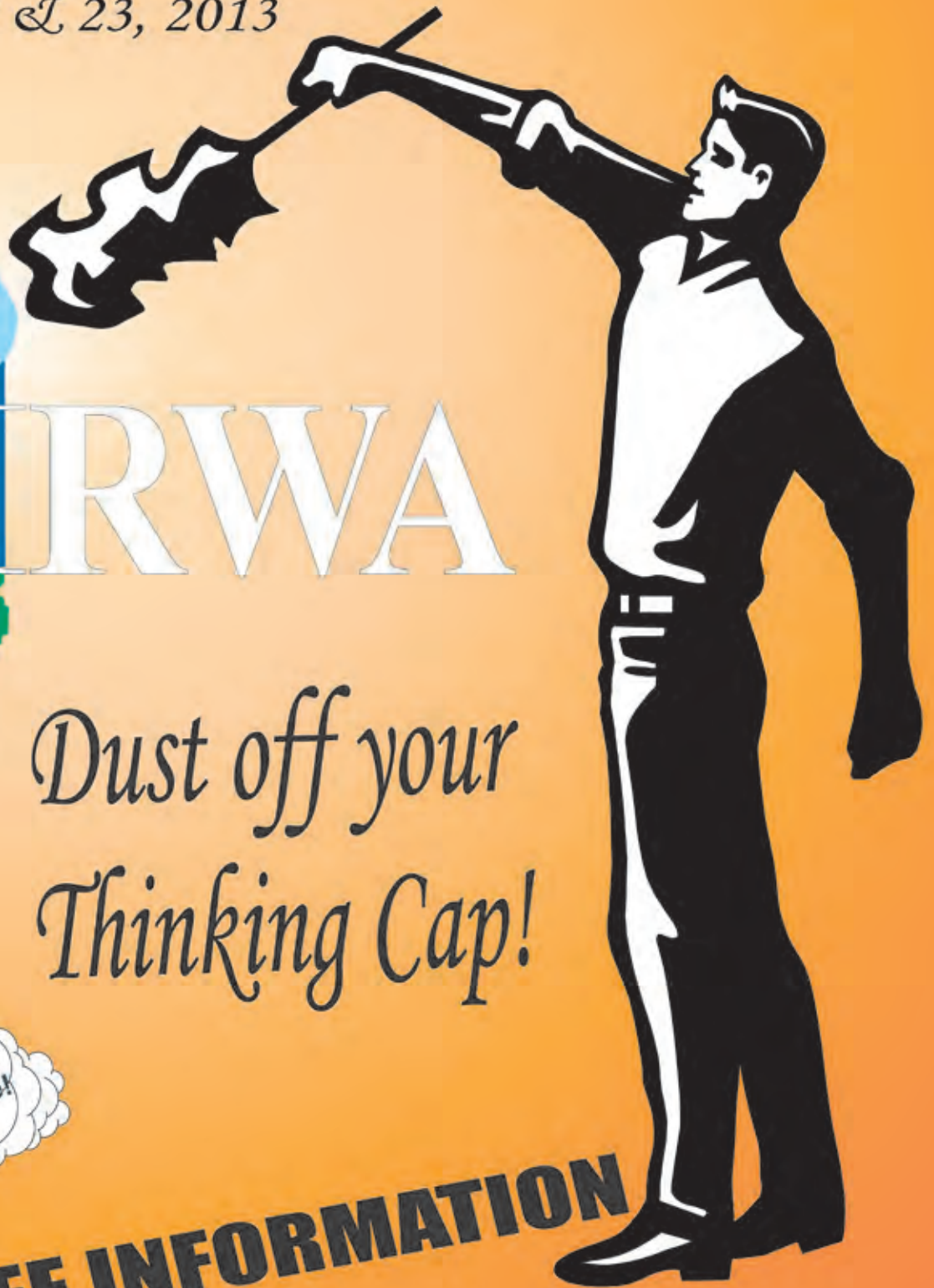


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PRE-REGISTRATION - Registration and badges are required for all conference attendees. Please register each attendee by completing the registration form included below and return it with your payment to: IRWA, P.O. BOX 49, TAYLORVILLE, IL 62568. You may also sign up on-line and pay with a credit card at: www.ilrwa.org. All fees must be paid when registering - we cannot do special billings or purchase orders. **Pre-registration must be postmarked by October 11th, 2013.**

ON-SITE REGISTRATION - All conference attendees must obtain a name badge and conference material at the registration desk. If you do not pre-register, please make sure that you register as soon as possible after you arrive at the conference. ****Please note that on-site registration fees are \$25.00 higher than pre-registration****

REGISTRATION HOURS- Tuesday, October 22nd - 7:30 a.m. - 3:00 p.m. & Wednesday, October 23rd - 8:00 a.m. - 11:30 a.m.

CANCELLATION AND REFUNDS - Refunds are only given in cases of emergency situations. You must provide a written request to the IRWA office in order to receive a refund.

EXHIBIT HALL - 40 companies will be on site to bring you the newest products and services they have to offer. The exhibit hall will be open: Tuesday, October 22nd 10:30 a.m. - 7:00 p.m. & Wednesday, October 23rd 8:00 a.m. - 11:00 a.m.

EXHIBITORS HOSPITALITY NIGHT - Tuesday evening 4:30 p.m. - 7:00 p.m. - Please join us for food and beverages provided by our exhibitors!



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Call 1-800-762-5011 with questions



CONFERENCE AT A GLANCE

Water Sessions

Tuesday, October 22nd

9:00 - 9:30 - Rural Development Update - Mike Wallace; Rural Development - Hear the latest updates on Rural Development.

9:30 - 10:30 - Calcium Chloride VS. Lime in R.O. Plants - Brian Henry; Hawkins Chemical - A lot of reverse osmosis plants use lime for pH control. Another option is the use of calcium chloride. Attend this session and learn the pros and cons of both chemicals. A portion of the hour will be spent discussing some operational tips for R.O. plants.

11:00 - 12:00 - Dealing with Unexpected Petroleum - David Shafer; Shive-Hattery - This presentation will look at 3 separate case studies from the Village of Heyworth where petroleum tainted soils were uncovered in the course of utility work. Discussion of how to handle the discovery, notification, soil disposal, and resources you can check before you dig will also be covered.

1:00 - 2:00 - WTP Flooding: It Could Happen Tomorrow - A Case Study - Jamie Headen; Benton & Associates & Jack Cosner; City of Jacksonville - Take a water treatment plant, add 15 inches of rain in 24 hours, and you have the perfect recipe for a disaster. Hear how Jack Cosner and his crew and their engineers brought the Jacksonville, Illinois water plant back to life after a major flood.

2:30 - 3:30 - The Evolution of Our Distribution Systems - Marla Braun; JCM Industries - Catch this informative session to learn about the evolution that our distribution systems have gone through in the last 100+ years.

3:30 - 4:30 - No Lead Rule - John Mone; Ford Meter Box - The new law will be taking effect in January - are you prepared?

Wednesday, October 23rd

9:00 - 10:30 - IEPA Regulatory Update - Dave McMillan, Brett Hanson, and Joanne Olson; IEPA - In this panel discussion, you will learn about a lot of changes to a wide variety of regulations, from reporting to operation certification

11:00 - 12:00 - Sampling & Reporting/Contractual Operations - Dave Lourie; TEST, Inc., Wayne Nelson; IRWA - In this session, we'll discuss proper sampling and reporting procedures as well as a quick overview of contractual operations (by a contracting firm or by an independent operator)

1:00 - 2:30 - Tank Cleaning, Coatings & Attachments - Tony Szabo; Midwest Mobile Washers/Brad Schotanus; Dixon Engineering - Have questions about cleaning the exterior of your tank, the right coatings for your tank, and antenna placement? Come to this session for the answers to your questions.

2:45 - 4:00 - Meters & Automated Billing Software - Dave Wieggers; Sensus - Find out about meter types and how they integrate with billing software.

Wastewater Sessions

Tuesday, October 22nd

9:30 - 10:30 - Backhoe Safety - Perry Musgrave; Lake Egypt Water - The backwards, forwards, left and right of backhoe safety!

11:00 - 12:00 - IEPA Updates - Scott Twait; IEPA - Hear the latest on the updates for wastewater.

1:00 - 2:00 - Lagoon Treatment Systems - Jim Martin; Lemna Technologies - Small to medium sized wastewater treatment lagoon systems to effectively perform nutrient removal

2:30 - 3:30 - Pumping Modern Trash - Robert Domkowsky; Xylem Water Solutions Flygt Products - Impeller and pump innovations to reduce problems with newer materials found in collection systems and lift stations

3:30 - 4:30 - Wastewater Lab Practices - Dave Lourie; TEST, Inc. - Proper Lab Procedures for the wastewater side will be discussed



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Flow Model Memories

by Chuck Woodworth,
Circuit Rider #3

On May 16th Mr. Frank Dunmire and I attended the Christian County Conservation day near Pana, IL. There were several organizations in attendance that day as the objective was to teach 3rd and 4th grade students how to, or the need to, protect the environment.

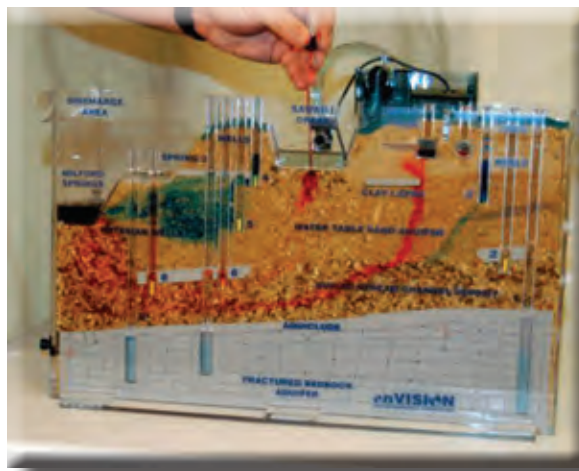
Mr. Dunmire and I discussed protection of the groundwater by using a groundwater flow model. Other presenters discussed topics such as soil erosion, recycling, climate, protected animals in Illinois, energy savings, agriculture and biodiversity. I did not visit with other stations but I think the flow model demonstration was the most interesting station there.

I'm not sure if you were aware of it but the month of May is **Groundwater Protection month**. As most of you know when I started working for the Association, I was hired as the Groundwater Specialist. The Groundwater Specialist worked with systems to develop **Well Head Protection Plans**. One of the steps in the Well Head Protection Plan was for the system to develop an outreach program to educate the community on ways to help protect the water source.

One very effective method was to use the Groundwater flow model at the local school targeting 3rd and 4th graders. The students were impressed with the flow model if you could be in the classroom shortly after the one lesson about the water cycle in science class. Although I'm not sure the reason but the teachers all seem to discuss the water cycle around Earth Day. I always enjoyed showing the Groundwater flow model to 3rd graders. That age group always asked the best questions. They also seemed very interested in watching the flow model.

About now, you might be asking yourself why a Circuit Rider is talking about this. After losing the funding for the **Well Head Protection Program** and

since becoming Circuit Rider 5 years ago, on May 16th was the first time in 5 years that I used the flow model. While giving my presentation to the different groups it reminded me of all the different field day, conservation day, water celebration and classroom events that I attended as a Groundwater Specialist. Most of these events were held inside a building but on the other hand several were outside, like the Christian County Conservation day. When the wind started blowing and the dark clouds started rolling in, it reminded me of all the outside events that brought rain to the area on the day of the event.



I attended a field day event near Edwardsville one sunny April day; the host was nice enough to supply each station with a light weight sun shade awning. It was nice until the wind started to blow. It's rather difficult to give a presentation while holding on to your sun shade and the pamphlets I was going to be handing out. I learned that day to give away heavier objects such as pencils or ink pens instead of pieces of paper.

On the opposite side I attended an outdoor event in Peoria on Earth day one cool spring morning. The temperature continued to rise and before noon my station was no longer in the shade. It's also difficult to give a presentation while dripping with sweat while obtaining the



perfect sunburn on your face. I learned that day to bring some type of shade and sun lotion with you.

One of the best shows I have been to was inside the Peoria Civic Center with Mark Mitchell, *IRWA's Source Water Protection Specialist*. The Clean Water Celebration is a large multi school event hosted by the **Central Regional Groundwater Protection Committee**.

The last Clean Water Celebration I attended I believe there were 1600 children in attendance. Mark and I each had a flow model set up and would take turns giving our presentation to the children. I don't remember how many times we would say our presentation that day but it was several. I think I was still saying it in my sleep that night. The building was always the right temperature and it was dry inside. I do remember the weather was not favorable several times during the day it was held. Maybe I should look into being able to do flow model demonstrations more. Doing so on the 16th brought back some good memories.

If you have a old flow model at your system and you have never used it, give me a call. I'll stop by and discuss ways you can use it in your community.

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ILLINOIS RURAL WATER ASSOCIATION 10th Annual Golf Outing

The Illinois Rural Water Association (IRWA) is hosting its 10th Annual Golf Outing. This event is sponsored as a way to have a fun IRWA member activity.

The location for this event is **Piper Glen Golf Course in Springfield, Illinois**. The date for this four person scramble is **Friday, August 16, 2013**. The fee is \$60.00 which includes lunch, a gift bag, green fees and golf cart. Various prizes will be given away as well. As always, IRWA is trying to make this a fun-filled and affordable golf scramble. Your participation will ensure that this year's event will be every bit as successful as past outings. This event gives the IRWA members an opportunity to have fun and enjoy a day of golf with fellow industry professionals.

Last year's event sold out so you are encouraged to submit your registration forms prior to the **Friday, August 9, 2013** deadline. Please make checks payable to Illinois Rural Water Association. You can also go online and sign up and pay by credit card at www.ilrwa.org.

This will be a four-person scramble with a **10:00 a.m. shotgun start**. Participants are encouraged to be at Piper Glen Golf Course and check in at the registration table no later than 9:45 a.m. Lunch will be served as you make your way by the club house while playing golf.

It is IRWA's hope that you will be able to attend this event. Please feel free to contact **Denise Burke** at 1-217-287-2115 with any questions you may have. We look forward to seeing you there!

Sincerely,



Board of Directors & Staff

WHAT: 10th Annual
IRWA Golf Outing

WHO: Water &
Wastewater Operators,
Board Members, Coun-
cilmen, Mayors,
Vendors, Others

WHEN: Friday,
August 16, 2013

WHERE: Piper Glen
Golf Course—
Springfield, IL

FEE: \$60.00 for
operators (includes
lunch, gift bag, green
fees & golf cart)

ILLINOIS RURAL WATER ASSOCIATION
10TH ANNUAL GOLF OUTING

The 10th Annual Illinois Rural Water Association Golf Outing will be held on Friday, August 16, 2013 at Piper Glen Golf Course located in Springfield, Illinois. Directions to the course are located on the last page. The golf format will be a shotgun start at **10:00 a.m.** Please check in at the registration table no later than 9:45 a.m. Please fill out the registration form below and send it along with your check to the address listed below. **You may also pay by credit card online at www.ilrwa.org.** **Registration must be received and paid by Friday, August 9, 2013 in order to reserve your spot. We are limited to 144 golfers for this event.**



Course Rules:

- Dress must be in good taste keeping with golf tradition.
- Only non metal spikes are allowed.

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www.piperglen.com

Registration Form

Friday, August 16, 2013—10:00 a.m. (Shotgun start—4 person scramble)

Single Golfers will be teamed with a foursome.

NAME(S):

SYSTEM NAME:

ADDRESS:

PHONE:

OF GOLFERS

Operators / City Officials / Guests _____ @ \$60.00 = _____

Associate Members / Vendors _____ @ \$75.00 = _____

(If Associate members are sponsoring the golf outing (please see next page), then the fee to participate will be \$60.00).

**Total _____ = _____
(includes lunch, gift bag, green fees & golf cart)**

Please make all checks payable to Illinois Rural Water Association. Return your completed registration and payment to: **Illinois Rural Water Association—P.O. Box 49—Taylorville, Illinois 62568**

If you have any questions, please contact **Denise** at Illinois Rural Water Association at 1-800-762-3547 or email her at: ilrwadb@ilrwa.org.

Sponsorship Form

Lunch Sponsorship	-	\$500.00	(limited to 3 sponsors)
Beverage Cart Sponsorship	-	\$500.00	(limited to 2 sponsors)
Hole Sponsorship	-	\$150.00	(limited to 18 sponsors)
Hole in One Sponsorship	-	\$275.00	(Seven day cruise)
\$300.00 (\$5,000 cash)			
\$250.00 (Golf Clubs)		\$250.00	(\$500.00 golf shop credit)
Gift Bag & Prize Sponsorship	-	SEE BELOW	

LUNCH SPONSORSHIP: Lunch sponsors will have their sponsorship sign posted where lunch will be served reaching all of the golfers and two free registrations to participate in the golf outing.

BEVERAGE CART SPONSORSHIP: Beverage cart sponsors will have their sponsorship sign on the courtesy carts that will be on the golf course driving around with bottled water, beer and soda compliments of your company. They will also receive two free registrations to participate in the golf outing.

HOLE SPONSORSHIP: Hole sponsors will have their sponsorship sign **off the tee**. This is a great opportunity for visibility.

HOLE IN ONE SPONSORSHIP: Hole in one sponsors will have their sponsorship sign displayed off the tee and will be recognized prior to the shotgun start of the outing.

GIFT BAG SPONSORSHIP: If your company wishes to provide an item for each gift bag (approximately 144), please contact Denise to discuss.

PRIZE SPONSORSHIP: If your company wishes to bring a door prize the day of the golf outing or send it in prior to outing, please contact Denise to let her know.

Sponsorship Registration Form

Company Name: _____

Contact Name: _____

Address: _____

City: _____ State _____ Zip Code _____

Sponsorship Level: _____ Amount Enclosed: _____

Please complete and return the Sponsorship registration form and payment to:
Illinois Rural Water Association—P.O. Box 49—Taylorville, IL 62568

If you plan on participating in the golf outing, please fill out the registration form on the previous page and return with this form with your payment. If you plan to attend but not golf in the outing, please let us know on this form.

Directions to Golf Outing

From North (Bloomington, Peoria, Chicago): Take I-55 into Springfield and go to the interchange with I-72 in southern Springfield. Take I-72 west towards Jacksonville and proceed to Exit #93 for Illinois Rt. 4. Take a left onto Rt. 4 and head south for approximately 3 miles. You will reach a stoplight intersection at Mansion Road. Take a left and follow that road in. It will curve and the golf course entrance will be on your left after that curve.

From South (St. Louis Metro Area): Take I-55 to the Toronto Road exit (#90). Turn left onto Toronto Road. Follow this road as it eventually merges into Woodside Road. Continue on Woodside Road for approximately 3 miles until you reach stoplight intersection at Illinois Route 4. Take a left at that stoplight and head south for about a mile to another stoplight intersection at Mansion Road. Take a left and follow that road in. The road will curve and the golf course entrance will be on your left after that curve.

From East (Decatur, Champaign-Urbana, Indianapolis): Take I-72 into the Springfield area. The freeway will end and you will be directed to take an on-ramp to get on I-55 South/72 West (St. Louis/Jacksonville). Take I-55/72 to the major interchange in southern Springfield. Take I-72 west towards Jacksonville and proceed to Exit #93 for Illinois Route 4. Take a left onto Rt. 4 and head south for approximately 3 miles. You will reach a stoplight intersection at Mansion Road. Take a left and follow that road in. The road will curve and the golf course entrance will be on your left after that curve.

From West (Jacksonville, Quincy, Hannibal): Take I-72 east to Exit #93 for Illinois Route 4. Take a right onto Rt. 4 and head south for approximately 3 miles. You will reach a stoplight intersection at Mansion Road. Take a left and follow that road in. The road will curve and the golf course entrance will be on your left after that curve.

From the Airport: When you are leaving the airport, take a right onto J. David Jones Parkway. Proceed to the stoplight intersection with Veteran's Parkway (Illinois Route 4). Take a right and head south on Veteran's Parkway for approximately 15 miles. You will reach a stoplight intersection at Mansion Road. Take a left and follow that road in. The road will curve and the golf course entrance will be on your left after that curve.

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Customer Education in Cross Connection

by Pat Gammill,
Circuit Rider

Greetings All! Seems like a while since anyone has discussed cross connection issues. Not since everyone was trying to get their cross connect control survey in order, and now updating it every two years, have I had a lot of questions or concerns about cross connects.

Lately, however I had a system that requested some information that they could pass on to their customers. Something to help them better understand...What is a cross connection? How do you prevent a cross connection?

So it got me thinking.... Even though we've all attended many classes and/or training sessions on the subject in the past, it might be time for a little update.

I hope this article will refresh your memory and provide educational material that you can pass on to your customers.

The following information was taken from a hand-out provided by: WATTS Regulator, Watts Industries Inc. The title of the pamphlet is: 50 Cross-Connection Questions, Answers, & Illustrations Relating To Backflow Prevention Products and Protection of Safe Drinking Water Supply. Because there is only so much space for each article written for our magazine, I am going to just choose a few for this article. You can however go to our IRWA website, download and print the entire pamphlet and have the information to share with your customers if so desired.



Go to: <http://www.ilrwa.org/downloads.htm>, Click on Cross Connection and then 50 Questions.

What Is A Cross-Connection?

A Cross-Connection is a direct arrangement of a piping line which

continued on page 23

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allows the potable water supply to be connected to a line which contains a contaminant. An example is the common garden hose attached to a sill cock with the end of the hose lying in a cesspool. Other examples are a garden hose attached to a service sink with the end of the hose submerged in a tub full of detergent, supply lines connected to bottom fed tanks, supply lines to boilers. Ironically, the ordinary garden hose is the most common form of cross-connection, as it can be easily connected to the potable water supply and used for a variety of potentially dangerous applications.

What Is Potentially Dangerous About An Unprotected Sill Cock?

The purpose of a sill cock is to permit easy attachment of a hose for outside watering purposes. However, a garden hose can be extremely hazardous because they are left submerged in swimming pools, lay in elevated locations (above sill cock) while watering shrubs, chemical sprayers are attached to hoses for weed killing, etc., and hoses are often left laying

on the ground which may be contaminated with fertilizer, cesspools, and garden chemicals.

What Protection Is Required For Sill Cocks?

A hose bibb vacuum breaker should be installed on every sill cock to isolate garden hose applications thus protecting the potable water supply from contamination.

What is Back-Siphonage?

Back-Siphonage is the reversal of normal flow in a system caused by a negative pressure (vacuum or partial vacuum) in the supply piping.

What factors can cause Back-siphonage?


Back-Siphonage can be created when there is stoppage of the water supply. For instance, nearby fire-fighting, repairs or breaks in the main, etc. The effect is similar to sipping a soda by inhaling through a straw, which induces a flow in the opposite direction.

What Factors Can Cause A Backpressure Backflow Condition?

Backpressure backflow is the reversal of normal flow in a system due to an increase in the downstream pressure above that of the supply pressure. It can be created by installations such as heating systems, elevated tanks and pressure reducing systems. An example would be a hot water space-heating boiler operating under 15-20 lbs pressure coincidental with a reduction of the city water supply below such pressure. As water tends to flow in the direction of least resistance, a backpressure backflow condition would be created and the contaminated boiler water would flow into the potable water supply.

I hope you all will take advantage of the website provided above and print off the entire pamphlet. It will answer all your questions about cross connections and provide you with illustrations as well. It's good stuff guys!

As Always,

See ya in my travels 

Answer Key for 80's Trivia

1. Mork & Mindy
2. Reeses Pieces
3. Pepsi
4. Sally Ride
5. George Michael
6. Dexy's Midnight Runners
7. 88 mph
8. Spuds MacKenzie
9. Milli Vanilli
10. à e General Lee
11. Video Killed the Radio Star
12. "Where's the Beef?"
13. Acid Washed
14. Adventure
15. Shrinky Dinks



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The digital map file on a CD, can be viewed and printed with free software that IRWA will provide. The software allows you to click on a waterline with a leak and highlight which valves need to be closed to isolate the line. There are also tracing features to show the direction of water flow, and other useful features.

Payment for services is determined by a charge per each system feature located. The amount charged for a Map Book will be \$50 plus \$5 per page; and a wall map is billed at \$100 per map. More information is also posted on our website at www.ilrwa.org or you may call our office at 217-287-2115.

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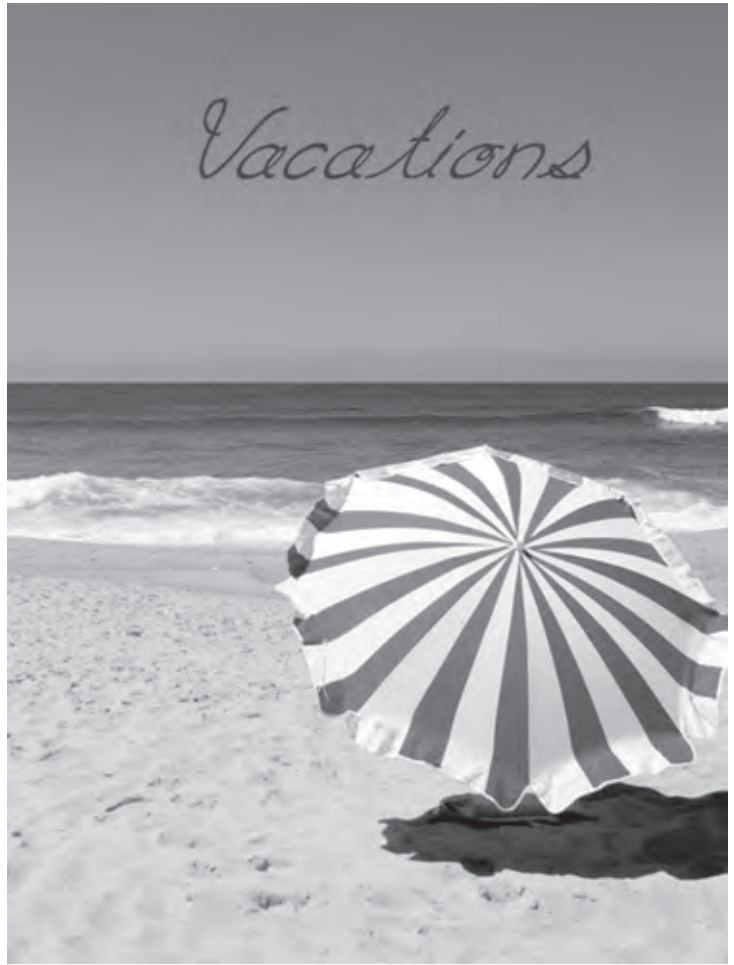
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