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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:

This picture was taken by Deputy Director Don Craig. The bridge, built in 1854, is called Mary's River Covered Bridge located off State Route 150 east of Chester, Illinois in Randolph County.

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 ilrwa.org.





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Bottled Water... A Sobering Story in Itself

by Don L. Craig, IRWA Deputy Director

Four years ago in March of 2010, the "Story of Stuff Project" and a coalition of partners, including Corporate Accountability International, Food & Water Watch, Polaris Institute, Pacific Institute and Environmental Working Group...created a short movie called "The Story of Bottled Water". It was written by Annie Leonard, and was produced by Free Range Studios. And, even though it's been over four years ago since this short movie/video was released, it's still a relative factor in our country, and world today.

"The Story of Bottled Water, released on World Water Day, employs the Story of Stuff style to tell the story of manufactured demand—how you get Americans to buy more than half a billion bottles of water every week, when it already flows virtually free (comparatively) from the tap. Over five minutes, the film explores the bottled water industry's attacks on tap water and its use of seductive, environmental-themed advertising to cover up the



mountains of plastic waste it produces. The film concludes with a call for viewers to make a personal commitment to avoid bottled water and support public investment in clean, available tap water for all."

The paragraph above and the FAQs (facts) information below were taken directly from "The Story of Stuff Project", public website. It gives the readers, and viewers of the movie, some factual insight in regard to the data relayed in the video. Take a few minutes to read over the information, and then take a look at the movie/video on the internet at: www.storyofbottledwater.com

It is quite interesting, to say the least. And the movie is in a simple, cartoon format that is easy to accept, but the information is hard to believe and hard-hitting. One last note, according to a recent Brita Filter commercial that was aired last year and referred to 2012, indicated that just in the United States alone, over 39 billion bottles of water were used. That is enough to stretch around the earth, more than 190 times!

In many ways, we as humans continue to be our own worst enemy....

Story of Bottled Water FAQs

(as of 2010)

Is bottled water cleaner?

The EPA regulates tap water under the Safe Drinking Water Act. Public water operators must provide reports to customers describing their water's source, evidence of contaminants, and compliance with federal, state, and local regulations. The FDA regulates bottled



water and cannot require certified lab testing or violation reporting; bottlers themselves are responsible for testing. Furthermore, the FDA doesn't require bottled water companies to disclose where the water came from, how it was treated, or what contaminants it contains.

Is bottled water tastier?

Corporate Accountability
International's "Think Outside the
Bottle" Campaign has held countless
taste tests comparing bottled water to tap
water, as have many media outlets, from
the New York Times to Cleveland's local
TV news channel. The results generally
favor the tap. But ultimately, the point
isn't whether one tastes better than the
other, its how our taste—and our tastes—
are shaped by advertising rather than by
what's good for us.

Is bottled tap different than plain tap?

Bottled water companies go to great length to tell you that while their water originates from a public water source, its more than just filtered tap water. They boast proprietary, state-of-theart, multistage filtration processes and esoteric references to mineral additives that make their water more than just water, and certainly better than tap. But, as Tony Clarke of Canada's Polaris

continued on page 6

From the Ground Up!



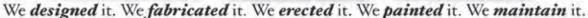
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Institute points out in his book, Inside the Bottle, "unlike other resource production processes, where raw materials like timber, minerals, and oil are transformed into new products, bottled water is different. Bottled water is about 'turning water into water.'"

And keep in mind that 10 percent to 15 percent of the cost of bottled water goes to the advertising budget. We not only buy their myths, we pay extra for them!

What's the energy footprint of water bottles?

The Pacific Institute breaks it down like this: "Because bottled water required approximately 1 million tons of PET [Polyethylene Terephthalate] in 2006, those bottles required roughly 100 billion MJ of energy. A barrel of oil contains around 6,000 MJ, so producing those bottles required the equivalent of around 17 million barrels of oil. This is enough energy to fuel one million American cars for one year." If that sounds crazy that's because it is!

Really, water is a right?

General Comment 15 of the United Nations Committee on Economic, Social and Cultural Rights—the definitive interpretation of human rights laws regarding water—says "the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses" ... and ..." is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights." In other words, it is the job of our governments (as the entities responsible for guaranteeing human rights) to ensure that we have good, clean, affordable tap water.

Need some first steps to take?

Many companies sell safe, easy-toclean, lightweight drinking water bottles. Food & Water Watch and Corporate Accountability International—two of our partners on this film—offer sleek, stainless steel, reusable bottles to their members. Or pick up a mug or glass or sippy-cup or ... well, you get the point. An under-the-sink filter can eliminate both bacterial and chemical concerns if you have either. And you can learn more about your water quality by contacting your local water utility. If find something that concerns you, don't just turn to bottled water, ask questions, talk to your neighbors and organize to win improvements to your water supply.

What can I do?

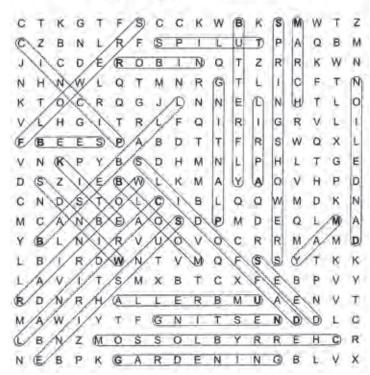
Before the bottled water craze hit,

we took it for granted that public fountains were part of any public building: schools, offices, sports stadiums and parks. Let's bring them back! In the U.S., many state building codes mandate that there be one source of public water for every 1,000 people the building has capacity for. Why not subsidize public water fountains as part of local efforts to build green? Bottled water bans are also spreading fast. In the U.S., San Francisco, Minneapolis, Seattle, and Salt Lake City have all banned bottled water at city functions to save money and promote their cities' highly drinkable tap water. And in Canada, the Polaris Institute reports that as of December 2009, 72 municipalities from 8 provinces and 2 territories had implemented restrictions on bottled water.

Way to go!

Spring Forward

Word Search Answer Key (Puzzle on page 22)





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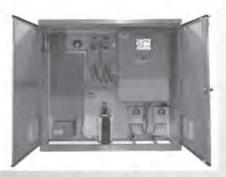
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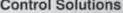


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2014 Annual Technical Conference Summary

by Heather McLeod, IRWA Membership Services Assistant

Is it really over already?? I know that the answer is yes, but I swear it feels like we just started planning it.

Conference week seemed to get off to a rough start this year, as ice, snow and foggy conditions had some of our exhibitors stuck in traffic or at home longer than anticipated. However, once things started to clear up – they made their way to Effingham to visit with over 400 water and wastewater operators who were waiting to see what was new.

We were able to move lunch rooms and some training session times around and had room to add another 12 exhibit spaces, bringing the booth numbers to 98. They proved to me once again this year how awesome our exhibitors and members are. \$1,800 was donated to hand out as cash prizes, \$550 was donated toward the Scholarship fund, and we had the largest Sportsman's Raffle to date with 48 prizes being donated, raising over \$8,300!

As a side note, the Sportsman's raffle is very important to IRWA as it has become increasingly difficult in procuring the necessary Federal funds for training, technical assistance and funding of water

and/or wastewater systems throughout the country. As a member of National Rural Water Association, IRWA receives most of its annual revenue as pass through grants from NRWA who has requested each state association raise \$10 per Voting member to fund its WaterPac for lobbying efforts on behalf of rural water systems throughout the country. The Sportsman's raffle helps us achieve our goal. Anything over the \$7,600 that we send to the WaterPac, is retained and used locally in Illinois to help keep our programs funded and purchase new equipment for our staff to better serve our members.

Before closing, I would like to congratulate the Village of Cornell for winning the Best Tasting Water award,

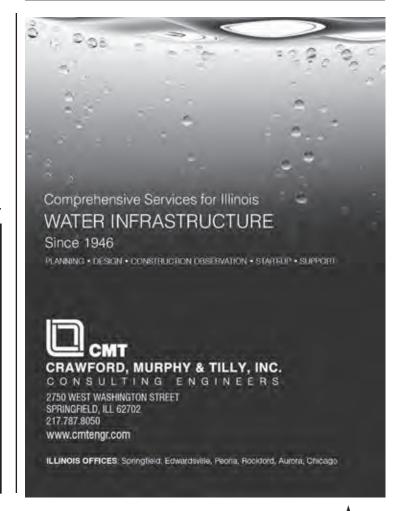
and Amber Nicole Williams from Vienna and Aiden Eli McMahon from Wolf Lake, who won the \$1,000 Associate Member Scholarships.

Pictures of the winners from Sportsman's Raffle



& Casino Night can be found on our website under the "Photos" link, and are also linked from our Facebook page.

Next year's conference will be in Effingham again on February 17-19, 2015! ♠



Don't Miss the

2015 Annual
Technical Conference!

February 17-19, 2015
Effingham, Illinois

by John Bell, IRWA Wastewater Technician

It was uncomfortably hot and humid as I made my visits in southern Illinois. Being hot and humid in the dog days of summer is not uncommon. While typical Illinois weather, it still seems to me that I am near a beautiful garden when I'm in the Shawnee Forest area. I located the superintendent at the Village Hall just a little before lunch. He informs me that the wife has made his favorite meal and he only has a few minutes. He doesn't need to say more, when the clock strikes noon, he will be gone. The superintendent asks "what is new at Rural Water?" Before I can say, he proceeds to start a story about a recent event that happened to him. Now, as most everyone knows, southern Illinois boys are good story tellers, with the really good tellers you can just sit down, relax and let your cares and worries melt away. This superintendent could charm the buttons off a General, so I settled in for the good story that is coming. I feel he is heading into trouble with the wife about being late for lunch because a good story takes some time, but I'm not going to stop him.

The superintendent and his helper were in the process of reading meters. A

customer stopped by to complain that he was sick and tired of paying a high water bill and asked what needed to be done to lower his bill? The superintendent thought for a second and said "You know Joe, you and I have been friends since we were in grade school together. We have fished and hunted together and had some fun times. I am positive that you know by now what beer I like to drink." The two looked at each other with nothing more said. Just a smile and a nod of the head and the contract of understanding was signed. We jump ahead to the following months meter reading. Still hot, still humid and no end of it seems in sight. He tells a quick side story about the Village purchasing a "swamp-gator" to use to read meters and the thing is really handy for lots of little jobs and possesses a "good burst of speed." He pops the meter lid at Joe's and finds a cold beer setting on top of the meter. It's hot, it's humid and the empty beer can is returned to the top of the meter. I ask if he adjusted the reading. The superintendent says no, but the cold beer was nice. The cell phone rings and the wife informs him that his meal is getting cold. I note with surprise



that time has flown right by and state that I will stop by when it is cooler.

Cold, snow and that darn never ending wind. Something is new at Rural Water. In January, I was asked about NetDMR. My response was "whats that." Here we are in April and the surprise of the Net DMR is starting to wane. The program for submitting your DMR's in Illinois was the eDMR. That is no longer accessible, and is now replaced by the Federal EPA website called NetDMR. Help with the website can be found within IEPA and Tracy Skaggs (217-557-3045) and Steve Nance (217-588-0098) have and are a great deal of help. Several training sessions have been presented



A Can of Beer and NetDMR

continued from page 10

by IRWA and it appears that most of the towns that submitted electronic DMR's are up and running with the new program. However, for those of you that have submitted your DMR's by paper to this point, a change is coming. The latest

word is that paper submission will be stopped in September and conversion to electronic submission via the NetDMR will begin. Tracy and Steve are available for help as well as IRWA. Just like the surprise of a cold beer on a hot day, enjoy the change and make it work. After all, they may build them, but we make them work! Waste water operators will also have to overcome this obstacle.

Electronic Consumer Confidence Reports — Is This Option For You?

It's getting that time of year again. Grass turns green, flowers bloom, spring is in the air. Then, we have to do the yearly Consumer Confidence Report (CCR). This is the fifteenth year that systems have been required to issue this annual report. I've heard hundreds of comments over the years from operators (all true) about the waste of a lot of paper for something that very few people read.

The bad news is that this reporting requirement is not going away. The good news is that there is another way to issue your CCR and not actually have to kill too many trees to do it. Last year Congress and the USEPA revised the CCR method of delivery to include electronic delivery via the internet. There are a couple of hoops to jump through but this option can save you major dollars.

Under the old rules, if you experienced a MCL violation, you had to do a direct-mail or hand-delivery of the entire report to all of your customers. We're talking perhaps hundreds of thousands of sheets of paper and printing costs and postage costs and hours of labor that could be put to better use.

Under the old rules, if your system received a waiver from the direct-mail or hand-delivery method of delivery, you

could place your CCR in a newspaper, flyer, or free publication that was sent to all of your customers. You still had to usually pay the publication a lot of money (usually hundreds of \$\$\$) to print your report.

These options can still be used but now there's a better way.

Now, you can use the electronic method regardless if you experienced violations or not. As I said, we do have a couple of hoops. To use this method, you have to notify your customers of the availability of the CCR on the internet. This can be done by including the appropriate language on your monthly water bill or a separate notice to your customers. In this language you will include a URL web address that takes the customer **DIRECTLY** to your CCR. If you have e-pay customers, you will need to send an email directly to them informing them of the website. You must also still provide a hard-copy of the CCR to anyone that requests one (from past experience, don't make too many copies!).

If you would like to use this option but you don't have a website available to publish your CCR, the IRWA can help out. For a \$50.00/year administration

by Wayne Nelson, IRWA Training Specialist



fee, we will put your CCR on the web and will issue you the website address that you will use in your customer notification.

We just need a copy of your completed CCR. If you are planning to use the CCR for issuing any public notices, we ask that you provide these notices at the same time. Accuracy and correctness is very important because once the CCR is posted, the language cannot be changed, per the CCR regulation.

For more information, please feel free to call me at 217-820-1561 with your CCR technical questions (required notification language, etc.) or Heather at 217-287-2115 with the submission and billing process.

Now That Is a Change That I Can Live With!

by Perry Musgrave, IRWA District #8 Board Member

In the last 25 years, I have seen a lot of changes in every aspect of potable water. There have been many that have made our jobs more difficult. But there is one change that has made it much easier as operator and manager of a water district. Data log meters are for our industry the best thing since sliced bread.

I'm sure all of us have had that call from the irate customer about their bill being too high. I recently had one of those calls and after 5 minutes of listening to the rant and me not being able to get a word in, I was able to tell the customer that his meter was a smart meter and we could pull the information off of it and let him know more about his usage. I told him that I would call him back in a couple days with the information. That seemed to calm him down some but he reassured me that they had not used that much water.

I proceeded by creating a work order and having one of our meter readers down load the information off the meter. When he brought it back to the office, I reviewed the information and found out that for 7 days they had used 3 gallons a minute 24 hours a day. I was able to narrow it down to the exact hour the usage started and stopped. I also printed out a graph with his usage for the last 3 months.

With this information I called back the customer. I began to explain the information to him and he began yelling at me saying he could not have used that much water and was calling his attorney and then hung up on me. At that point I mailed him the graph of his usage to let him see it for himself. Much to my surprise, I got a call from him 4 days later

to apologize for his conduct and to let me know he was paying the bill.

He had talked to his wife and they had been on vacation for those 7 days and when they had got back she had found the upstairs toilet running. In this case a data log meter was able to take an irate customer and turn him into a reasonable one.

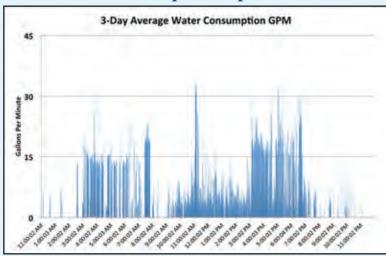
In my 25 years I can only remember getting an apology two other times so maybe they will be more common with this new tool in our tool box.



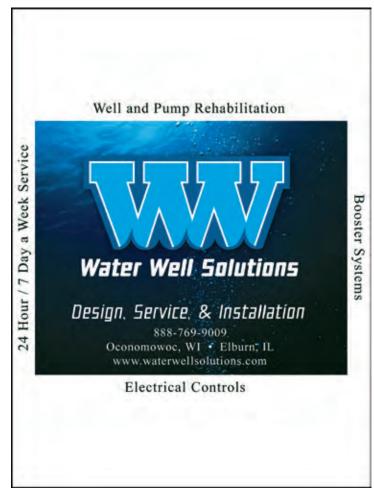
Meter Reading: Badger Meter to Showcase Solutions That Help Utilities



Sample Graph









IRWA's 32nd Annual Conference Award Winners Effingham, Illinois — February 18-20, 2014



Water Plant of the Year – City of Casey



Wastewater Plant of the Year – City of Carollton



Associate Member of the Year – Utility Service Group



Water System Specialist of the Year – Eric Kelly



Wastewater Specialist of the Year – Doug Eastman



Best Tasting Water of the Year – Village of Cornell



Pictures From Around The State



IRWA Training and Our 2nd Annual Spring Administrative Conference

Happy Spring everybody, if you can call it that yet...I don't know about you, but I think this industry is ready for a thaw!! It is once again my turn to check in with all of you by way of an article. I want to make you aware of the direction our Training Division will be going in the next several months and touch on a couple programs we are now offering.

We want to make you aware and encourage you to take advantage of them. One that is very near and dear to my heart is our Administrative Conferences! In the past year I have now hosted two of them and will summarize what we experienced and give you a heads up on the next one, which is rapidly approaching! My hopes

are that if you will read on, you may be made aware of the current training offerings that are out there for you; our members. At the root of all we do, the IRWA hopes that our members take full advantage of their membership and you enjoy your relationship with the association. YOU are the reason we do all the things we do! We are very grateful to all of you; our members!!

The bulk of my efforts involve setting up training around the state so all our operators out there have options for training hours. But as I mentioned above, I have been given the mission of setting up a much needed service in the way of an Administrative Conference. If

by Phil Donelson, IRWA Training and Marketing Division



you are unfamiliar with the conference, it is a full day of speakers on Thursday, and a half day on Friday concluding by noon. We have a well-rounded variety of topics that are directed at the office and

continued on page 17



continued from page 16

IRWA Training and Our 2nd Annual Spring Administrative Conference

administrative professionals. I hosted one last spring in Fairview Heights, and one last fall in East Peoria. Both were so well received that we are staying with the format we had and are going to host another one this May at the Four Points by Sheridan in Fairview Heights and one in November at the ParaDice Riverboat and Casino in East Peoria. The sessions were full of wonderful Q & A and the attendees engaged our speakers to the benefit of all in attendance. It was a great learning environment and we expect more of the same this year! We all had a lot of fun getting to know one another and sharing horror stories and victories. Attendees not only got to speak to the trainers, but they got to share what they encounter and what works in their own communities. That is exactly what I like to hear. IRWA prides itself on practical real word education, not only for the operators in the field, but also for the administrative staff in the offices! I had many positive comments from the folks who attended last year. Most of our attendees were so happy that almost all are planning to return for the 2nd year as well.

We always have great food, raffles, and giveaways, as well as a hospitality hour after the sessions conclude on Thursday. Our topics in 2013 included water shut off procedures, insurance laws, risk management, accounting software, Illinois E-pay, records retention and archiving. This May 8th and 9th, our agenda will include some updates on the ever-changing world of insurance, going paperless, TIFF districts, recording public meetings, FOIA, setting up municipal websites, the open meetings act, and an overview of MS Excel. Anyone who is on a city board, holds a public office, and

or any professional who works with the day to day administrative operations of one of our municipalities should consider attending. The networking among the last two groups has been wonderful. Not to mention we have a lot of laughs. The area around the conference center offers a ton of restaurants and shopping so after sessions conclude you have something fun to do as well.

In an attempt to make our conferences and our training experiences better, I attended the MO Rural Water Office Professionals conference last fall. They have a very established office professional's conference and one I would like to see ours modeled after. Something they do that I would like to initiate here in Illinois is a certification program for those office professionals who are willing to attend classes to further themselves and the job they perform. We will be discussing this idea at this year's conferences and will encourage your feedback. We really hope you will take advantage of this conference and the wonderful networking opportunity. Please look on our website, call the office, or print an upcoming e-mail so you can get registered as soon as possible for this event coming up on May 8th and 9th 2014! It is close, but there is still time to register!!

As I mentioned, the training is my main function, and this year along with establishing training dates, I have decided to do something to reward those of you who I see at multiple sessions each year. I have put in place a new promotion starting on January 1, 2014 for those of you who sign up and attend multiple classes throughout the year. Over the

2014 calendar year when you attend one of my classes you will get a numbered card which will be initialed each time you attend a class. After you have purchased three classes, the fourth one will be free. I have already had several get their second class marked off, so it is getting used, and will benefit those of you who take part. It is a program at its infancy and may evolve, but it is a way to let you know how much I appreciate those of you who support the training programs I host. I want to give you some kind of "thank you" if you take part regularly. I hope you will take advantage of it soon.

Back in the fall of 2013 I had a number of classes and some really great speakers who many of you know. We couldn't do these classes without the support and efforts of our vendors and manufacturers who volunteer their time, so special thanks goes out to all of them. In September I started out the fall with a great session set up by Chris Peschang and the guys from Layne. We went to Fulton, Havana, and Maryville; systems who were gracious enough to host these wonderful hands on sessions. I had the pleasure of going out again with Tom Rodebaugh - American Flow Control, Marla Braun - JCM, and Michelle - Midwest Water as well in September. October had me in the field with Jim Schuth from Hach, and Don Van veldhuizen with US BlueBook; both wonderful speakers with tons of experience. In November I was able to train with Dave Laurie from TEST, which is always a fun time and a great experience! Later that same month I went out with Marla Braun (who was so

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IRWA Training and Our 2nd Annual Spring Administrative Conference

gracious with her time this season-Thanks Marla!), Scott Rauen from SubSurface, and Dan McKeugue from Kupferle Foundry. Lastly to close out the 2013 training year, I took Darin from Utility Services and Brad Baldwin with Hach out in December, and had another great set of sessions! Thanks again all of you!!

2014 has had several training offerings as well. This year which began with a session in January with Don from USA BlueBook, in February we went out for the first time with Dennis Brown and RJ Lindmark from Cedar Chem. We had a great three days of training on jar testing methods. In early March I made a trip out with John Mone from Ford Meter Box, and Chris Callahan with HydraStop. All the sessions this year have been very well received and the survey responses were very good, I am really glad we are hitting the mark for your training needs. In the near future we have the Mueller Road show scheduled for one day at Kaskaskia College on April 8th, and from there on April 29th and 30th we will be with PDC labs in Macomb and Hudson. In May, I have great hands on session with RE Pedrotti, and then in June I will be out with American Flow Control and AY McDonald. Please keep looking for the e-mails, and the fliers to register for upcoming sessions. Also don't forget you can always find information on the IRWA website.

Thanks again to all of you who support the training we do, whether it is through speaking or attending as a student, thanks and let us know what we can do to make it better, see ya soon in class!!

2014 Annual Spring Administrative Conference

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Must be completed for all attendees

(Please photo copy for each additional attendee)

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EMPLOYER:				
MAILING ADDRESS	:		_	
CITY:	ST	ZIP:	_	
PH. NUMBER:				
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Includes Sessions, Meals, and Activities for both days				
Pre-Registra	<u>ition</u>			
Member:	\$150.00 = \$	\$		
Non-Membe	er \$175.00 =	\$		
On-Site Reg	<u>istration</u>			
Member:	\$175.00 = \$	\$		
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The Times They Are A-Changin'

by Wayne Nelson, IRWA Training Specialist

For a lot of us baby-boomers out there, we know that the title of this article is also the name of a song written by Bob Dylan in late 1963. It spoke of the enormous changes occurring in our country, from our music to assassinations to civil unrest to the reality of war and the wish for peace.

It's now 2014 and the times are changing in the water treatment industry. They're not as noisy as the changes we seen happen in our country half a century ago but they're happening. Again, us baby-boomers are still heavily involved in these changes. Many of us that used to be carded to get an alcoholic beverage back then are now more likely to be asked if we are eligible to receive a senior citizen discount.

Many of us are retiring or nearing retirement from the water treatment business. This is not creating a shortage of certified water operators in our state and country; rather, it is rapidly expanding a problem that has existed for several years.

I've been in the water treatment industry for 42 years and proud of it. We know it's not the most glamorous job but it's one that must be done. Consider what you do: ensuring that our customers have a safe clean supply of water 24/7, working on holidays, some long days and often nights, wading mud to fix water breaks in the heat of summer but more likely in the chill of winter, and many times doing it all on a shoestring budget and often for low pay and benefits.

OMG (as the kids say), why aren't people lining up to take our jobs?

All kidding aside, there is a shortage

of operators and it's getting worse. Currently, there are approximately 1800 community water supplies in Illinois. At this time, over 700 are under the supervision of contractual operations due to the shortage of operators, system's budgetary factors, and many other reasons.

Both the United States EPA and the Illinois EPA have considered ways to relieve this shortage and bring more people into the field. After months of planning and legal review, the Illinois EPA recently revised its water supply operator certification regulations to add the new "Operator In Training" option, effective April 1, 2014.

This option will eliminate the long-time requirement that applicants wishing to take the certification examination must meet the "hands-on" experience criteria BEFORE they can test. Under the Operator In Training option, anyone may apply and take any level of water certification. If they pass the examination, they are considered an Operator In Training. This does not give them a Certificate of Competency as a certified water operator.

However, an individual that passes the examination may now be considered as a much more attractive applicant when applying for a job with a public water supply. A Catch-22 existed under the old regulation. Often, you couldn't get hired because you didn't have a certificate and you couldn't get a certificate because you couldn't get hired to get the experience.

Now, before you start hollering about how we had to do our time (literally) in the trenches before we could take our test (like I did when I first heard about this



option but without the details), let me cover the following:

- Any person who passes the water supply operator examination shall be considered an Operator In Training for the class of examination passed.
- Passing the examination does not give the applicant a Certificate of Competency. They still have to work the required time (based on certification level) in the appropriate level of facility before they can receive their Certificate of Competency.
- An Operator In Training cannot serve as the Responsible Operator in Charge (ROINC) until they meet the experience criteria. A community water supply will still be required to have a fully certified operator of the proper classification to serve as their ROINC.
- An Operator In Training may hold a
 Certificate of Competency in a lower
 classification level and also be an
 Operator In Training with a higher
 class of certification. For example,
 a Class C certified operator may also
 be a Class A or a Class B Operator

continued on page 22







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In Training. In these instances, the operator would be required to obtain the necessary training renewal hours for his/her level of classification.

The Class C certified operator that is also an Operator In Training must still obtain 15 hours of approved training in the three-year renewal cycle.

- If an Operator In Training does not possess a Certificate of Competency for a lower level, that person is exempt from the renewal training hours requirements.
- · Any person that passes the

examination has a six-year window to obtain the needed experience criteria. After six years the original examination results are no longer valid and the individual would have to begin the application process again.

 And, once the Operator In Training meets their experience needs and a Certificate of Competency is issued by the Illinois Environmental Protection Agency, that person will no longer be considered as an Operator In Training.

I applaud this action on the part of

the IEPA because I have seen the growing operator shortage first-hand. A lot of the operators that I have had the privilege to meet and work with in my 20 years with IRWA are no longer in the business. I also see current operators leaving the field at an ever-increasing rate.

The Sample Collectors Handbook (Operator Certification chapter) is currently being updated to cover this new option and the application process. To learn more, contact the IEPA Compliance Assurance Section at 217-785-0561.

WORD SEARCH

Spring Forward

Find the words in the grid. Words can go horizontally, vertically and diagonally in all eight directions.

C T K G T F S C C K W B K S M W T Z
C Z B N L R F S P I L U T P A Q B M
J I C D E R O B I N Q T Z R R K W N
N H N W L Q T M N R G T L I C F T N
K T O C R Q G J L N N E L N H T L O
V L H G I T R L F Q I R I G R V L I
F B E E S P A B D T T F R S W Q X L
V N K P Y B S D H M N L P H L T G E
D S Z I E B W L K M A Y A O V H P D
C N D S T O L C I B L Q Q W M D K N
M C A N B E A O S D P M D E Q L M A
Y B L N I R V U O V O C R R M A M D
L B I R D W N T V M Q F S S Y T K K
L A V I T S M X B T C X F E B P V Y
R D N R H A L L E R B M U A E N V T
M A W I Y T F G N I T S E N D D L C
L B N Z M O S S O L B Y R R E H C R



(Answer Key is on page 6)

Hard Winter Leak Detections

by Gale Moore, IRWA Circuit Rider

Wow, leak detections this winter proved to be a challenge for operators across the State. The extreme cold temperatures, wind chills, and deep frost levels made for tough repairs. When talking with Operators it appears water system breaks doubled this year in comparison to last year and are more of a challenge zeroing in on where to dig. Many breaks were very difficult to find due to the break traveling under the frost, under the road, into a tile, into a sanitary, or a storm sewer, and of course into homeowner's basements. With the assistance of IRWA's leak detection and correlation equipment we are able to help verify these kinds of leaks. The leak detections found were anywhere from 25,000 to 300,000 gallons per day, with some requiring assistance only once and some requiring multiple days of assistance.

One in particular was in Avon, population 900, which endured 20 plus breaks. Water and Wastewater Manager Greg Fulkerson with my help was able to keep his breaks under control. Another difficult leak detection was in Viola, population 950, which endured several breaks. One leak finally showed up in

a ditch, but after further investigation the leak was over a block away and still traveling. Water Superintendent Dave Maynard spent several hours digging to repair the leak. The leaks continue in The Village of Pecatonica with Manager Mark Frost. After a system survey, a leak in the State Highway was correlated. This leak was repaired but the "unaccounted for water" was still high, so further leak detection was planned. A major leak of 100,000 gallons per day in The Village of Hinckley was next on the list of to be located. After surveying approximately 125 fire hydrants, a two block area was narrowed down as suspect. After using the correlation equipment, the leak was pinpointed. Water and Wastewater Manager Dale Youngers dug and repaired the leak. While excavating, they discovered a major washout leaving a large area completely hollow under

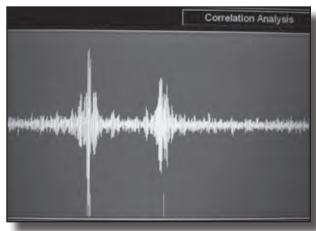
they discovered a major washout leaving a large area completely hollow under the blacktopped road. Had they not been able to locate and repair the main break, a sinkhole could have formed and allowed a vehicle to drop into the area. Several other leak detections of importance were in Dallas



City, Geneseo, Stockton, Compton,
Alexis, and many other systems. The
winner for most gallons lost per day
goes to Milan. Water and Wastewater
Superintendent Kevin Farrell gave me a

continued on page 24

Double Leak Correlation Analysis



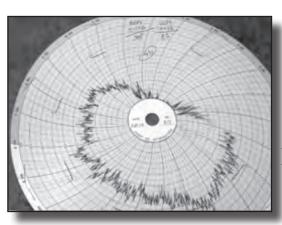
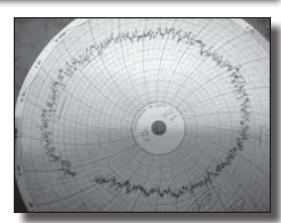


Photo right-High Flow Chart, Village of Milan

Photo left-Normal Flow Chart, Village of Milan



Hard Winter Leak Detections

continued from page 23

call stating he was losing approximately 250,000 to 300,000 gallons per day. With the help of Kevin, Jeff Kerres, Dale Spencer, and Dan Hartmann and several days of surveying their system, four water main breaks, and several fire hydrants leaking out the weep holes were discovered. The crew first went around to snug up the fire hydrants, then continued on to pinpointing the main breaks. A first experience for me happened when the correlation showed a double hit. Normal correlation results show just one spike, but we had two. We were able to move the correlation sensors to different valves and pinpointed one of the leaks.

Next they dug and repaired the leak, which reduced their loss about a hundred gallons per minute. We then correlated the next spike, and sure enough another break. Due to the location of the leak being in the middle of the intersection, concrete sidewalk, concrete curbing, telephone vault, sewer, and traffic, a plan is being implemented to repair the leak. A strong noise from a fire hydrant was next on the list to pinpoint; this one appeared to be going into the sanitary sewer. Using leak listening equipment it was pinpointed and repaired, another one hundred gallons per minute reduction. The next correlation brought us to a

leaking hydrant valve in the turn lane on a four lane State Highway, they are never easy!

My hat goes off to all the operators that are involved in repairing a water main break, fighting the elements, equipment, pumps, tools, traffic, and of course the public. It's not an easy job but a much needed one. No one really knows what it takes when the faucet, shower, or toilet is used! Thanks Operators!!!

P.S. Thanks to Illinois Rural Water
Association for allowing me to help when
I can, as I have been there too.



Simple Ways to Improve Memory

ARE y OU SEEk ING WAY S TO IMPROVE MEMORY?

The human mind is undoubtedly a wonderful tool but memory is a skill that can only be cultivated with some practice and a lot of patience. Anyone wanting to improve memory can learn memory sharpening skills and problem solving techniques with only a little effort.

No one actually has "bad" memory. The problem is that people unknowingly end up developing bad memory habits as early as infancy itself. Because of bad recall habits, people often face problems during examinations, interviews and other circumstances that require efficient memory.

Many people believe that they possess a poor capacity to remember facts, information and experiences in life. However, many ways and techniques, which can be applied at any age, aid in memory improvement. In fact, improving memory is just a method of modulating certain personal habits in order to practice skills that can help in strengthening recall power.

If you are also looking for ways you can improve your memory then the best way to start is by visiting the improvememoryhub.com. By visiting this website, you will be able to draw the maximum advantage of the free memory improvements articles, videos and resources. The website features interactive and skilled audio techniques that can help those suffering with problems of memory loss.

Who would not like to sharpen his/

her cognitive function and improve their ability to retain information? Memory improvement techniques are endless and it is very important to effectively navigate through these techniques so that life becomes even easier thereby increasing brainpower.

All of us know that neither memory loss nor the ability to improve memory is dependent on age. Regardless of your age, you can successfully improve your memory. Below are a few ways that can help you to improve your memory.

proper Diet and Sleep

It is very important to have a highly nutritious diet that is rich in minerals and vitamins. Following a proper diet and adequate sleep is also extremely important. Both these things help to optimize learning abilities and keep the body healthy. Diets rich in fruits and vegetables have been proven to improve brain activity.

Stay Organized

Staying organized helps in reducing stress and simplifying life. Staying clutter free will help you get rid of trivial matters. You will be able to channel your mental energy and focus on things that are more important. Staying organized will also increase your ability to retain more information.

Exercise your Brain

In order to function at a high level, our brain needs adequate exercise. It is extremely important to keep the brain active and give it enough opportunities to grow. You can involve yourself in crossword puzzles, Sudoku and in playing strategy games such as chess or checkers.

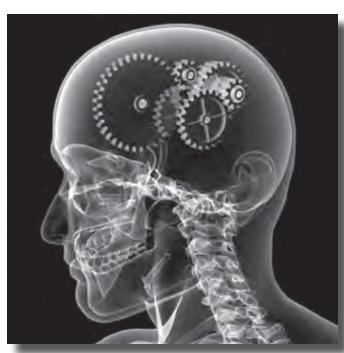
Use Brain Foods

According to studies, certain food items help in improving memory.

Some of these items are grapes, apples, blueberries, onions, whole-grain puffed rice, spinach, curry, orange juice, nuts, dark leafy vegetables, fish and caffeine.

About the Author

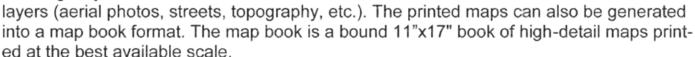
For more information on how to improve memory, visit the site http://www.improvememoryhub.com. The website provides interactive and skilled audio techniques and memory articles that can help people of all ages sharpen their memory.

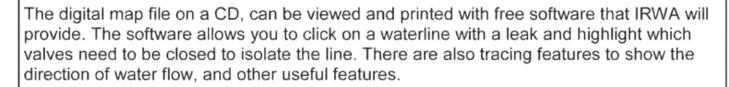


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