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 Note: minimum riser must be 1/2 more than thickness of existing lid



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- Requires No Tools

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Contact Name			. Phone #		
С	RDER F	ORM			
Quantity	Manhole #	Street / Location	Lid O.D. Top / Bottom	Thickness of Lid	Desired Rise
				_	
				1	

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Illinois Rural Water Association

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Volume XI - Winter 2014



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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 on Illinois Route 9 between Gibson City and Bloomington on January 6, 2014 by Don Craig, Deputy Director.

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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Hydrant Crisis of 2013/2014

by Frank Dunmire, IRWA Executive Director

Back in 2010 P.L. 111-380 was passed by Congress and signed into law on January 4, 2011. This law became known as the Reduction of Lead in Drinking Water Act and we have been referring to it as the lead-free rule. Although we, as an association, may not have agreed with all of the provisions of the law we did support its underlying intended purpose of potentially reducing the levels of lead found in drinking water. From the beginning we knew that nearly all of the brass goods commonly used by water systems (as well as homeowners) would need to be manufactured from a lead free formula and would lead to increased prices for those items containing brass.

Over the past few years IRWA and

other trade associations have had many training sessions where the new lead free brass rule was on the agenda. For the most part, manufacturers or their representatives would be brought in to explain the finer points of the law and PITTSBURG TANK & TOWER MAINTENANCE CO., INC. SAVE! We have a crew in YOUR AREA!

how they would meet the January 4, 2014 deadline for "getting the lead out". Up until October of this year it was pretty clear what was going to have to take place to comply with the new law. In fact, virtually all of the brass goods being purchased were compliant with the new law. Then the USEPA released its "Summary Of The Reduction Of Lead In Drinking Water Act" document and things took a bizarre twist.

In USEPA's summary of the 2011 Reduction of Lead in Drinking Water Act revisions to Section 1417 of the SDWA were defined as: (the link to this summary can be found at http://water.epa.gov/ drink/info/lead/index.cfm#lfsum.)

- 1. Redefine lead free in SDWA Section 1417(d) to:
 - lower the maximum lead content of the wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings and fixtures from 8.0% to a weighted average of 0.25%;
 - establish a statutory method for the calculation of lead content; and
 - eliminate the requirement that lead free products be in compliance with voluntary standards established in accordance with SDWA 1417(e) for leaching of lead from new plumbing fittings and fixtures.
- 2. Create exemptions in SDWA Section 1417(a)(4) from the prohibitions on the use or introduction into commerce for:



- "pipes, pipe fittings, plumbing fittings or fixtures, including backflow preventers, that are used exclusively for non potable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption;" (SDWA 1417(a) (4)(A)
- "toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2 inches in diameter or larger." $(SDWA\ 1417(a)(4)(B))$

As a part of the summary, USEPA had a section of frequently asked questions that contained the following:

- Q. Are fire hydrants subject to the lead free requirements in section 1417(a)?
- A. Information available to EPA indicates that fire hydrants can be, and are, used in emergency situations to provide drinking water when there are disruptions to the normal operations of the drinking water distribution system. Therefore,

continued on page 6



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Hugh McGee

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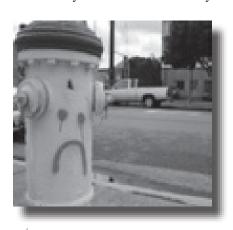
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as a class, hydrants would not qualify for the exclusion for pipes, fittings and fixtures used exclusively for non potable services.

This interpretation created quite a controversy and almost all trade associations dealing with water infrastructure and municipalities joined forces and voiced their concerns with Congress. A joint letter from at least nine associations/agencies was sent to congress explaining that when the USEPA released its summary on October 22, 2013 – less than three months before the January 4, 2014 effective date of P.L. 111-380 – the U.S. Environmental Protection Agency for the first time announced that newly installed fire hydrants would also be subject to the law's lead content requirements. As many communities and water systems keep several hydrants in stock for emergencies and/or scheduled replacement, they felt as if they had been blind sided. Now, at the eleventh hour, under USEPA's interpretation, whatever hydrants that might be in stock would become non-compliant on January 4th and would need to be scrapped.

In an effort to avoid scrapping countless hydrants across the country a



bill (H.R. 3588) was introduced into the House asking for a clarification in the law. H.R. 3588, which has been titled the "Community Fire Safety Act", addresses these problems by simply adding fire hydrants to the list of devices (such as toilets, bidets, and shower valves) that are already exempt from the new lead content standards. This modification will not otherwise impact implementation of P.L. 111-380 on January 4, but will ensure that the replacement and maintenance of fire hydrants may continue uninterrupted after that date. This bill passed the House with a vote of 384 - 0 and has been passed on to the Senate for consideration. Congressman Bill Johnson from Ohio released the following statement after the House of Representatives unanimously passed his bipartisan Community Fire Safety Act: "Today, the House of Representatives took an important step in stopping the EPA from going forward on a costly and potentially dangerous rule that would ban the installation of current fire hydrants after January 4, 2014. This legislation recognizes the fact that fire hydrants are not a major source of drinking water, and it protects public safety by ensuring that fire hydrants can continue to be produced and installed. Shower valves are already exempted from the Safe Water Drinking Act, and now this legislation exempts fire hydrants too. I thank Congressman Tonko (NY) for introducing this commonsense, bipartisan legislation with me, and I urge the Senate to take prompt action and pass this bill before the end of the year."

As this article is being written the Senate is poised to take up the bill passed by the House (possibly even yet this week) as several Senate offices have indicated they would be interested in moving this bill forward for full Senate consideration. However, it has been reported that some key Senators are withholding their needed support in hopes that the USEPA will have an opportunity to correct the problem without enacting new legislation. NRWA and all the national water groups have teamed up with a number of local government associations to support Senate passage of the legislation. Let's hope that by the time you have read this article that the "fire hydrant crisis of 2013/2014" has come to an agreeable conclusion.



UPDATE: Late last Friday
(12/13/13), USEPA spokeswoman
Julia Valentine said in a statement "In
response to the feedback received through
that process, EPA concluded that fire
hydrants are not widely used as a potable
source of water and that the guidance
should be revised to exclude fire hydrants
if Congress doesn't take action to do so
before the January deadline."



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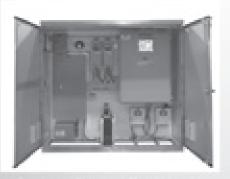
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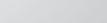


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by Greg Bates, IRWA Board President

Reflections

As most red-blooded American males would be doing at this time of year I found myself sitting on a bench at the mall as my wife was finishing her Christmas shopping. While sitting there wondering how much money she was saving me and watching the hustle and bustle of people passing by I recognized one as a retired water operator from a number of years ago. As I sat there trying in vain to recall the retired operators name my mind began to wander and I found myself beginning to reflect back on all of the great people I have either worked with or known in the water and wastewater industry for the past thirty plus years. If I had to create a list of all these great mentors it would be somewhat difficult and quite long - much like that of drawing up a list for my daughter's wedding invitation and then having to come up with all the addresses as well. I'm sure many who are reading this can relate to running into an old acquaintance and trying to associate them with a town or company only to be frustrated because you can't quite remember at the time but, more often than not, it hits you several hours later after you arrive home.

I have had the distinct pleasure to know many very fine people in the water/wastewater field over the years and have been impressed with the degree of dedication they had towards what they do as well as their willingness to always help in any way possible. I can honestly say that the operators retiring now or those retiring in the near future have done an excellent job of passing on their knowledge and have left or will be leaving their respective operations in better shape than when they took over. And now, it is the younger operators looking up to them for all the knowledge

and experience they can pass on. As they soak up the knowledge being passed on and gain more experience we can only hope that the new operators coming in will be as dedicated as the ones that came before. The biggest challenge ahead of us "old timers" is that of continuing to try and entice younger men and women into entering the water/wastewater profession.

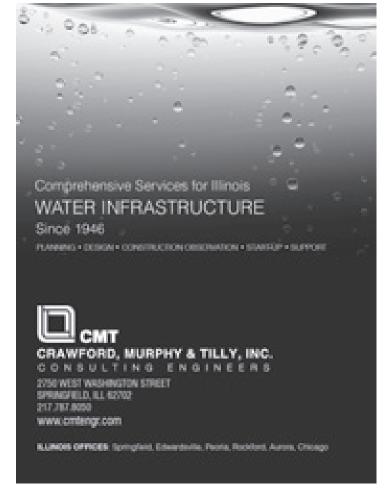
Just as in every other profession there is some operators that always seem to stand out in a crowd. Without naming names, I can think of a handful of operators that I will never forget who have left lasting memories. These guys are the ones that keep everything interesting and entertaining - but no

matter how crazy they might be they still do their jobs second to none. As we all know, these operators wear many hats (especially in small town operations) and it is refreshing to see that, even under such pressures, they continue to have such a positive attitude.

I can still recall the first conference for water operators that I attended in Springfield way back in the early 80's when I was the new guy and all the older operators would "show us the ropes" as they would say. Now I find that I am fast approaching the role of the "old



operator" as I see guys retiring who are just a few years older than me. Wow, it almost seems like yesterday when I was the new guy! Everyone have a Happy and Safe New Year!



Keeping your street's storm drains clear prevent unnecessary flooding, no matter what time of the year it is. But winter weather can cause unforeseen problems. When clearing snow packed streets, your friendly neighborhood snow plow can unintentionally cause flooding in your neighborhood.

While making our streets safer by removing the snow, these same plows can cover your street's storm drains in piles of deep hard packed snow and debris. When the temperature gets in the negative, as we are experiencing this winter, those large piles of snow freeze. When the temperature does rise and your

storm drains are not clear, ol' man winter can create an ice rink in your yard and the street when the temperature drops again!

So unless your goal is to put on your ice skates and practice your figure eights, make sure your storm drains are clear of snow and debris so melting snow can flow freely.





WHAT THE HECK IS WATERPAC?

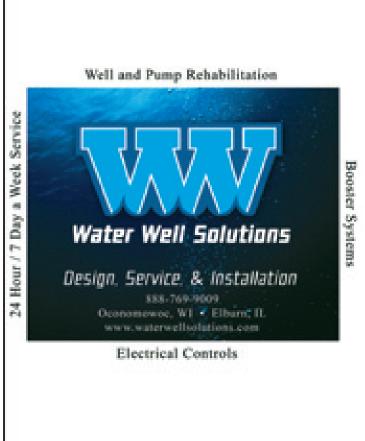
Waterpac is the money used by Rural Water Associations for lobbying efforts in Washington D.C. for funding of Rural Water programs.

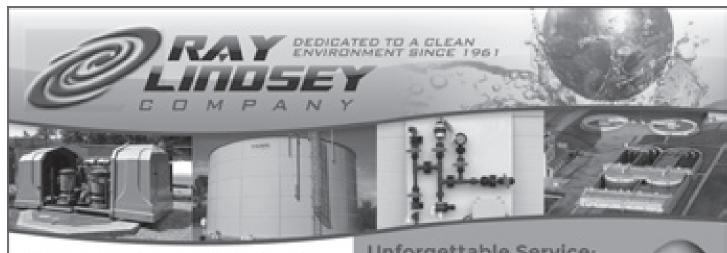
The money is raised differently in each state. In Illinois, we hold a Sportsman's Raffle at our Annual Conference in February with donated prizes from our exhibitors and other interested parties.

If you would like to donate to the Sportsman's Raffle or would like more information, please call Heather at IRWA. 800-762-5011.

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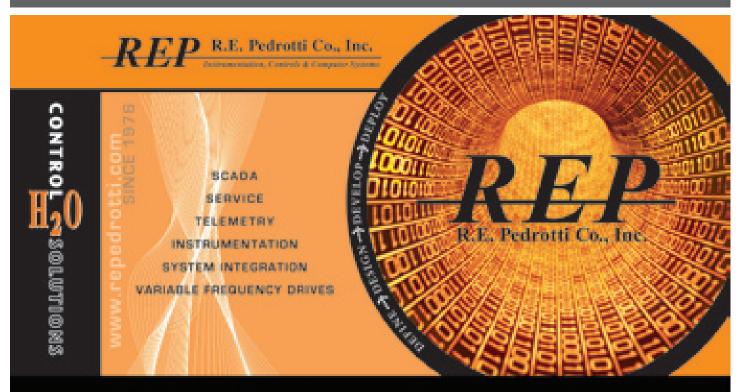
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REGISTRATION

Registration & badges are required for all conference attendees. Please register each attendee using the registration form included in this packet. Include the attendee's full name on the registration form as it should appear on his or her badge. Pre-Registration:

To pre-register complete the registration form and mail with payment to:

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PO Box 49

Taylorville, IL 62568

Or pay on-line with your credit card at www.irwa.org. Pre-registration must be postmarked by February 7th. 2014

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 Keller Convention Center.

"Please note that on-site registration is \$25.00 higher than pre-registration.***

Registration Hours:

Tuesday, February 18th 8:00 a.m.-4:00 p.m. Wednesday, February 19th 8:00 a.m.-4:00 p.m. Thursday, February 20th 8:00 a.m.-9:00 a.m.

Cancellation & Refunds:

Refunds only in the event of emergencies. We must have a written notice of cancellation to issue a refund.

EXHIBIT HALL

Professionals from all areas of the water and wastewater industry will be on hand to help solve your problems and provide you with the information you need to make those crucial decisions. 94 companies will be bringing their products and services to you at this year's conference. The exhibit hall will be open during the following hours: 10:30 a.m.-4:00 p.m. Tuesday February 18th Wednesday, February 19th 8:00 a.m.-3:15 p.m.

EXHIBITORS HOSPITALITY NIGHT

Tuesday, February 18th 5:30 p.m.- 8:30 p.m. Come down and thank the exhibitors for providing the food, soda and beer for the evening.

PUB CRAWL

Tuesday, February 18th

Buses will be available again this year for those who wish to go on a pub crawl.

CASINO NIGHT

Wednesday February 19th

6:00 p.m.-9:00 p.m.

SPORTSMAN RAFFLE

The exhibitors will be donating sports related prizes for the raffie. Attendees have the opportunity to purchase raffie tickets for these prizes. The winners will be announced at the conclusion of Casino night, Last year we purchased new equipment for the staff and sent a portion of the proceeds to rural water lobbying efforts in Washington D.C.

NEW PRODUCTS/SERVICES ROOM

Stop by the Jefferson Room to see the presentations for the new and improved products or services our exhibitors. have to offer. A new presentation will begin every 45 minutes. The schedule of sessions will be included in your packet at the conference. These sessions will be included for CEU's.

> 13 Credit Hours at this conference

Conference at a Giance

Tuesday, February 18	th Registration Open: 8:00 a.m. — 4:00 p.m.			
9:00 a.m.—10:00 a.m.	Opening/Awards Ceremony/RD Update			
10.00 a.m.—11:00 a.m.	PERSONAL SERVICE	Break/Exhibit Hall Opens		
· 图像	WATER	WASTEWATER	BREAKOUT	
11:00 a.m.—12:00 p.m.	Backhoe Salety		Lagoons with Aerated Rock Filters to Remove Ammonia	
12:00 p.m.—1:00 p.m.	Lunch Buffet—Ticket Required			
1:00 p.m.—1:45 p.m.	Risk Management		Seven Developments in Puri Station Control	
1:45 p.m.—2:30 p.m.	Risk Management (cont'd)		VFD Harmonics Understanding & Preventing	
2:30 p.m.—3:00 p.m.		Break/Exhibitor Drawings		
3:00 p.m.—3:45 p.m.	HDPE Piping Solution 101		GIS	
3:45 p.m.—4:30 p.m.	Optically Activated Pigment for Water Tower and Water Storage		Heavy Lifting in GIS (Going beyond the map)	
4:30 p.m.	Water Taste Test		Annual Meeting	
5:30 p.m.—8:30 p.m.	BITTELL LEDWING TO THE	Hospitality Night		
Wednesday, February	19th Registration Open: 8:00 a.m. — 4:00 p.m.			
8:00 a.m.	Exhibit Hall Opens			
9:00 a.m.—9:45 a.m.	Blended Phosphate for Water Treatment	IEPA Bureau of Water Updates	Cellular Remote Monitoring with Control	
9:45 a.m.—10:30 a.m.	Generation of On-Site Disinfectant	Lab Practices—Fecal Coliform Testing	Wastewater Microbiology Problems and Solutions	
10:30 a.m.—11:00 a.m.	Break/Exhibitor Drawings			
11:00 a.m.—12:00 p.m.	Underwater Storage Tank Inspections	Flooding & Remediation— Quincy Wastewater Plant	Controlling Tree Roots in Sewers and Laterals	
12:00 p.m.—1:00 p.m.	SERVICE SERVIC	Lunch Buffet/Ticket Required	NAME OF THE OWNER, OWNE	
1:00 p.m.—1:45 p.m.	IEPA Regulatory Update		Legal Issues Facing	
1:45 p.m.—2:30 p.m.	IEPA Regulatory Update (conf'd)	Wastewater Math	Your System	
2:30 p.m.—3:00 p.m.	Break/Exhibitor Drawings			
3.00 p.m.—3.45 p.m.	Electronic Monthly Operations Report (EMOR)	Wastewater Certification Review	Legal Issues Facing Your System (Including:	
3:45 p.m.—4:30 p.m.	Consumer Confidence Report (OCR) Distribution Options	Nutrient Removal in Lagoon Systems	Choosing Legal Counsel, Rate Setting & Crossing Permits)	
6:00 p.m.—9:00 p.m.	Casino Night	Announcement of Sportsman Ra	offie Winners	
Thursday, February 20	oth	Registration Open: 8:00 a.	m. — 9:00 a.m.	
7:30 a.m.—8:30 a.m.	Breakfast Buffet/Ticket Required			
8:30 a.m.—9:15 a.m.	Using Geothermal in Your Water Plant or Buildings			
9:15 a.m. — 10:00 a.m.	Distribution System Repair & Maintenance			
10:00 a.m.—10:15 a.m.		Break	CARLES AND A	
10:15 a.m 11:45 a.m.	Providing Surge Protection in Water Mains			
11:45 a.m.—12:00 p.m.	Cle	sing Ceremony/Grand Prize Drawin	10	



WATER SESSIONS

RD Update - Mike Wallace; Rural Development - Hear about funding options available for your water and/or wastewater projects.

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

Risk Management - Keith Dobrolinsky: Assurance - Risk management - what is it? What are the main causes of accidents? Attend this session to get all of the answers to these and more questions.

HDPE Piping Solution 101 - Shaun Parker, ISCO Industries, LLC -What is HDPE pipe? How do you join HDPE pipe? How do you install it? How do you tap it? Want to find more information? Attend this session!

Optically Activated Pigment for Water Tower & Water Storage -Jim Allen: Sherwin Williams - Paint inspection made easy? Hear about a coating system that uses UV light to see areas that have been missed, under applied or areas that need to be recoated.

Annual Meeting - Conducted by Frank Dunmine: IRWA - Drop in and hear an update about what your Association has been up to in the past year.

Blended Phosphate for Vilater Treatment - Bill Mersch: Viking Chemical - This presentation will review compaion control, sequestration of metals, and biofilm control of your communities drinking water distribution system.

Generation of On-Site Disinfectant - Jack Hendrick: Gateway Regional Water Company - A large water plant using gas chlorine may need to keep a lot on hand that will push them into a risk management plan. Hear how one large system went a different direction by generating bleach on-site.

Underwater Storage Tank Inspections - Randy Jacobs, Pro-Dive - Drain your tanks for inspection or use divers. Learn about this option when checking the interior conditions of your tanks.

IEPA Regulatory Update - Dave McMillan; IEPA - A lot is changing in the world of water regs, especially in operator certification. Dave will cover changes in the certification process, changes affecting current operators and other regulatory changes.

Electronic Monthly Operations Reports (EMOR) - Steve Wilson: Illinois State Water Survey - We're getting closer to being able to e-file our monthly operating reports to the IEPA. The Class C & D reports are now available for use. Learn about how these reports will provide an option to the current method.

Consumer Confidence Report (CCR) Distribution Options : Wayne Nelson: IRWA - There's been an addition in the distribution options for your annual CCR. If you've got a clean report, this new option can save your system a lot of dollars.

Using Geothermal In Your Water Plant or Buildings - John Freitag: Geothermal Alliance of Illinois - More and more government bodies are saving money by going to geo-thermal systems for their heating and cooling needs. See if this option would work for your plant or offices.

Distribution Maintenance & Repair Techniques to Avoid System Shutdown - Steve Roehrig, Hydra-Stop - A presentation of line taps, line stops, and insertion valves to maintain and control your system, with the elimination of shutdowns.

Providing Surge Protection in Water Mains - Maria Braun: JCM Industries - Pressure surges and water hammer happens. When it does, bad things can happen. Hear how to stop the bad things with this new technology and equipment.

WASTEWATER SESSIONS

EPA Updates - Scott Twart, IEPA - The latest information on wastewater regulations from IEPA.

Lab Practices - Fecal Coliform Testing - Kurt Stepping, PDC Laboratories - This discussion will cover all aspects of testing for fecal coliform as being required for background information in numerous wastewater facilities.

Flooding and Remediation - Quincy Wastewater Plant - Dan Ebbing, City of Quincy - This will be a discussion covering the historic April 2003 Mississippi flooding issues and the remediation efforts afterwards.

Math Review - John Bell & Bill Dowell: IRWA - This discussion will be a review of all types of wastewater math Wastewater.

Certification - John Bell & Bill Dowell: IRMA - This will be a review of the IEPA wastewater certification application and study guide information.

Nutrient in Lagoon Systems - Jason Bradley: Bradley Innovation Group represented by Covalen - Nutrient control in lagoon systems concentrating on signe control and winter ammonia treatment.

BREAKOUT SESSIONS

Illinois Lagoons with Aerated Rock Filters to Remove Ammonia Under Snowfice - John Hinde, Air Diffusion Systems - Aerated rock filters can remove not only ammonia but also can reduce CBOD and TSS to single digit concentration. New design features of the Aerated rock filter can make this process work better with less energy and no chemicals.

Seven Developments in Pump Station Control - Mike Ross; Vandevanter Engineering- Hear about seven advancements in pump station control systems including performance monitoring and alarming.

VFD Harmonics Understanding and Preventing - Steve Boren.

ABB - Steve will discuss the cause and effects of VFD harmonics &
how to mitigate harmonics in water and wastewater applications.

GIS - Jonathan Hodel: Cloudpoint Geographics - Basic GIS tools and implementation tips to help save time and money.

Heavy Lifting in GIS: Going Beyond the Map - Jonathan Hodel; Cloudpoint Geographics - This session will explain how to begin building "intelligence" into your GIS by utilizing utility network tools.

Cellular Remote Monitoring with Control - Brian Gorniak, R.E. Pedrotti - This has been such a popular session in the past, that we decided to bring it back for an encore! Cellular technology can put information at your fingertips easier than you think!

Wastewater Microbiology Problems and Solutions - Ryan Hennessy, Woodard and Curran - See how conditions in the plant can be learned by the filaments and other bacteria present and how this information is useful in process control and troubleshooting.

Controlling Tree Roots in Sewers & Laterals—Chad Smeltzer; Duke's Root Control—Understanding the basics of tree root growth and the impacts they have on our collection system. The fundamentals and the implications of a chemical root control program will be taught.

Legal Issues Concerning Your System - Mike Antoline: The Law Office of Michael Antoline - Mr. Antoline will return again this year for an afternoon of information regarding how to choose legal counsel, setting your rates, and crossing permits.

32nd ANNUAL TECHNICAL CONFERENCE





Registration Form

must be comp	leted for all attendees - please p	note copy for each attendee	
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System Name:			
Mailing Address:			
City:	State:	Zip:	
Phone:	E-mail address:		
Registrations me	ust be postmarked by February 7th	to receive pre-registration pricing	
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☐Member - \$150.00	Member - \$150.00 ☐ Spouse/Non-Employee - \$150.00		
■ Non-Member - \$190.00	□ Non-Member - \$190.00 □ Non-Member Individual Joining as a Member + Conference - \$197.00		
ONE DAY REGISTRATIO	N: (Includes technical sessions, ex	hibit hall, meals & activities for 1 day only)	
☐ Member - \$120.00	☐ Member - \$120.00 ☐ Spouse/Non-Employee - \$120.00		
□ Non-Member - \$160.00	■ Non-Member Individual Joini	ng as a Member + Conference - \$167.00	
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TF	IERE IS NO PRICE BREAK FOR EX	CHIBIT HALL ONLY	
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Ice Pigging

by Chuck Woodworth, Circuit Rider

A couple of months ago, Darin Clarke from Utility Service Company Inc. contacted the Illinois Rural Water office asking if any of the staff would be interested to watch an Ice Pigging demonstration. A central Illinois water system had hired Utility Service Company to perform this new form of pigging. I asked what Ice Pigging was and it was explained that ice in the consistency of a slushy is pumped into the system through a fire hydrant and exits the system through another fire hydrant. My thought was "yea right a slushy is going to clean out a water main, I got to see this."

Traditionally polyurethane foam swabs such as solid plugs or pigs are propelled through the main by water pressure, scouring the pipe clean as they went. Although solid plugs have been used successfully for a number of years to clear and clean pipes in various systems using foam swabs, the process has several drawbacks when used in complex pipes. Traditional foam swabbing involves installing a launch site and a retrieval site, which can be both costly and time consuming. Problems also arise in the traditional pigging method such as losing

a foam pig in the system. The foam pig could become stuck, due to the potential build up of sediment ahead of the foam or a change in pipe diameter. However, using a technique called ice pigging, which involves cleaning by injecting ice slush into a water main before forcing it through the pipe with water, has the potential of being more successful than the traditional method. The Ice Pig is a semi-solid that is pumped like a liquid and flows through changes in diameter, bends and fittings without blockage. Ice Pigging has a minimum impact on operations. The ice pig is simply pumped into and recovered from a hydrant at each end of the pipe section without excavation or modification to the hydrant.

Going back to my thought of a slushy cleaning a water main, seeing is believing, watching a video about this is ok but being there that cold November day made a believer out of me. In the following picture of sample bottles, the sample on the left was collected before any ice was introduced in the system, they continue to the right. Hopefully you can see the sediment that has collected at the bottom of the samples. As the ice melts it releases more sediment that it has picked up.



The dark looking samples still contain ice floating in them. The most impressive sample is the bottle on the far right.

If you have any questions about Ice Pigging you can contact Bill Murfree or Darin Clarke from Utility Service Company. If you have any questions about the pictures give me a call.



Sediment removed from water main after ice melt.



Sediment

being re-

Note the sediment in the bottom of the sample, ice is still floating in darker looking samples.

Photo left:



Photo left: Discharging ice which carries sediment with it.



Photo left: The controller is connected to the discharge hydrant, it monitors the temp, ph, pressure and turbidity.





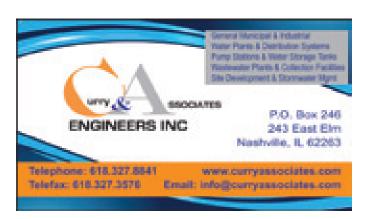






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CHANGES: Expected, Unexpected and Catastrophic

by Mark E. Mitchell, Source Water Protection Specialist

As I write this I am anticipating a new year. 2013 is within hours of being over now and as you read this we are well into the beginning of 2014. 2013 brought many changes for many people. Some changes such as just plain old growing older are to be expected.

Some changes are more of a wonderful and anticipated nature such as retirement, or even as some I've seen, even early retirement! (Good for you!)

Others are of a more unexpected and severe nature, but really how we adapt to those changes is really what it is all about. We've all heard of the lottery winners who hit it big and within just a few years are penniless and even out on the street. What is the difference between the lottery winner who hits it big and is able to retire and enjoy the rest of their years in comfort and the ones who end up out on the street? I think it is attitude and planning. Our attitude about the way we accept the things in life that come our way is really what will determine our eventual outcome.

Some things that come our way are not always so pleasant. What determines our eventual outcome in those situations? Once again I think it is attitude and planning. Once a situation comes our way, we eventually have to make a decision about how am I going to handle this?

On one of the coldest days of our northern winter just recently I drove by what I recognized as an obvious water main break. The classic surfacing of water, bringing up with it mud and sand. (One of the easier ones to find!) It was on a Saturday and I wondered if the city I live in would respond and fix it or count off the water, hope it wouldn't get much worse and wait until Monday morning to fix it. I soon knew what was going to happen when the locators started showing up. I told my wife that we should grab a couple of pitchers of water (and maybe a bucket or two!) Oh, c'mon I don't have to explain that one to you!

I watched in amazement (from my warm picture



window in my house) as the crew showed up to respond to that water leak. The equipment that was needed all started showing up, jackhammer on a backhoe to get through the pavement and frost, trailer with tools for repairing whatever type of break they found, a warming trailer for workers to take a break from the cold and get a hot drink. I was thinking to myself....efficiency in motion. Pre planning to how do we deal with the problem that might come up? I watched as one laborer shut down a water valve

continued on page 20





continued from page 19

CHANGES: Expected, Unexpected and Catastrophic

(hopefully counting the turns as he went) and another jumped in a service truck and headed down the street. Sure enough, within minutes our water was off. As this was all happening the jackhammer on the backhoe was making headway through the pavement and frost. Soon a hole was dug a ladder was placed in it and the crew went to work. I did not head across the street to talk to them because I am not quite ready to be the old man who shows up and says "I've fixed a many of these in my day, sonny"!

It was not very long until the necessary tools and parts were being handed to the laborers in the hole. Almost before I knew it they were done and our water was flowing again. We neither needed the buckets or pitchers of water, although we used them I am glad to say. What I am getting at is a little planning for what can go wrong can sure help out in a big way. That water main break is one of those "expected" problems without the "Where", "When" and "Why" being filled in for you.

What about the unexpected? Do you have a plan in place for what you might think of as the "worst case scenario"? Do we ever really know when we have hit our "worst case scenario"? I have told myself many times in life... no matter the

consequence, "Hey it could be worse!"
We don't have to look too far around us
to see someone who has it worse than we
do. Be grateful for today, plan for what
you can, and plan to face what you can't
even imagine with the same "game face"
you've learned to have in each of life's
situations.

For those water main breaks, well problems, and other day to day problems, let IRWA assist you with an Emergency Response Plan that will let you respond to that water main break with the efficiency I watched take place from my warm room through my picture window!

Tips To Keep Your Water Flowing in Freezing Temps

Cold weather can cause problems with your home's water service if ignored. Taking proper precautions now can better ensure that your water pipes work properly throughout the cold winter months.

Here are some things to be aware of and steps to take to keep your water flowing without problems.

- Make sure all of your garden hoses on outside faucets are disconnected.
- If you have an irrigation system, make sure it is disconnected and winterized.
- If you live in a manufactured home, make sure your heat tape is turned on and working properly.
- If you have water pipes located in closets or cabinets along an outside

- wall, open the doors and let warm air from your home circulate into these openings to prevent the pipes from freezing.
- Make sure the cold air return line from your furnace is not blowing directly on your internal water pipes.
- water services in the past, starting in mid-December you should begin monitoring the temperature and condition of your water. Taking your water's temperature is a simple way to avoid a costly problem. If the water temperature reaches 35 degrees, your water service could be in danger of freezing. You should

- begin leaving a small stream of water flowing from a faucet in the lower level of your home.
- 7) If you are leaving your home for an extended time period during the winter, you should:
 - Turn off your water supply at the valve located near the water meter.
 - Set the thermostat on your furnace to no lower than 55 degrees.
 - You should also call your utility provider with the dates you will be gone and leave a name and phone number of a person in the area who would know how to reach you in case of a utility emergency at your home.







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Don't Let Your Septic System Freeze

by Minnesota Pollution Control Agency

Lack of snow cover and dropping temperatures can spell trouble for homeowners with septic systems.

There are some things you should never do to try to fix a frozen system:

Do not add antifreeze, salt, or a septic system additive into the system.

Do not pump sewage onto the ground surface.

Do not start a fire over the system to attempt to thaw it out.

Do not run water continually to try to unfreeze system. This can overload the system.

Snow helps to insulate septic systems and keep them from freezing. Unfortunately, a lot of our snow cover has melted and temperatures across the state are dropping.

Here is a list of seasonal tips for homeowners on how to prevent septic system freeze-ups as the winter season progresses and how to deal with them should they occur.

- Place a layer of mulch 8 to 12 inches thick over the pipes, tank, and soil treatment system to provide extra insulation. This can be straw, leaves, hay or other loose material that will stay in place and not become compacted. This is particularly important for new systems that were installed so late in the year that vegetative cover didn't get established. However, if the system is currently frozen, don't add mulch now; it will delay thawing in the spring.
- Use water—the warmer the better if you're worried your system

is starting to freeze. Spread out your laundry schedule so you run one warm/hot load a day. Use the dishwasher and take hot baths.

- Do not leave water running all the time—this will overload the septic system.
- Going away for an extended period?
 Have someone use warm water in the home regularly or pump out your tank before leaving.
- Fix any leaky plumbing fixtures or appliances in your home. This will help prevent freezing problems and help your system perform better all year.
- Keep all vehicle, animal, and people traffic off the system. This is a rule to follow all year as compacted snow and soils cause frost to go down deeper and faster. Pay special attention to the area between the house and tank.
- Keep an eye on your system. If any seeping or ponding occurs, contact an on site professional to help determine the cause and remedy.

Add more insulation to your system. This could include replacing pipe with insulated pipe, adding expanded foam panels over septic tanks, or adding more soil cover.

If your system freezes

If your septic system freezes, call a septic system professional. The pros have devices called steamers and high-pressure jetters for thawing pipes.

Other methods used to fix a freezing problem include adding heat tape and tank heaters. Cameras can be sent down pipes to determine where freezing is occurring. If the soil treatment system is full of ice, or there is evidence of leaking, skip trying to thaw the lines leading to the treatment area as it cannot accept liquid until the area thaws in spring.

If it's not feasible to correct a problem, the only option is using the septic tank as a holding tank until the system thaws naturally. Contact a pumper to empty the tank when it starts to fill up. In this situation, reduce water use by limiting the number of toilet flushes, taking short showers, and using the dishwasher at full capacity.



Snow helps to insulate septic systems and keep them from freezing.

Gifford Devastation

On November 17, 2013 an F-3 tornado tore through the small Village of Gifford completely destroying areas of the village including the water plant. The community was extremely fortunate in that there were no major injuries or fatalities.

I was called on the evening of
November 18, 2013 by IRWA's Deputy
Director, Don Craig, explaining the
devastation in Gifford. I headed there
first thing in the morning of November
19 arriving at the State police road block
a little before 8:00a.m. I was informed to
call Jess Childress to get permission to
enter the village due to all the volunteers
and utility company's workers in town
they were trying to limit the number of
vehicles in town. Jess informed me to

head to the water plant on the East side of town. He said that I couldn't miss it all that was standing was the aerator and the sand filters. As I drove into town the devastation that I saw was nothing at all like what Don had described to me. It was much worse than he was able to describe.

Upon arriving at what was left of the water plant, I met with Jess Childress, Water Superintendent and Sean Weary, Chief of Police. There were already numerous volunteers from the City of Paxton and Gibson City. They were already working on getting new wires pulled to one of the wells that had them pulled out when the plant was destroyed. After reestablishing power thru the wells via generator from ESDA (the

water plants emergency generator had been badly damaged) the crew from Gibson City, Paxton, myself and Steve Johnson from IEPA finished cleaning off the site of the water plant. There were numerous jugs of bleach disinfectant and fluorosilicic acid laying around that had to be picked up and relocated to a secure location. Once the insurance adjuster had given the word, we were able to remove the sand filters from the plant site.

Once this was accomplished, we worked on getting a water line that bypassed the treatment plant since it was no longer there. Once the line was in place it was sleeved in double wall pipe and wrapped in insulation in hopes that this would stop any freezing due to the dropping temperatures forecasted for the









next several days. Around 2:00 p.m, a call was made by Mark LeClair, Paxton's water Superintendent to Hawkins Chemical to see if they could come and install the disinfection equipment. Hawkins arrived at about 3:00 p.m. and by 4:00 p.m. the water system was pressurized once again. The village had been without water for 24 hours. They still could not fill their water tower due to damage it had received from the high winds.

On November 20, I returned to Gifford and again met Jess Childress, the volunteers from the city of Paxton, and IRWA Deputy Director Don Craig at our temporary water plant. Everything had made it through the night without a hitch. Jess then got Don and I lined out on locating and marking shut-offs as the Paxton crew followed behind and dug them up and cut them off so that nothing would get tore out during demolition. That was how we spent the rest of the day locating and this was very difficult due to the amount of debris everywhere.

It was just amazing on how the village and officials had jumped right in with spirits high and moving constantly looking forward. It was also a great thing to see how the surrounding communities supported their neighbors. With anything from sending bottled water to sending their whole water departments and also police cars. It was just an amazing thing to see everyone from all over the area working together to make this community livable again. Jess and the Village still have a long road ahead of them but they have the right attitude and are forever moving forward. It will take time but they are rebuilding their community so that it will be their home once again.



The dinner table can be one of the best places to bring your family together. Eating a nice home cooked meal with your whole family is a wonderful experience, and can bring great discussion, or humor to everyone attending. My family has a wonderful pasta dinner every Sunday night. My mother spends all day preparing her sauce, meatballs, and whatever else it takes to create her masterpiece. After hours of preparing it's finally done. The family gathers at the dinner table and begins the feast. On Sundays we always sit at the dinner table. You're asking, where else would you sit? Well, during the week we have an island counter top which we eat our meals at. The island is simply more convenient, and easy to use for my mother when she's cooking. For our Sunday feast, we always set the dinner table, and sit at the table together to eat our meal.

I look forward to every Sunday for a number of reasons. The main reason being I love to eat, and I love to eat pasta more than anything. We are an Italian family and we all enjoy a fabulous pasta dinner every week. Besides the eating part of our feast, I enjoy joining my family and starting conversation. It's not often you get to sit down with your whole family at once for an extended period of time. Being able to talk to my all my brothers at once is pretty cool. I got three brothers, and having them all there at once can be quite exciting. Asking one brother one thing can lead to a fun conversation, or sometimes a ruthless argument. Overall it's a fun experience and you get to learn a lot about your siblings, and/or parents.

My brothers all attend school, and two of them work full time jobs, there's just no time to spend time with them. Having a weekly dinner is a very exciting aspect of our family. No matter what is happening that week, I know that the upcoming Sunday I will see my whole family whether it's at our dinner table, or simply out to eat at one of our favorite restaurants. Not everyone can make it every Sunday, but that's understandable and we forgive them. Most Sunday's we have the whole family attending, including my grandma, who I feel is the most important person at the dinner table.

My grandma, who we call "nuni" or "nonna" which is Italian for grandmother. Our nonna came over from Italy over 50 years ago on a boat, and has never been the same since. I love talking to her at the dinner table about the old times in the old country. She teaches us some cool things about cooking, and just being Italian in general. Sometimes my nonna will teach us some Italian phrases, or secrets to different things that she's learned over in Italy. I love comparing her different ways to go about doing certain things to the way we do certain things over here in America, it's very interesting.

One of the coolest things I've learned from my grandmother is how to make

homemade pasta. My grandmother grew up in a village in Sicily, and was taught to produce her own pasta noodles when it came to their family feasts. Learning how to make my own homemade pasta was easily one of the coolest things I've learned from her. I currently attend the University of New Hampshire for Culinary Arts,

and cooking happens to be my passion. Having my grandma around is so awesome, and I learn a lot from her every day. She taught me the basics of using a Pasta Machine, and how to make my own pasta from scratch. After a few hours of preparing our noodles, our product was done. I had produced enough pasta for weeks! We ate the homemade pasta later that night and it was fantastic. May not taste like it was store bought, but it definitely tastes homemade, and delicious.

The moral of the article is to make more people aware of the power of food, whether your preparing it or eating it. Take advantage of your family dinners, who knows how much longer you'll have with them. Whether you sit and enjoy the presence, or strike a conversation with your family members, a family dinner is a great way to gather the family each week.

About the Author

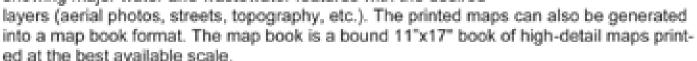
Anthony Valentine attends the University of New Hampshire for culinary arts. Valentine also runs a pasta website which provides recipes, tutorials, and pasta products.

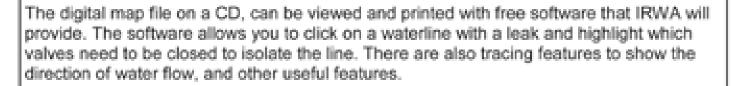


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