

Volume IX – Summer 2012



MANHOLE ADJUSTMENT RING

READJUST MANHOLE LIDS TO NEW ELEVATION WHEN RESURFACING

MANHOLE ADJUSTMENT RING

ONLY 4 DIMENSIONS REQUIRED

- 1 O.D. of existing lid: TOP and BOTTOM
- 2 thickness of existing lid
- 3 riser height (thickness of asphalt matt*)
 *Note: minimum riser must be 1/2" more than thickness of existing lid



- * Full Range of Sizes
- * Eliminates Digging
- * Requires No Tools

Company Name_

Contact Name_

Phone #

ORDER FORM

Quantity	Manhole #	Street / Location	Lid O.D. Top / Bottom	Thickness of Lid	Desired Rise
		9 D D			

SIMPLE--QUICK--PERMANENT

To Order, Please Call:

Schulte Supply, Inc. (800) 843-3711

FAX Your Order to: 618-656-8750

Illinois Rural Water Association

BOARD OF DIRECTORS

PRESIDENT GREG BATES Jersey County Water Company

> VICE PRESIDENT DALE HANNER City of Oakland

> > SECRETARY JAY BELL City of Chenoa

TREASURER Jeff Tumiati Village of Stonington

BOARD MEMBERS

STEVE FLETCHER Washington County Water Company

> JACQUE PLESE City of Wilmington

PERRY MUSGRAVE Lake of Egypt P.W.D.

WAYNE DIXON City of Mason City

JEFF MCCREADY Village of Woodhull

Staff

FRANK DUNMIRE Executive Director dunmire@ilrwa.org • 217-820-4626

DON CRAIG Deputy Director craig@ilrwa.org • 217-561-1061

HEATHER McLeod Membership Services Assistant ilrwahm@ilrwa.org

DENISE **B**URKE Administrative/Program Assistant ilrwadb@ilrwa.org

WAYNE NELSON EPA Training Specialist ilrwawn@ilrwa.org • 217-820-1561

GALE MOORE Circuit Rider moore@ilrwa.org • 217-820-4754

PAT GAMMILL Circuit Rider gam@ilrwa.org • 217-820-1564

CHUCK WOODWORTH Circuit Rider ilrwacw@ilrwa.org • 217-820-1569

JOHN BELL Wastewater Technician ilrwajb@ilrwa.org • 217-820-1568

BILL DOWELL Wastewater Technician dowell@ilrwa.org • 217-820-1562

MARK MITCHELL USDA Source Water Specialist Mitchell@ilrwa.org • 217-820-1565

ARTICLES

Growing Pains by Greg Bates IRWA Testifies Before Congressional	4
Subcommitteeby Frank Dunmire	7
Summer Time Word Search	10
8th Annual Northern Conference	14
Northern Conference Attendee Registration Form	15
Rural Water Wire	17
That's Why It's Called Rural Illinois	18
Global Warming 12.0by Bill Dowell	19
Summer Time is Flushing Timeby Chuck Woodworth	20
Mark Your Calendars	21
Smiles Will Constantly	
Brighten Your Dayby Whinston Sparks	22
Ford Fleet Pricing	22
Water Pro Conference	24
Keeping It Cool In The Hot Weather	25

MISSION STATEMENT

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

On the Cover: Pictured is the bridge on Route 161 between Centralia and West Salem, taken by Pat Gammil, IRWA Circuit Rider.

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



Volume IX-Summer 2012

LIST OF ADVERTISERS

American Flow Control 12
Aqua Aerobic Systems 26
Cady Aquastore
Caldwell Tanks, Inc4
Coe Equipment, Inc5
Crawford, Murphy & Tilly, Inc16
Curry & Associates Engineers13
Dixon Engineering24
DN Tanks16
Heneghan & Associates, P.C11
Lemna Technologies, Inc
Maguire Iron
Municipal Well & Pump16
Newell Sand/Rock Filter Cleaning5
Norman Noe Co., Inc
PBD Painting Company9
PDC Laboratories, Inc12
Pittsburg Tank & Tower Maintenance .7
Ressler & Associates
Schulte Supply, Inc2
Sidener Environmental Services8
Taylor Coating Sales, Inc
Test, Inc
The Ford Meter Box Co., Inc
United Systems & Software13
USA Bluebook
Utility Service Co., Inc
Water Well Solutions
······································

Growing Pains

For this edition of the Water Ways magazine I thought I would share with you the growing pains that rural water systems throughout Illinois, as well as the nation, experience at some point in time. As most of you know I manage the operations for Jersey County Rural Water Company, a not-for-profit water supplier, out of our office located in Jerseyville,

DOGS

Illinois. Our original water system was constructed back in the early to mid 70's and consisted of six underground pumping stations along with six water standpipes and a maze of 3 and 4 inch PVC watermains. Then along came the 1980's and 1990's and their rapid growth. It did not take long for this growth to tax our water system and it was quickly



determined that some of our smaller diameter mains would need to be upgraded to a larger size – especially those that fed water to the storage tanks. Our system had finally grown to the point where it was time for the Board of Directors

by Greg Bates, IRWA Board President



to make some tough decisions on how to best handle the growth and where to find funding for the improvements needed to supply our customers with a safe and reliable source of water.

A multifaceted plan was agreed upon and first on the list was to raise tap-on fees for new meter installations to *continued on page 5*

The Most Important Tank Is The One You Preserve



Because the most affordable tank is the one you preserve, Caldwell Tanks offers the Tank Asset Preservation (TAP) program - from extended warranties to full service, on-going maintenance for new or existing water tanks.

From engineering and construction to maintenance and repair, when you think tanks, think Caldwell.

- Annual Inspections
- Interior Clean Outs
- Repairs & Replacement of Parts
- Graffiti Removal
 Exterior Repainting
 Interior Relining







Ted A. Server 502.974.6930 • Fax: 502.962.2252 tserver@CaldwellTanks.com www.CaldwellTap.com

continued from page 4

Growing Pains

help raise the needed capital to finance two new elevated water towers. One 200,000 gallon and one 400,000 gallon water tower was erected to handle our water storage short-fall. Ten-year bonds were sold to cover the cost of these two new water towers and the 8-inch PVC mains required to feed them. With the addition of these two elevated tanks two of the old standpipes were taken out of service. Unlike the standpipes, these new towers were much larger with almost all of the water approximately 100 feet in the air allowing us to provide our distribution system with a larger capacity of water as well as a more consistent water pressure. In subsequent years we have also been able to replace two more of the standpipes with larger 100,000 gallon and 300,000 gallon elevated bowl

tanks in an effort to supply peak demands during the summer months. These replacements were part of two expansion projects the company had undertaken and leaves us with two of the old standpipes remaining.

There is an old

saying that some people live and learn while others just live. We at Jersey County Rural Water like to follow the first part of the saying and learn from our past. Although thought to be a good idea at the time, we have found that having six pumping stations located underground



may not have been the best long-range solution and had many unintentional operational issues. Potential flooding; confined space entry requirements; electrical set back clearances; motors overheating; sensitive control equipment prematurely failing; and just getting equipment in and out for repair and/ *continued on page 6*



- · Sampling & Field Related Services ·
- Contract Services Water/Wastewater
 - Regulatory Compliance Services
 - Certified Laboratory •
 - IEPA Regional Lab •
 - Consultant Services •
 - Over 100 Plants & Operations throughout Illinois

Peru, Illinois Established 1987 815-224-1650 *www.testinc.com*

• Bushnell • Carthage • Hinckley • Peru • • Avon • Prairie City • Dallas City • • Creve Coeur •





Growing Pains

continued from page 5



or maintenance are just a few of the issues that come to mind. In 1995 our first above ground booster station was installed and most of the operational issues mentioned above were totally eliminated and it is so much easier to monitor and maintain the equipment. This above ground pump station was so well received that it was decided to phase out all of the underground stations. Stations where chemical feed equipment is present are designed to be constructed as concrete block structures with concrete floors so

they can provide many years of service life and easy cleanup in the event of a spill. Currently only two of the original six underground booster pump stations remain and are slated to be replaced in the next 5 years. We have found that the cost is well worth the advantages and it also allows for modernization of our equipment with variable speed drives for energy savings and SCADA systems to offer us more control and security measures for these remote pumping stations.

As most of you can appreciate, with the economic downturn and lack of new housing starts in the last two years, our growth and expansion plans have been slowed as well. We hope to get our upgrades back on track in the near future, but, in the meantime there is still plenty to do as we are relocating waterlines and other infrastructure for major highway realignments and expansions in and around the Metro East area.

DO YOU COMPLY?

On January 4, 2014, waterworks brass will change forever.

The No-Lead Law affects you. The Ford Meter Box Company is ready for 2014 and can help you make the transition to no-lead brass.



IRWA Testifies Before Congressional Subcommittee

I was invited to testify before the United States House of Representatives Committee on Agriculture's Subcommittee on Rural Development, Research, Biotechnology, and Foreign Agriculture on April 25, 2012. The Chairman of this Subcommittee is Representative Tim Johnson who happens to represent the area where I live and will not be seeking re-election this November. I had met with him and his staff for a couple of hours late one evening last fall in Washington DC and had commented at that time that if they ever needed someone to testify on behalf of rural Illinois, I would be happy to do so. Little did I know they would take me up on the offer! Now, I have testified many times before committees in the State Legislature, but never before a Congressional Committee so I was somewhat nervous and subsequently quite relieved when I learned that NRWA's DC staff would "hold my hand" throughout the time needed to prepare,

practice, deliver, and follow-up on my testimony. I would like to share excerpts of that testimony with you in this Issue of *WaterWays*.

After my introduction I thanked Chairman Johnson, Ranking Member Costa and members of the subcommittee, for holding the hearing and "Before I get too far along in my testimony, I would like to thank Chairman Johnson for his service to Illinois. As many of you know the Chairman, while still in law school, began his career in public service by winning a seat on the Urbana City Council in 1971. In 1976 he was elected to the Illinois state legislature and served there until he was elected in 2000 to represent the 15th district here in Washington. He has been a champion of the farmers and rural communities in our state during his time in Congress and we wish him well as he leaves the House of Representatives and returns home to his family in Illinois."

by Frank Dunmire, IRWA Executive Director



Illinois has a total of three members on the subcommittee – Tim Johnson, Bobby Schilling and Randy Hultgren who all know who we are and what we do but the rest of the members were not quite as well versed so I continued with, "The Illinois Rural Water Association is a member of the National Rural Water Association (NRWA), on whose behalf I am testifying this afternoon. NRWA represents over 28,000 small rural water systems in all 50 states through its 49 rural water association members. Of *continued on page 8*



PITTSBURG TANK & TOWER MAINTENANCE CO., INC. SAVEL

We have a crew in YOUR AREA!

Inspections	Repair	New & Used	<u>Tanks</u>
Wet	In Service Cleaning	Relocation	Elevated
Dry	Paint	Erectors	Underground
ROV	Insulation	Dismantles	Ground Storage
(Robotic)	API	Mixing System	

ROV inspections can be viewed on TV console during inspection & DVD provided. All inspections include bound reports, recommendations and cost estimates.

> Hugh McGee 270-826-9000 Ext. 330 www.watertank.com

IRWA Testifies Before Congressional Subcommittee

those 28,000 member systems, 1,100 are located in Illinois. Every day state rural water associations are helping rural communities throughout the country learn how to properly operate, maintain, and manage their water and wastewater systems; how to best ensure compliance with the Safe Drinking Water Act; how to protect their ground and surface water sources; and when necessary, responding to natural disasters. Rural Water prides itself as being an organization that helps build capacity in rural America. When a community has a problem with its water and/or wastewater system, Rural Water assists the system operators in the identification and repair of the problem. We do not do the work for the community, but we help train their operators and teach them how to do it. Last year Rural Water provided over 155,000 hours (or the equivalent of over 17 years) of onsite assistance to rural water and wastewater systems. Rural Water also provided 3,500 hours of wastewater technician classroom training to nearly 15,000 individuals."

"The rural development title of the farm bill historically has not received as much focus as other policy matters such as: direct payments, crop insurance, conservation, or nutrition. However, the rural development programs authorized

by this subcommittee in the farm bill will meaningfully impact the lives of millions of people - take water for example. USDA's water infrastructure and technical assistance programs are authorized in the farm bill. Everyone realizes the importance of water, but it is very easy to take for granted. It is not until you turn on the tap and nothing comes out, or your community is under a boil order, that you begin to understand how complicated life becomes without easy access to water. But the importance of access to safe, affordable, and plentiful drinking water is not only important in rural homes but also to rural businesses. Water quality and affordability are important factors for businesses wanting to locate or remain in a rural community. Many of the businesses related to agriculture that are located in rural communities (think food processing, meat packing, biofuel production, farm services facilities) need high quality and affordable water supplies. Rural water is important to the rural economy. Many times job creation is directly tied to the availability of a good supply of potable water. An excellent example of this is located in Southwestern Illinois at the Prairie State Energy Campus. Chairman Johnson and possibly other committee members are aware that this project alone



MARK LOGAN Service / Sales Representative

1829 Borman Circle Drive St. Louis, MO 63146 TEL 314-991-0730 FAX 314-991-3527 TOLL FREE 800-528-2887 CELL 618-420-9927 www.sidener.net created in excess of 3000 construction jobs and will create approximately 500 permanent on-site jobs. High paying jobs I might add. In addition to those 500 jobs it is estimated that an additional 800 support sector jobs will be created as

continued from page 7

well. BUT, what most people don't know is that all of the potable water supply needs for this facility are being met by Washington County Water Company, a not-for-profit water co-operative funded through Rural Development.

Perhaps as a representative of NRWA I am a little biased, but I believe that USDA's water program is one of the most important for rural communities that this subcommittee will address in the farm bill. As a lender of last resort, USDA provides critical financing for water systems that are unable to secure commercial credit. In FY2011 USDA obligated \$1.379 billion in loans and grants to 695 water and wastewater projects. Eighty-two percent of these funds were used for projects in communities with populations of 5,000 or fewer. And even though over the last 72 years USDA has made over \$30 billion in water infrastructure loans to communities that others would not, the lifetime default rate for this program is 1.02%. The metrics for this program are impressive, as are the demands for its funds. According to USDA at the end of FY2011 there were 415 completed applications for which no funding was then available. It would have required an additional \$1.5 billion dollars in loans and grants to fund these projects. There were also an additional \$3.3 billion in preliminary applications from rural communities. Many of the completed applications will be funded with FY2012 funding, but the fact remains that the backlog for loan and grant funds currently exceeds \$3 billion dollars.

In addition to infrastructure financing, the USDA's water program also provides funding for technical assistance to rural *continued on page 9*

IRWA Testifies Before Congressional Subcommittee

communities that meet the eligibility requirements to be a borrower from Rural Development. As I mentioned previously, as one of USDA's technical assistance providers Rural Water provided over 155,000 hours of onsite assistance to rural communities last year. This onsite assistance, provided by circuit riders and wastewater technicians (and authorized in Section 306(a)(22) and 306(a)(14)of the Consolidated Farm and Rural Development Act, respectively) is critical to ensuring that rural communities have safe, affordable, healthy drinking water and wastewater systems. The authority for the circuit rider program expires at the end of the fiscal year. We strongly encourage the reauthorization of the circuit rider program.

As the committee considers whether changes to the authorizations for the rural water programs are warranted, the NRWA would urge caution. We believe the farm bill should maintain the water program's current policies: funding should be limited to rural communities who are unable to find credit elsewhere; funding should be targeted to rural communities with the greatest economic need and environmental/ public health challenges; and grants should be awarded based in proportion to a community's economic need.

We are aware of discussions to expand USDA loan and grant eligibility to more populous communities. While there may be other issues within the Rural Development mission area, we believe the water program's current focus on communities with populations of 10,000 or less is working. Currently, 82% of USDA's water infrastructure funding goes to communities with populations of 5,000 or fewer, 64% goes to communities with populations of 2500 or fewer, 51% goes

to communities with populations of 1500 or fewer, and 42% goes to communities with populations of 1000 or fewer. Even though funding has been awarded to the smaller and poorer communities, as I mentioned earlier, there still is \$3 billion backlog. We do not believe anything is to be gained by increasing the pool of eligible communities for water infrastructure loans and grants. In fact, we are concerned this could result in fewer loans and grants for truly needy rural communities and that the increase in applications could place a substantial burden on a shrinking Rural Development field office staff, thereby delaying all loan and grant approvals.

We are also aware of proposals

that would expand water infrastructure grant eligibility for more affluent communities. Again, we support the policies underlying the water program and believe the current grant limitationsprojects in communities with household incomes that exceed 80% of the state nonmetropolitan median household income level are not grant eligible-are working.

continued from page 8

Mr. Chairman, and Ranking Member Costa, this concludes my testimony. I appreciate the opportunity to appear before you this afternoon. I wish you luck in the days and weeks ahead as the committee develops a new farm bill. I would be happy to answer any questions you may have."

It was at that time I found out that the Members had five minutes each to ask questions of those who had just completed their testimony. I fielded several questions during the Q & A session and through subsequent e-mails. It was quite an honor to testify on behalf of Rural Water and an experience not soon forgotten. Thanks for allowing me the opportunity.



Summer Time Word Search

Find the words in the grid. Words can go horizontally, vertically and diagonally in all 8 directions!

F	R	Ζ	Т	Ν	S	U	Ν	G	L	Α	S	S	Е	S	L	J	L	J	L
D	Q	R	Μ	F	В	Х	Ν	G	Ν	Ι	Н	S	I	F	Ν	Т	Μ	Е	W
Ζ	Н	В	J	С	W	Α	Т	Е	R	Μ	Е	L	0	Ν	V	Ν	Μ	Ν	D
Т	S	U	Ε	S	Е	D	Α	R	Α	Ρ	W	D	R	G	Ν	Е	R	I	J
Т	Ν	G	V	А	F	L	0	W	Е	R	S	U	Ν	L	В	E	R	Η	Х
Е	Μ	Ν	U	Y	С	Ρ	D	Т	Н	С	В	Т	С	R	W	R	F	S	Ζ
Ν	Т	Α	Х	В	Ν	Н	S	К	0	Ν	Ν	С	Α	Μ	S	С	Х	Ν	Y
L	V	R	Е	Y	G	L	Ν	0	U	Ε	F	κ	Μ	V	Е	S	Κ	U	Q
D	V	S	Т	R	Α	Ν	Κ	S	D	Х	L	L	Ρ	Α	Ν	Ν	κ	S	Х
Y	S	Ν	Е	D	С	0	Т	R	W	L	Х	J	I	С	0	U	Т	Т	А
Ρ	Μ	W	Ν	I	U	Е	А	Ν	Α	Κ	В	Ν	Ν	Α	С	S	0	Н	U
F	I	Α	I	Т	L	G	С	В	Т	0	Υ	Ρ	G	Т	W	Μ	Т	Е	G
L	S	С	S	Μ	Ρ	F	Е	I	Α	Н	D	Т	F	I	0	Т	I	Μ	U
L	В	Т	Ν	Κ	Μ	S	Е	Т	Т	В	G	Ρ	Ν	0	Ν	Ζ	U	Е	S
С	Х	Е	Т	Ι	Α	Т	I	R	Μ	Т	Ν	Ι	V	Ν	S	Q	Q	Ρ	Т
R	Υ	С	Α	В	С	N	Ν	Т	Ι	R	Ν	L	L	Y	Κ	L	S	А	Y
В	Т	В	В	С	G	S	Q	G	R	F	Κ	Ν	Т	Ζ	J	L	0	R	Н
G	Ρ	D	Ρ	F	Н	S	Ρ	R	I	Ν	Κ	L	Е	R	S	G	Μ	Κ	Н
Н	Y	L	U	J	Ζ	W	W	D	J	Ζ	V	Т	G	Ν	Т	Μ	Μ	S	Κ
Μ	L	Ζ	Ζ	L	G	М	Х	Н	Y	С	Α	R	Ν	I	V	Α	L	S	R

Auqust	Fireflies	Mosquito	Sunscreen
Baseball	Fishing	Parades	Sunshine
Beach	Flowers	Picnics	
Beach	Gardening	Sandals	Swimminq
Boating	Ice Cream	Snow Cones	Theme Parks
Campinq	July	Sprinklers	
Carnivals	June	Sunburn	Vacation
Cookouts	Lightning Bugs	Sunglasses	Watermelon

(10



<u>"Thinking of Forming</u> <u>a Regional System?"</u>

Let Heneghan & Associates Guide Your Group Through the Organizational and Financial Steps to Success



HENEGHAN & ASSOCIATES, P.C.



Water

Wastewater

Stormwater

Grant Writing

WATER

Feasibility Studies

"Dedicating Our Services to Strengthen Client Trust" Centralia Columbia Godfrey Jerseyville 2010 ACEC – Illinois Engineering Excellence Award – Gateway Regional Water Company

Think Tnemec.

Themee Company has been the leading supplier of protective coatings to the water industry for more than 30 years. Our extensive line of proven products offers unparalleled corrosion protection and aesthetics, extending your maintenance cycles and providing unmatched life-cycle value. Contact us for a complimentary protective coatings packet or coating system consultation.

When you think of coatings, think Tnemec.

NEMEC

Tnemec Company Incorporated 6800 Corporate Drive Kansas City, Missouri 64120-1372 1-800-TNEMEC1 Fax: 1-816-483-3969 www.tnemec.com

CONTACT YOUR LOCAL TNEMEC REPRESENTATIVE:

NORTHERN ILLINOIS

Erik Otten Taylor Coating Sales 8520 Brookfield Avenue Brookfield, Illinois 60513 Tel: (708) 387-0305 eotten@tnemec.com

WESTERN ILLINOIS

Keith Kennett Kentec, Inc. 110 North State Street Geneseo, Illinois 61254 Tel: (309) 945-2094 kkennett@tnemec.com

SOUTHERN ILLINOIS

Steve Schatz Coating Solutions, LLC 530 Orchard Lane Eureka, Missouri 63025 Tel: (636) 938-9292 sschatz@tnemec.com



THE RIGHT VALVES AND HYDRANTS. THE RIGHT WAY.

At AMERICAN Flow Control. we manufacture our products one way the right way. We don't cut corners: we don't make excuses. We ship a product you know you can count on — hydrants, valves, our GIS Valve and Hydrant inspector system and the Captivater locking device.

We make our products the right way, because that's the AMERICAN way.



PDC Laboratories, Inc. – 2231 W. Altorfer Drive - Peoria, IL 61615



PDC LABORATORIES, INC.

Professional. Dependable. Committed.

For more information contact: Julie Rada (309) 683-1724 Drinking Water Project Manager jrada@pdclab.com

Cathryn Dunn (309) 683-1765 Microbiology Section Supervisor cdunn@pdclab.com

Janet Clutters (309) 683-1743 Wastewater Project Manager jclutters@pdclab.com

Kurt Stepping (309) 683-1719 Senior Project Manager kstepping@pdclab.com

PDC Laboratories, Inc.—St. Louis Barb Pandolfo (314) 595-7336 Project Manager bpandolfo@pdclab.com PEORIA, IL & FLORISSANT, MO





PDC Laboratories, Inc. is the largest independent laboratory in the State of Illinois. Our staff of over 80 professionals, have over eight decades of experience in the environmental services industry and supported by state-of-the-art analytical technologies.

PDC provides the highest quality testing available in the industry. Our highly-trained, professional staff are ready to assist you in meeting compliance testing deadlines as well as provide a thorough and comprehensive understanding of the most current regulatory testing requirements that effect your business.







Professional. Dependable. Committed.

Į2`

PDC Laboratories, Inc. – 3278 N. Highway 67 -Florissant, MO 63033



STH ANNUAL NORTHERN CONFERENCE

Illinois Rural Water A s s o c i a t i o n

SERVICE THAT SHINES! October 23 & 24, 2012

<u>Hotel Information</u> Clock Tower Resort and Conference Center 7801 E State St, Rockford, IL 61108 Phone: 815-398-6000 Room Rate \$95.00 (remember to tell them you are with IRWA's room block)



CONFERENCE AT A GLANCE (**PLEASE NOTE THIS IS A TENTATIVE SCHEDULE ONLY**)

	WATER	
9:30	Emor	
11:00	Load Balancing Using VFD's	
1:00	IEPA Update	
2:30	Leak Audits & Unaccounted for Water	
3:30	Source Water Protection Update	

Tuesday, October 23rd WASTEWATER

Pumps EPA Update Certification Review Update Activated Sludge Operation Panel Basic Math

10.75 Credit Hours

Wednesday, October 24th

9:00 Panel Discussion - Emergency Preparedness/Response (both water & ww)

- 11:00 Working with (not for) Your Engineer Lagoon & Sand Filter Operation Pan
- 1:00 GIS & GPS Mapping/Line Locating
- 2:00 OSHA

3:15 Filter Care & Troubleshooting

dness/Response (both water & ww) Lagoon & Sand Filter Operation Panel Solving Real Life WW Problems in Illinois Communities Manhole/Sewer Line Rehab Sludge Judging



Please make check payable to: Illinois Rural Water Association P.O. Box 49 Taylorville, IL 62568 Call 1-800-762-5011 with questions



847-782-0357 www.natgun.com Jerry Myers, Regional Manager jmyers@natgun.com

A Division Of DN Tanks

Find Out What's Going on in Rural Water... Around the Country or Around the World!



FREE SUBSCRIPTION!

Rural Water Wire is THE electronic newsletter to keep you informed and up-to-date on RURAL WATER!

Every week you'll get the latest rural water news delivered FREE to your in-box!

Get your FREE SUBSCRIPTION TODAY! Simply send your email address to: kdonovan@naylor.com.



Rural Water Wire is a free newsletter service provided by NRWA and Naylor Publications. Your email address will never be sold to any other third party. However, NRWA may send you materials about NRWA services, meetings and other information we think could be of interest to the Rural Water Family.

That's Why It's Called Rural Illinois



Global Warming 12.0

Due to the mild late-Winter and Summer-like Spring weather, we'll toss out some topics discussed way earlier than normal this year.

Lagoons: The great weather actually allowed most algae populations to cruise right through the winter. Algae blooms of varied colors got a good head-start in a lot of areas. Most of the time additional oxygen will help control excess growth. If aerators are set for specific run-times to conserve electricity, you may have had to extend the run periods. If no aeration exists, the pond water-level can be raised, and/or sodium nitrate added for additional oxygen. (Start the sodium nitrate dose at 8-10 pounds per acre.) Improvement should be seen within 2 weeks.

Should BOD and TSS increase along with the algae, and the additional oxygen level cannot be maintained, other treatment methods may need to be considered. Chemical-addition, barley straw, even the introduction of duckweed, are items to be investigated and analyzed for the most cost-effective solution.

Activated Sludge: The hot days, (even in March), started to point out some ammonia removal problems early. High temperatures and humidity really reduce blower output, and, if you are running close and conserving electricity with those blowers, aeration oxygen-levels can go away quickly, especially with a high mixed liquor suspended solids. Actual aeration oxidation drops off, then when the bugs start gasping for air, the small population of them that are nitrifiers will conk out first. (Removal of BOD will stall out also). When those upper 80s and higher temps are forecast, try to keep the aeration oxygen levels around 3 ppm just to be safe.

We should be past the spring period for filamentous/Nocardia problems, but the fall temperature change will be here soon. Dirty, greasy foam and poor sludge-settling are the main indicators. An "old" sludge seems to be close to setting these conditions in motion. And, sometimes high concentrations of cooking grease in the influent tend to aggravate the situation.

To help dissipate:

- Increase Return Sludge Flow 10 to 20 %
- Increase Waste 10 to 15%
- Keep D.O. above 2 ppm

Be patient and conditions should be can restore normal operations. (In improved within 2 – 3 weeks, and you extreme conditions, chlorination of the Return Sludge Flow can be attempted. This process must be done very carefully or the entire process population can be damaged.)

Sewers: The recent dry period, which has embrace almost all of Illinois and our neighbors, has provided an extended opportunity to check for unusual flows that might be entering any sewers. Unknown tile connections, even water system leaks, can be tracked better with lowered water tables.

Water & Sewer

Rates: If you haven't thought of adjusting your rate structure by some type of inflationary method, ponder this one:

- Change in Consumer Price Index from 2005 to 2011 = +15. 8202%
- Average increase per

by Bill Dowell, IRWA Wastewater Technician



year = 2.6367%

• If the charge for 1000 gallons of water in 2005 was \$16.000, the adjusted estimated charge for 2012 would be \$18.953.

Interest on savings accounts didn't work that way, did it?

Call 217-820-1562 if you have any questions on this information.



Summer Time is Flushing Time

It's that time of the year when operators start exercising valves and flushing hydrants. I thought I would offer some quick tips to save lots of time; buy or make one of those speed wrenches for hydrants, locate hydrant, stomp down all the weeds around it, remove nozzle cap, turn the operating nut real fast until it stops, count to ten or fifteen, then turn the operating nut the other way even faster. If you feel the valve slam shut beneath your feet it's done, replace cap, toss speed wrench in the back of the truck and drive to the next hydrant. If you follow those steps I'm sure you will be contacting someone to help locate leaks all around town real soon. We all know that if all these steps are followed it will be a long summer repairing leaks and or replacing hydrants.

Most hydrant manufacturer's offer suggested steps as to proper hydrant flushing. I would suggest that you follow the manufacturer steps and not the quick steps in the previous paragraph. Although there are several brands of fire hydrants on the market and possibly in your system, they all work essentially the same way. The operation specifications for hydrants are quite different. If you have not collected the following information on each hydrant in your system, take along a note book and collect some information while waiting for the water to clear up. Don't forget to apply the proper lube to each manufacturer's suggesting.

- Size and type of operating nut, is it a pentagon, square, 1.5" etc.
- Direction of opening, left (counterclockwise) or right (clockwise)
- Size of hydrant valve opening: 4.5", 5.25" or 6.25"
- Number and size of hose nozzles, don't forget the type of tread
- Size of shoe connection: 4", 6" or 8"

- Brand and model number
- Flow rate, is hydrant color coded
- · Year manufactured

The standard color coding of hydrants it is recommended that the top and the nozzle caps be painted according to the following.

- Class AA: Light Blue- usually has a flow of 1500 gpm or more.
- Class A: Green- usually has a flow of 1000 to 1500 gpm.
- Class B: Orange- usually has a flow of 500 to 1000 gpm.
- Class C: Red- usually has a flow of less than 500 gpm.

Now, on to exercising valves; typically there are two styles of gate valves used today. They are double disc and resilient seated. Double disc valves have two metal discs that when in the closed position, tighten against seats to shut off the flow. Double disc valves should be operated regularly, at a minimum annually, to remove buildup on the disc. Resilient seated valves have a coating on the single disc which aids in closing completely. When operating a valve you should count the turns. By doing so you can find out what size the valve is, also to know if it is closing all the way. Is it normally open or closed, left hand thread, right hand thread and is there really a valve where the map says it is. Common valve sizes along with the approximate number of turns for double disc valves. Sometimes the hardest part of exercising all the valves is finding them.

Valve Size	Number of turns
4"	14.5
6"	20.5
8"	27
10"	33.5
12"	38.5

by Chuck Woodworth, IRWA Circuit Rider



If you can't find all the valves marked on your system map, call the office for assistance, a circuit rider would be happy to help you locate your valves. We also have valve exerciser machines, hydrant diffusers, hydrant flow testers and lots of other equipment to help make your job easier.

Be safe out there.

Word Search Answer Key TNOSUNGLASSES FBXN<u>GNIHSI</u>FN (B)√J C (W A T E R M E L O∕N D ESEDARAPWDR GVAFLOWERSU в Х CPDTH/C/B XBNHS /n/n/c М Σ Κ L. N EXDXCXOX <u>~</u>R/W ∕B N P (SXC (SXM P FXEX)) т (H\ D Т K MXSXE LT) Q S Q G R F н К SPRINK G H (Y L U J) Z W W D J Z V T G N T M M LZZL MXHYCARNI VALS Word Search

is on Page 23

Nark Your Calendars! IUNOS RIRAL WATER ASSOCIATION Gth Annual Golf Outing

WHEN: FRIDAY, August 24, 2012 10:00 a.m. Shot Gun Start

WHERE: Piper Glen Golf Club Springfield, Illinois



Last year was a sold out event. If you have not received an agenda and are interested in playing in this year's outing, you can pay by credit card online at www.ilrwa.org or please call the office at 217-287-2115 to have an agenda mailed to you. We look forward to seeing you there!!

Smiles Will Constantly Brighten Your Day!

Grinning is one of the easiest and cheapest methods to enhance one's high quality of life and the advantages from grinning reach extra than just a single individual at a time. Smiling is contagious, alterations our mood, can make us look younger and additional interesting, creates us glimpse extra successful and relieves pressure.

Grinning is contagious. When you smile, it causes others smile. It is like when you see others grinning it creates you want to smile as well. It just can make you think excellent when you see an individual smiling at you ir even just in your direction and when you smile you are doing the same for other people. You are actively passing along a great feeling via your actions and you will draw people today towards you by presenting a appearance of happiness.

Like somewhat stated above, smiling can also transform your mood. Seeing other

individuals smile adjustments your mood simply because they are presenting a seem of happiness. If you are feeling low, you ought to try smiling even if your feelings on the inside do not reflect it. It has been proven that grinning can trick your body into tricking your mood and can reverse sad or depressed feelings.

Smiling draws individuals in also simply because a smile on ones face can make them appearance additional appealing. Smiling also causes people search younger mainly because when you smile it lifts the muscles in the face. In addition, nothing is much more appealing to a potential partner then an irresistible smile, so start grinning and spread the love.

Grinning can make you extra flourishing. Even though this may be tough to believe, it is true. When you walk into function, wearing a smile you will seem extra pleasant and outgoing. It has been proven that people today who smile a lot more though on the task are less likely to be passed up for promotions. Use this bit of facts to enhance the high quality of your existence and moving ahead in your career. Your next work advancement may possibly just be a smile away.

by Whinston Sparks

If you feel stressed at operate, home, or just in general try a smile on for size. Smiling initial gives you the appearance of not being stressed and second it helps by lowering your blood pressure, boosts your immune system, and releases endorphins that make you feel excellent and melts the pressure away.

It is awesome how such a little act can transform so several lives for the much better all at once.

About The Author

Brighten someone's day by sending <u>www.eligr.com</u>. It's a sure way to make someone smile!

<section-header><section-header>Exclusively for RURAL WATER! FOR CONTRACT Your State RURAL WATER ASSOCIATION Wars State RURAL WATER SASOCIATION FOR LEE

From the Ground Up!



Building and maintaining great tanks, that's what Maguire Iron has been doing since 1915. We are now in 30 states so let us do it for you too from the ground up!



We designed it. We fabricated it. We erected it. We painted it. We maintain it.





P.O. Box 1446 Sioux Falls, SD 57101 605 334-9749 www.MaguireIron.com







NORMAN NOE, President

317-933-2274

NACE Certified Coating Inspector #1891 AWWA Life Member Norman@NormanNoeWaterTankInspection.com www.NormanNoeWaterTankInspection.com



BRASS FIRE HYDRANT WATER PRESSURE RELIEF VALVES The NORMAN NOE CO INC offers brass water pressure relief valves that are used to help relieve water main pressure when a water tank is "off line" for maintenance or emergencies. The adjustable valves are preset to 65 psi and come complete with 2-1/2 inch brass fire hydrant and fire hose discharge adapters and a 0-100 psi pressure gauge.

To order one or more valves go to www.normannoewatertankinspection.com and click on Relief Valves or call 317-933-2274



9620 Route 34, Suite C Yorkville, IL 60560 (630) 553-7750 illinois@dixonengineering.net Dixon Engineering, Inc www.dixonengineering.net 1104 Third Avenue Lake Odessa, MI 48849 · (616) 374-3221

9415 W. Forest Home, Suite 208 Hales Corner, WI 53130 (414)529-1859 wisconsin@dixonengineering.net



Keeping It Cool In the Hot Weather

Getting too hot can make you sick. You can become ill from the heat if your body can't compensate for it and properly cool you off. Heat exposure can even kill you: it caused 8,015 deaths in the United States from 1979 to 2003.

These are the main things affecting your body's ability to cool itself during extremely hot weather:

- High humidity. When the humidity is high, sweat won't evaporate as quickly, which keeps your body from releasing heat as fast as it may need to.
- **Personal factors.** Age, obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, and prescription drug and alcohol use can play a role in whether a person can cool off enough in very hot weather.

Here are some facts about which people are at greatest risk for heat-related illness and what protective actions to take to prevent illness or death:

- People who are at highest risk are the elderly, the very young, and people with mental illness and chronic diseases
- But even young and healthy people can get sick from the heat if they participate in strenuous physical activities during hot weather.
- Air-conditioning is the number one protective factor against heat-related illness and death. If a home is not air-conditioned, people can reduce their risk for heat-related illness by spending time in public facilities that are airconditioned.

You can take these steps to prevent heat-related illnesses, injuries, and deaths

during hot weather:

- Stay in an air-conditioned indoor location
- Drink plenty of fluids.
- Wear loose, lightweight, lightcolored clothing and sunscreen.
- Schedule outdoor activities carefully.
- Pace yourself.

- Take cool showers or baths to cool down.
- Check on a friend or neighbor and have someone do the same for you.
- Do not leave children in cars.
- Check the local news for health and safety updates.
- And remember your pets, they are susceptible to overheating too!



Swimming is great fun and keeps you cool in excessive heat, just don't forget the sunscreen.



Wading pools are an easy cool down for your pets too.

by the CDC



AQUA-AEROBIC SYSTEMS, INC.

www.aqua-aerobic.com | 1-815-654-2501

TOTAL WATER MANAGEMENT SOLUTIONS Adaptable for today's changing demands

Our experience in Aeration and Mixing, coupled with years of expertise in Biological Processes and Filtration Systems allows us to provide you with the most adaptable treatment solutions that offer the lowest cost of ownership. Aqua-Aerobic Systems' advanced wastewater technologies meet or exceed the most stringent effluent requirements, including nutrient removal and water reuse, and are designed to easily accommodate changing effluent demands.



AERATION & MIXING

- Range of models, sizes and options
 Proven high-efficiency and reliable
- performance
- Low maintenance, easily retrievable units
- Endura[®] Series limited maintenance motors

BIOLOGICAL PROCESSES

Batch Processes

- · Time-managed nutrient removal
- Low maintenance decanter
- Enhanced process control with integrated IntelliPro® system
- · Low cost of ownership

Flow-Through Systems

- Flow-through operation with multi-stage performance
- Enhanced nutrient removal capabilities
- Ideal for a wide range of design flows
- Unique phase separator reduces WAS volume 20-50%



FILTRATION

- OptiFiber[®] family of pile cloth media is designed for specific applications
- Disk and diamond configurations with automatic PLC based controls
 Small footprint
- · Low cost of ownership

MEMBRANE SYSTEMS

- · Time-managed, sequential aeration
- Equalization, nitrogen and phosphorus removal within a single reactor
- Enhanced process control with IntelliPro[®] system



PROCESS MANAGEMENT & CONTROL

- Provides integrated comparative analysis
- Automatic adjustment of biological nutrient removal and chemical addition
- Proactive operator guidance via the BioAlert[™] process notification program



Woody Wolff | Elgin, IL (Northern Illinois) P 224.629.4060 | wwolff@drydon.com

HYDRO-KINETICS CORPORATION

Mickey Bernard | St. Louis, MO (Southern Illinois) P 314.647.6104 | mbernard@hydro-kinetics.com



26

...There simply is no better tank

coating than glass-fused-to-steel.



Glass-Fused-to-Steel (Porcelain Enamel) is:

- A single, strong, integrated porcelain enamel and steel material Pused together at over 1500° F
- · An inert, inorganic coating that NEVER needs painting

Glass-Fused-to-Steel is not:

- A coating that needs periodic repainting to remain in operation
- An organic coating that begins to deteriorate starting day one after installation

Glass-Fused-to-steel tanks have been proven in the Field For over 60 years. The technology is so robust that a service expiration date is yet to be determined. Don't be Fooled by claims that paint and other paint-like coatings are better than glass.

IF it's NOT Fading, IF it's NOT chalking, Then it's not paint.....it's <u>Glass</u> !!

Specify quality, experience and low maintenance. Specify Aquastore® glass-fused-to-steel tanks. The choice is clear:

Call 815-899-5678 or visit www.CadyAquastore.com For more information.



920 W Prairie Drive Suite G • Sycamore, IL 60178 Ph: 815-899-5678 • Fx: 815-899-5681 davef@cadyaquastore.com • www.cadyaquastore.com

Southern Illinois Municipal Equipment CO., Inc., St. Louis, MO 314-645-2400

Northern Illinois Peterson and Matz, Inc. Elgin, IL 847-844-4405

Glass Tanks with a Heart of Steel[™] www.aquastore.com

registered trademark of Engineered Stonage Products Company







Featuring products in the following categories:

Aeration **Chart Recorders Chemical Feed Collection Systems** Electrical Flow Metering Gauges **Grounds Maintenance** Hose **Hydrants** Lab Chemicals, **Equipment & Testing** Level & Pressure Locating & Leak Detection Maintenance **Office Products** Pipe Plugs **Process Analyzers** Pumps Reference Safety Sampling Equipment Security Stormwater Tanks Tools Valves Water/Wastewater Treatment Workwear

USABlueBook has EVERYTHING YOU NEED for Water & Wastewater Operations

> Unsurpassed personal customer service and expert technical support

Over 27,000 items in stock and 95% of orders ship the same day

Nationwide distribution centers to serve you better!

★ WAUKEGAN, IL ★ LAS VEGAS ★ BOSTON ★ ATLANTA

Coming Summer 2011!



We're celebrating 20 years of service!



USABlueBook

Get the Best Treatment • 800-548-1234 • www.usabluebook.com