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The official publication of the Alliance of Indiana Rural Water

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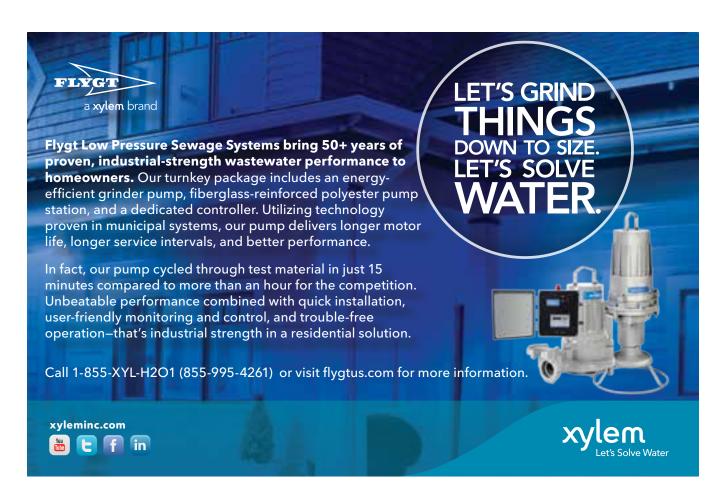


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PRESIDENT'S Message



Tim Frederick Alliance Board President

The Unsung Heroes of Indiana's Water and Wastewater Utilities

n behalf of the Alliance of Indiana Rural Water I am proud to represent the unsung heroes who have chosen a career at water and wastewater systems across Indiana. You are the professionals providing safe drinking water and/or cleaning wastewater returned to the environment to be reused again and again.

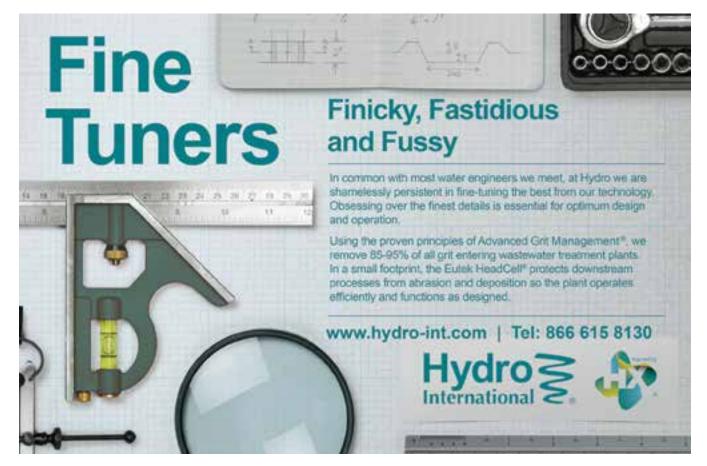
Your team may include the water plant operator, water distribution system technician, wastewater treatment plant operator, sanitary wastewater collection system technician, laboratory

technician, office manager, manager, superintendent, supervisor, accounting and billing clerk, pretreatment coordinator, storm water coordinator, etc., all professionals, demonstrating the vast knowledge needed to operate a water and wastewater utility.

It takes a 'team' to perform the many tasks in the daily routine at these utilities. Routine!? It is anything but routine; these people are specialists who make up Team Rural Water, including financial, managerial and technical aspects, all depending on one another to get the job done.

No matter what your position on Team Rural Water, you are vital to protecting public health and the environment, fostering economic development, and sustaining healthy community growth.

Someday, our community leaders may understand the invaluable contribution of providing and cleaning water 24/7, 365 days a year. As I hear over and over, "water is life!" Thank you for choosing a vitally important career as part of Team Rural Water, a team of water and wastewater utility professionals in Indiana!



A Message from the EXECUTIVE DIRECTOR



Connie Stevens Executive Director

Reach Out to Your Municipal Leaders

s we start the new year, many of us are experiencing changes that may have an effect on our utilities, such as new mayors, council members, clerks, and department heads. Keep in mind, they all have a lot to learn about their new responsibilities, and you may be able to help with this. It would be helpful if they knew what is working well and what needs to be replaced or repaired within your water/wastewater systems. Build a relationship with them

early on so they know that they can trust you to keep them informed.

Water and Wastewater infrastructure is crucial to the community you serve for public health, economic development, property value and the environment. Take them on a tour of the system and show them the good, the bad and the ugly. When was the last time your 'veteran council members' have witnessed the true condition of your infrastructure? Do you have an Asset Management

Plan (AMP)? Is there money set aside for it? We are all facing infrastructure problems, usually without adequate time or money to address them.

This is a common concern all over the country, which is why many government agencies (federal, state and local), along with water industry stakeholders, came together to figure out a way to address this problem. In May of 2007, the Environmental Protection Agency (EPA) along with six water utility professional organizations developed the Ten Attributes of Effectively Managed Water Sector Utilities. In 2011, a Memorandum of Agreement between United States Department of Agriculture (USDA) and EPA paved the way for the Rural and Small Systems Guidebook to Sustainable Utility Management, which made further use of the 10 areas. These 10 key management areas make up a framework for a well-managed utility and are considered equally important for a sustainability-managed utility. These areas are the following:

- **Product Quality** the system delivers a good product and meets its permit requirements.
- Customer Satisfaction –
 Customers are satisfied with their service. The system meets the customer's needs.
- Infrastructure Stability The system understands the importance and condition of its infrastructure.
- Community Sustainability &
 Economic Development The
 system works with the community
 and is aware of the impacts of its



actions on the community.

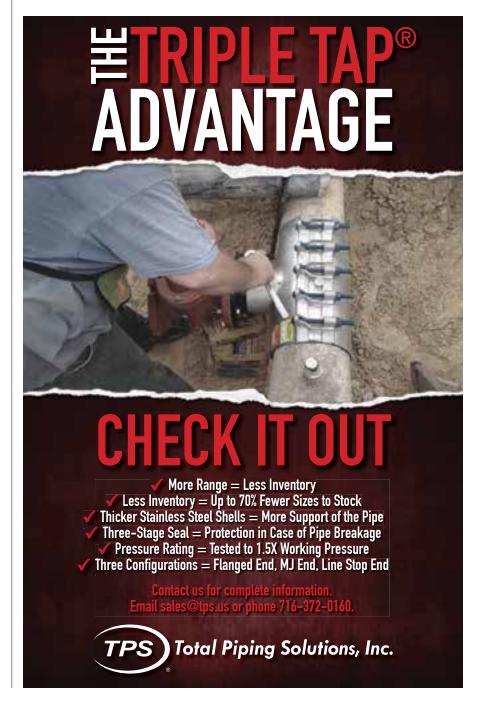
- Stakeholder Understanding and Support – The system works to build a good relationship with regulatory agencies, community agencies, and customers.
- Employee Leadership and Development – The system recruits and retains a competent and professional workforce.
- Operational Optimization of Energy and Water Efficiency
 - The system is reliable and cost effective in its operations (water loss and water audits.)
- Operational Resiliency The staff members work together to anticipate and avoid problems. The system has conducted a vulnerability assessment and developed an emergency response plan.
- Water Resource Adequacy The system ensures that it has available water for its customers' needs under all conditions.
- Financial Viability The system understands its debts, assets, and revenues.

Systems that can make improvements in any of these 10 key management areas will be able to deliver a consistently better service to their customers.

Managers and operators of water/ wastewater systems can use the Rural and Small Systems Guidebook to Sustainable Utility Management to rate achievement for each management area, rank the importance of each area, and identify critical areas for improvement.

The Alliance of Indiana Rural Water will be offering an Effective Utility Management class based on the guidebook. This class guides participants through the process of rating, ranking, and improvement, as listed above. Our 2016 Training Calendar includes the dates and locations of these classes. If you do not have one of our calendars, you can find it on our website at www.inh2o.org or by calling the office 317-789-4200. You can also get more information from the USDA or EPA website. https://www.inhao.org or

2016 Effective Utility Management Training Class					
Tue, April 12, 2016	City of Cloverdale				
Wed, May 4, 2016	Connersville Utilities				
Thu, May 5, 2016	City of Knox				
Tue, October 4, 2016	Town of Cicero				



www.inh2o.org Winter/spring 2016 | Hoosier pipeline | 9





2015

2015 Fall Conference RECAP

FALL CONFERENCE
Grand Wayne Convention Center
Fort Wayne Indiana

August 26 & 27, 2015

This year's Fall Conference was at the beautiful Grand Wayne Convention Center in Fort Wayne. The conference was attended by **335 people**, representing **104 different utilities**, and **64 different vendor companies**. Over 50% of those people downloaded our conference mobile app – which turned out to be a huge success!

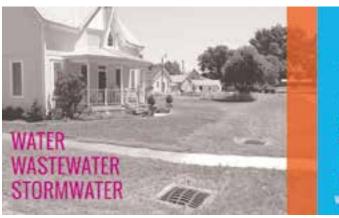
We offered up to 10 technical CEU hours for water and wastewater and even managed to have lots of fun! From the clay shoot and the 'pre-conference' dinner to the TinCaps baseball game, and exhibitor bingo – this conference was truly an all-American experience! Thank you to everyone who attended, spoke, displayed and sponsored!

Our Sportsman's Raffle was a big hit again with the grand prize of \$1,500 cash going to Jack Frisby from ENCAPSix. Some of the other great prizes included a pair of Colts tickets, a three-speed cruiser bicycle, a flat screen TV. electric smoker, a crossbow and many more!! Thank you to everyone who purchased tickets, and those who pooled for the larger prize: Allied Pump, Technical & Underwater Services, Beam, Longest & Neff, LLC; Culy Contracting, Inc.; Cummins Inc.; E-Tank / E-Pump Ltd.; Engineering Resources, Inc.; Ford Meter Box Company Inc.; FPBH, Inc.; Gripp, Inc.; GRW Engineers, Inc.; Hurst Technical Services; London Witte Group, LLC.; Midwest Meter, Inc.; Ortman Drilling & Water Services; United Systems & Software, Inc.; Utility Supply Company; and Water Solutions Unlimited.

Also, a very special thanks to our Raffle Committee – Mike Ricks, Water Solutions Unlimited; Dan Wright, FPBH Inc.; and Phil Bonneau, Ortman Drilling & Water Services, Inc. Wednesday's luncheon featured Keynote Speaker, Andrew Whelton, Ph.D., Assistant Professor from Purdue University along with our annual water taste test contest. Congratulations to Connersville Utilities who was awarded the 2015 Best Tasting Water in Indiana! A representative from Connersville will travel (all expenses paid) to Washington DC in February to compete in the Great American Water Taste Test competition and meet with Indiana's delegation.

On Thursday morning, during our hot breakfast buffet and annual meeting, we raffled off a Kindle Fire HD – to lucky winner, Sharon Eaton from Napoleon Water. Lastly, before everyone went off to the their last class of the day, we raffled off a shotgun to proud winner Tim Buchanan from Ligonier Water and Wastewater Utility.























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The Best Taste on Tap

- Connersville Utilities!

Officials at the Alliance of Indiana Rural Water have found the best-tasting water in Indiana. On August 26, 2015, the winner of a statewide competition was announced to identify the tastiest rural water in the state and, participants hope, in the nation. The competition was conducted during lunch on the first day of the Alliance of Indiana Rural Water Annual Fall Conference at the Grand Wayne Convention Center in Fort Wayne, Indiana. Participating water samples were judged on three categories – clarity, odor, and taste.

Small and rural water utilities from around the state submitted samples of their water, straight from the tap. The winner of the event was Connersville Utilities. Their water sample was chosen by judges as the most appealing. "It tasted clean, pure and refreshing," stated official judge, Liz Melvin of IDEM.

"Because of the quality of this water, Indiana has a good chance at the national taste test in Washington, DC," added Alliance of Indiana Rural Water Executive Director, Connie Stevens.

According to Manager, Mike Bottomly, "We pride ourselves in providing strict testing, maintenance, and overall quality of the water that we provide to the citizens of Connersville."

The competition is part of the **Quality On Tap!** campaign to emphasize the high quality, standards and, consequently, the taste of rural water. Winners of the state taste test will compete in a national contest at Capitol Hill in Washington, DC in early February 2016. This event is part of the Rural Water Rally, an annual legislative event for the 49 state affiliates of National Rural Water Association.

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Dear Attendee:

Please join us for our 2016 Annual Spring Conference at the French Lick Resort in French Lick, Indiana on March 16 & 17.

Here's what you can expect this year:

- A fun gathering on Tuesday evening including dinner and drinks.
- Earn up to 10 Water and Wastewater Contact Hours and receive a Conference T-Shirt!
- An Exhibit Hall filled with exhibitors where you can see all the new products related to our industry and hear about new and exciting services offered to utility professionals.
- Don't miss our Utility Administration Track available for utility boards, managers, councils, clerk treasurers and office personnel on both days!
- An Awards Luncheon on Wednesday honors the best in the industry. If you know of someone who deserves recognition, please contact us for the nomination form.
- Wednesday night's Reception in the Exhibit hall offers games, delicious drinks and food. Later be sure to join us for a **Bowling and Pizza Hospitality Event** second to none!
- The Sportsman's Raffle Grand Prize is valued at over \$2,500 and will be announced later. Also, many numerous other prizes will be up for raffle.
- A chance to win a free trip for two to the NRWA Water Pro Conference in Orlando, Florida. **Sponsored by Covalen & Midwestern Engineers**
- French Lick Resort is packed with exciting and entertaining things to do during your down time, including: a casino, spa, winery, indoor pool (open from 6 a.m. until midnight), golf courses, stables and tennis. The Big Splash Adventure Indoor Waterpark is about a minute away and offers a year-round tropical adventure for the entire family!

So, don't put off making plans to attend the Alliance of Indiana Rural Water's 2016 Spring Conference. On-line registration is now available at www.inh2o.org.

We sincerely look forward to seeing you in French Lick!

AGENDA AT A GLANCE

Tuesday, March 15, 2016

6:00 P.M. PRE-CONFERENCE HOSPITALITY EVENT

12:00 P.M. BOARD OF DIRECTORS MEETING

6:00 P.M. EARLY REGISTRATION/ 8:00 P.M. ATTENDEE PACKET PICK-UP

8:00 P.M. (Fun, Food & Drinks)

Wednesday, March 16, 2016 TO 7:00 A.M. REGISTRATION DESK OPEN 5:30 P.M. IN LOBBY 7:45 A.M. WELCOME ADDRESS **TOTAL CONTACT HOURS WEDNESDAY** COFFEE AND DOUGHNUTS 8:00 A.M. 9:00 A.M. CONCURRENT TRAINING SESSIONS TO 9:00 A.M. 9:15 A.M. Break - Foyer TO 9:15 A.M. 10:15 A.M. CONCURRENT TRAINING SESSIONS TO 10:15 A.M. 10:45 A.M. EXHIBIT HALL GRAND OPENING TO 10:30 A.M. 12:00 P.M. WASTEWATER EXAM REVIEW SESSION to ${10:45\atop11:45}$ A.M. Concurrent Training Sessions AWARDS LUNCHEON WITH KEYNOTE SPEAKER TO 2:15 P.M. WASTEWATER MOCK EXAM 1:15 P.M. 2:15 P.M. CONCURRENT TRAINING SESSIONS TO 2:15 P.M. 2:45 P.M. Break IN EXHIBIT HALL 2:45 P.M. 3:45 P.M. CONCURRENT TRAINING SESSIONS 3:45 P.M. 5:15 P.M. RECEPTION IN EXHIBIT HALL TO GAMES, FOOD, DRINKS & SPORTSMAN'S RAFFLE! TO 8:00 P.M. HOSPITALITY BOWLING EVENT (BOWLING, PIZZA & DRINKS) THURSDAY, MARCH 17, 2016 7:00 A.M. REGISTRATION DESK OPEN 3:00 P.M. IN LOBBY TO 7:00 A.M. HOT Breakfast In Exhibit Hall TOTAL CONTACT HOURS THURSDAY 8:00 A.M. OPENING REMARKS WIN A KINDLE FIRE! TO 8:30 A.M. CONCURRENT TRAINING SESSIONS 9:30 A.M. 10:00 A.M. BREAK IN EXHIBIT HALL TO 10:00 A.M. 11:50 A.M. WATER EXAM REVIEW SESSION TO 10:00 A.M. 11:00 A.M. CONCURRENT TRAINING SESSIONS TO 11:00 A.M. 11:15 A.M. Break in Exhibit Hall TO $\begin{array}{c} 11:15 \text{ A.M.} \\ 12:15 \text{ P.M.} \end{array}$ Concurrent Training Sessions TO 12:15 P.M. 12:30 P.M. **GRAND PRIZE DRAWING** LUNCH - ON YOUR OWN 1:30 P.M. 1:00 P.M. 2:00 P.M. WATER MOCK EXAM 1:30 P.M. CONCURRENT TRAINING SESSIONS TO 2:30 P.M. 2:45 P.M. BREAK - SHOTGUN RAFFLE DRAWING 2:45 P.M. 3:45 P.M. CONCURRENT TRAINING SESSIONS то

Technical Sessions What follows is a tentative list of topics and invited excellent

and invited speakers.

WEDNESDAY, MARCH 16

8:00 a.m. - 9:00 a.m.

WATER SESSION

CONTROLLING WATER LOSS WITH "LARGE METER TESTING" AND "LEAK DETECTION"

Matt Brown and Jeff Cunningham M.E. Simpson Co., Inc.

WASTEWATER SESSION

INVESTIGATION AND DEVELOPMENT OF THE MODERN, SELF-CLEANING, CIRCULAR WASTEWATER "WET-WELL"

Robert Domkowski, Xylem, Inc. - Flygt

9:15 a.m. - 10:15 a.m.

SWP FORUM

Toby Days, Alliance of Indiana Rural Water

WATER SESSION

AMR? AMI? THE CLOUD? How Does IT ALL WORK? WHAT'S BEST FOR YOUR UTILITY?

Ben Chrisiansen and Paul Nero, Utility Supply Company

WASTEWATER SESSION

ADVANCED WATER RESOURCE RECLAMATION LAGOONS: DEVELOPMENTS, TECHNOLOGIES AND FIELD EXPERIENCES

Tim Canter, Environmental Dynamics International

10:45 a.m. - 11:45 a.m.

WATER SESSION

HIGH LOADING RATE IRON AND MANGANESE REMOVAL

Bob Curley, Terry Breckenridge and Chris Savino

WASTEWATER SESSION

ACCURATE NPDES DATA REPORTING

Becky Ruark and Lynn Raisor, IDEM

1:15 p.m. - 2:15 p.m.

WATER SESSION

GROUND WATER UNDER THE DIRECT INFLUENCE: CARMEL UTILITIES' EXPERIENCE AND WHAT'S ON THE RADAR FOR OTHER COMMUNITIES

Jaimie Foreman, City of Carmel Water Utility

WASTEWATER SESSION

PRESSURE SEWERS - AN ALTERNATIVE SEWER REHAB TECHNIQUE (PART 1)

Bob Jordan, Covalen

2:45 p.m. - 3:45 p.m.

WATER SESSION

PATOKA LAKE REGIONAL WATER AND SEWER DISTRICT - PROVIDING A CRUCIAL RESOURCE TO SOUTHERN INDIANA

Deen Rogers, John Wetzel and Doug Merkel Umbaugh

WASTEWATER SESSION

Pressure Sewers - An Alternative SEWER REHAB TECHNIQUE (PART 2)

Bob Jordan, Covalen

THURSDAY. MARCH 17

8:30 a.m. - 9:30 a.m.

WATER SESSION

THE CARE AND FEEDING OF YOUR WATER SUPPLY WELLS

Phil Bonneau and Rick Ortman Ortman Drilling & Water Services

WASTEWATER SESSION

DANGERS OF ARC FLASH AND ENERGY VIEW CONTROLLER

Adam Conover, Primex Controls

10:00 a.m. - 11:00 a.m.

WATER SESSION

IDEM UPDATES - RTCR AND MORE (Part 1)

Stacy Jones, Liz Melvin and Carrie Lowe, IDEM

WASTEWATER SESSION

ONE WATER'S "ALGAE WHEEL" - A COST EFFECTIVE ALTERNATIVE FOR SMALL, **DECENTRALIZED WWTPs**

Al Strong, P.E., Commonwealth Engineers, Inc.

11:15 a.m. - 12:15 p.m.

WATER SESSION

IDEM UPDATES - RTCR AND MORE (Part 2)

Stacy Jones, Liz Melvin and Carrie Lowe, IDEM

WASTEWATER SESSION

FROM FLORIDA, USA TO HAMBURG, GERMANY: A JOURNEY TOWARD PHOSPHORUS SUSTAINABILITY Richard Radcliff, Beam, Longest and Neff

NETDMR LAB

1:30 p.m. - 2:30 p.m.

WATER SESSION

STEEL AND CONCRETE WATER TANK CONDITION ASSESSMENT INCLUDING WATER TANK ACTIVE MIXING

Marc Hansen, Utility Service Group

WASTEWATER SESSION

CAN I AFFORD TO USE THAT? **EVALUATING NEW TECHNOLOGY AND ITS** VALUE FOR SEWER AND STORMWATER INFRASTRUCTURE

Brad Boyer, Watermark Engineered Product Sales, Inc.

NETDMR LAB

2:45 p.m. - 3:45 p.m.

WATER SESSION

IDEM Cross Connection and Backflow RULES

Kristine Taylor, IDEM

WASTEWATER SESSION

EMERGING USES OF CLOTH MEDIA FILTRATION

Mark Hughes, P.E., Agua-Aerobic Systems, Inc.

Technical Registration

MARCH 16 & 17, 2016

Please print or type.

List all attendees and indicate the type of registration desired.

We encourage you to fax or email completed forms:

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Registration Rates	Mo	embei	•	Non-M	
Full Registration Two (2) days of technical sessions; and Pre-Conference Hospitality Event (Tues.); Exhibit Hall	Before Februa	A1 1ry 26,	iter 2016	Before February	After 26, 2016
Access, Awards Luncheon (Wed.); Reception (Wed.); Hospitality Bowling Event (Wed.); Hot Breakfast Buffet (Thurs.)	\$135	5 \$1	60	\$185	\$210
Wednesday ONLY Technical sessions; Exhibit Hall Access; Awards Luncheon and Reception; Hospitality Bowling Event	\$90	\$1	15	\$115	\$140
Thursday ONLY Technical Sessions; Exhibit Hall Access; Hot Breakfast Buffet	\$80	\$1	05	\$105	\$130
Spouse / Guest Registration Pre-Conference Hospitality Event (Tues.); Exhibit Hall Access; Water Taste Test Luncheon (Wed.); Reception (Wed.); Hospitality Baseball Event (Wed.); Hot Breakfast Buffet (Thurs	\$5() \$	75	\$75	\$100
PLEASE INDICATE NUMBER OF ATTENDEES PLANNING TO ATTEND WEDNESDAY'S WATER TASTE TEST LUNCHEON.		Dietar	y restrictions	and/or special requests	
Please send invoice Enclosed is my check #	13	11 _			
Visa O L "		•••••	Fxn	Date	:
MasterCard # Exp Date Exp Date Exp Date					
Signature		Tota	al §		
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Registration form must be returned to the Alliance office no later than February 26, 2016 for "Early Bird" registration prices.

Registrations will be fully refunded if cancellation is made before March 4, 2016. No refunds after March 4, 2016.

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Administrative Sessions

WEDNESDAY, MARCH 16

8:00 a.m. - 9:00 a.m.

ADMINISTRATIVE SESSION

RD APPLY

Christie McReynolds, Community Programs Specialist Rural Utilities Services of USDA Rural Development

Ditch those paper files! USDA Rural Development's Water and Environmental Programs is proud to announce the release of RD Apply, an electronic application intake system. At the crossroads of environmental awareness and processing efficiency, RD Apply is a responsive, flexible program that will make paper files a thing of the past. Offering real time feedback, application checklists, digital forms, and the pre-population of data for future applications, RD Apply is ushering a new platform to connect our staff with the communities we serve.

9:15 a.m. - 10:15 a.m.

ADMINISTRATIVE SESSION

THE UTILITY'S ROLE IN ECONOMIC DEVELOPMENT - 2016 UPDATE

Jon W. Craig, Midwestern Engineers, Inc.

The class will provide a basic overview of current trends in Local Economic Development efforts and how water and wastewater utilities are successfully participating in efforts for the mutual benefit of the utility and the community. We will discuss deal making, place making, regional collaboration and educational opportunities.

10:45 a.m. - 11:45 a.m.

ADMINISTRATIVE SESSION

WEBSITES - THE WORKHORSE OF THE 21ST CENTURY STREAMLINING COMMUNICATION, COMPLIANCE & CUSTOMER SERVICE ... WHAT ARE YOU WAITING FOR?

Shannon Farmer, Rural Water Impact.com Shelly Howay, Municipal Impact.com

Are you juggling so many tasks in your office that you never seem to be able to get anything done? Learn compliance requirements for posting your CCR, streamline communications to your residents, and increase customer service levels - walk away with ideas and answers you can implement immediately saving you time and money.

1:15 p.m. - 2:15 p.m.

ADMINISTRATIVE SESSION

LEGAL PROBLEMS FACED BY YOUR COLLEAGUES, HOW TO PREVENT THEM FROM IMPACTING YOU (PART 1)

Parvin Price, Bose McKinney & Evans, LLP Peter Campbell King, Cline, King & King, P.C.

Review various legal issues that have impacted Indiana's water utilities in the last few years. Based on actual legal matters, learn steps to take to avoid these problems, and tools available to protect the utility if these problems occur.

2:45 p.m. - 3:45 p.m.

ADMINISTRATIVE SESSION

LEGAL PROBLEMS FACED BY YOUR COLLEAGUES, HOW TO PREVENT THEM FROM IMPACTING YOU (PART 2)

Parvin Price, Bose McKinney & Evans, LLP Peter Campbell King, Cline, King & King, P.C.

See above description.

THURSDAY. MARCH 17

8:30 a.m. - 9:30 a.m.

ADMINISTRATIVE SESSION

A LOOK AT GOVERNMENT REGULATIONS, INFRASTRUCTURE FUNDING AND THEIR IMPACTS ON JOBS

What follows is a tentative list of

topics and invited speakers.

Scott Dompke, GRW

Recognize reasons for project requirements when using government money.

10:00 a.m. - 11:00 a.m.

ADMINISTRATIVE SESSION

UTILITY RATE COMPARISONS AND CURRENT TRENDS IN RATES AND PROJECT FINANCING

Doug Baldessari, Umbaugh

Information relevant to utilities regarding water and sewer user fees and rates and also information regarding utility financings.

11:15 a.m. - 12:15 p.m.

ADMINISTRATIVE SESSION

THE TRIALS AND TRIBULATIONS OF KEEPING YOUR CUSTOMERS INFORMED AND HAPPY

Bill Etzler, Engineering Resources, Inc.

This course is a "how to" primer on dealing with customers and service issues from the perspective of real world experiences. The course will show how you can take a perceived negative event and make it a PR win for you and your utility.

1:30 p.m. - 2:30 p.m.

ADMINISTRATIVE SESSION

OCRA GREEN INFRASTRUCTURE CURRICULUM & TRAINING PROGRAM (PART 1)

Sheila McKinley, Christopher B. Burke Engineering, LLC

The Green Infrastructure Curriculum and Training program is an effort to develop a curriculum and deliver a training program to provide local governments and their project partners' information to design stormwater projects that integrate green infrastructure practices. These services will assist local governments in stormwater mitigation planning and make them more competitive when submitting applications for OCRA's Stormwater Improvements Program (SIP) funding.

2:45 p.m. - 3:45 p.m.

ADMINISTRATIVE SESSION

OCRA GREEN INFRASTRUCTURE CURRICULUM & TRAINING PROGRAM (PART 2)

Sheila McKinley, Christopher B. Burke Engineering, LLC

See above description.

WINTER/SPRING 2016 | HOOSIER PIPELINE | 21

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MARCH 16 & 17, 2016

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Wednesday ONLY Administrative sessions; Exhibit Hall Access; Awards Luncheon and Reception; Hospitality Bowling Event	\$90	\$115	\$115	\$140
Thursday ONLY Administrative sessions; Exhibit Hall Access; Hot Breakfast Buffet	\$80	\$105	\$105	\$130
Spouse / Guest Registration Pre-Conference Hospitality Event (Tues.); Exhibit Hall Access; Awards Luncheon (Wed.); Reception (Wed.); Hospitality Bowling Event (Wed.); Hot Breakfast Buffet (Thurs.)	\$50	\$75	\$75	\$100
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Registration form must be returned to the Alliance office no later than February 26, 2016 for "Early Bird" registration prices.

Registrations will be fully refunded if cancellation is made before March 4, 2016.

No refunds after March 4, 2016.



Recognizing the outstanding contributions of rural water & wastewater professionals is one of the highlights of the Alliance's Annual Spring Conference.

Each year the Alliance of Indiana Rural Water presents awards in recognition of outstanding performance in four categories.

Award winners in each category will be presented with a plaque and a special award winner polo shirt on Wednesday, March 16 during the Awards Luncheon. Please take advantage of this chance to recognize someone for a job well done!

To assist the Alliance Awards Committee in selecting deserving individuals, please fill out the form below; attach additional pages if necessary. **Nominations must be received by February 14, 2016.**

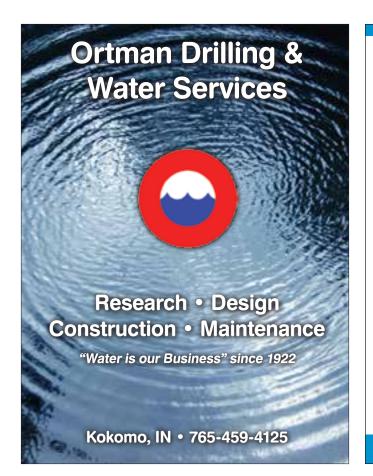
Ple	ease select one:
	Water System Operations Specialist of the Year Wastewater System Operations Specialist of the Year
	Manager of the Year Administrative Professional of the Year
No	minee's Name:
	b Title: Shirt Size (circle one): S M L XL 2XL 3X
Sy	stem Name:
No	minator:
	lephone Number of Nominator:
1.	How long has nominee been employed with system?
2.	What are the responsibilities of the nominee in his/her current position?
3.	What is/are your primary reason(s) for nominating him/her for this award?
4.	Please indicate what type of training the nominee has received:
5 .	Please list awards or certificates the nominee has received:
3 .	What contributions has the nominee made to the improvement of his/her system?
В.	Will the nominee be attending the conference? Yes No
	One award in each category will be presented. You may nominate one person in each of the four categories.

Mail to: Alliance of Indiana Rural Water, P.O. Box 789, Franklin, IN 46131 Fax: 317-736-6676

Nominations MUST be received by February 14, 2016 to be considered.

(Please copy this form and submit one for each person you wish to nominate.)

 ${}^{\star}\text{The Alliance reserves the right to publish names and photos of all awards winners in future publications}.$





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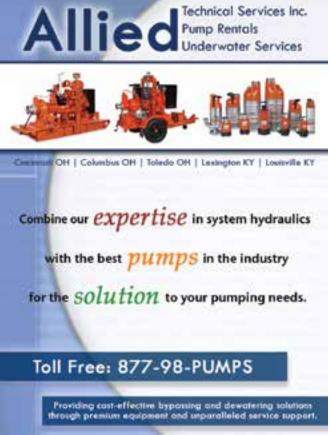
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2015 Scholarship Golf Outing Recap

The 2015 Scholarship Golf Outing was a fun-filled success! This year we had blue skies and a pleasant breeze to play a full day of golf with 20 teams. Our famous longest drive contest was conducted **while sitting on a toilet!** Teams donated \$20 to the scholarship fund for a chance to hit the longest drive... the only catch was you had to sit on a toilet while hitting the ball. The prize for the longest drive was a new golf bag; but the biggest reason to participate was that on the next shot participants could drop their ball 165 yards from the hole on a par 5 – not to

mention all the fun we had and great pictures it created!

Thank you to all our sponsors and everyone that attended to help make the golf outing a success!

Congratulations to the Winners!

Longest Drive Winner – Phil Beckman Closest to the Pin – Mike Muse Tom Speer won \$216 in the 50/50 Raffle, and donated it back to the scholarship fund!

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Scholarship Application

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A. Personal Informa	ition				
Name: (Last)	(Fi	rst)		(MI)	(Gender) M F
Address:					
City:	St	ate:		<u> Z</u> ip:	
Phone:	Er	nail:			
B. Member Informa	tion (Applicant must be a depe	ndent child (of an Alliance voting member)	
Utility Name:					
Employee Name:					
Relationship to employe	e:				
_	rmation - (Transcript must be addemic awards, memberships			ceived dat	ing back to your
School Name:	Gr	aduation Da	ate:		
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City:	St	ate:		Zip:	
GPA:	SAT Score (total):_		Class Rank:		out of:
D. College / Univers	sity Information				
Is this your first year of h	nigher education? Yes	No	(If "No," college transcript is	required)	
		If "No," inc	dicate credit hours completed	d:	
		If "No," inc	dicate credit hours required to	o graduate	»:
School Name:					
Address:					
City:	St	ate:		Zip:	
Please indicate:	4 Year College/Universi	ty			
	Vocational/Technical Sc	chool			
	2-Year Community/Jun	ior College			
	Other, Specify:				
Major Course of study:					
·	(Priority will be given but is	s not limited	to water/wastewater related	studies)	

Continued on other side...

E. Financial Information			
Please indicate which of the following i	ncome ranges matches your gr	oss family income:	
Under \$30,000	\$30,000 - \$50,000	\$50,000 - \$70,000	Over \$70,000
If you are receiving other financial aid p	•		
Name:		Amount:	
Name:		Amount:	
Name:		Amount:	
If there are any family circumstances the	nat influence your need for finance	cial assistance, please describe:	
F. Essay			
On a separate page in 250 words or le	ss. (Please type)		
Write a brief essay on your goals as the	ey relate to your education, care	eer, and future plans.	
G. Certification			
In submitting this application, I certify the False information will result in revocation		complete and accurate to the best of	of my knowledge.
Applicant's Signature:		Date:	
Parent's/Guardian's Signature:		Date:	
OFFICIAL RULES			
This grant will be made to defray the confidence of Indiana Rural Water. Disburs invoice.) The scholarship money will be United States, a resident of the state of eligible, applicants must complete the January 29, 2016. All applications will school activities and on grade point avocommitment, and quality of leadership career goals and financial need. Applications are final. Application material permission to use recipient's name and must plan to attend an accredited school.	sement of the money will be made paid directly to the scholarship of Indiana and a dependent chi application form in its entirety are be first screened on the basis of the erage. Scholarship recipients will responsibilities in community are ants will be evaluated on a community and decisions of the committee dor likeness for purpose of proposed in the fall of 2016. Recipients	de upon presentation of proof of en winner. Applicants must be a citize Id of a voting member system end return it to the Alliance by the end leadership responsibilities in committed by the end school activities, awards, honors aparative basis at the sole discretion eshall be confidential. Acceptance motion. No transfer of scholarship is swill be notified by mail.	arrollment (transcript or en or legal resident of the mployee. In order to be atry postmark deadline, munity activities and umber, length of s, academic records, an of the committee. All of scholarship constitutes a permitted. Applicant
Family members of employees of the A			rectors are not eligible.
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Franklin, IN 46131

NRWA WaterPro

OKLAHOMA CITY, OKLAHOMA

By Laura Vidal, Marketing / PR Director

At each Alliance Spring conference Covalen and Midwestern Engineers team up to sponsor an all-inclusive prize package to the National Rural Water





Association's WaterPro Conference. This year's winners were Tim Baur and his lovely wife, Libby from Tell City, Indiana, and the destination for NRWA's WaterPro Conference was Oklahoma City, Oklahoma.

Tim and Libby had a great time experiencing not only the NRWA conference, but also exploring Oklahoma City! This year, I was able to attend the conference as well and snapped some photos of the two lucky winners. Both were well deserving and very enthusiastic about winning this prize package. I was so pleased to be able to experience a few pieces of the trip with them, such as the Oklahoma City National Memorial and Museum and the WaterPro exhibit hall!

Covalen and Midwestern will raffle off another all-inclusive trip for two to NRWA's WaterPro Conference at our Spring Conference – March 16 and 17, so make plans to attend now because this year's NRWA's WaterPro Conference destination is

Orlando, Florida; September 12-14! *







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Rural Development Lends a Hand

By Jacki Ponti-Lazaruk Assistant Administrator, Water and Environmental Programs, Rural Utilities Service, USDA Rural Development

The US Department of Agriculture (USDA) Rural Development has low cost infrastructure loans and grants available now to help you provide quality water and waste services to your customers. We stand ready to assist you! USDA Rural Development has a long, rich history of working with rural America's smallest and most needy communities to provide loan and grant assistance for essential water and sewer infrastructure projects, Since 2009, we have helped more than 18 million rural residents receive new or improved water and waste disposal services, emergency water assistance, and technical help. Our assistance has been as varied as the need: for new or upgraded water and sewage treatment plants,

equipment, wells, and even water itself for drought-inflicted communities.

Our program started as a partnership with rural communities. It was designed with an understanding of how good, clean, affordable, and reliable service interconnects with every other aspect of life in rural America and the knowledge of how important rural contributions are to the national economy. Today, 78 years later - the issues surrounding water are no less critical to our country, and the need for programs like rural development's water program remains high.

We are proud of our successes – but we know we can do better. We realize that the funding process for USDA water and waste loans and grants can be time-consuming and we are working to change that.

Our goal is to ensure our loan and grant applicants receive funding decisions within 45 days of submitting a complete application. We have already demonstrated this can be achieved. Grove City, Minnesota sought funding in FY 2015 from Rural Development to replace its more than 50-year-old sewer system. In just 30 days from the time they submitted a complete application. the project was reviewed and funds were obligated. In Georgia, the Town of Resaca received loan and grant funding for its sewer project in 48 days from the date a completed application was on hand at Rural Development. Mustang Special Utility District had a similar

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experience when funds were obligated in 57 days from completed application.

USDA Rural Development funded more than \$1.6 billion in loans, grants and guarantees in all 50 states over the last year. We have funding available now under the Continuing Resolution, and our success depends on helping you, our rural partners, receive the funding you need to provide essential water and waste services.

To reach our goal, we are taking measurable steps to improve and expedite our customers' experiences. Through new streamlined underwriting processes, use of improved technologies, collaboration and outreach, as well as increased employee training and engagement, we are decreasing loan processing times.

Many timesaving improvements have already been implemented. On September 28, 2015 we launched RD Apply at the NRWA Water Pro Conference in Oklahoma City. RD Apply is an online system that allows you to complete and submit your applications online. You can register to use the system on any smart phone, tablet, or laptop.

The system is designed with our applicants and their consultants in mind. In Oklahoma City, hundreds of community leaders, engineers and circuit riders signed up and were able to test out the system. The feedback was overwhelmingly positive. "Easy to use" was the most used way to describe RDApply. Even the NRWA President registered and started an online application at the conference! The system will result in faster processing times and an easier-to-understand filing process. If you are interested in learning more, contact your state Rural Water Association, or USDA at 202-253-8060.

In 2014, our streamlining efforts began in earnest with the introduction of new procedures for faster processing Emergency and Imminent Community Water Assistance Grant (ECWAG) applications. By utilizing this new streamlined process, towns such as tornado-ravaged Gifford, Illinois were able to receive much-needed ECWAG grants to help replace a destroyed water plant and damaged water tower in record time. Our guaranteed loan program is currently being revamped

and streamlined. We will have a new user-friendly guaranteed loan process in place in the coming year.

We are also intensifying our employee training and customer outreach efforts, ensuring all staff members have the knowledge and skills to deliver our programs efficiently, effectively, and consistently.

Collaboration with other state and federal agencies remains a priority. Our partnership with the Environmental Protection Agency (EPA) on the new sustainability guide, also known as 'Workshop in a Box,' has proven to be very successful. Together, over the last 24 months, we have trained more than 1,600 trainers to facilitate the workshop. Workshops have been held in more than 140 locations across the country. Through this and many more collaborative efforts, we are building capacity and leveraging knowledge and financial resources.

To learn more about how Rural Development can help meet your water and waste needs, please contact your local USDA office. I look forward to working with you and the rural communities we all serve!

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THE **PROS** AND **CONS** OF PRIVATIZATION

By Toby Days, Source Water Specialist

Failing infrastructure, aging equipment, stringent regulations, increased operating cost, are challenging municipalities just as the cost of employee benefits and pensions are soaring. Police and fire protection, water and sewer, trash pickup, road paving, and snow plowing are services that must be delivered, but revenue and tax bases have been stagnant, if not declining, for years.

Where does the money come from to pay for all these services? Raising taxes and rates to make up for years of shortfalls can only go so far. Hiking them too high may cause a spike in delinquencies, chase homeowners and businesses out of town, or deter new ones from coming in, and lead to even less revenue.

When communities have increases in expenses without a concurrent increase in revenues, some start borrowing and end up in debt. The problem in many cities is that the underlying financial problem was not addressed early on and it snowballed, and now communities have this wild animal that's out of control. How can an ailing city still provide needed services to its citizens?

Throughout the past decade, the water industry has experienced a flurry of merger and acquisition (M&A) activity in which private, or investor-owned utilities (IOUs), have stepped in to acquire struggling public operators. Large players such as American Water, Veolia, and Aqua America have acquired dozens of small operations to grow their customer base, take advantage of economies of scale, and raise profit margins.

In the United States, the big commercial players in the field of water privatization include:

- Veolia Water North America, a subsidiary of France's Veolia Environment. According to the organization's website, the North American division serves more than 14 million people in 650 communities "through public-private partnerships with municipalities or governments," and in 2002 Indianapolis reached a \$1.5-billion, 20-year agreement with Veolia to run the city's waterworks. The contract is the largest public-private services partnership of its kind in North America.
- United Water, a subsidiary of France's Suez Environment, which serves more than seven million people in 24 states and operates 240 municipal water systems, including three of the nation's largest contract services operations.
- American Water Works Company, Inc., which was owned by German conglomerate RWE and currently serves 15 million people in 32 states as well as Ontario, Canada.
- Aqua America, which provides water and wastewater services to approximately three million people in 13 states.

PRIVATIZATION DRIVERS

In an industry where expansion is the key to profitability, the scarcity of cheap capital has put small public utilities in jeopardy. Drastic decreases in employment and household income during the 2008 recession resulted in lower cash available to municipalities, in turn making infrastructure investments for expansion extremely unlikely. Financing expansion with debt has become more difficult as well due to a rise in interest rates from their near-zero levels after the recession.

This inability to access capital makes privatization one of the few survival options that these utilities have.

In addition to capital requirements for expansion, the EPA estimates that over the next 20 years \$300 billion to \$1 trillion in infrastructure improvements are required nationwide to improve, repair or replace drinking water and wastewater facilities (US General Accounting Office, 2002). Under current economic conditions, small public utilities cannot handle the financial burden of these upgrades and instead need private companies with greater liquidity and more assets to step in and improve infrastructure.

POLITICAL PUSHBACK

There is some pushback and criticism of water privatization by certain special interest groups. These groups cite corruption, desire for excessive profits and poor water quality as issues. The EPA and General Accounting Office (GAO), however, published reports on water infrastructure privatization, endorsing and supporting privatization as a way to bridge the gap between current spending levels and money needed for infrastructure investment over the next 20 years. (US Environmental Protection Agency, 1999)

EXAMPLES

In Indiana alone there are over 25 municipal water and sewer systems that are operated by privately owned utilities. In some communities, private-sector management helped trim bureaucracies and replace decaying infrastructure, local officials say. However, in Indianapolis, Evansville, Ft. Wayne, and other cities, privatization has been accompanied by corruption scandals,

environmental violations, and a torrent of customer complaints.

In Fort Wayne, Indiana parts of the city get water from a municipal system while other areas use Aqua Indiana: an Aqua America subsidiary. Complaints from Aqua Indiana customers have spurred the city to begin buying back portions of the Aqua Indiana system and folding them into the city's service.

In 2010, the City officials of Evansville, Indiana decided to end its service with Indiana American Water after a 17 year contract to run their water and sewer system. Poor service, loss of revenue and failure to maintain the City's infrastructure were just some of the reason for ending the use of a private company to operate Evansville's water and sewer system.

Another dilemma with privatization is the likelihood of increased costs.

"The private water companies in the US cost, on average, 21% more than public water utilities in providing water," said John Keesecker, a senior organizer for the non-profit consumer organization Food & Water Watch, who works with community groups across the United States to prevent the privatization of public water resources. "And although private municipal water systems are regulated at the state level, the public service commissions at the state level often rubber-stamp rate increases, and allow companies to make profits, which require dramatic rate increases." (The Public Works, 2010)

For example, in Indianapolis, which Veolia Water North America cites as a successful partnership, residents were furious over a requested 35% rate hike in 2010. The request came just three months after the water department won permission to charge a 10.8% emergency rate increase. Within the first year that Veolia took over operations, customer complaints nearly tripled and the company admitted mailing more than 15,000 incorrect bills. Inadequate maintenance caused hundreds of fire hydrants to freeze, hampering efforts to put out fires that consumed a church and other buildings.

Then, on January 6, 2005, heavy rains swelled the White River and triggered a chain of system failures at the White River Treatment Plant.

Officials issued a boil-water advisory, 40,000 schoolchildren took an unscheduled holiday, and residents of the nation's 12th largest city learned they could no longer take their tap water for granted.

Increasing cost, poor service, and citizen outcry spurred the city of Indianapolis to pay \$29 million to cancel contractual services with Veolia in 2011.

OUTLOOK

Even if the economic environment becomes more favorable to small public utilities (i.e., interest rates stay low as household income increases), public utilities face a considerable challenge in repairing, replacing, or upgrading current infrastructure while simultaneously managing growth necessary for profitability. To meet these growing demands, privatization is expected to be a continuing trend in the industry, as private utilities acquire small public utilities with the intent to improve and expand infrastructure.

In these times of economic crisis, it is important for cities to examine ways to raise revenue, but we must proceed

with extreme caution when it comes to natural resources like water. Water is life, not a commodity to be auctioned off to the highest bidder.

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US Environmental Protection Agency, Environmental Finance Program. (1999). A Guidebook of Financial Tools Section 4B. Public-Private Partnerships and Optimization Case Studies. www.epa.gov/ efinpage/guidbk98/gbk4b.htm. See more at http://reason.org/news/ show/122661.html#ref2

The Public Works. (2010). How the Remunicipalization of Water Services Saves Money. Fact Sheet. December 2010. http://www.foodandwaterwatch.org/sites/default/files/The%20Public%20Works%20 FS%20Dec%202010.pdf ★





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GPEASE IS THE WORD

By Kevin Wenzel, Wastewater Circuit Rider

When you walk through your plant do you notice grease build up? Do you notice grease balls floating on the surface of your tanks, oxidation ditches, or clarifiers? Or, clinging to their walls? Do you notice grease coming in at your headworks? If you answered yes to any of these questions, you might want to think about creating a plan to eliminate the apparent grease problem.

The first step is to check your sewer use ordinance and see what power you have. Does the town have the authority to inspect restaurants, schools, hospitals, or any other food establishments? Does the town have the authority to implement fines? If there isn't any language in your ordinance, it must be created by a lawyer and voted on by the town council.

The second step is to create a document to send to the food establishments asking about their grease removal systems and what they do with the grease. Do they have proof where it goes? Do they keep receipts on file?

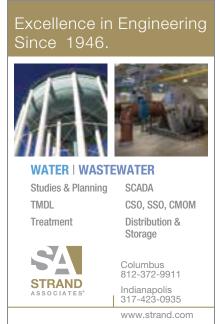
The third step is to inspect the establishments, and observe their grease removal practices. Educate them on what grease does to your plant. Help them create a way to dispose of their grease that benefits both parties. Have them give the plant a copy of their receipt every time grease is hauled away.

When I worked for a town, there was a lift station next to a pizza hut that was always filled with grease. Our staff would get down inside the lift station and scrape the grease off the walls at least four times a year. The lift pumps were always having problems.

The town finally sat down with the pizza hut restaurant and informed them of what their grease was doing. They began to have their grease pumped more often and sent us the receipts to show proof. When our staff was out checking lift stations, they would swing by and check the grease interceptor at the pizza hut. The grease problems went away and a good partnership was formed.

In conclusion, if your plant has a grease problem, set up steps to eliminate the problem before it causes major issues later on. In fact, all plants should have a grease pre-treatment program in place. The Indiana Department of Environmental Management (IDEM) does not like to see tanks with grease on them. Officials may recommend that your plant have a grease plan anyway.*





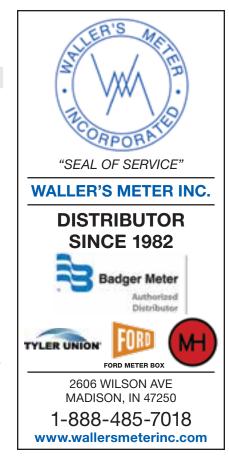
Newly Elected Clerks and Board Members

By Joe Frazier - Northern Water Circuit Rider

We all just had local elections. Some of us will be welcoming new clerk treasurers, board members, and or mayors. Naturally, they will have ideas on how they can make things better. I know what you are thinking as a water or wastewater specialist... Am I going to keep my job? Will they make changes that make my job even more challenging? Are they going to cut my budget?

When I was an operation specialist the same thoughts went through my head. Sometimes we even wonder why they can't just leave things alone. The best advice I can give you is to approach the newly elected officials with an open mind. It is your job to educate them on what it takes for you to do your job as an expert to provide the best quality on tap that you can, and the best waste removal that you can. Show them the cost of what it takes to run your systems, what is required of you by the Indiana Department of Environmental Management (IDEM) to run the system, and, most of all, how important you are to your system (sell yourself).

One way to do this is to get them to an Alliance of Indiana Rural Water training for board members and clerks. There, they will receive guidance on their responsibilities. They will also learn what your job entails. If there has been some talk about selling the water and wastewater system in order to save money, then it is important that you show them how crucial/beneficial it is to keep the water and wastewater systems. Illustrate the need for a "Phase-in Rate Increase" for the Water and/or Wastewater bills such as: 2.5% each year for five years, then re-evaluate during the fifth year in order to plan for the next 3-5 years. Putting rate increases off until they are forced to do updates to the system, will require a 50% to 150% increase at one time and no one likes that.







Revised Total Coliform Rule

By Sherri Winters, Water Programs Director

nless you've been living under a rock, you have been hearing about the *Revised Total Coliform Rule (RTCR)* for at least the past two years. The RTCR can be located in the Federal Register (78 FR 10269, February 13, 2013, Vol. 78, No. 30). However, if you prefer not to go through the trouble of perusing the source document, perhaps the quick reference guide will help you understand what it really means to you and your public water supply. We have a link to this guide on our webpage, in the 'Resources'



section: www.inh2o.org/?page_id=151. In the meantime, I will highlight most of what it means to you, as well as what steps the Indiana Department of Environmental Management (IDEM) has been taking in preparation for implementation of the RTCR.

As many of you know, I spent six years at IDEM prior to my return to the Alliance. For at least two years prior to my departure from IDEM, we were discussing what this revised rule would mean to all public water supplies in addition to how IDEM would need to make changes to assist with compliance. IDEM, the Alliance, and all other drinking water trade organizations have been providing training and/or educational materials on the RTCR for at least the past two years.

The purpose of the RTCR is to increase public health protection through the reduction of potential pathways of entry for fecal contamination into distribution systems. It establishes a maximum contaminant level (MCL) for *E. coli* by using *E. coli* and total coliforms to initiate a 'find and fix' approach to address *fecal* contamination that could enter your distribution system. It will require assessments to identify sanitary defects and corrective actions for those defects.

The rule is effective April 1, 2016. Prior to that date, every public water supply, community, non-community and transient systems, must submit an updated site sampling plan to IDEM. This site sampling plan must include all routine sample sites *and* two repeat sample sites for *each* routine sample site. These repeat sites must include one within five service connections

upstream and one within five service connections downstream of the routine sample site. It is imperative that you locate all of your routine and repeat sites on a map plus supply a list of physical addresses for those sites. Keep in mind that your routine sites must be representative of your overall distribution system. **Do not** include a routine site at a dead end or at any location for which you are not able to take a repeat upstream and downstream. Routine sites should not be at your source, this does not represent your distribution system. These site sample plans must be submitted to IDEM prior to April 1, 2016. The sooner you submit these plans, the sooner IDEM can review them for approval and/or revisions.

When taking samples, if any routine or repeat sample is TC+, that sample must also be analyzed for *E. coli*. (Your labs should routinely do this, but double-checking with them is probably a good idea.) If any routine or repeat sample is deemed *E. coli*+, you must report this *E. coli*+ sample result to IDEM by the end of the day that you are notified.

If any routine or repeat sample is TC+, you must take repeat samples within 24 hours of notification of these results. At least three repeat samples must be taken: one at your TC+ routine site, one within five service connections upstream of the routine site and one within five service connections downstream of the routine site. (You must remember to take a Ground Water Rule (GWR) source sample upon receiving your first TC+ routine sample. If that sample

is negative for TC, you are done with the GWR sampling.) For each subsequent TC+ or E. Coli+ sample result, routine or repeat, more repeat sampling must be completed.

One big change with this rule is that assessments will be triggered if a combination of routine and repeat TC+ and/or E. Coli+ sample results occur. I will not list those combinations in this article but will again refer to the RTCR quick reference guide found on our website, as it will best depict these scenarios. There are two levels of assessments that can be triggered, Level 1 and Level 2.

A Level 1 assessment can be performed by the public water supply owner or operator. This assessment is meant to discern if there are sanitary defects, improper microbial contamination barriers, sampling techniques, etc., that may have contributed to the positive sample results. A Level 1 assessment form will be provided by IDEM. The assessment form must be completed and submitted to IDEM within 30 days of the triggered assessment. Any defects found on this

assessment must be corrected within this 30-day period or within a timeframe approved by IDEM if more time is necessary for the correction.

A Level 2 assessment is a little more serious in nature due to continued TC+ and/or E. coli+ issues. This more detailed assessment must be performed by the state or a state approved entity. Your system owner or operator cannot perform Level 2 assessments on your own system. It is the responsibility of your system to ensure that this Level 2 assessment is performed regardless of the entity you choose. As with a Level 1 assessment, the form must be submitted to IDEM within 30 days of the trigger. Level 2 assessments can be triggered if your system has had two Level 1 assessments within a rolling 12-month period.

There are more requirements for the RTCR, i.e., seasonal systems startup procedures, provisions for IDEM regarding inspections on ground water systems under 1,000 population, and an explanation of what constitutes a major violation, to name a few.

In conclusion, submitting your site sample plans as soon as possible will help you and IDEM transition as smoothly as possible. Finding and correcting sanitary defects as soon as you are aware of them will help reduce triggered assessments, MCLs and Major Violations. Ensuring that you take all of your routine and repeat samples as required can also reduce the potential for triggering these actions. Because this is a change for all public water supplies (approximately 4,000 in Indiana), IDEM has made many internal changes to implement this rule and in turn, to assist your systems with compliance of the rule.

If you have any questions about the RTCR, what you must do and when, please do not hesitate to call the Alliance staff to assist you. Always utilize your IDEM inspector throughout this process. Maintaining good communication with IDEM (inspectors and/or compliance staff) will be a must when reporting routine and repeat positive sample results. If you haven't already done so, establish that connection sooner rather than later. You will be glad you did.★





Just One Drop, and Then Some

By Carl Brown, President, GettingGreatRates.com

every one of your water customers used just one drop of water every month, calculating adequate and fair bills would be easy.

Total up all expenses for a year (add a little extra for building some reserves), divide by the number of customers, and divide by the billing frequency.

No need for meters. No billing program. Just do the simple math once a year, put that number on every invoice and you are done.

But no one signs up to get just one drop of water each month. They want a lot of water. And everybody wants a different amount of water. And how much one customer got last month is going to be different from what they will get next month.

Shakespeare, or maybe it was somebody else, once said, "Utility rate structure fairness is in the eye of the beholder." The trick is getting most of your customers to agree that they

are beholding adequate and fair rates. It helps if they really are.

It turns out that adequate and fair rates are hard to come by. It takes some serious math and well-reasoned assumptions to get there. Since the whole rate-setting process is too much to bite off here, let's consider just one important part of the picture – recapturing the cost of infrastructure.

'One drop' simply stands for the base cost of infrastructure needed to be able to supply water (or sewer, or anything else) at the lowest practical volume. Many small utilities assess a connection fee, often called a 'benefit unit' fee and here called a 'tap' fee, at the time a new customer connects or buys into the system. One drop infrastructure costs and tap fees are related, or at least they should be.

In the old days, lots of rural water districts and small towns, and some not so small cities' systems were designed around one- or two-inch diameter distribution lines. The cost of building those lines, plus the infrastructure needed to fully charge those lines with potable water at the required psi is (roughly) the one drop infrastructure cost. Since all customers are going to want their one drop, every customer should pay an equal share of this cost. Their share of this cost should be figured into their tap fee. The math for such a tap fee is illustrated in **Table 1**.

A tap fee of \$2,500 may be a bit expensive for some young families and small businesses starting out. They will want to pay it over time. Within reason, that is fair. To accommodate that, you could recapture basic infrastructure costs by way of a (monthly) surcharge to the minimum charge, to be paid over 20 years. That math is the same as in **Table 1**, with two exceptions. One year becomes 20 years and one payment becomes 12 payments (monthly) per year, as shown in **Table 2**.

Table 1: Basic Infrastructure Cost (One-time Equal Tap Fees)

One Drop Infrastructure Cost:					\$1,000,000
Number of Customers:					400
Billing Periods per Year:					1
Years to Payoff:					1
Cost	Customers	Bills	Years	=	Tap Fee
\$1,000,000	400	1	1	=	\$2,500

Table 2: Basic Infrastructure Cost (Equal Monthly Surcharges)

	\$1,000,000				
Number of Customers:					400
	Billing Periods per Year:				
Years to Payoff:					20
Cost	Customers	Bills	Years	=	Surcharge
\$1,000,000	400	12	20	=	\$10.42

There once was a small rural water district, formed to serve small farms and a few small businesses. The district assessed the same low benefit unit fee to every new customer because they were all about the same.

Eventually, some of those small farms switched to operating confined animal feeding operations (CAFOs). A few of the businesses grew large. Now their use and especially their **peak** use was running the water tower dry. Everyone was asked to pay an equal fee to build a new, bigger water tower. But was this fair? Did the small farms and businesses that stayed small create this need?

If you wanted to get fancy you could split this cost, say, half to be paid up front as a tap fee and half to be paid over time as a \$5 per month surcharge.

About now you are probably starting to think that this example has some holes in it:

- Infrastructure for 400 customers only costs \$1,000,000? Probably not, but this amount was chosen so a side-by-side comparison that follows will be an 'apples to apples' comparison.
- In Table 1, a one-time tap fee infers that infrastructure only needs to be built once. No. It will have to be replaced periodically so a one-time tap fee only gets you started. The real math is harder.
- The federal and state governments are always coming up with more requirements for infrastructure and those cost more money, not less.
 So infrastructure costs also increase over time by more than a simple inflation factor.
- **Table 2** assumes borrowing \$1,000,000 without having to pay interest. Wouldn't that be nice? In real life, interest expense happens.

These and other realities can be dealt with using a bit more math and some well-reasoned assumptions. Do not let these complicating factors stop you from you from fixing unfair rates.

Equal one drop fees are fine for part of the infrastructure cost. But what about the cost of capacity that exceeds one drop? After all, not all customers exert the same demand on the system. Some exert very high peak or seasonal demands. If you assess the same total tap fee or surcharge to all customers, you will overcharge young families and small businesses and undercharge the big, peaky customers. Intuitively, you might think

this is not a big deal. But for many systems, even small ones, it is a very big deal.

The solution to this problem is to equate the infrastructure cost each customer causes with an indicator that tracks consistently with peak demand. Such an indicator exists – water meter size.

The simple fact is, a four-inch diameter meter can pass more water in a given time at a given pressure than a 5/8-inch meter. Thus, if a peaky customer needs a four-inch meter for those occasions when they will use lots of water, they should pay more of the infrastructure costs needed to satisfy peak flows than the 5/8-inch meter customer.

Doing the math in your head you might think that a four-inch meter can pass about six times more flow than a 5/8-inch meter. You would be wrong.

The American Water Works
Association (AWWA), the authority
on such things, has determined that
a four-inch meter can pass about
75 times more flow than a 5/8-inch
meter. With that in mind, let's go to
the math of meter size-based tap fees
and surcharges.

To get meter size-based fees for peaking capacity you determine the cost of that peaking capacity and then divide by the square inch capacity of meters the system can charge at peak sustainable flow. That will give you the cost for one square inch of meter. From that, calculate the fee

Table 3: Peak Flow Tap Fee per Square Inch of Meter Capacity

Infrast	One tructure (\$1,000,000	
400 - Their Tot	em can S - 5/8" Me al Capac quare Inc	eters, city in			122.7
Billing Peri	ods per '	Year:			1
Ye	ars to Pa	ayoff:			1
Cost	Square Inches of Meter	Bills	Years	=	Tap Fee per Square Inch
\$1,000,000	122.7	1	1	=	\$8,149

Table 4: Peak Flow Monthly Surcharge per Square Inch of Meter Capacity

1000 1000 1000 1000					-	
Infrast	\$1,000,000					
System can Serve 400 - 5/8" Meters, Their Total Capacity in Square Inches:					122.7	
Billing Periods per Year: 12						
Years to Payoff: 20						
Cost	Square Inches of Meter	Bills	Years	=	Tap Fee per Square Inch	
\$1,000,000	122.7	12	20	=	\$33.95	

Which Systems Need Meter Size-based Fees?

- Any system that has relatively high infrastructure costs – they recently built or will soon build a major upgrade or replacement and are or will be carrying debt,
- Any system that has a relatively large number of 1½-inch or larger diameter meter customers,
- Any system that has even a small number of six-inch meter customers.
- Any system that has 1/8-inch or larger meter customer,
- Any system that has a relatively high number of customers that irrigate lawns and landscapes, and
- Any system that is adding customers rapidly, especially larger meter customers.

When your utility allows a new customer to connect to the system, staff should determine the appropriate meter size to serve their needs and require installation of that size meter. Thus, the basis for each customer's 'share' of infrastructure costs required to satisfy peak flows based upon their meter size, will be set correctly from the beginning.

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Table 5: Meter Sized-based Tap Fees and Monthly Surcharge Fees for Each Meter Size

Meter Size in Inches	Meter Capacity in Square Inches	Meters of This Size System Can Serve	Rate per Square Inch	Capacity Multiplier Compared to 0.625 Inch Meter	Tap Fee by Meter Size	Surcharge per Square Inch	Monthly Surcharge by Meter Size
0.625	0.307	400.0	\$8,149	1.0	\$2,500	\$33.95	\$10.42
0.750	0.442	266.7		1.5	\$3,750		\$15.63
1.000	0.785	160.0		2.5	\$6,250		\$26.04
1.500	1.767	80.0		5.0	\$12,500		\$52.08
2.000	3.142	25.0		16.0	\$40,000		\$166.67
3.000	7.069	9.2		43.5	\$108,750		\$453.13
4.000	12.566	5.3		75.0	\$187,500		\$781.25
6.000	28.274	2.5		160.0	\$400,000		\$1,666.67
8.000	50.265	1.4		280.0	\$700,000		\$2,916.67

for a 5/8 (0.625)-inch meter and then multiply that by the AWWA multiplier for each meter size. **Table 3** shows the calculation of the peaking tap fee for one square inch of meter capacity.

Table 4 shows the same calculation, except this time it converts the tap fee amount to a monthly surcharge rate per square inch of meter.

Table 5 shows the resulting tap fee and minimum surcharge bills for different meter sizes based upon the fee rates calculated in **Tables 3 and 4.**

With the addition of **Tables 3, 4** and **5**, this example changed. Instead of demonstrating one drop infrastructure fees, it now demonstrates peaking infrastructure fees.

But systems do not have one or the other. They have a combination of level infrastructure costs and peaking infrastructure costs. So let's say this system has \$1,000,000 of each. And let's say those costs are going to be recovered using only monthly surcharges – level surcharges for the level costs and meter size-based surcharges for the peaking costs. The resulting total surcharges for each meter size are shown in **Table 6**.

The large meter customer is not going to like this structure. But it is much fairer than assessing every customer the same fee amount. And as cost recovery through infrastructure surcharges goes up, the regular minimum and unit charges can go down. That improves rate structure fairness even more. And, it helps to level out the utility's income stream without burdening small meter customers with excessive minimum charges.

As you can see, peaking infrastructure cost billed on a meter size basis *is* a big deal in these examples. It probably is in your situation, too.

Again, you may be picking at this methodology. For example:

 You may not want to base the calculations on an estimate of level and peaking capacity infrastructure costs. Instead, you may want to base

One important reason for calculating capacity costs of customers is so you can learn what you would be giving away if you allowed a free or discounted connection. For example, if a large water user proposed to move into your area if you would just give it a free eight-inch water meter connection, based upon the costs in **Table 5**, you would be giving that company a one-time gift of \$700,000. Then, once the original system capacity you gave the company had to be replaced, you would be giving that company a monthly bonus of \$2,916.67, for as long as that company stayed around. Unless, of course, capital improvement costs went up, in which case you would be giving the company more. Of course, the company is not just going to ask you for a free water connection. It is going to want a free sewer connection and lots of other things. At some point the cost of buying more jobs and taxable property and sales can become a negative return investment. Without doing the tap fee and surcharge calculations, you might negotiate your way into a bad deal.

Table 6: Level Surcharge for "One Drop" Cost Plus Meter Size-based Surcharges for Peaking Capacity Costs

Meter Size in Inches	Level Surcharge	Meter Size-based Surcharge	Total Surcharge	
0.625	\$10.42	\$10.42	\$20.83	
0.750	\$10.42	\$15.63	\$26.04	
1.000	\$10.42	\$26.04	\$36.46	
1.500	\$10.42	\$52.08	\$62.50	
2.000	\$10.42	\$166.67	\$177.08	
3.000	\$10.42	\$453.13	\$463.54	
4.000	\$10.42	\$781.25	\$791.67	
6.000	\$10.42	\$1,666.67	\$1,677.08	
8.000	\$10.42	\$2,916.67	\$2,927.08	

them on each customer's percentage of use of the system's production. You can do that. That method is not as direct and fair, but it is easy to retrieve the data needed for the calculations.

- You may not want to collect an entire year's worth of capacity costs in the form of tap fees in the early years if your utility is adding customers rapidly. To do so would make customers that connected early pay costs that later connecting customers rightly should pay. With a little more math you can ramp up tap fees to fix this problem.
- You may want to keep the math easier by assessing the basic infrastructure costs as a level tap fee (which may ramp up) and the peaking costs as a minimum charge surcharge based on meter size. That is a logical methodology and the way the author usually does these calculations.

If you have concluded that this one aspect of rate setting is uncomfortably complex, welcome to a large club. Add this task to all other aspects of appropriate rate setting and you will be up against a serious challenge. But set rates correctly and you will do your ratepayers, and your utility, a world of good. It's worth the extra effort so look into it.

Carl Brown is President of GettingGreatRates.com and Carl Brown Consulting, which specialize in water, sewer and other utility rate analysis and do-it-yourself rate setting tools. The firm also serves as the RATES Program rate analyst for the Kansas, New Mexico, North Dakota, Virginia, and Wyoming rural water associations. Contact: (573) 619-3411; carl@gettinggreatrates.com. ★

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very three years the Indiana Department of Environmental Management (IDEM) field inspectors are required to give water systems a Sanitary Survey Inspection. Everything is going great during the inspection until they ask you to see your updated Emergency Response Plan (ERP). In the back of your mind you ask yourself when was the last time you updated it as you search through drawers and on shelves to find it. Then, after it is located, the inspector reviews it and finds that some information such as emergency phone numbers have not been updated since the last time the survey was conducted three years ago. The inspection just went from great, to, well... you know.

The ERP is not something you fill out and put on the shelf to collect dust. It is a living document that needs to be reviewed annually at the very minimum, to be updated with any new contact information or emergency procedures that have changed during the year. This document becomes instrumentally priceless in emergency situations, whether they are natural or manmade. Emergency scenarios need to be included in the plan, such as what to do if a tornado takes out the electric power lines to the treatment plant and they won't be repaired for days. You say to yourself, "I'll just fire up the generator

at the plant and we can operate off of that, no problem." Ok what if you are on vacation, have a family emergency to address, or you are incapacitated and can't be there to fire up the generator and run the plant. What happens then? Do other people in your organization know what do in that event? Who do they call to get fuel for the generator? What do they need to do to keep the system up and running?

A good ERP is one that explains in simple step-by-step procedures the operation of the plant, daily lab testing procedures and other steps that need to be taken to insure that your system can operate and produce safe potable water for consumption. Other organization employees who have a limited knowledge of the system can use the plan to run the system. Or, another certified operator who does not have a working knowledge of the day-to-day operation of your system can use it until you can return to work.

Each person in the organization, including board members, who could possibly be put in the situation of using the emergency operation procedures for the operation of the water system should read the plan, sign off that they have reviewed it, and know where the plan is located. They should also be involved in tabletop exercises of mock emergency scenarios so they can have

a basic understanding of what needs to be done if a situation should occur.

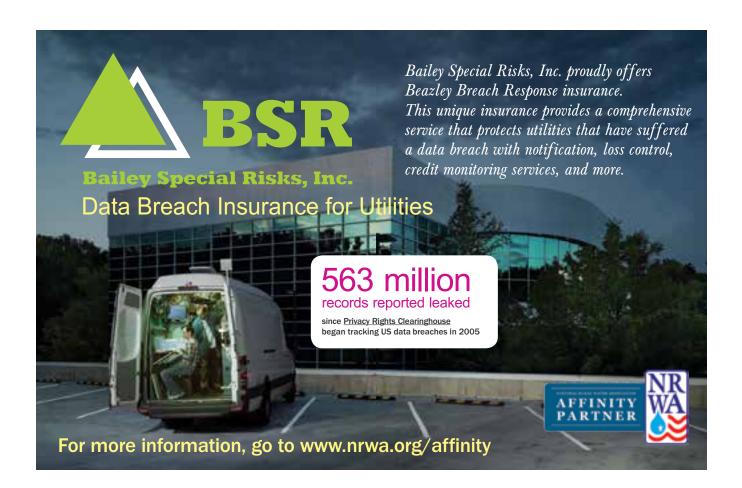
If unusual situations should occur during the normal operation of the system where different procedures were used to correct the problem, those can be added to the plan in an appendix at the end. That way, if the situation reoccurs, the procedures may be used again to fix the problem quickly.

If you have an ERP and it is up to date, it is a good idea to have more than one copy of it available at different locations in the system in case the original plan is destroyed or cannot be located. Remember this plan is confidential and should not be made available to the public.

Both water and wastewater systems should have an ERP for emergency situations as well as a Vulnerability Assessment Plan (VA) that guides each organization to look at their system in order to see where they are secure and where they are vulnerable and the steps that they can take to make their system more secure. VAs and ERPs are also required to be completed by Rural Development in the loan and grant process.

If you have not developed a VA or ERP we have easy-to-use templates available on our website at *inh2o.org* under resources. We would be happy to assist to you in the development of the plan.★

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I wanted to take a moment to express my gratitude to your organization and, in particular, to Kevin Wenzel for his tremendous assistance, especially this year. As you are aware, our previous operator resigned early this year. As a result, two of my staff, with only cursory knowledge of wastewater treatment and collection, had to rise to the occasion. I attribute their success not only to their strong work ethic, but equally to the assistance provided by Kevin, on location and by telephone. Kevin also continued to be an integral component during the productive, albeit short, tenure of Matt Rippey, whom we hired as Shipshewana operator for treatment and collection.

This past summer, after Matt left for another opportunity, daily operations once again fell to my staff. Included in the team was our summer intern, Brian Rupp, a very knowledgeable Michigan Technological University engineer student who did much of the daily and weekly testing and maintenance for the facility – again under Kevin's guidance. Since hiring our new utilities superintendent (in training) Sean Neeley, we have relied heavily on Kevin's assistance in significantly improving the entire facility's ability to meet and exceed IDEM standards. The significant operational improvements indicated in our November 4 inspection are clearly a result of Kevin's leadership, knowledge, and persistence.

Kevin also brought a philosophy of plant organization and cleanliness that had been sorely missing for years. Our lab is clean, organized and continues to reflect ongoing improvements. Our testing is consistent and timely. Procedures are documented and the testing records are accessible for IDEM inspectors and other staff members. Kevin's suggestion to implement new methodology such as the use of polymer in lieu of ferric acid treatment is proving more effective.

Thanks to Kevin's leadership and experience, Shipshewana Wastewater Treatment plant and collection system staff responded to requirements, thereby avoiding exposure to possible 'formal enforcement action' by IDEM and substantial monetary fines.

We applaud the Alliance for having staff members like Kevin Wenzel. Your staff's work in assisting operations like the Shipshewana Wastewater Treatment facility and collection system should be recognized by both the state and national agencies for critical 'boots on the ground' assistance and leadership to communities such as Shipshewana.

Mike Sutter, Town Manager, Town of Shipshewana

A special thank you to Gordon Meyer for helping find a couple of leaks. The first one was under blacktop, but not surfacing. It went through fill sand around newly installed surface water drain tile and into a cistern, then into the basement to a sump pump. For several months, before anyone suspected a leak, the sump pump would run every four minutes.

Gordon used his bionic stethoscope and pinpointed the area of a corporation stop for a meter service next door. As digging progressed, no water showed up until we broke through the last eight inches of fill sand. The distance from the leak to the sump pump was about 150 feet. The service line at the stop is now repaired and the sump pump barely ever runs.

The second leak was also under the blacktop and Gordon almost gave up, but kept zeroing in on an area. Sure enough, he found a small, difficult-to-hear pinhole in the plastic service line.

Thanks to the Alliance for making this service available and thanks again to Gordon Meyer. Great job! Well done!

Melvin Craig, LMS Superintendent, Aurora, IN



We get LETTERS

I worked eighteen years as the maintenance/operations worker at Churubusco Wastewater Treatment plant. When I became Superintendent a few years ago and I had many questions about the running of a sewage plant, Kevin Wenzel would stop by to help. If he didn't know the answer, he would find it and get back to me. He would also make connections between me and other superintendents so that we could compare plants.

Mr. Wenzel has helped me with QC in my lab, setting up the Net-DMR, pretreatment programs, and researching cheaper options of removing sludge. Sometimes he stops by and we just talk about the wastewater industry and compare ideas. He always keeps me up to date on the Alliance's upcoming training.

Once again, I want to thank the Alliance of Indiana Rural Water for all the help they have given me since I have become superintendent. Along with Mr. Wenzel, their trainings, conferences, and expos, have helped me tremendously.

Bob Gray

The Town of Fort Branch, IN appreciates all the work and training provided by Rex Blanton. He was able to fully train our new wastewater operator on all the phases of testing as required by IDEM. Rex Blanton also taught our operator how to electronically file the required DMRs and MROs. He also enabled me to electronically sign for these reports as required by an agreed order with IDEM. Additionally, he recommended what type of testing equipment the Town should have, which greatly upgraded our lab. Everything he did enabled us to get back in compliance with IDEM. In summary, his training was invaluable to us.

Tom Wallace, President of Town Council

We would like to thank the Alliance of Indiana Rural Water for their assistance during the Vigo County fifth grade field days at the Vigo County Fair Grounds. Seelyville Water Works was contacted by the Vigo County Soil and Water Conservation District to educate 1,147 children about the importance of clean, safe, drinking water.

Toby Days took three days out of his busy schedule to set up the aquifer model and help our operator teach these classes. Without your organization's assistance, it would have been a great undertaking for our operator.

Finally, we wish to thank all members of the Alliance for their continued support and the important role they play in educating and representing smaller utilities. We appreciate all you do for us.

John Wade, Council President; Jerry Reynolds, Council Member; Jerry Jones, Council Member; Brent Spier, Town Manager; and John Allen, Operator.







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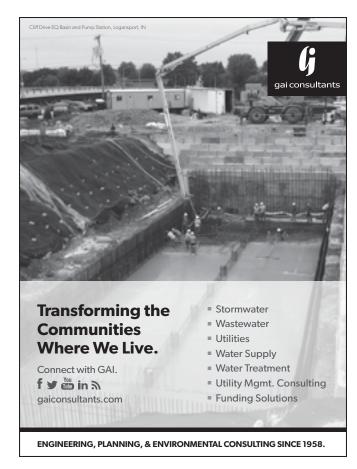
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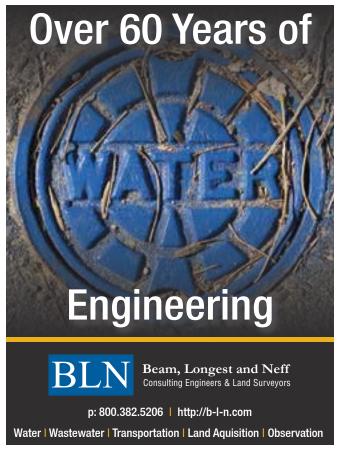


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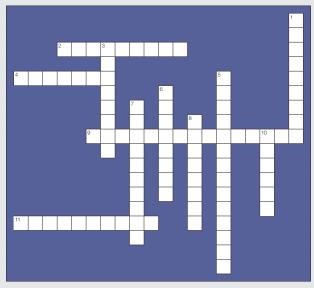


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Wastewater Treatment



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7. WASTEWATER 8. AERATION 10. GREASE 1. DIGESTION 3. BACTERIA 5. MICROORGANISMS 6. EFFLUENT

DOWN

2. TURBIDITY 4. AEROBIC 9. DISSOLVED OXYGEN 11. STORM SEWER **ACROSS**

ACROSS

- 2. The amount of cloudiness of a normally clear liquid due to the suspension of solid particles.
- 4. Life or natural processes that require an environment with oxygen.
- 9. The amount of molecular oxygen dissolved in water.
- 11. A separate sewer that carries rain and melted snow from street runoff.

- 1. The biological decomposition of organic matter in sludge by anaerobic or aerobic microorganisms in the wastewater.
- 3. Single-celled microscopic organisms that may be used in a variety of biological treatment processes.
- 4. Microscopic animals and plants of simple cell structure that feed on the wastes in wastewater to remove organic pollutants.
- 6. Wastewater flowing into a treatment process or treatment plant.
- 7. The used water and solids that flow to a treatment plant.
- 8. The process of adding air in wastewater treatment to provide oxygen for microorganisms and to keep solids in suspension.
- 10. Oily or fatty matter.

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