

MARI NERASTRUCTURE

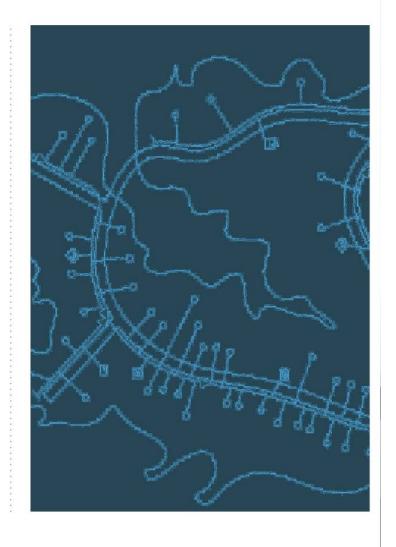
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SUMMER/FALL 2017

The official publication of the Alliance of Indiana Rural Water

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Tim Frederick Alliance Board President

Highly Important Message from Me to You!

Small Towns and **Rural Communities Funding**

Presently, the most important issues are USDA Rural Development and EPA funding. The new Washington administration is attempting to make drastic cuts in many different areas of our Nation's budget. But why water? "Water is Life!"

This funding is very important to small towns and rural communities that face challenges in building, operating, and maintaining the necessary infrastructure to continue to flourish and maintain a high quality of life. This is why it is very important that each and every one of you take an active role communicating the importance of water and wastewater to your legislators at the State and Federal levels. Take the time to get INVOLVED!

Highly Skilled Retiree Replacements

Another challenge facing the water and wastewater industry is the number of highly skilled maintenance,

administrative, and management personnel who are retiring. Consequently, it is imperative to have some type of succession plan in place that includes training and knowledge sharing.

The Alliance of Indiana Rural Water is developing an apprenticeship program to help meet the needs of the training plan. Staff qualifications can differ from plant to plant which makes it more difficult to develop a one size fits all training program. Facilities can cross-train people to help fill the gaps until the replacement water/ wastewater professional obtains the necessary license and enough knowledge to perform the job for their facility.

The upside of the retirement issue is that the 'supply and demand' for highly skilled water/wastewater professionals may trigger an increase in the wages for this industry.

Public Appreciation for the Value of Water

As water/wastewater professionals we need to develop and communicate

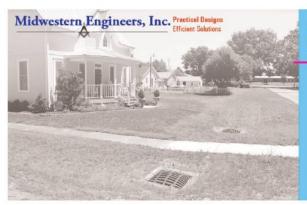
a great water outreach program for our customers. The water outreach program can provide insight on the challenges of providing safe drinking water and the challenges of cleaning wastewater to reuse again and again.

If we can teach our customers about the value of water and develop public support, then maybe they will understand the regulations that govern our utilities, the need for water/ wastewater infrastructure funding, rate increases, capital improvement projects, competitive wages - the list can go on and on.

Farewell

I will be retiring at the end of 2017, so this is my farewell to a great bunch of people who are an important part of the water/wastewater industry. Even though my career has had its occasional challenges over the past 22 years, overall it has been very rewarding.

It has been a pleasure representing everyone who works in the water/ wastewater industry, people who are too numerous to name; the operators, office staff, maintenance technicians, administrators, vendors, regulatory people just to name a few groups. However, there are several special people I would like to recognize with whom I have been more closely involved throughout my career: my Staff at the Steuben Lakes Regional Waste District as well as Connie Stevens and Ted Stubbs. Thank you to ALL those involved in this industry! Water is Life! *



CORE COMPETENCIES



Indiana Team Work During a Flood Emergency

he end of May 2017 rains caused extensive flooding in the West Lake Regional Sewer District's (WLRSD) area of service. Roads were closed and residents were asked to leave their homes because of the severity of the flooding. WLRSD serves an area that includes Jones, Waldron, Steinbarger, and Tamarack Lakes, which includes about 450 customers. The collection system consists of a combination of vacuum system, low pressure grinder pumps, and

gravity that flows to a 0.145 MGD treatment plant. The District is located near Wawaka, Noble County, Indiana. John Shoudel, Maintenance Manager; Cindy Wick, Office Manager; and Mr. Miller, past President of West Lakes had been fighting the flood waters since before Memorial Day 2017.

Mike Seigel and Steve Stewart of Tri Lakes RSD had already been helping WLRSD for three days. (These maintenance technicians are experts in vacuum collection systems so they were a big help to John.) When an underground vacuum pipe failed and they needed even more help, Cindy called the Alliance of Indiana Rural Water. In order to get them immediate assistance, they recommended calling Tim Frederick, President of the Alliance of Indiana Rural Water and Superintendent of a neighboring system – Steuben Lakes Regional Waste District.

Willing and able, Tim had two employees (Mike Klavinski and Mike Reid) who volunteered to dig up the pipe. Upon their arrival, everyone started working together to excavate the damaged pipe. Things were going smoothly until they came across two pipes that were **not** shown on the prints or in the construction pictures. The trench box could not go

any deeper because it was resting on top of these pipes. Since it was uncertain what these pipes went to, we could not risk cutting them. An attempt was made to excavate deeper, but water and sand flowed under the trench box causing the sandbagged area to partially fail. Excavating had to cease for fear of losing the sandbagged area.

The team then switched gears to see if they could get one vacuum pit operational while plugging off the side that had the damaged pipe. Mike Seigel

removed the vacuum valve from the damaged side plugging off those pipes. Three local teenage volunteers were instrumental in expediting this process. The Noble County Highway Department then brought their Ditch Witch trailer mounted vacuum in to vacuum out the receiving manhole. With the damaged side blocked, this allowed the remaining vacuum pit to function properly. West Lake RSD is waiting on the flood waters to recede in order to replace the blocked vacuum pit.



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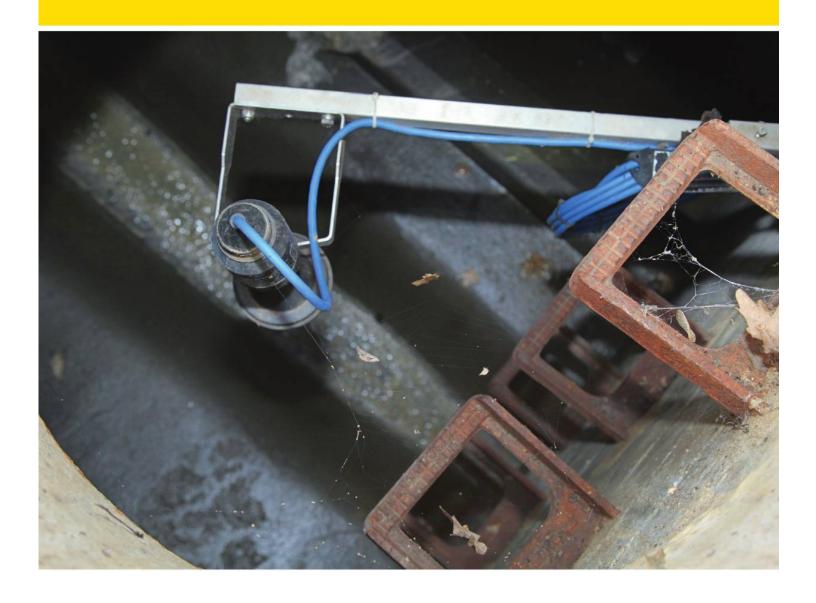
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This small rural community did what was necessary to abate well and water pollution by installing a small municipal sanitary sewer collection and treatment plant system. Many times these small rural communities struggle to administer, operate, and maintain their systems on a daily basis, not to mention during an emergency! Once again, rural communities come to the aid of their neighbors to assist during these challenging times. Thankfully, local residents along with entities like the Tri Lakes Regional Sewer District, Steuben Lakes Regional Waste District, Noble County Highway Department and the Alliance of Indiana Rural Water jump in to help during an emergency situation like this flood.

Office manager, Cindy Wick, stated, "This has been a very challenging time for the folks around the lakes. Many homes have been flooded. This experience has lead us to make changes and additions to our Emergency Response Plan."

It was a great "Team Rural Water" effort from all those involved over many days to restore sanitary sewer service to West Lake RSD customers. *



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Connie Stevens Executive Director

Legislation-Budget Cuts and Their Connection to Rural Water/Wastewater

t has been an interesting year for rural America. Remember, what goes on at the national level does affect us at the state level. Allow me to start with the NRWA Rally in Washington DC.

First, five Alliance Board members, Andy Croyle from Farmland - Indiana's Water Taste Test winner - and I, traveled to DC to meet with our Indiana Legislators from every District. We were there to talk about the needs and concerns of water and wastewater for rural and urban communities. This seemed to go well, we had all good responses and promises to keep safe drinking water in the forefront for rural communities. All of us felt like we were heard and it was a successful trip.

Then on March 16, the President released his First Budget, which included the proposal for Congress to eliminate the U.S. Department of Agriculture's (USDA) Water & Waste Disposal Loan & Grant Program. NRWA sends the message out to all the states to step up and contact our congressman/congresswomen to tell our stories for the need of USDA Water & Wastewater Programs. Many of you sent letters and some of you joined me in a

meeting with the congressional staff to tell about your successes and that there is still a great need for this program. Thanks to you... it worked! At least for now until September 30, 2017.

On May 23rd, we were notified of the President's fiscal year 2018 federal budget request, which calls for the elimination of all the water and wastewater programs within the U.S. Department of Agriculture's Rural Utility Service (RUS). Meaning, all the accounts that fall under the RUS Rural Water and Waste Disposal accounts, such as the loan and grant funding programs, circuit riders, wastewater technicians, revolving loan funds and other set-asides have been identified for elimination. The President's budget proposal states, "Rural communities can be served by private sector financing or other federal investments in rural water infrastructure, such as EPA's State Revolving Loan Funds (SRFs)." While this budget request would eliminate nearly \$500 million for RUS rural water and sewer projects; it only requests an additional \$4 million for the EPA SRFs to fund such projects.

Keep in mind that the U.S. Environmental Protection Agency (EPA) has identified regionalization, consolidation and privatization as a solution for small drinking water and wastewater utility affordability challenges. Also keep in mind that many in the President's Administration. including some of our local congressional representatives, believe that privatizing water utilities would be more efficient. However, there is nothing inherently more efficient or more economical in the operation of a private water utility versus a public-governmental water utility. We believe that all decisions regarding privatization and consolidation should be left to the local citizens' discretion. We do not think any new federal regulatory policy at the expense of local government control and choice for privatization or consolidation would be beneficial to local communities or their citizens.

NRWA has had a presence at the capitol every day. Besides our DC staff working behind the scenes, there has been testimony by several rural water folks to the U.S. House of Rep. Subcommittee on the Environment. They addressed the push for regionalization and privatization. They talked about "Appropriate Partnerships" and how they can work. Steve Fletcher, NRWA President, testified that "there are regionalization and consolidation of small community water/wastewater systems occurring now. We support the concept and encourage these partnerships when it makes local economic sense because of growing economies of scale result in lower cost to the consumer than operating independent systems. When communities believe consolidation will benefit them,





they eagerly agree with these partnerships. However, if communities are coerced to consolidate, one can almost guarantee future controversy. We urge you to allow local governments the authority to choose when to merge, consolidate or enter in to a partnership. If a community is out of compliance with the Safe Drinking Water Act, civil enforcement can drive a community to a compliance solution. However, they should be able to choose their preferred compliance solution whether it be new treatment, regionalization, technical assistance, government changes, etc."

You can view Steve's entire testimony on our website. It covers much more than I could put into this article and I think you would be very interested in how much it sounds like our situations here in Indiana. Some of you may remember meeting Steve at our Fall Conference last year or our Spring Conference this year. Speaking of our conferences, all of the proceeds from those nice raffle prizes we have at our conferences go to support our DC Staff. When I say "our," I mean all of the Alliance of Indiana Rural Water membership.

There will be some big cuts made for Budget FY 2018 and no one knows what that outcome will be. It is very important that we all contact our local representative and let them know how important rural utilities are to us. This can be done through emails, phone calls or letters. We may need to do follow-up calls as well. Every legislator representing Indiana needs to hear from us. They do tend to listen to the people who vote in their district. Your hard work and efforts continue to make the difference.

I leave you with a quote from Chairman Frelinghuysen. "As outlined in the Constitution, the Congress, not the Executive Branch, has the power of the purse."

Rest assured that NRWA (our) DC staff is staying on top of this 24/7. There are no guarantees, especially when there are so many groups out there, vying for the same pot of money. If you have questions or would like to share your thoughts on our representation of the rural water and wastewater communities, do not hesitate to contact me.





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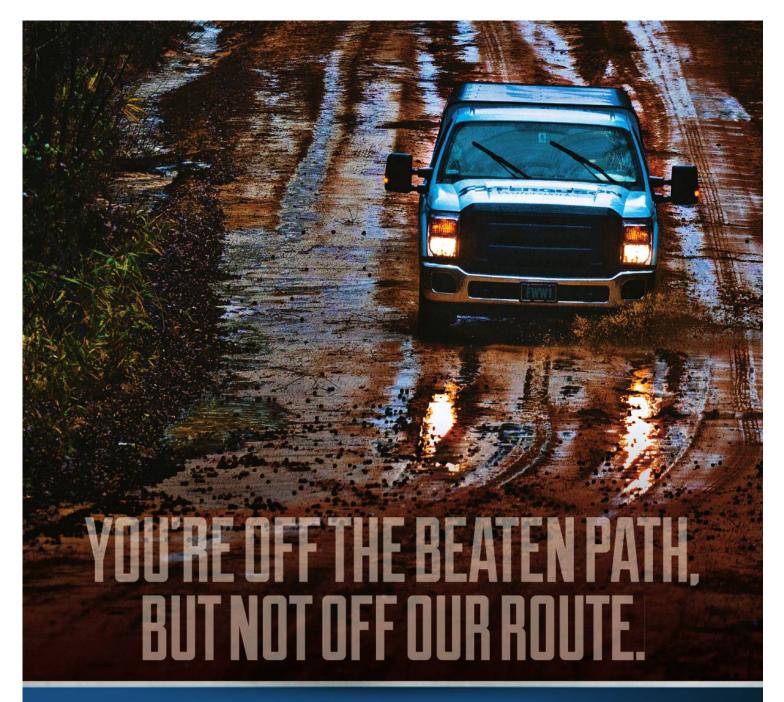
Just a couple examples of our members celebrating Water Week

(held the first full week of May each year).









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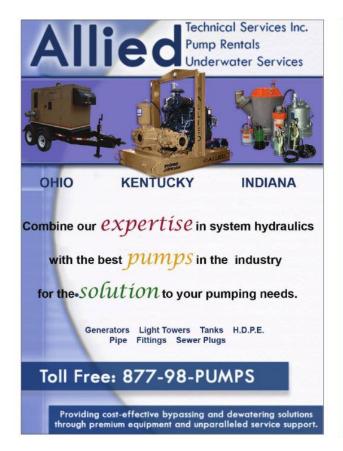


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2017 SPRING CONFERENCE RECAP



hanks to you, we surpassed last year's record with 785 people in attendance! Thank you to everyone who participated in the conference at the beautiful French Lick Resort.

We welcomed everyone on Tuesday evening with dinner and drinks; it was a great time to mingle and get the "lay of the land." Wednesday morning we hit the ground running and participants started off to their special track of classes – administrative, water or wastewater.

That afternoon our Awards Luncheon began with a special message from Keynote Speaker, IDEM Commissioner, Bruno Pigott, just before we honored the best of the best in the industry! Wednesday evening included our exhibitor reception complete with a photo-booth, food, drinks, and prizes. We also held round one of our Regional Taste Test Competitions. Patoka Lake Regional Water District will advance to the Best Tasting Water in Indiana contest to be held in Fort Wayne at the Fall Conference. As if that wasn't enough, we ended the evening with pizza, bowling and drinks! It was a great time to wind down from a full day of classes, while mingling with peers and friends.

Thursday, everyone woke up to a delicious hot breakfast buffet before starting in on another day of classes. We wrapped up the conference by

announcing the big Sportsman's Raffle grand prizewinner. Over \$5,000 in tickets were sold for the Sportsman's Raffle, the proceeds of which were donated to WaterPac! This year's winner was Terry Cooper from Windfall, who walked away with a Weber Grill worth over \$2,500! The Town of Ossian must have been extra lucky, because Scott Kling won the all-inclusive trip for two to Reno for the WaterPro conference sponsored by Covalen and Midwestern. The shotgun winner was Jared Brown, also from Ossian.

Thank you to all our attendees, speakers, vendors, and sponsors for helping make this another fantastic event! *













SUMMER/FALL 2017 HOOSIER PIPELINE 15























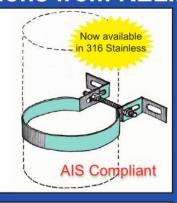






Manhole Inside Drop

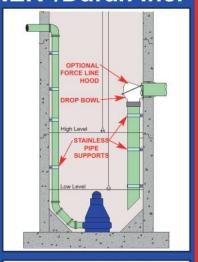
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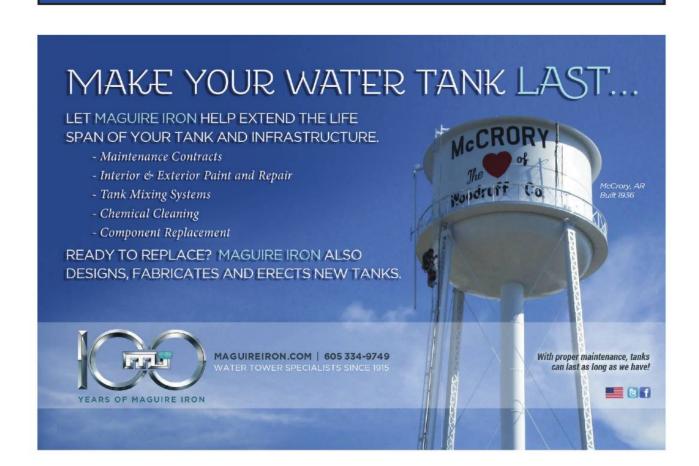
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18 HOOSIER PIPELINE SUMMER/FALL 2017 To return to Table of Contents CLICK HERE www.inh2o.org



2017 ALLIANCE AWARDS

All awards presented by President, Tim Frederick and Executive Director, Connie Stevens.



Wastewater System Operations Specialist of the Year Tony Wood, Town of Osgood



Water System Operations Specialist of the Year Karl Broyer, City of Martinsville



Manager of the Year Robin Merchant, Town Syracuse



Administrative Professional of the Year Ellen Masteller, Brown County Water Utility



Associate Member of the Year The Ford Meter Box Company Inc.



President's Choice Rocky Hayden, Mapleturn Utilities



Steward of the Environment Award Rochelle Owen, USDA Rural Development



\$1,500 Scholarship Recipient Ellei Kay, Daughter of Jennifer Kay - Town of Kewanna



\$1,500 Scholarship Recipient Sydney Field, Daughter of Jennifer Field - Ellis Water Company



\$1,500 Scholarship Recipient Clayton Schreck, Son of Jayme Schreck - Ramsey Water Company



\$1,500 Scholarship Recipient Kelsi Warfield, Daughter of Paul Warfield - City of Garrett



* 2017 * * Southern Operator Expo

Our Southern Expo was held on May 18, in Huntingburg, Indiana and was a huge success once again! We had over 230 people in attendance and 18 demonstrating companies. We had our 'famous' hog roast, donated by Water Solutions Unlimited while the Schnitzelbank catered the rest of the food.

Our meter toss contest and backhoe rodeos provided chances to win cash and prizes, and didn't disappoint on the fun!

The meter toss contest was split into three divisions: Powder Puff, Young Bucks, and Grizzly Old Veterans. The winner of each division took home \$50 cash! The winners were Kayla Harvey (Water Solutions Unlimited), Bradley Lillpop (Edwardsville Water), and Paul Cornett (Edwardsville Water)

respectively. Isaac Snyder from Synder Contruction and Clint Eichmiller from Dubois Water each claimed \$50 when they won the Equipment Rodeos sponsored by Southeastern Equipment Company and Whayne Supply.

Thanks to all our attendees, demonstrators and especially our sponsors. We couldn't do it without you! Hope to see all of you next year! ★























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★ 2017 ★

NORTHERN Operator Expo

Held on May 25, in Akron, Indiana, our Northern Expo was a big success! We had over 220 people in attendance and 15 demonstrating companies. Once again, we all enjoyed what everyone has come to know as our 'famous' hog roast, donated by Water Solutions Unlimited.

Our meter toss contest and backhoe rodeos provided chances

to win cash and prizes, and didn't disappoint on fun! The meter toss contest was split into three divisions: Powder Puff, Young Bucks, and Grizzly Old Veterans. The winner of each division took home \$50 cash! The winners were Amanda Howard (South Whitley), Peni Faitele (City of Lawrence), and Chris Lalonde

(Waterloo) respectively. Alex Mikel from Bremen Water Department claimed \$50 when he won the Equipment Rodeo (Gauntlet) sponsored by Southeastern Equipment Company.

Thanks to all our attendees, demonstrators and especially our sponsors. We couldn't do it without you! Hope to see all of you next year! *





















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An Indiana City Finds a Variety of Uses for Progressive Cavity Pumps for Moving Different Wastewater Treatment Plant Solids Streams

BY DAN MILLER

The Indiana city of Carmel has been recognized nationally as one of the best cities in the United States to live. Its award-winning wastewater treatment facility is known for using innovative processes and technologies to meet environmental challenges.

The careful, data-driven approach extends even to simpler devices including sludge pumps. The city used progressive cavity (PC) pumps for more than 30 years to move solids. In the 1980s, issues with the pumps led plant management to investigate alternatives.

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CHEAPER THAN REPAIR

The team chose a pin-joint, openhopper, bridge breaker pump to convey gravity-thickened waste activated sludge from a 2-meter thickener at about 6% solids. Using a variable-speed drive, the pump maintained a constant level within a small hopper, meeting the challenges of rapidly changing sludge characteristics and variable flow rates from the belt thickener.

As an added benefit, the Carmel staff found that the innovative technology came at cost lower than repair of the existing pumps. In the early 1990s, encouraged by the performance of the thickened sludge pumps, the city selected SEEPEX PC pumps to feed anaerobically digested sludge at 2 to 4% solids to the plant's belt filter presses.

Consistent, low pulse feeding to any dewatering device is critical for effective dewatering. SEEPEX 6L stator/rotor geometry, which provides a longer pump cavity and better cavity sealing with reduced pulsation, performs well in that application.

PUMP PROTECTION

In a progressive cavity pump, a singlehelix rotor turns insides a double-helix stator to create cavities that progress from the suction to the discharge side of the pump. The compression fit between the rotor and stator creates seal lines that keep the cavities separate as they move through the pump with each revolution of the rotor. The design lets PC pumps gently meter and convey fluids of nearly any viscosity in a wide range of temperatures, with or without solids.

The pumps in Carmel were fitted with thermal protection devices that shield the pump stator from run-dry damage. The devices have proven more reliable for protecting pumps than traditional pressure-sensing devices.

In 1997, two pumps were added to move primary solids from the north primary tanks to the anaerobic digesters. Primary sludge consistency can be highly variable, changing the discharge pumping head conditions. Using a centrifugal-style pump under these conditions changes the discharge output, while a PC pump maintains a constant flow.

The Carmel team at first tried to use a percent solids meter to maintain a consistent solids feed to the anaerobic digester. However when the meter proved unreliable, the pump's ability to deliver a constant flow at a set speed enabled a switch-timed operation, thus maintaining a thick product delivered to the digesters.

FEEDING CENTRIFUGES

Two more SEEPEX pumps were added in 2004 to feed newly added centrifuges, which replaced the belt filter presses for dewatering. The plant personnel repurposed and installed one of the old belt filter press feed pumps to pump primary sludge from the south primaries to the digesters. The ability of a PC to move a variety of solids made the switchover easy.

The city then selected SEEPEX as the pump supplier when installing the nation's first Biopasterization (Kruger) in 2003. Pumping sludge at 160 to 165 degrees F from the heat exchangers to the pasteurization tanks proved challenging due to high temperatures and intermittent operation.

SEEPEX tested several combinations of rotor and stator materials during a trial period. The city also tested a variety of other pumps that were not completely suitable. SEEPEX ultimately defined a rotor and stator material combination that proved successful and provided the expected operation and stator life.

EASY MAINTENANCE

Recently, Carmel chose a phased approach to deploy SEEPEX PC pumps with Smart Conveying Technology (SCT). The SCT design allows easy access to the pump internals by incorporating split stator halves covered by four metal segments and a smart rotor. The rotor and stator can be changed in minutes without special tools and without disconnecting suction or discharge piping.

The SCT design also extends stator and rotor life, optimizes flow rates, and improves energy efficiency simply by tightening the stator's metal segments at the first signs of wear. This saves the city maintenance, time, and money.

Dan Miller is an outside sales engineering representative with Pelton Environmental Products (www.peltonenv.com), a distributor of pumps and other water and wastewater equipment based in Lewis Center, OH. *



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GOOD REASON for Flushing Hydrants

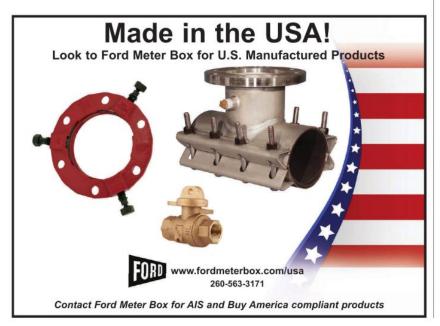
BY JOE FRAZIER, WATER CIRCUIT RIDER

A town here in Indiana was recently blessed with money to build a new water tower, put in some new water mains, and a install a few new fire hydrants.

While on one of my routine visits to a water system, the water operator specialist wanted to share an incident that happened in his system. He stated that the local fire department was

holding some hose training for their new firefighters. They were holding their training near the new tower. After hooking a two and half inch hose to the two and half outlet, they proceeded to open the hydrant slowly.

All of a sudden the hydrant started making a loud clanking nose. The firefighters tried to shut down the





hydrant, but they could not get it shut down. They proceeded to call the water operators to explain what was going on. The operator showed up to where they were training, and after working on the hydrant, was able to shut it down. But before the operator succeeded, he noticed the hydrant was lifting out of the ground. The concrete was lifting as well!

He also noticed that the shut off valve was lifting. After removing the hose from the hydrant, the operator

26 HOOSIER PIPELINE SUMMER/FALL 2017





proceeded to open the hydrant again. That's when he noticed steel balls coming from the hydrant onto the concrete. The operator then tried to close down the hydrant, without success. After the hydrant started lifting from the ground, long pieces of steel came out. A short time later the safety hook ring came through the hydrant.

The operator was able to finally get the hydrant shut down. When he took the hydrant apart and took the gates out, he saw that the rubber shoe had nicks in it. After examining the brass brake part we noticed a crack in the brass. The only place that all this foreign stuff could have come from was out of the standpipe of the new tower. So remember, when you're flushing your hydrants, be prepared for anything, especially when it comes to





Floyds Knobs, Indiana 47119 812-941-0300 EST. 1994

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INSTRUMENTATION

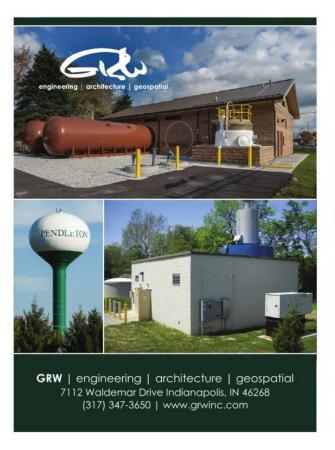
Telemetry & SCADA Flowmeter Certification Instrument Calibration Control System Design

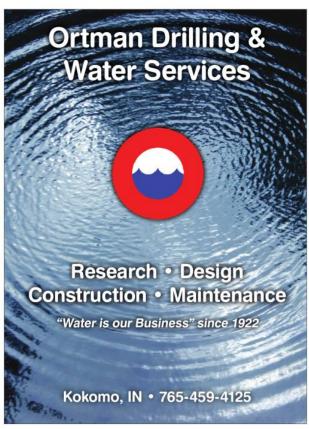
ELECTRICAL

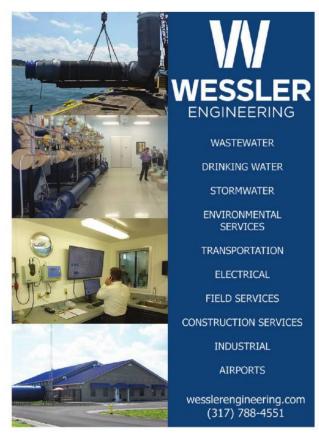
Electrical Design and Installation **Electrical Motor Repair** Electrical System Repair

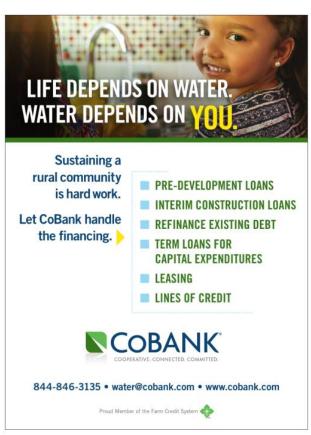
MECHANICAL

Lift Station & Pump Station Maintenance **Pump Repairs** Mechanical Maintenance









Dear Attendee:

Please join us for our
2017 Annual Fall Conference
in Fort Wayne, Indiana on
October 18 & 19.



Here's what you can expect this year:



A hospitality gathering on Tuesday evening promising fun and camaraderie, along with food and drinks!



Earn up to 10 Water and Wastewater CEUs, and receive a FREE 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.**



Each day offers an administrative track of classes in addition to water and wastewater tracks.



The "Best Tasting Water in Indiana" Taste Test and Luncheon on Wednesday will declare one utility's water the tastiest in Indiana! Winners from the 4 regional taste tests throughout the state will compete.



Plan on having some fun during the reception in the Exhibit Hall on Wednesday evening. As classes conclude for the day, we invite everyone to gather in the exhibit hall for games, drinks, food, and the Sportsman's Raffle!



Later Wednesday evening, join us for a **hospitality** event at the host hotel. We'll have snacks, drinks, friends and a lot of fun!



The Annual Membership Meeting on Thursday will include board elections for THREE At-Large positions. Registration forms to vote or to run for the board are inside and also on our website.



Be sure to be there for Thursday's GRAND PRIZE DRAWING - Worth over \$1,500!

You really don't want to miss out on this year's Fall Conference—so, don't hesitate to make your plans to attend.

We look forward to seeing you on October 18 &19 at the Grand Wayne Convention Center 120 W. Jefferson Blvd. in Fort Wayne!





Conference Kick-Off

Concurrent Training Sessions

Fun, Food, Drinks & Sportsman's Raffle!

Hospitality Room - Hilton Hotel

Concurrent Training Sessions

Reception in Exhibit Hall

Exhibit Hall Grand Opening

Water Taste Test Luncheon

Break in Exhibit Hall

Coffee & Donuts

Break - Foyer

7:45 am

9:00 am 9:15 am

to 10:15 am

10:45 am 11:45 am

11:45 am 1:15 pm

2:15 pm 2:45 pm

3:45 pm 5:15 pm

Thursday, October 19, 2017 THURSDAY **Registration Desk Open** 7:00 am 3:00 pm in Lobby Hot Breakfast Buffet in Exhibit Hall 8:00 am **Annual Membership Meeting** WIN a Kindle Fire! 8:30 9:30 **Concurrent Training Sessions** HOURS 9:30 am to 10:00 am Break in Exhibit Hall **Concurrent Training Sessions** 11:00 to 11:15 am **Break in Exhibit Hall** CONTACT **Concurrent Training Sessions** to 12:15 pm 12:30 pm GRAND PRIZE DRAWING in Exhibit Hall **Lunch - On Your Own** 1:30 pm 2:30 pm **Concurrent Training Sessions** TOTAL **Break - Shotgun Raffle**

Technical Sessions What follows is a tentative list of topics

What follows is a and invited speakers.

WEDNESDAY, OCTOBER18

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

Water Session

Asbestos Pipe!... Oh NO!!! Jeff Hersha - Jones & Henry Engineers, Inc.

Wastewater Session

Drugged Waters

Richard Radcliff - Beam, Longest and Neff

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

Water Session

Chlorine Gas or Liquid Chlorine? Paul Hayes - Living Waters Co., Inc.

Wastewater Session

Moving Solids

Barbara Smith - Wastewater 101, LLC

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

Water Session

How Open Source GIS Can Help **Smaller Communities**

Philip Bernard - Frontier Geospatial, LLC

Wastewater Session

A Case for Value Engineering / Sewer System Modeling (VE) Madison, IN -Long Term Control Plan

Rob Bellucci, P.E. and/or Albert Stong, P.E. Commonwealth Engineers, Inc.

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

Water Session

Lead in Drinking Water

Mike Ricks and Kristine Hawkins Water Solutions Unlimited

Wastewater Session

Vacuum Under Water

Mark Jones - Airvac / Agseptence Group

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

Water Session

Developing a Defensible Cross Connection Control Program

Artemis Nikolaou and Liz Melvin

Wastewater Session

Huntertown WWTP - Design for the Future

Doug Ralston, P.E. and Jim Breckler Engineering Resources, Inc.

THURSDAY, OCTOBER 19

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

Water Session

Lead and Copper: Effect on Drinking Water **Wastewater Utilities**

Jim Collins - Brenntag Mid-South, Inc.

Wastewater Session

Fasteners for a Lifetime

Stanton Walter - Never Gall

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

Water Session

Failure to Plan is Planning to Fail:

Preparing Your Water System for the Future Kwabena Adu-Sarkodie, P.E. Commonwealth Engineers, Inc.

Wastewater Session

Got Sulfide?

John Hampton Source Technologies, LLC

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

Water Session

Transforming Data into Knowledge, Knowledge into a Better Performing Plant Austin Collins - Hach Company

Wastewater Session

Keeping Lagoons EPA Compliant

Wade Stinson - Wastewater Compliance Systems

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

Water Session

The Busy Operator's Tips to **Management Success**

Mike McFadden - Retired, City of Madison / Alliance

Wastewater Session

Pressure Sewers, New Frontiers with a Tried and True Technology (Part 1)

Bob Jordan- Covalen

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

Water Session

Common Sense Maintenance

Todd Gardner - City of Knox

Wastewater Session

Pressure Sewers, New Frontiers with a Tried and True Technology (Part 2)

Bob Jordan- Covalen



We are pleased to welcome all Regional Sewer and Water Districts to our Fall Conference! As partners in bringing clean water and sanitary sewers to our rural and suburban Indiana communities, we value the participation of our friends from the IRSDA.

Technical Registration

October 18 & 19, 2017

Please print or type.

List all attendees and indicate the type of registration desired.

On-line registration is available with invoicing option! Please email or fax completed forms:

Email: alliance@inh2o.org • Fax: 317-736-6676

Host Hotel

1020 South Calhoun Street Fort Wayne, Indiana

RESERVATIONS:

260-420-1100 www.hiltonfortwayne.com

ROOM RATE: \$124/night GROUP CODE: ALI Room Block Rate Expires 9/24/17



Utility / Company				
Address				
City	Stat	e	Zip	
Phone Fax				
Email	TIME		ONLY MUR	S. OUSE
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Email Please list ALL Attendees and specify registration type for each: Name				
Name				
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Registration Rates	Me	mber	Non-M	ember
Full Registration	Before	After er 4, 2017	Before October	After 4, 2017
Two (2) days of technical sessions; and Pre-Conference Hospitality Event (Tues.); Exhibit Hall Access, Taste Test Luncheon (Wed.); Reception (Wed.); Hospitality Room Event (Wed.); Hot Breakfast Buffet (Thurs.)	\$140	\$165	\$200	\$225
Wednesday ONLY Technical sessions; Exhibit Hall Access; Taste Test Luncheon and Reception; Hospitality Room Event	\$95	\$120	\$130	\$155
Thursday ONLY Technical Sessions; Exhibit Hall Access; Hot Breakfast Buffet	\$85	\$110	\$120	\$145
Spouse / Guest Registration Pre-Conference Hospitality Event (Tues.); Exhibit Hall Access; Taste Test Luncheon (Wed.); Reception (Wed.); Hospitality Room Event (Wed.); Hot Breakfast Buffet (Thurs.)	\$55	\$80	\$90	\$115
PLEASE INDICATE NUMBER OF ATTENDEES PLANNING TO ATTEND WEDNESDAY'S AWARDS LUNCHEON.		Please list any	dietary restriction	S:
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Registration forms must be returned to the Alliance office no later than October 4, 2017 for "Early Bird" registration prices. Registrations will be fully refunded if cancellation is made before October 4, 2017.

No refunds after October 4, 2017.

Admin. / Regional Districts

October 18 & 19, 2017

Please print or type.

Utility / Company

List all attendees and indicate the type of registration desired.

On-line registration is available with invoicing option!

Please email or fax completed forms:

Email: alliance@inh2o.org • Fax: 317-736-6676

Host Hotel

Hilton Fort Wayne 1020 South Calhoun Street Fort Wayne, Indiana

RESERVATIONS: 260-420-1100 www.hiltonfortwayne.com

ROOM RATE: \$124/night GROUP CODE: ALI

Room Block Rate Expires 9/24/17



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Registration Rates	Mer	nber	Non-M	ember
Full Registration Two (2) days of Admin. / Reg. Districts Sessions; and Pre-Conference Hospitality Event (Tues.);	Before October	After 4, 2017	Before October	After 4, 2017
Exhibit Hall Access, Taste Test Luncheon (Wed.); Reception (Wed.); Hospitality Room Event (Wed.); Hot Breakfast Buffet (Thurs.)	\$140	\$165	\$200	\$225
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Registration forms must be returned to the Alliance office no later than October 4, 2017 for "Early Bird" registration prices

Registrations will be fully refunded if cancellation is made before October 4, 2017.

No refunds after October 4, 2017.

Phone: 317-789-4200 ● Fax: 317-736-6676 ● Email: alliance@inh2o.org ● Address: P.O. Box 789, Franklin, IN 46131

Admin. / Regional Districts Sessions What follows is a tentative list of topics and invited speakers.

WEDNESDAY, OCTOBER 18

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

Update from IFA on the New Water Resources and Infrastructure Planning

Bill Harkins & Sarah Hudson Indiana Finance Authority

We will present the new Water Resources and Infrastructure Planning Program (how and why it came to be) and the Lead Sampling Program for Public Schools. Also we will discuss SRF current funding options and new programmatic updates.

IRSDA Meeting / Legislative Updates

Ted Stubbs, Brookville Lake RSD Tim Frederick, Steuben Lake RWD Connie Stevens, Alliance of Indiana Rural Water



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

Regionalization, Consolidation, Privatization... Will This Affect My Utility? (Part 1)

Pete King - Cline, King & King, P.C.

Pros and cons of regionalization, consolidation, or privatization. How do you decide what's best for your utility?

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

Regionalization, Consolidation, Privatization... Will This Affect My Utility? (Part 2)

Pete King - Cline, King & King, P.C.

Pros and cons of regionalization, consolidation, or privatization. How do you decide what's best for your utility?

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

Value Added Services for Your Utility (Part 1)

Connie Stevens - Alliance of Indiana Rural Water

We are all looking for the "biggest bang for the buck", and your customers are no exception. Join us for a discussion on ways you can enhance your value and image to your customers without adding to your expenses.

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

Value Added Services for Your Utility (Part 2)

Connie Stevens - Alliance of Indiana Rural Water We are all looking for the "biggest bang for the buck", and your customers are no exception. Join us for a discussion on ways you can enhance your value and image to your customers without adding 8:30 a.m. - 9:30 a.m.

THURSDAY, OCTOBER 19

Improving Revenue Collections for Utilities

Gary Sanders - Logics, LLC

Participants will learn how policies and procedures at various stages of the customer cycle - application for service, billing, delinquent processing, and final bills can impact collections. They will learn what policies and procedures other utilities have implemented to improve collection rates and reduce bad debt and

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

Human Resources - What You Should Know

Nathan Baker & Parvin Price Barnes & Thornburg, LLP

Friends it's true, what you don't know may hurt you. Join us for this lively update on Indiana and Federal Laws for employers.

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

Why Should I Worry About Lead Pipes?

And What Can I Do To Pay For The Fix?

Parvin Price and Nick Kile - Barnes & Thornburg, LLP Discussion of legal liabilities and financing options.

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

Financial Management (FM) for Water & Wastewater Utilities

Otto W. "Buzz" Krohn, CPA, CGMA O.W. Krohn & Associates, LLP

To provide Management, Staff & Board Members with a basic understanding of Financial Mgmt Concepts & Procedures for Utilities in Indiana. To also provide specific examples / illustrations of "best practices" within the Utility Industry. Participants will receive checklists, reports & illustrations which address many of the Key Concepts covered.

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

Utility Innovation

Doug Baldessari - Umbaugh

We will discuss what utilities are doing now to be innovative and efficient and hear what else your utility can do now to innovate and save money now or in the future.

We are pleased to welcome all Regional Sewer and Water Districts to our Fall Conference! As partners in bringing clean water and sanitary sewers to our rural and suburban Indiana communities, we value the participation of our friends from the IRSDA.





SAVE THESE DATES!

Room Block Now Open!

Registration Form Inside!

LODGING

HOST HOTEL

Hilton - Fort Wayne

at the Grand Wayne Center

1020 South Calhoun St.

FORT WAYNE INDIANA, 46802

RESERVATIONS:

260-420-1100

www.hiltonfortwayne.com

ROOM RATE:

\$124/night

PARKING: \$8/night

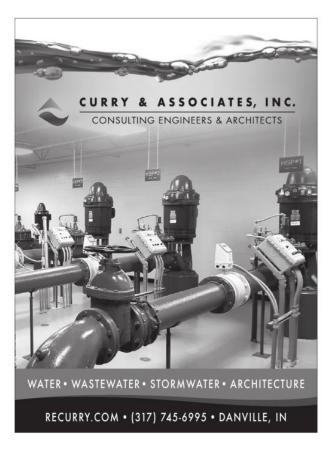
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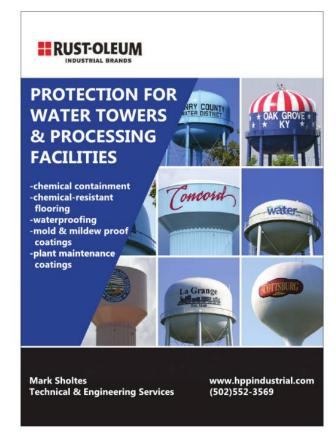
ROOM BLOCK RATE expires 9/24/17

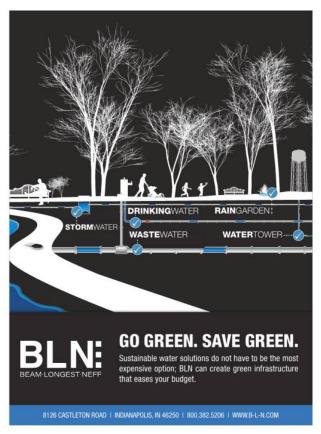
Overflow Hotel Info available on our website











12th Annual Alliance Scholarship Clay Shoot & Golf Outing

Thursday, September 14th, 2017

Kingen Gun Club 5112 W. 500 N McCordsville, IN 46055

Registration: 7:30am (Coffee & Donuts)

Start Time: 8:00am -10:30 am

Cost: \$30 / person

(Includes lunch at the golf course)

Winners will be announced during

lunch at the golf course

Winding Ridge Golf Course 5450 Bogey Drive Indianapolis, IN 46235

(Located just off East 56th Street)

Registration: 10:00am

Lunch: 11:00am

Tee Time: 12:00pm (Shot gun start) **Format:** Scramble, Teams of four

Cost: \$85-Individual / \$300-Foursome

Dress Code: Collared Shirt, Soft spikes

All proceeds benefit the Alliance of Indiana Rural Water's Scholarship fund.

Meet the 2017 Scholarship Winners



Sydney Field, Daughter of Jennifer Field – Ellis Water Company



Ellei Kay, Daughter of Jennifer Kay – Town of Kewanna



Clayton Schreck, Son of Jayme Schreck – Ramsey Water Company



Kelsi Warfield, Daughter of Paul Warfield – City of Garrett



Send Registration to - Email: alliance@inh2o.org or Fax: 317-736-6676 or Mail: P.O. Box 789. Franklin, IN 46131

Please return registration forms to the Alliance office no later than <u>Sept. 1, 201</u>7. Refunds after Sept. 1, 2017 will be subject to \$15 administrative fee. (Questions - call toll free 888-937-4992, or email: alliance@inh2o.org)

12th Annual Alliance Scholarship Clay Shoot & Golf Outing

Registration Form

Company	Phone Email
addressCity	State Zip
Name Place me with a team List Team Members: Individual: \$85 Foursome: \$300	\$30 / Person (includes lunch at the golf course Name
Name	
Name	Name
All proceeds benefit Rural Water's Sponsorships (must be secured by Sept. 1st	Scholarship fund.
Rural Water's Sponsorships (must be secured by Sept. 1st	Scholarship fund. , to receive signage.) \$400
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Refunds after Sept. 1, 2017 will be subject to \$15 administrative fee. (Questions - call toll free 888-937-4992, or email: alliance@inh2o.org)



By Toby Days, Source Water Specialist



Essential. Reliable. Invaluable.

Water - it's the thread that weaves together our daily lives. It keeps our communities healthy, our cities running, and our economies growing. Water is a cup of coffee, the produce aisle, better production, increased exports, and greater American strength. While essential, water infrastructure is largely invisible. Few people realize what it takes to treat and deliver drinking water every day or how wastewater is cleaned so that it can be safely reused or returned to the environment. The high quality of life we enjoy in America would not be possible without water and the infrastructure that fuels it.

Historically, water and wastewater utilities were happy to be out of sight and out of mind. The incredible systems, which bring water to homes and businesses and then take it away and treat it, were built generations ago. They have served their communities well - and in most parts of the country, customers are intrinsically used to having clean, safe, reliable water service. As a result, most Americans take our most precious resource for granted. To date, utilities were largely content with that arrangement. They could quietly go about their business, proud to do the work that keeps communities going. But now, with aging infrastructure and depleted source waters failing to safely meet the growing demands of communities throughout the US, many Americans are beginning

to lose trust in their local water utility and are questionning the rate increases needed for infrastructure improvement projects. Miscommunication - or lack of communication altogether - is usually at the heart of such misunderstandings.

Developing and maintaining good relationships with customers involves more than simply informing them about the utility's needs (e.g., rate increase/bill) or meeting minimal regulatory requirements (e.g., Consumer Confidence Reports). It's an ongoing process involving education about the value of public water and transparency, about the needs and challenges of the water system. Voluntary communication practices can help foster a community-wide water ethic, garner public support for infrastructure improvements and rate changes. as well as provide an overall better understanding of your water department and its value. Proactive and routine communication with your customers will keep the importance of water in the forefront of their mind. After all, as the idiom goes, "out of sight, out of mind."

Giving Customers What They Want, When They Want It

With customers increasingly turning to online platforms and social media as primary channels for knowledge and communication, water providers need to diversify the way they inform and communicate as well. This may mean:

- Increasing and maintaining a consistent, responsive, and robust social media presence.
- · Developing and maintaining an informative website, which includes areas where customers can answer their own questions or seek answers from others.
- Developing text and email notification alerts.
- Smart metering with real time use data that can be accessed online.
- · Branding your utility.

The goal of your utility in terms of its customer interactions is to generate loyalty. There's no better way to do that than to offer quality products and services and to be responsive to your customers. New technologies have increased the number of options through which a utility can interact with their customers; however, people do business with people, not businesses. So no matter how often you communicate with technology, nothing beats the connections made through interacting with others in person. The key is to tailor how you connect with your customers, understanding what kind of information they want from you and the context in which they want it.

It may be tempting to revert to "out of sight, out of mind," but it is better to be loud and proud about your utility and the services you provide. *



"We needed a solution and we needed it fast. Covalen came in and not only solved our problem, but they did it in record time. Even better, the park visitors would never know the extent of the trenching because of Covalen's creative landscape camouflage."

- Brent Lockamy, Town Engineer Reservoir Park is a central attraction in Southern Pines, NC. The pristine park was plagued by frequent sewage tank pumping and overflow fouling the footpaths. This 165-acre site is home to a 95-acre lake. Nature trails, hiking trails, fishing, and boating are some of the activities enjoyed by hundreds of people every day. The necessary solution which had been deemed impossible by local utility experts, was sent to COVALEN.

The 'impossible' solution needed to not close the entrance to the park for any interruption. But from a technical challenges included 2300' of service lateral that had to be laid over 30' - 40' of elevation changes across two hills to the gravity line.

As is often the case with 'impossible' sewage, low gravity projects, COVALEN solved it with flying colors. In just 3 days, the park's sewage issue was solved and the foot trails were pristine once again.

The most fulfilling aspects of the project was COVALEN's ability to quickly provide a solution that met all of the needs of the Town of Southern Pines: within budget, on-time, and with minimal disruption to the park and visitors.



2300' of service lateral installed beside the non-stop traffic of the two-lane road that provides access to the park.



Once the wastewater is ground to slurry by the grinder pump station it is discharged through 11/4" HDPE dr11 pipe.



Total install complete in just 3 days. And, park visitors would never even know we'd been there.







By Rex Blanton, Wastewater Training Director

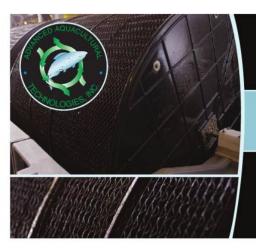
In-House Train

These classes can assist new employees with learning some basics about personally involved with so

The Alliance of Indiana Rural Water is known for our training programs for Certification Contact Hours, Effective Utility Management and Certification Exam Prep, to mention a few. We offer these to all Water and Wastewater Professionals in many locations around the state of Indiana, at our two conferences, Operator Expos and online. Anyone can attend our regular five contact hour classes for free if they are not certified or don't need those hours for their certification.

employees with learning some basics about the operations of water and wastewater systems; however they are not intended, nor specific enough, to fulfill the needs of new employees wanting to become career operation specialists. The training needed to accomplish these goals must be offered from current operators, superintendents and board members at the system for which they were hired to work. The veterans can pass on their expertise and experience operating the facility.

We've all heard about or been personally involved with some employees that were not properly trained when first hired. It leads to higher cost to the system. Some of those veterans, I mentioned above, are not ready to 'give up' their expertise to new employees. However, they are not 'giving up' their expertise when passing on knowledge, but rather improving the overall operations of your facility, creating uniformity of procedures, and building morale with less supervision.



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40 HOOSIER PIPELINE SUMMER/FALL 2017 To return to Table of Contents CLICK HERE www.inh2o.org

Remember, lighting another candle does not diminish a candle's flame. It burns just as brightly as before.

In-system or in-house training builds trust among the employees. Employees will ask questions and seek assistance if challenged with difficult situations. The worst thing you can do is to tell someone, "This is the way we have always done things" when they ask you "why?" This breeds mistrust and the notion that your organization is resistant to change. Tell them why you perform a duty a particular way, and what the outcomes can be if it is performed another way. However, if the change is for the overall good, then not only incorporate it in your procedures, but also acknowledge the fact it was their idea.

There is a management theory that teaches managers to ask five why questions to employees for situations that maybe didn't quite end the way they were intended. Try reversing that scenario and encourage your employees, new and old to ask five why questions when they do not understand processes, procedures and policies. Normally, those five questions can get to the bottom of most problematic situations as well as attaining everyday skills needed to perform daily tasks.

There is knowledge to be gained from these daily exchanges of bits of expertise exchange. Along with scheduled trainings by management, these interactions build the confidence necessary to perform daily tasks with fewer mistakes. The result is fewer repeat trainings and less guidance needed for doing the same task. This saves your system financially, by allowing supervisors and others the time to complete their tasks on schedule, without interference.

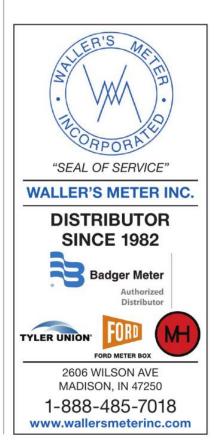
Training your staff is good for your system and your workforce. If you offer training on company time, it shows your staff that you value them enough to invest in them. This leads to employee loyalty and retention of staff, which is a huge cost savings to your system.

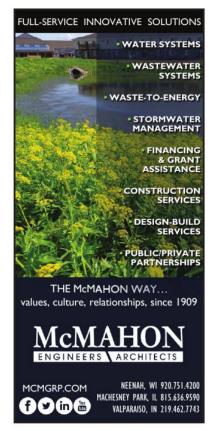
By retaining employees you save money because you don't have to conduct as many interviews, you save man hours on new employee training, and your higher salaried employees are not getting paid overtime to do entry level tasks.

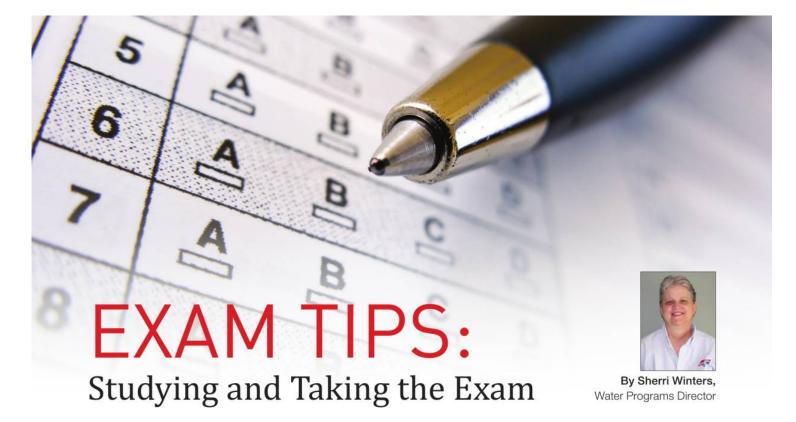
Additional training is needed for your entire staff, as new technologies, processes, and compliance issues arise. But perhaps the most important part of training is holding regular safety sessions. Retention of your experienced workforce is very important, so keeping them safe and free of injury is a must. Water and wastewater facilities can be dangerous places. Without the proper knowledge and awareness of the areas where injuries could occur, employees could be at risk of permanent or even fatal consequences. Lock out/tag out, confined space and harmful gas inhalation are just a few of the situations

you should cover on an annual basis. Along with targeted training by professionals, reminders such as posters and handouts can go a long way to instilling the 'safety first' attitude at your utility.

After your employees have developed the experience and comfort level for operating your particular systems and processes, it's time to get them certified. We offer numerous Certification Exam Review sessions around the state each year. During these sessions, attendees will learn about other types of treatment facilities and processes. This will not only assist them in passing their exam, but can also help in their daily tasks by giving them a better understanding what all facilities have in common. The confidence they gain from the successful certification process is another piece in the overall building of your A-team. *







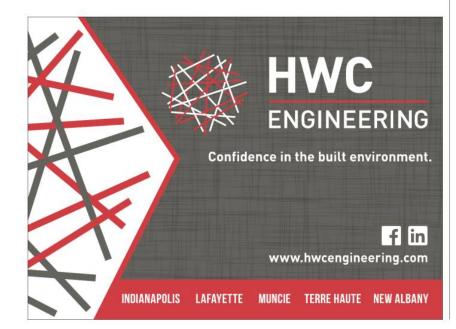
As you know by now, all drinking water and wastewater exams in Indiana are offered electronically at various lvy Tech locations around the state. Since this partnership between Ivy Tech and the Indiana Department of Environmental Management (IDEM) was established, many new operators have taken advantage of this convenient way to take their respective exams. It has been found to be much more convenient than

driving several hours to Indianapolis, plus now you don't have to wait for only two exam dates per year like in the past.

However, this setup does offer challenges for trainers and instructors to offer refresher courses, since you may now sit for the exam at your convenience. Plus, if you're like me, you've been out of school for several years and may have forgotten former study habits. Test anxiety then begins to rear its ugly head! After researching many articles, I've condensed some tips for not only studying for an exam but also how to approach taking the exam. I've used some of these techniques myself and hope some of them will help you.

Study Tips:

- 1. Manage your time by making time to study. If you need to block off time on the calendar, do it. Make sure it is enough time over the course of the week. (At least two hours each time is recommended.)
- 2. Prepare your study space so it is comfortable and you have all materials on hand. Get rid of distractions! No electronics! If you must go to the library for a few hours for peace and quiet, do it.
- 3. Eat smart by not using energyboosting types of food or drinks or just plain junk food. Try to eat healthy. You want to energize your brain not crash and burn. Vegetables, fruits and even nuts are an excellent idea. Stay hydrated with water while studying and during the exam.
- 4. Use practice exams to get used to the format. There are also questions at the end of chapters and sometimes at the end of chapter sections in most textbooks.



42 HOOSIER PIPELINE SUMMER/FALL 2017

- 5. Know what is expected for your level of certification and study those topics. Ask IDEM staff for study guides. This will help focus on assorted topics.
- 6. Highlight whatever you need in your textbooks. Also, writing notes while studying can help you remember certain things.
- 7. Take regular breaks! It is recommended to study no longer than 45-50 minutes without a break.

Exam Day Tips:

- 1. Know the rules for exam day. What can you bring? What will be provided?
- 2. Once you receive the exam, read the instructions carefully.
- 3. Initially go through the exam and answer questions for which you are certain of the answers. This will get you in the right mindset for the overall exam.
- 4. Read the questions carefully. Look for 'qualifying' words such as 'not' or 'all', etc.
- 5. Increase your chances. Go back to the more tough questions. It is

- usually easy to eliminate wrong answers at first glance.
- 6. Always answer all questions. You will have at least a 25% chance.
- 7. Focus on key words in each question and try to form an answer before looking at your choices.
- 8. For math questions, you can sometimes form a rough estimate of the answer. Then look at your choices to see the closest answer.
- 9. Familiarize yourself with the formula sheet provided. Make sure you're formulating with the correct units.
- 10. Always review your exam. Don't be afraid to use all the time allotted but don't second-guess yourself.
- 11. Always, always, always request a time to review your exam with IDEM if you did not pass! This will give you the opportunity to know where you are lacking so you can better prepare for the next exam.

The computerized exams are set up so that you may mark questions to review if there is still some doubt. Don't cram the night before. Statistics show that this is not a good practice.

The IDEM drinking water operator certification workgroup is still working hard at making these exams as relevant as possible to the five treatment and three distribution standard exams. There are review classes, and in some instances tutors, available to help you.

As a final note, there are many variables in taking these exams. Did you take an exam review class? How well did you take notes? Did you review those notes within 24 hours? Have you had all the necessary hands on experiences? Do you know why you're doing specific tasks and not just what you are required to do on a regular basis? How long have you been in your position? Do you ask enough questions to understand why tasks are required? The bottom line is that all operators must take responsibility for obtaining their individual operator certifications. Hopefully your utility has a good mentoring process to guide you along the way.

Good luck and if you have questions about anything related to operator certification, give the Alliance office a call at 888-937-4992. We are happy to help! ★

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Today's forest industry is working hard to become one of the greenest industries on earth.

- What other industry plants hundreds of millions of trees every year?
- What other industry actually grows more of its main resource than it consumes?
- What other industry generates most of its own energy needs from renewable resources, including waste biomass, biogas, hydro and wind?
- What other industry uses a renewable resource and recycled stock as its main ingredients?
- What other industry has worked harder on improving its environmental performance with partners and advocates including governments, customers and environmental groups?

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While we all use and depend upon electronic communications, it is easy to ignore that it comes at an environmental cost.

Worldwide spam email traffic creates greenhouse gases equivalent to burning two billion gallons of gasoline yearly, with numbers rising. More than 200 million items of toxic e-waste are thrown away every year in the US alone, with a recycling rate of only 18% compared to 57% for paper. Estimates are that North Americans throw out more than 500,000 toxic computers and cell phones every day.

No industry is perfect. But the paper industry has made, and continues to make, huge investments in environmental responsibility. Specifying and buying paper from certified sources ensures the continuation and growth of carbonabsorbing forests. Using paper with appropriate amounts of recycled fibre helps preserve forests, conserve energy, and maximize fibre usage through paper lifecycles.

Paper is a powerful communications medium.
Use it responsibly... and recycle the paper that you use.



A FEW **BRAIN TEASERS**



BY GORDON MEYER, WATER CIRCUIT RIDER

While I was contemplating my article for this addition of the Hoosier Pipeline I was searching in some of my old text books and tried to answer some of the questions. I soon learned that what seemed so familiar 30 years ago was now hidden somewhere down in the crevasses of my brain. I thought to myself, "I need to share this feeling with some of you, my colleagues." So I have created some softball type questions for you.

- 1. What is the layer of solids and biological growth that forms on the top of a slow sand filter called?
 - A. Bio-scale film
 - B. Schmutzdecke
 - C. Old nasty layer
 - D. Kickelfritz scale layer
- 2. What is the most important use for chlorine in water treatment?
 - A. Aid to coagulation
 - B. As an algaecide
 - C. To oxidize iron and manganese
 - **D.** As a disinfectant
- 3. When doing a flow test on a well, what is the difference between the static level and pumping level called?
 - A. Drawdown
 - B. Air gap
 - C. Cone of depression
 - D. Capacity

- 4. In prepared water bacteriological sample bottles, what is the white powdery chemical in the bottle that neutralizes any chlorine present in the sample called?
 - A. Sodium chloride
 - B. Sodium hypochlorite
 - C. Sodium thiosulfate
 - D. Sodium hydroxide
- 5. What is the volume of water contained in a 6-inch water main that is 3,000 feet long?
 - A. 588.75 gallons
 - B. 2,927.25 gallons
 - C. 4,403.85 gallons
 - B. 6,300.50 gallons

What was the name of the catcher who hit the game-winning homer to win the sixth game of the 1975 World Series and claim the series title for the Boston Red Sox?

- A. Yogi Berra
- B. Johnny Bench
- C. Jackie Robinson
- D. Carlton Fisk

Hopefully you all didn't need to rack your brains for the answers to these questions. The point I am trying to convey is for you to dig out those old manuals, blow the dust off of them and look them over. You may be surprised at all of the stuff that you have forgotten over the years, and you may even be so intrigued as to read them all over again and discover new things that you missed the first time.

I know I always seem to.

- B. Schmutzdecke
- D. Disinfectant
- A. Drawdown
- C. Sodium Thiosulfate
- C. 4,403.85 gallons

Diameter

(6 divided by 12 = .5)

Formula

.785 x Diameter Squared x Length = cubic feet

 $.785 \times .5 \times .5 \times 3,000 = 588.75$ Cubic Feet

 $588.75 \times 7.48 = 4,403.85$ gallons

Sorry I threw you a knuckle ball, the answer is D. Carlton Fisk, but the Red Sox didn't win the series in 75 they tied it at three games each. The Cincinnati Reds won the title in game seven the next night. Some folks in New England seem to forget this fact and their egos get "DEFLATED" when they hear the truth, BUT THAT IS ANOTHER STORY! *



Remember the Apprenticeship Program

We Mentioned in the January Issue?

The article stated:

Between 2010 and 2020, the water and wastewater sector is expected to lose between 30 and 50% of the workforce to retirement. Many of these employees have worked at the same utility for the majority of their careers, and they will depart with decades of valuable institutional knowledge. As the infamous George Jones used to sing, "Who's gonna fill their shoes?"

2017 Agenda for NRWA Workforce Advancement Center

- Design registered apprenticeship standards for water workforce (by Spring 2017).
- Register new apprenticeship program with the US
 Department of Labor's Office of Apprenticeship (Summer).
- Promote the new Water Workforce programs through marketing and technical assistance (Fall).
- Begin 'learn and learn' Water Workforce Registered Apprenticeship Program; enroll initial apprentices and employers (Winter).
- Administer the program nationally by managing apprentices, employers, training, mentors, certificates of completion, etc. (Winter).
- Assure that all participants are provided high quality training, education, and professional opportunities (long term).

We are currently finishing up Step 2 at the time of publication and are right on target with the 2017 Agenda for NRWA Workforce Advancement Center.

More updates will follow soon!



n my last article, I mentioned that the average age of a water or wastewater operation system specialist in Indiana is late 50s. This means that, in the near future, there will be a lot of positions to fill without anyone available to fill them. One way for a town/city to fill their waste water/water openings is through contract management. Contract operators can be individuals or a company. Fortunately, there are several good ones in Indiana.

If a town/city hires a contract operator management service, this contract service will put a superintendent in place to manage the facilities. Sometimes the management service will hire all the employees, but, they don't have too. The contract operator can manage the water, wastewater, or even the streets. Sometimes they will be hired to manage one or the other or all of them.

Benefits of hiring a contract operator management team is they have to do a good job if they want to be rehired for another year. They can't have any violations with IDEM/EPA, or they won't be hired anywhere else. Contract management services have plenty of resources. Most of these management services have other people who can be called on for assistance or pulled from other jobs.

Another benefit of having contract management services is that, since these people are not from your town, they are not a political hire. They are not involved in the town politics. They are hired to come in and manage your facility to the best of their ability and resources. As we all know, every time there is an election things can seriously change for all the town services. If the contract management services are

already in place, they are generally not affected by the elections that go on.

While writing this article, I interviewed a citizen of a town where a contract operator had been hired. This citizen said the quality of the town services had improved immensely after this firm was hired. The services improved so much that he was inspired to go to work for this company as an employee.

In my own experience, I worked for a town that had gotten in trouble with IDEM. So we hired a contract operating management service, and they came in and cleaned up our plant. They trained all the employees in the proper way of running a wastewater plant and they got us back on track with IDEM. They also helped us get through a plant expansion and a sewer separation project. I believe the town's wastewater treatment plant is still operating in compliance due to this service.



HyOflow

Welcome to H2O Flow-a reoccurring post circulated in the Alliance of Indiana Rural Water's monthly Newsletter and Hoosier Pipeline magazine that features fun facts highlighting the water industry, including simple reminders of the value of water and of the men and women who deliver this essential resource to our homes and businesses. Sharing these posts by placing a message on a water bill, or sending it out to your customers' email list, text list or via social media is an entertaining way to educate your customers. In addition, proactive and routine communication with your customers will keep the importance of water in the forefront of their thoughts, changing the idiom of "out of sight, out of mind." Stay in the current with H2O Flow!

August

- National Water Quality Month: Share posts on social media about how to keep the water in your area clean. Proper disposal of medications, house hold hazardous waste and pet wastes are three specific topics that come to mind.
- National Toilet Paper Day (August 26): Use this day to educate the community about the 4 P's of Flushing, Only Pee, Poo, Paper (that's toilet paper!), and Puke go down the potty.
- · World Water Week (last week in August): Organized by the Stockholm International Water Institute, it is a time for people to share the latest findings and developments as they relate to water. Does water have a memory? Is there a 4th phase to water?

New studies continue to explore this marvelous molecule. Share some water knowledge with your customers

September

- Water Monitoring Day (September 18): Actively protect water resources by conducting basic monitoring of water bodies in your area. Order test kits and share your data with the world.
- **Pollution Prevention Week** (begins the third Monday): You see it happen. Trash blows out of the back of a pick up truck. A plastic bag floats down the street. All of this litter has the potential to land in our water supply. Prevent pollution to protect our waters.
 - Water is the universal solvent Water dissolves more substances than any other liquid. Wherever it

travels, water absorbs and carries chemicals, minerals, and nutrients that it comes in contact with. Apply fertilizers and pesticides at the recommended labeled rates and dispose of any unused chemicals at the nearest hazardous waste collection site to keep these chemicals out of our water resources

- National Drink Beer Day (September 28): Imagine a world without water. That would mean there is no beer. This beverage requires 28 gallons of water to produce 12 fluid ounces of beer.
- National Coffee Day (September 29): You wake up the day after National Drink Beer Day. Again, imagine a world without water. That world would mean there is NO COFFEE this morning. One cup of coffee requires 37 gallons of water to produce it. We need water.

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October

- Imagine a Day Without Water (October 12): Help your community realize how water is essential, invaluable, and worthy of investment by imagining a day without water. imagineadaywithoutwater.org
- Shower Better Month: In conjunction with Energy Action Month, the EPA's WaterSense declared October the month to shower better. Replace a showerhead with a WaterSense-labeled model and you can cut your water use in half. Less water means less need for the water heater, thus saving energy in the process. A win-win worth celebrating!

- H20 FL0W
 - · Global Handwashing Day (October 15): This simple act has the power to save lives and you can't do it without clean water. Promote hand-washing with young children using activities from Project WET.
 - Clean Water Week (third week): Georgia has designated this week as Clean Water Week. Check with your state to see if there is a special time set aside to promote clean water. If not, ask your legislature to declare a proclamation in support.

November

- World Toilet Day (November 19): This day is not a joke. Proper treatment of our wastewater prevents harmful bacteria and viruses from entering our water ways. Remind your rural residents to have their septic system inspected every five years.
- How much water do you use? The average person in the United States uses anywhere from 80-100 gallons of water per day. Flushing the toilet actually takes up the largest amount of this water. "If it's yellow, let it mellow. If it's brown, flush it down," Selective flushing can conserve water. Installing a high efficiency, low-flow toilet will save more!

December

 National Handwashing Awareness Week (first week):

As cold and flu season continues, remind people they have the power to decrease the spread of infectious diseases. You just need a little soap and water. Its also a good time to remind people not to use soaps that have microbeads in them. Microbeads are used as exfoliants in common products such as toothpaste, facial scrubs, body washes, and soaps. They are detrimental to aquatic life and contribute to the

- chemical pollution of our rivers, lakes and oceans.
- . Human Rights Day (December 10): Water is one of the most basic human needs and should be something to which everyone has acces. On this

day, plan a fundraiser or support an organization that promotes the delivery of clean water to all.

Source: thinkatthesink.wordpress.com/2016/ 01/06/make-a-splash-all-year-special-daysto-celebrate-water/*





Small Enough to Care

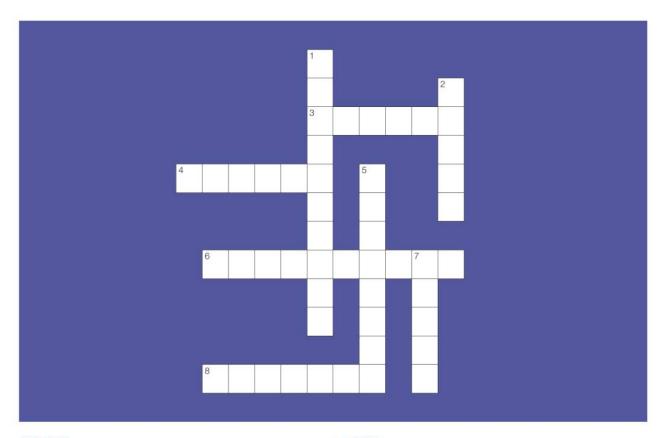
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ACROSS

- 3. Liquid waste products
- 4. Solid waste extracted in sewage treatment
- 6. A word related to hygiene
- 8. Waste matter discharged from human body

DOWN

- Used water
- 2. Pipe carrying sewage
- 5. Micro-organisms that cause cholera
- 7. A chemical used to disinfect water

1. WASTEWATER 2. SEWER 5. BACTERIA 7. OZONE

3. SEWAGE 4. SLUDGE 6. SANITATION 8. EXCRETA





We get LETTERS



January 20, 2017

Just wanted to give a big at-a-boy to Sherri and Toby for the class they put on at Jasper. We were the only system that had fire department personnel at the class and, from what was reported to me, it really opened their eyes. One of the people from our system was Jack White, Owen County Emergency Management Director. Jack said he had no idea what it takes behind the scenes when it comes to water for drinking/fire protection. Great Job!

Dan Dalton, General Manager, BBP Water Corp.

April 13, 2017

I just wanted to take time to say thanks to the Alliance and Joe Frazier for the services you provide. Joe came to our town and searched for a leak we were suspicious we might have but had no idea where to look. With the equipment and Joe's abilities we did find some issues, not only with a service line but also with a storm line. So because of your services and Joe's help, we were able to correct some issues we have been dealing with. Considering the tight budget that we have to work within, this is a great service.

Scott Kling, Town of Ossian, IN

January 12, 2017

The Town of Ladoga recently received approval from IDEM for the WHPP Phase II 5 year update.

I would like to thank Alliance for the water quality literature that will be given to grades 3 though 5 at Ladoga Elementary and especially to Toby Days for his assistance in helping the Town get this approval.

Toby came to our office with info from our WHPP and was very instrumental in helping me answer several questions on the update form and even dropped off the form directly to IDEM! Toby then returned this week with the approved form from IDEM and a CD with the upgrade information. Without his help, this process would have taken much longer, with certainly many headaches! Thanks again to Alliance and Toby.

Keith Keck, Water Operator, Town of Ladoga

December 21, 2016

I wanted to let you know that Joe Frazier from your organization assisted us twice this year. He came and did a lead survey and also assisted us with our water audit. He was professional and very helpful both times. As a new superintendent, there is a lot to learn and having someone like Joe makes it much easier. He saved us much time and money. Thanks again for your services.

Aaron Solms, Utility Superintendent, Jonesboro, Indiana

To reach water professionals through Hoosier Pipeline and its targeted readership, contact Dave at your earliest convenience.

Dave Gill, Marketing Manager david@kelman.ca Phone: 866-985-9791



These photos were all taken somewhere in Indiana. Can you pinpoint the location? (Answers at bottom.)











- 5. John Wood Grist Mill 4. Indiana Dunes National Lakeshore 3. Cordry Lake 2. Eagle Creek Resevoir
 - 1. Sank Creek, Rural Decatur



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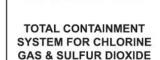
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The Ford Meter Box Co., Inc.	26	260-563-3171	www.fordmeterbox.com
The Leary Construction Co.	52	800-428-2323	www.learycc.com
TnT Technologies, Inc.	27	812-941-0300	www.tnttechnologiesinc.com
Total Piping Solutions	11	716-372-0160	www.tps.us
United Consulting	53	317-895-2585	www.ucindy.com
United Systems & Software, Inc.	14	270-527-3293	www.united-systems.com
VEGA Americas, Inc.	9	800-FOR-LEVEL	www.vega.com
Waller's Meter, Inc.	41	888-485-7018	www.wallersmeterinc.com
Water Solutions Unlimited, Inc.	14	800-359-3570	www.getwsu.com
Wealing Brothers LLC	43	219-261-2520	www.wealingbrothers.com
Wessler Engineering	28	317-788-4551	www.wesslerengineering.com
Xylem - Water & Dewatering Solutions (Flygt & Godwin Products)	3	317-273-4470	www.xyleminc.com
Zoeller Company	21	800-928-7867	www.zoeller.com





WE SPECIALIZE IN

S & K Equipment

S & K Equipment was establised in 2002 by president and CEO Steven Gott to provide water and wastewater industries with a level of quality, commitment, and service rarely seen in today's business models. Based in Vincennes, Indiana and servicing Central and Southern Indiana, Western Kentucky, and Southern Illinois, we strive to develop and maintain a relationship with our customers that goes beyond the typical adversarial vendor/customer to that of friendship and partnership. We want to earn your trust and will do what it takes to keep it. The relationship we develop with our customer is very important to us, and we strive to make your experience with us one that our customers will remember in the future. We also realize that, once a project is complete, that our relationship with our customer does not end there. Our goal is not only to provide our customers with the right equipment for the job, but to assist in any way that we can with a project; from design to finalization to maintenance and service after the sale.

With over 100 years of experience in the industry, we bring a high level of expertise and knowledge to every project; ensuring that the job goes smoothly and that our customers get the right equipment the first time. S & K Equipment Company provides only the highest quality product and the most trusted brands in the industry to ensure our customers get the quality and durability that they deserve.

S & K Equipment also offers a full service and repair department with on-site mobile services available. Through our network of partners, we can handle just about any service job that is required in the water and wastewater industries; from start up and training services, to complete pump reconditioning. We can service all major brands and in all sizes. Whether it is a small dewatering pump or massive flood control equipment, no job is too small or too large. We can also offer on-site maintenance and repairs, annual service contracts, equipment removal, and station reconditioning.







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