



ILLINOIS RURAL WATER  
ASSOCIATION

**42nd Annual Technical Conference**  
**February 20-22, 2024**

**Old Friends**

**Attendee Information**  
**Keller Convention Center - Effingham, IL**

**Host Hotel  
SOLD OUT!**

### HOST HOTEL

Holiday Inn  
1301 Ave. of Mid-America  
Effingham, IL  
Phone: 217-540-7777  
\$120.00 + tax per night

### Auxiliary Hotel

LaQuinta  
1103 Ave of Mid America  
Phone: 217-540-1111

### Auxiliary Hotel

Country Inn & Suites  
1200 N. Raney St.  
Phone: 217-540-5555

### Auxiliary Hotel

Holiday Inn Express  
1604 Fayette Ave  
(exit 159)  
217-994-9949

### Auxiliary Hotel

Best Western-Delta Inn  
1509 Hampton Drive  
217-342-4499

### Auxiliary Hotel

Hampton Inn & Suites  
1305 N Keller Dr  
217-540-5050

### CONFERENCE LOCATION

The conference will be held at the Thelma Keller Convention Center located at 1202 N. Keller Dr. The convention center is attached to the host hotel.

### REGISTRATION

Registration & badges are required for all conference attendees. Please register each attendee using the registration form included.

### Pre-Registration:

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

*IRWA, PO Box 49, Taylorville, IL 62568*

To pay on-line with your credit card, go to [www.ilrwa.org](http://www.ilrwa.org) and click on the conference link on the home page.

**CONFIRMATIONS OF  
REGISTRATION WILL NOT BE SENT!**

Pre-registration must be postmarked by February 9, 2024.

### On-Site Registration:

All conference attendees must obtain a name badge and conference material at the registration desk. If you do not pre-register, please make sure that you register as soon as possible after you arrive at the Keller Convention Center. \*\*Please note that on-site registration is \$25.00 higher than pre-registration.\*\*

An event membership of one-cent per person is included in your registration fee(s) allowing participants in NRW fundraising activities. This is required by Federal Election Commission laws. If you wish to opt-out, please go to the registration booth at the conference for your refund of this one-cent fee.

### CANCELLATION & REFUNDS

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

### REGISTRATION HOURS

#### Pre-Registration Pickup ONLY

Monday, February 19 4:00 p.m. - 6:00 p.m.

#### Regular Registration Hours

Tuesday, February 20 8:00 a.m. - 4:00 p.m.

Wednesday, February 21 8:00 a.m. - 3:00 p.m.

### EXHIBIT HALL

Professionals from all areas of the water and wastewater industry will be on hand to help solve your problems and provide you with the information you need to make those crucial decisions. 109 companies will be bringing their products and services to you at this year's conference.

The exhibit hall will be open during the following hours:

Tuesday, February 20 10:00 a.m. - 4:00 p.m.

Wednesday, February 21 8:00 a.m. - 3:00 p.m.

### OTHER ACTIVITIES

#### Exhibitors Hospitality Night

Tuesday, February 20 4:30 p.m. - 7:30 p.m.

All food and beverages for the evening provided by our exhibitors.

#### Pub Crawl

Tuesday, February 20 7:30 p.m. - 12:00 a.m.

Thank you to the City of Effingham for their continued support of the pub crawl! The buses will begin picking up at the Holiday Inn at the conclusion of Hospitality Night.

#### Casino Night

Wednesday, February 21 7:00 p.m. - 9:00 p.m.

### CERTIFICATION OVERVIEWS & EXAMS

Certification overview courses and state certification exams for drinking water and wastewater will be held at the conference. The reviews will be given courtesy of E.R.T.C. on Wednesday, February 21, 2024. The review is included with your conference registration.

The exams will be given on Thursday, February 22, 2024 beginning at 8:30 a.m. It will be available for attendees and non-attendees alike. You must have a valid **Letter of Admission** issued by the IEPA. You **must** bring the Letter of Admission and a photo ID. There are no conference fees associated with the exam. **However, you must return a registration form with the exam you will be taking circled.**





# 42nd Annual Technical Conference

## February 20-22, 2024

### ATTENDEE REGISTRATION FORM

Please complete one form for each attendee

Make check payable to: Illinois Rural Water Association  
P.O. Box 49, Taylorville, IL 62568

You may also pay on-line at [www.ilrwa.org](http://www.ilrwa.org) with a credit card

FIRST NAME: \_\_\_\_\_ LAST NAME: \_\_\_\_\_

SYSTEM: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE \_\_\_\_\_ ZIP: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_



#### FULL REGISTRATION: (Includes technical sessions, exhibit hall, meals & activities for all 3 days)

- Member—\$190.00
- Spouse—\$190.00
- Non-Member—\$240.00
- Non-Member Individual Joining as a Member + Conference—\$225.00

#### ONE DAY REGISTRATION: (Includes technical sessions, exhibit hall, meals & activities for 1 day only)

- Member—\$165.00
- Spouse—\$165.00
- Non-Member—\$215.00
- Non-Member Individual Joining as a Member + Conference—\$190.00

#### PLEASE CIRCLE WHICH DAY YOU WILL BE ATTENDING (for one day registration only)

TUESDAY

WEDNESDAY

THURSDAY



#### WATER CERTIFICATION EXAM—PLEASE CIRCLE WHICH EXAM YOU ARE TAKING (if applicable)

CLASS A

CLASS B

CLASS C

CLASS D

#### WASTEWATER CERTIFICATION EXAM—PLEASE CIRCLE WHICH EXAM YOU ARE TAKING (if applicable)

CLASS I

CLASS II

CLASS III

CLASS IV

**Registrations must be postmarked by February 9, 2024 to receive pre-registration pricing**

**\*\*All fees must be paid when registering—no purchase orders or special billings\*\***

**NO REFUNDS AFTER FEBRUARY 9, 2024**

**CONFIRMATIONS OF REGISTRATION WILL NOT BE SENT!**



**Have a Question?  
Call 1-800-762-3547**



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**12.75**  
**Water/10.25**  
**Credit Hours**  
**Available!**

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**February 20-22, 2024**  
**Keller Convention Center - Effingham, IL**

**Old Friends**



# Conference At A Glance

**Tuesday, February 20th - Registration Open: 8:00 a.m.— 4:00 p.m.**  
**4.5 Water/3.5 Wastewater credits available ( \* = dual credit)**

9:00 a.m.	Opening Session/Awards Ceremony/RD Update*		
10:00 a.m.	<i>Break/Exhibit Hall Opens</i>		
	<b>WATER</b>	<b>WASTEWATER</b>	<b>BREAKOUT</b>
11:00 a.m.	IEPA Update		
12:00 p.m.	<i>Lunch Buffet—Ticket Required</i>		
1:00 p.m.	13 Water and Wastewater Nightmares*	Lagoon Systems	Jar Testing for Plant Optimization
1:45 p.m.	Saving Money, Pumping Groundwater	Blower Technologies Past and Present	Guatemala Water System: Designing and Constructing a New Water Well and Transmission Line in a Third World Country
2:30 p.m.	<i>Break/Exhibitor Drawings</i>		
3:00 p.m.	For Operators: The Down and Dirty of How Small Towns Can Avoid Getting Hacked*	Surge for Dummies*	Source Water Planning Case Studies
3:45 p.m.	Smart Tanks	Controlling Algae and Biofilm with Ultrasonic Technology*	Water Main Leak Detection
4:30 p.m.	Water Taste Test		Annual Meeting

**Wednesday, February 21st - Registration & Exhibit Hall Open: 8:00 a.m.— 3:00 p.m.**  
**5.25 Water/5.25 Wastewater credits available ( \* = dual credit)**

9:00 a.m.	What is a LoRaWAN®? A New Open Global Standard for Utilities and Cities*	Algae Control	Water Math Review (9:00—11:00)
9:45 a.m.	The Dead-End Danger Zone	Lagoon Operation Control Strategies	
10:30 a.m.	<i>Break/Exhibitor Drawings</i>		
11:15 a.m.	OSHA 101 for Water & Wastewater Plants*	Farmington, MO — Retrofit Oxidation Ditch Case Study	
12:00 p.m.	<i>Lunch Buffet—Ticket Required</i>		
1:00 p.m.	Fire Hydrant Maintenance	Submersible Pumps	Disinfection and Softening Review
1:45 p.m.	NRWA Affinity Programs*	The PFAS Connection*	
2:30 p.m.	<i>Break/Exhibitor Drawings</i>		
3:00 p.m.	Master Meter Testing for ALL Systems	Trenching/Excavation Safety*	Basic Wastewater Math (2:45—4:00)
3:45 p.m.	Biotechnology Solutions for Lake and Reservoir Managers	Pump Maintenance and Repair*	

**Thursday, February 22nd (No registration or exhibit hall open)**  
**3 Water/1.50 Wastewater credits available ( \* = dual credit)**

7:30 a.m.	<i>Breakfast Buffet—Ticket Required</i>		
8:30 a.m.	Tank Inspection Methods and Maintenance Considerations	<b>WASTEWATER CERTIFICATION EXAM (until 11:30)</b>	<b>WATER CERTIFICATION EXAM (until 1:30)</b>
9:15 a.m.	Carbon Chemistry 101		
10:00 a.m.	<i>Break</i>		
10:15 a.m.	Tracer Wire		
11:00 a.m.	Importance of Backup Power*		
11:45 a.m.	<i>Grand Prize Drawing</i>		

# Sessions At A Glance

## WATER SESSIONS

**Rural Development Update - Mike Wallace; RD**— Find out about updates to the Rural Development programs.

**IEPA Update - TBD; IEPA** - This popular session will fill you in on all of the new regs and any changes to older ones.

**13 Water and Wastewater Nightmares - Sarah Towle & Jen Aguilar; C and C Pumps & Supply** - How to mitigate and/or prevent 13 nightmares that commonly occur in water/wastewater plants.

**Saving Money, Pumping Groundwater - Nicolas Steverlync; Hose Solutions** - Focus on pumping efficiencies & highlight what is costing us money, how much it is costing & how we can save money & prolong the life of our wells & pumping equipment.

**For Operators: The Down and Dirty of How Small Towns Can Avoid Getting Hacked - Chris Sosnowski; Waterly** - Learn how to talk with IT (they speak a different language), what questions to ask your systems integrator and some security best practices you can do yourself without IT.

**Smart Tanks - John Busse; Cleanwater1** - This topic will focus on the implementation of active tank mixing, residual control systems, and THM reduction to optimize water quality in the distribution system.

**What is a LoRaWAN®? A New Open Global Standard for Utilities and Cities - Richard Sanders; Zenner USA** - A comparison of LoRaWAN and other technology will be presented.

**Dead End Danger Zone - Chris Jones; Kupferle Foundry** - Hear about information about the two main health threats that old, uncirculating potable water on dead-end water mains pose to consumers. Information on EPA guidelines for residual level and the new Stage 2 DBP rule will be shared. Additionally, tools on identifying hazardous dead-ends, as well as, solutions to address the threats will be presented.

**OSHA 101 for Water & Wastewater Plants - Erik Kambarian ; Illinois Department of Labor** - Find out what you should expect from OSHA during a plant inspection.

**Fire Hydrant Maintenance—Don Walker; Kennedy Valve** - How to maintain a fire hydrant through inspection, exercising, lubrication and flushing.

**NRWA Affinity Programs—TBA; National Rural Water Assoc.** - NRWA has several programs for small systems to take advantage of. From website design & customer communications, to several insurance packages, background screening as well as our Rural Water Loan Fund. Come to this session to learn more!

**Master Meter Testing for ALL Systems—Randy Lusk; M.E. Simpson** - Did you know there is a method of testing your large master/production meters called pitot testing? This methodology will work on any size, type or brand of meter and has a +/-2% accuracy.

**Biotechnology Solutions for Lake and Reservoir Managers —Dave Shakleton; Clean Flo**—Invasive weeds, mucky organic sediment accumulation that promotes excessive weed growth, excessive algae blooms, toxic HABs – all these are signs that the biology of a water body is being degraded. Mechanical dredging and chemical treatments are palliative. Biotechnology solutions that reverse eutrophication, prevent HABs and restore nutrient clearance through a productive food web are a sustainable management tool.

**Tank Inspection Methods and Maintenance Considerations - Todd Schaefer; Dixon Engineering** - This presentation will discuss different tank inspection methods and tank maintenance.

**Carbon Chemistry 101 - Corey Harper; Hawkins, Inc.** - The highlights or bullet points include organic reduction, algal toxin reduction, and PFAS/PFOA reduction.

**Proper Use of Tracer Wire - Chad Thompson; Copperhead** - Hear some tips on how to correctly use tracer wire.

**Importance of Backup Power - Scott Sell; Interstate Power Systems** - We take for granted that the electricity needed to run our plants to always be there when we need it. Find out why it is important to have a back up power system when it isn't.

## WASTEWATER SESSIONS

**Lagoon Systems - Dave Shackleton; Clean-Flo** - Hidden wastewater treatment treasures – how to get the most out of them.

**Blower Technologies Past and Present - Brent Schultz & George Graves; Kaeser Compressors, Inc.** - This presentation will go through all of the blower technologies in the US market, when they are best applied, and their typical energy consumption.

**Surge for Dummies - William Nicholl; GA Industries** - This session will discuss fluid elasticity, surge wave speed, critical period, and much more!

**Controlling Algae and Biofilm with Ultrasonic Technology - Todd Austin; Hydro-BioScience** - This session will cover critical resonate frequency and sound pressure can be helpful in drinking and wastewater.

**Algae Control for Lagoons - Robert Risley; Water Treat Technology** - How to identify the different types of algae and what you can do to control them.

**Control Strategies for Lagoons - Robert Risley; Water Treat Technology** - Tips and tricks to maximize your lagoons performance and efficiency.

**Farmington MO - Retrofit Oxidation Ditch Case Study - Brian Gentes; Cochran Engineering/Mark Mayer; Jaeger Aeration** - Energy savings from retrofitting an oxidation race track from mechanical aeration to retrievable strip diffusers.

**Submersible Pumps - Mark Mayer; Enviro-Line, Co.** - A discussion on hydraulics, pumps and controls.

**The PFAS Connection - Kimberly Cole; KimHEC** - Some background on PFAS, where they came from and lessons learned.

**Trenching/Excavation Safety - Brad Hoffman; IML Risk Management Association** - This will include inspections for hazards, soil classifications, personal protective equipment and types of trench protective measures. IL OSHA Standards requirements for trenching will also be reviewed.

**Pump Maintenance and Repair - Mike Pontrelli; Stenner Pump Company** - Basic pump maintenance and repair.

## BREAKOUT SESSIONS

**Jar Testing for Plant Optimization—Mark Weirich; Hawkins, Inc.** - A valuable tool you should be using often! Find out some background and history as well as the benefits of jar testing.

**Guatemala Water System: Designing and Constructing a New Water Well and Transmission Line in a Third World Country - Greg Gustufson; Berns Clancy** - Greg Gustafson, PE and students from Engineers Without Borders (EWB), University of Illinois chapter traveled to a small community in the highlands of the Central American country of Guatemala to increase the water supply in order to serve the Village in all four seasons of the year.

**Source Water Planning Case Studies—Rich Adams; IRWA** - Some examples to assist you in preparing for your source water protection plan.

**Water Main Leak Detection - Serena Page; TWM, Inc.** - A general look at several water main leak detection methods seen within the industry. A leak locating project will also be detailed.

**Water and Wastewater Certification Math Overviews—Matt Maas; ERTC** - Water math review will be back again this year. By popular request, Matt will also be going over wastewater math as well!

**Disinfection and Softening Certification Overview—Drew Hoelscher; ERTC** - Come to this session to hear an overview on disinfection and softening to assist you in passing your certification exam.