



**WEST VIRGINIA
RURAL WATER
ASSOCIATION**

Every drop counts.

MOUNTAIN STATE WATER LINE

A Publication of the West Virginia Rural Water Association

Summer 2023

In This Issue

- ◆ **East Palestine Train Derailment**
- ◆ **Lagoons: Problems and Solutions**
- ◆ **Water Rules 150-07**

WEST VIRGINIA RURAL WATER ASSOCIATION



Summer 2023

Articles and Features



Dunbar, WV
Photo by: Amanda Cochran

BOARD OF DIRECTORS

PRESIDENT

Eric Bennett, Region III

VICE-PRESIDENT

Brian Shade, Region II

SECRETARY-TREASURER

Porter Robertson, Region VI

MEMBERS

Alan Haught, National Director
Michael McNulty, Region I
Mary Seymour, Region I
Curtis Keller, Region II
A. J. Allen, Region III
Jason Myers, Region IV
Valli Davis, Region IV
James Evers, Region V
Dina Foster, Region V
Scott Howell, Region, VI

STAFF

Todd Grinstead, Executive Director
Janie Witt, Office Manager
Amanda Cochran, Membership Coordinator
Lamar Godbey, Information Specialist & EPA
Jerry Dotson, Source Water Specialist
Jim Johnson, Wastewater Technician
Beth Fletcher, DEP Wastewater Technician
Shawn Strain, EPA Wastewater Specialist
Mike Hersman, Circuit Rider
Bertis McCarty, Circuit Rider
Shane Altizer, Circuit Rider
Charlie Cooper, Circuit Rider
Danny Vestal, ARC Specialist
Heather Somers, 2% HELP Training Specialist
Cory Weese, Apprenticeship Coordinator
Adam Conant, Energy Efficiency Technician

Mountain State Water Line is published by:
WVRWA, 100 Young Street,
Scott Depot, WV 25560
Phone: (304) 201-1689 1-800-339-4513
Fax: (304) 201-1694 <http://www.wvrwa.org>

- 7 East Palestine Train Derailment
- 9 Lead Inventory Reminder
- 11 Our Friend: The Flushable Wipe
- 17 Are MBR's Becoming the Plant of the Future?
- 23 Lagoons: Problems and Solutions
- 28 WVRWA Water and Wastewater Circuit Rider Maps
- 33 Let's Not Forget Annual Updates
- 35 Sudoku Puzzle
- 39 Water Rules 150-07
- 41 Attention Boards and Managers: Here is What Operators
- 43 Membership

Want You to Know



West Virginia Rural Water Association, WVRWA, is a non-profit organization of rural and small publicly owned water and wastewater systems. The vision of the WVRWA is to be the recognized leader and respected voice for water and wastewater systems. The mission or purpose of WVRWA is to provide and promote the highest level of utility service, technical assistance, training, and advocacy for all West Virginia water and wastewater systems.

WVRWA is affiliated with the National Rural Water Association.



Water on the Mountain

2023



See you at Oglebay! ~ August 12-16, 2023



MARYLAND BIOCHEMICAL CO., INC.

BIOLOGICAL & CHEMICAL
WASTEWATER TREATMENT
ULTRASONIC ALGAE CONTROL

TOM BUNDICK
Technical Sales Representative
www.marylandbiochemical.com
tom@marylandbiochemical.com

712 TOBACCO RUN DRIVE
BEL AIR, MD 21015

BUS: (800) 771-7252
FAX: (410) 734-9102
CELL: (804) 245-4630

MICHAEL D. GRIFFITH, CPA, AFI



Griffith & Associates, PLLC

Accountants and Consultants

950 Little Coal River Road
Alum Creek, WV 25003
mgriffith@gcorpww.com

Phone: (304) 756-3600
Fax: (304) 756-2911
Cell: (304) 545-3645

The Publisher reserves the right to reject or edit any manuscripts received for publication. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of the West Virginia Rural Water Association.

WVRWA has the right to reject any advertising deemed unsuitable for the West Virginia Rural Water Association publication. Acceptance of advertising by the West Virginia Rural Water Association does not constitute endorsement of the advertiser, its products or services, nor does West Virginia Rural Water Association magazine make any claims or guarantees as to the accuracy or validity of the advertiser's offer.



THE RIGHT VALVES AND HYDRANTS. THE RIGHT WAY.

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



Online Training Classes

WVRWA has teamed up with SunCoast Learning Systems, Inc. to bring online computer-based water and wastewater training to operators throughout the state. Through WVRWA Online Learning, you now have the freedom to learn from home, the office, or your local library. Training can be accessed directly from your personal computer using your internet connection.

Water and wastewater operators registering for e-Learning courses will have a menu of courses from which to choose. We are constantly adding and updating courseware to reflect changing industry needs and regulations. For more information, you can visit www.wvrwa.org or contact the office at 800-339-4513. Some of the available courses are shown below.

Course	CEH Hours	Approved for	Price
Drinking Water Mathematics	10	Water/WW	\$180
Surface Water Treatment	10	Water	\$180
Basic Environmental Chemistry	10	Water/WW	\$180
Small Water Systems I	5	Water	\$100
Chlorinator Systems & Chemical Handling	10	Water/WW	\$180
Water Transmission and Distribution	10	Water	\$180
Practical Personnel Management	7	Water/WW	\$125
Water Utility Calculations	10	Water	\$180
Pumps & Motor Maintenance	10	Water/WW	\$180



Experience is Our Natural Resource

Just as water is a vital natural resource, the attorneys of Jackson Kelly PLLC are a vital resource to county governments, municipalities and public service districts across West Virginia. Jackson Kelly's attorneys have a wide range of legal experience serving local government agencies. From infrastructure expansion to economic development, the Firm's attorneys structure solutions to finance West Virginia's critical projects.

Jackson Kelly attorneys have over **60 years of collective experience** in the area of public finance.

The Firm's attorneys **routinely serve** as bond counsel, underwriter's counsel, issuer's counsel, trustee's counsel, lender's counsel and Public Service Commission counsel.

Jackson Kelly attorneys hold membership in the National Association of Bond Lawyers and have been **recognized by publications** such as Woodward/White's *The Best Lawyers in America*[®], Chambers USA and Super Lawyers.

Samme L. Gee, Responsible Attorney
304-340-1318 • www.jacksonkelly.com



COLORADO • INDIANA • KENTUCKY • OHIO • PENNSYLVANIA • WASHINGTON, D.C. • WEST VIRGINIA

The rules of the Kentucky Supreme Court require the following statement: This is an advertisement. Jackson Kelly PLLC has a wholly-owned subsidiary law firm, JK Minerals Law Group PLLC.

West Virginia Rural Water Association

Don't Miss Out on Available Services



Our little to no-cost, two-year, nationally recognized Water/Wastewater Apprenticeship Program matches candidates with employers.

During your apprenticeship, you will earn-while-you-learn with on-the-job training and classroom instruction.

This program starts as a job and emerges as a solid and secure career as either a water operations specialist or wastewater operations specialist.



Our Circuit Riders provide training and technical assistance to operations specialists, water utility managers, and boards. On-site help is available upon request when a system needs it.

- Leak detection and water audits
- Sampling and testing
- System troubleshooting
- CCRs



Our Source Water Protection Specialist provides on-site help for systems to assess, delineate sources of water, and reduce/eliminate the potential of contamination.

- Source water protection plans
- Emergency response plans
- Measure well draw downs
- Perform TV inspection of wells



Training is available to obtain continuing education hours (CEHs) for license renewals.

As part of this training endeavor, training videos have been developed to help bring about compliance with safe drinking water regulations and to enhance system operations.

Videos and study material are available upon request.



Our ARC Specialist provides technical, training, financial, and managerial assistance for water and wastewater systems in economically distressed Appalachian counties.

- Asset management plans
- Rate analysis
- Leak detection
- Preventing inflow & infiltration (I&I)



Our Wastewater Technicians provide assistance to enhance and maintain financial sustainability of wastewater systems through technical support and/or training.

- Smoke testing and camera inspections
- Nitrogen problems
- Solids handling
- Compliance issues



Our Energy Efficiency Technician provides assistance to rural and small community water and wastewater utility systems to help in becoming more energy efficient.

- Evaluates energy needs, consumption, and costs
- Recommends measures to reduce energy consumption
- Identifies potential funding sources for improvements



Our EPA Water Technical Assistance Specialist provides training and technical assistance to water systems that struggle to achieve compliance with regulations.

A key priority is assisting small systems with their technical, managerial, and financial capacity to achieve long-term sustainability and resiliency.



GARRETT FREY

garrett.frey@freymunicipalsoftware.com
☎ (859) 441-6566 ☒ (859) 409-3259
40 N. GRAND AVE, SUITE 303
FORT THOMAS, KY 41075

www.freymunicipalsoftware.com
Fund Accounting ~ Payroll ~ Utility Billing



Water Loss Management | Remote Disconnect
Itron AMR / AMI | Ultrasonic Water Meters
Utility Billing & Financial Software

Will Taylor, Region Manager
Mobile: (615) 388-4877
Email: wilt@united-systems.com
Toll Free 1.800.455.3293 | www.united-systems.com




CLINTON "CJ" FOWLER

Territory Sales Representative
clinton.fowler@mcwaneductile.com
330-260-9292

2266 South 6th Street
Coshocton, OH 43812
mcwaneductile.com



310 Clay Ave. P.O. Box 897 Mars, PA 16046 Phone: 724-625-4260 Fax: 724-625-4227	5793 W Veterans Memorial Hwy Suite 102 Bridgeport WV 26330 Phone: 304-842-8611 Fax: 304-842-8684
---	--

ROB TROMBOLD

Distributors & Representatives
Grinder Pumps -- Sewage Pumps -- Telemetry
Water Booster Pumps -- Fire Pumps

E-mail: rtrombold@tepco.io
Web: www.tepco.io



Bowles Rice

ATTORNEYS AT LAW

James V. Kelsh

jkesh@bowlesrice.com
304-347-1135

bowlesrice.com



Since 1952

John P. Place, Inc.

90 Clairton Boulevard
Pittsburgh, Pennsylvania 15236

304/343-2607
Fax 412/655-1109
www.Johnplaceinc.com

*Process and Pumping Solutions
for Water and Wastewater*

ProSource Water Products, Ltd.

14680 Pleasant Valley - Chillicothe, Oh 45601
Phone: 888-772-5478 Cell: 614-306-3798

Terry E. Hicks
Sales Manager



Email: THicks@horizonview.net

State Equipment, Inc.

Cross Lanes, WV
Beaver, WV
Parkersburg, WV
Bridgeport, WV
Ashland, KY

Phone: 877-821-5322
Fax: 304-776-4409
Email: INFO@STATEEQUIPMENT.COM
www.stateequipment.com





By Jerry Dotson, Sourcewater Specialist

East Palestine Train Derailment

Shortly before 9:00 PM on February 3, 2023, a Norfolk Southern train left the tracks near East Palestine, Ohio while traveling from Madison, Illinois to Conway, Pennsylvania. According to the National Transportation Safety Board, out of the 150 railcars, approximately 20 were transporting hazardous materials. Thirty-eight cars derailed, 11 of which were carrying hazardous materials. Twelve other cars were damaged in the incident. About half of the Town's 4,761 residents were initially told to evacuate, yet more than 500 chose to stay in their homes. A second evacuation order was issued on February 5 due to the possibility of an explosion when the temperature of five tankers filled with vinyl chloride began to rise. Authorities chose to breach those tankers and burn off the chemical. This released hydrogen chloride and phosgene into the air. One tank car lost its entire load of butyl acrylate. Residents in the area complained of health issues attributed to the chemicals. The Ohio Department of Natural Resources estimate that 3,500 fish were killed because of the spill. Contaminants from the spill reached Sulfur Run and Leslie Run, which eventually feed into the Ohio River. The bulk of the contamination stayed in Sulfur Run and has been isolated. The East Palestine water system was not affected and monitoring wells have been placed between the water system's wells and the derailment sight. Households utilizing residential water wells have been instructed to not

drink their water until it is tested.

Experts previously said that a plume of contaminants was moving along the Ohio River; however, James Lee, a spokesperson for the Ohio EPA said that low levels of butyl acrylate made its way into the Ohio River through Little Beaver Creek. James Metcalf, a professor of biological sciences at Bowling Green State University in Ohio said that the water treatment systems and information from the Environmental Protection Agency indicate it is likely that these concentrations are not at a level of public health concern. The Ohio River Valley Sanitation Commission (ORSANCO) worked with federal, state and local partners to track the spill and provide sampling results to drinking water systems along the Ohio River. Water samples are continuing to be collected from 30 locations along the Ohio River from East Liverpool, Ohio to Cincinnati, Ohio. Sample results can be viewed at this website: <https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/ep-surface-water-results>. Fortunately, ORSANCO has monitoring stations with very sophisticated equipment on the Ohio River that aided greatly in tracking this spill. Unfortunately, that is not the case with most surface water sources.

There are numerous learning opportunities presented by this disaster. For instance, it is very important to have an on-going working relationship with your local emergency management agency. It is vital that

your personnel are available and can be reached at a moment's notice when an emergency arises. Systems must have an understanding of the recharge area and protection area that feeds their water source. And one of the most important lessons from this incident is that it is vital to get accurate, up-to-date information out to the public. This spill was overrun with inaccurate information, and the public officials did not have viable answers when the public was afforded the opportunity to ask questions. People need to know the truth of the situation and how it affects them. Building public trust is a very difficult task and when that trust is lost, it is nearly impossible to regain it.

This incident proves the wisdom in developing and maintaining a source water protection plan. If your utility needs help to develop a new plan or update an existing plan, contact Jerry Dotson, Source Water Specialist at 304.483.3497 or jerry-dotson@wvrwa.org.

<https://www.npr.org/2023/02/16/1157333630/east-palestine-ohio-train-derailment>

<https://www.usatoday.com/story/news/factcheck/2023/02/16/east-palestine-ohio-train-derailment-fact-check/11263859002/>

<https://www.orsanco.org/orsanco-east-palestine-spill-sampling-data/>

<https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/ep-surface-water-results>

<https://www.epa.gov/east-palestine-oh-train-derailment> ■

Brett Kemerer
Account Manager
Brett.kemerer@ppvs.com
Main: (304) 542-0016

Wayne Russell
Account Manager
wrussell@ppvs.com
Main: (304) 543-0550

Greg Jarrett
Project Manager
gjarrett@ppvs.com
Main (304) 982-1419

James Lawson
Application Engineer
jlawson@ppvs.com
Main: (304) 204-2257



PRECISION

PUMP & VALVE SERVICE

Quality Works Harder



- **SmartRun** technology greatly reduces energy costs with pre-programmed functions and parameters that maximize run-time and self cleaning efficiency
- **Adaptive-N** impellers move axially upward when necessary to allow bulky objects such as rags and other tough debris to pass through smoothly
- **Flygt's N-technology** utilizes adaptive hydraulics to provide clog-free, self cleaning performance
- The **Exterior's** Premium Efficiency motors are engineered to maintain lower temperatures in the motor which drastically extends life of the motor and bearings



- Full service control shop including custom panels & field service
- **Flygt** authorized warranty, repair, and aftermarket center
- Repair capabilities for all manufacturers
- Complete shop & field service capabilities
- Confined space certified technicians
- Preventative Maintenance Programs



517 Old Goff Mountain Road

Charleston, WV 25313

O: (304) 776-1710 F: (304) 776-7874

Emergency: (304) 553-5062

Technicians on call

24/7/365



By Shane Altizer, Water Circuit Rider

Lead Inventory Reminder

January 1, 2000, a date most of us all know as Y2K. People all over the world, maybe including you, feared the world was going to shut down. They stock piled food, water and other resources hoping to survive Armageddon. According to Slate.com, around 100 billion dollars were spent by the government and other American corporations hoping to survive the computer crash. Add to that amount all the people who built bunkers and spent thousands on nonperishable items. The Y2K Armageddon never happened, and a lot of money was wasted in preparation for it.

Unlike Y2K, the October 16, 2024 lead inventory list deadline is going to happen, and your preparation is required. In case you haven't heard of this, every system is required to

inventory every line in their system from main lines to the customer's house. You might feel that doing an inventory on customer's lines is wrong because everything past the meter has always been the customer's responsibility, but, right or wrong, it must be done.

As of today, June 1, 2023, you have 503 days to complete your inventory. If you don't work weekends, you have 359 days minus holidays. If you have 1000 customers, you will have to inventory nearly 3 per day, every day until the due date to complete your list on time. October 16 will be here before you realize it, so don't wait. Maybe you are unsure where to begin or it seems too overwhelming, so you haven't done anything. If that is the case, start with a letter to your custom-

ers. Ask your local circuit rider for a copy of a sample letter we have. You can also start by looking at the tax map, <https://www.mapwv.gov/parcel/>, and find houses built after 1986 when lead was outlawed. Check your maps and project contracts to see if they tell you what type of material was used when they installed the water lines.

This is a big task for most systems, but know that you don't have to do it alone. WVRWA is here to help and we have been helping systems with this since this law was passed. If you haven't started, now is the time. Our water operators and fields crews in WV are some of the best, hardest working men and women I've met. Using my best Rob Schneider interpretation from the Water Boy movie, "You can do it." ■

RURAL WATER FLEET PROGRAM

The National Rural Water Association has created partnerships with motor groups to offer discounts to utilities around the country. Member utilities should contact their State Rural Water Association to access the Rural Water Fleet Program.

Visit <https://nrwa.org/members/products-services-portfolio/fleet-program/> for up-to-date information.





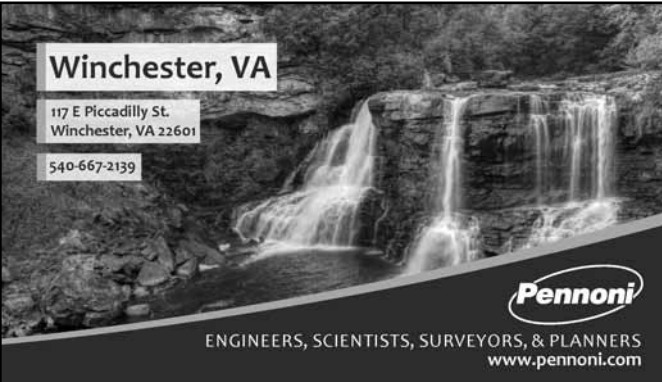
Will Michael
Municipal Sales

Ferguson Waterworks
698 Middletown Road, Rte 73S
White Hall, WV 26554
(681) 404-2857 *Mobile*
(304) 534-5823 *Office*
(304) 534-5828 *Fax*
william.michael@ferguson.com
ferguson.com/waterworks




 Non-Revenue Water
**Time is money.
So is water.**

neptunetg.com/NRW
#winyourday

Winchester, VA
117 E Piccadilly St.
Winchester, VA 22601
540-667-2139



ENGINEERS, SCIENTISTS, SURVEYORS, & PLANNERS
www.pennoni.com

Pleasants Underground Rehabilitation Services


Your Partner of Choice for UV Cured Pipe Lining and manhole and Structure repair!

- *Certified Installer of Alphaliner a Glass Fiber Reinforced Pipe Liner for storm & Sanitary Pipe
- *Certified Applicator of Epoxytec structural epoxy

P: 301-428-0800 | www.pleasantsconstruction.com

Chuck Rockacy

Rockacy and Associates, Inc.



800.836.1011
434.977.4447
800.793.8428 - Fax
434.960.9565 - Mobile
chuck@rockacy.com

2528 Thrush Road
Charlottesville, VA 22901

SERVING PUBLIC WATER SYSTEMS ACROSS WV



Certified Water Operators Leak Detection & Repair

Distribution Services Backflow Program Management

NEW! Compliance Tracking Software

304-269-0072 info@qualitywaterserviceswv.com

Clear flow ~ Preassembled Structures by CP&P



Precast Utility Buildings PRV Vaults Lift Stations
 Flume Vaults Fire Service Vaults Altitude Valve Vaults
 Water Meter Vaults Sewage Grinder Vaults



We are committed to making Concrete Pipe & Precast the preferred supplier for our customers by delivering outstanding value, continuous innovation, and exceptional customer experience by consistently fulfilling our promise:
"Not Just Concrete, Concrete Solutions"

Phone: (800) 648-2278 www.ConcreteP&P.com



Solutions to your water problems
Need a booster station? A pump or control? A pump repaired? We've got you covered.

SERVICE PUMP & SUPPLY
SERVICE FIRST SINCE 1980

Rentals | Sales | Installations | Repairs
SERVICING WV, OH, KY, AND PA

SERVICEPUMP.COM • 1 (800) 480-7867 • 24/7 SERVICE



Our Friend: The Flushable Wipe

Do disposable wipes accumulate in your sewer system? As an operator, they could be called job security for sure. In all seriousness, disposable wipes are quite a problem in sewer systems all over the world. They often cause blockages to occur on the residential, commercial and the system side. In most systems, the sewer pipes are just not capable of handling this type of waste.

The disposable wipes are a great product and have a variety of different uses. They are easy to store and easy to carry with us. The biggest problem with disposable wipes, at least in our business, is that, many times, they are being labeled as "FLUSHABLE." Most of them will flush very easily. The problem is, many of them do not biodegrade. This causes them to remain in pipes and other process equipment and accumulate.

Nationally, the wipes market is a multibillion-dollar industry. It has been growing annually over the past several years. As stated earlier, they are a very good product; however, it is estimated that the problems they cause wastewater systems nationwide could be near the billion dollar a year mark. This is really hard on our industry.

The wipe industry is getting better, but only about 7-10% of wipes are designed to be flushed. The others need to be put in the trash. The wipes industry has been taking steps to encourage wipes manufacturers to better label their products as flushable or non-flushable. Most of these products just do not break down enough to safely pass through average sewer pipes or to prevent causing issues at the public sewer system.

The EPA actually urges Americans to not flush the wipes. They would like to see the only paper product that comes into the sewer to be toilet paper. Toilet paper breaks down in the sewer, most of these wipes do not.

One of the big problems is that many manufactures label any product that will make it through a home plumbing system as flushable. The wastewater industry labels flushable as being able to break down and disperse. Wastewater organizations are urging congress to actually come up with a legal definition of the word flushable. They would like this to include that product must be able to break down and disperse. Most wipes are made of plastic fibers, so, when one is flushed, you are adding a plastic

product to the sewer system.

So, what can we do as wastewater professionals to help with this issue? The first step would be to try to educate the public. Things that do not break down such as wipes, cotton swabs, and toiletries should not be flushed. Encourage consumers to educate each other on what can be flushed and the cost it can cause to the utility if it is flushed and causes an issue. In the proper way, it is also good to let them know that the cost is always passed on to the customer. We can also encourage our political leaders to pass laws that would prohibit putting these products in the sewer. Although these laws would be hard to enforce, many people will follow the law. The system might try to put information about the problems flushable wipes cause them on their social media pages such as Facebook and Twitter. Have an article on your website or in your newsletter about how these wipes affect your system. I would mention the problems they could cause the homeowner, also. Just try to educate the public about these products and the problem putting them in the sewer can cause. They are great products. We just need to properly dispose of them. ■

JOIN WVRWA

Small firm **SERVICE** with Big firm **EXPERTISE**



The world has changed over the past two years, but our commitment to customer service has not.

At E.L. Robinson, we handle each project with personal attention, yet have a wide range of services often found at larger firms. Whether in-person or through video conferencing, our staff will be there to assist you with a project's conception to construction to close out. We may have changed our sense of personal space, but personal service never goes out of fashion.



Engineering • Planning • Landscape Architecture
Construction Services & Surveying • Emergency Management

elrobinsonengineering.com



- ◆ Leak Detectors
- ◆ GIS & Asset Mgt. Apps
- ◆ GPS/GNSS Receivers
- ◆ Ruggedized Tablets
- ◆ Pressure Loggers
- ◆ Pipe Locators
- ◆ Ultrasonic Meters
- ◆ Metering Accessories
- ◆ Waterworks Tools



64seconds



Utility Technologies, LLC | 513-488-1940 | sales@utility.biz | www.utility.biz



No Inventory? No Problem!

Need help building and validating your service line inventory?

www.120water.com/LSLI



Partnering with your association to help build your path to LCR compliance.

New Initiative in 2023



In 2023 Extreme Endeavors is starting a new business initiative, our budget is focusing on Research to Lower the Cost of Automation. This involves partnerships with organizations and companies from almost every continent, with benefits being driven back into West Virginia. Due to the material shortages and increase in cost, we thought there has to be a better way, and we want to use our innovation to help you save. We would enjoy talking with you about this new initiative!

Extreme

Endeavors Automation | Telemetry | SCADA

<http://www.extreme-endeavors.com/scada/> 304-457-2500



We Know Water!

(844) 542-4757

jhacompanies.com

- WATER/WASTEWATER
- CONSTRUCTION MANAGEMENT
- PLANNING
- FUNDING DESIGN
- PERMITTING



FEHR AND CUDA SALES, INC.

Eric Fehr

Manufacturer's Representative

662 North Main Street
PO Box 127
Greensburg, PA 15601

eric@fehrcuda.com

724.838.9394 Office
724.396.7612 Mobile
724.832.8211 Fax



Tim Spradling

304-881-1735

Benchmark Construction Co. Inc. ~ Since 1980

Mailing Address: PO Box 1018 • Hurricane, WV 25526

**Tri-State Industrial Coating
Contractors Alliance**

Brian Stanley
Marketing Representative

"Focus on Quality"

512 33rd Street
Parkersburg, WV 26101
304-546-1906
bstanley@iupatdc53.org



CHEMICAL FEED AND PROCESS EQUIPMENT FOR
WATER & WASTEWATER

VISIT OUR WEBSITE FOR ACCOUNT LISTING: www.bissnussinc.com

PITTSBURGH / WEST VIRGINIA

2600 Boyce Plaza Rd.
Suite 141
Pittsburgh, PA 15241
Tel: (412) 221-1200
Fax: (412) 221-5952

CANFIELD

Olde Courthouse Bldg
Suite 260
Canfield, OH 44406
Tel: (330) 533-5531
Fax: (330) 533-6857

FOR CHEMICAL FEED PARTS & SERVICE VISIT
www.bnrcinc.com OR CALL 888-256-3142



Bryan Martineck

Field Service Representative

Mobile: (513) 568-0514

bmartineck@fordmeterbox.com

The Ford Meter Box Company, Inc.

775 Manchester Avenue, P.O. Box 443

Wabash, Indiana USA 46992-0443

Phone: 260-563-3171 / Fax: 800-826-3487

www.fordmeterbox.com



Engineered Concrete Environmental Solutions

Micah D. Boyer | Regional Sales Manager

(c) 717-598-9081
(o) 717-442-8282

160 Route 41
Gap, PA 17527
mboyer@dutchlandinc.com

Dan Nelson
dan@dasgroupinc.com
Mobile: 412-559-8646

305 Plum Industrial Court
Pittsburgh, PA 15239-2913
724-327-8979 ext #4
Fax 724-733-9066



"The Environmental Solutions Provider"



www.dasgroupinc.com



**STIFFLER
MCGRAW**
ENGINEERS - SURVEYORS - ARCHITECTS



THE EXPERIENCE *you want,*
THE APPROACH *you need.*

WATER SUPPLY & WASTEWATER ENGINEERING - SURVEYING - GENERAL MUNICIPAL CONSULTATION
LAND DEVELOPMENT - ARCHITECTURE & BUILDING SYSTEMS - ENVIRONMENTAL ENGINEERING - TRANSPORTATION
GRANTSMANSHIP - LANDSCAPE ARCHITECTURE - CONSTRUCTION MANAGEMENT - STORMWATER MANAGEMENT - MS4

OFFICES LOCATED THROUGHOUT PENNSYLVANIA
1.888.696.6280 •    STIFFLER-MCGRAW.COM



coreandmain.com



**We're all about
West Virginia**

Dunbar 304-768-0086	Martinsburg 304-263-6986
Morgantown 304-983-8221	Poca 304-756-9901
	Stonewood 304-626-3090

TRENT HERTZFELD
manufacturers representative

Utility Solutions, Inc.

office 740.369.4300
fax 740.369.4301
cell 614.397.0196

327 Curtis Street
Delaware, Ohio 43015

www.utility-solutions.com
trent@utility-solutions.com



**INFRATECH
SOLUTIONS**

Trisha Gamsky
Sales Associate

Trisha@infratechsolutionsllc.com
910-617-0291

U
T
I
L
I
T
Y
B
I
L
L
I
N
G

ASI
an easy choice

*Your billing system is supposed
to make your job easier. Does it?*



For information or a demonstration,
call or write

Walter Frazier
Appalachian Software, Inc.
44 Amber Way
Scott Depot, West Virginia 25560
(304) 757-1260

Are MBR's Becoming the Plant of the Future?

Although first introduced in 1969, the Membrane Bio Reactor plant has taken quite a few years to become feasible. Membrane Bio Reactors are becoming more popular when a small footprint in sensitive areas is needed. The MBR can allow for higher flows with increased treatment performance in a much smaller space. The systems are usually built in trains that run side by side with solids removal, aeration chamber, membrane chamber, on to the effluent and disinfection. Some use an anoxic chamber, as well, with the on/off rotation of the aeration, and an EQ Basin of some sort is usually part of the system.

Influent screening is a very important part of the process with normally a two-step process involved, including a 6-12 mm bar screen and then onto a 1-3mm fine screen. This process requires removing almost all of the screening before the flow continues into the basins.

The flow continues into the aeration chamber or anoxic chamber before entering the filtration basin. The wastewater flows across the filters and is then filtered or permeates through the filters, the permeate is then pumped onto effluent treatment, but the solids are retained in the tank for disposal. The two most common types of filters are the hol-

low fiber membranes and the plate membranes. The filters are set up to pump air back through the filters to help clean them of solids; however, scheduled filter cleaning is a must to ensure they are clean and have no tears. Filter warranties are usually anywhere from 5-10 years from the manufacturer; however, I'm sure they fluctuate with the different brand of filters that are in service. The filters are not cheap to replace, but up to a 10-year warranty doesn't seem bad.

A few interesting things that I have learned by visiting a couple plants is that the MBR plant have the ability maintain MLSS in the range of 10,000-50,000 mg/l. Because of the smaller footprint and being able to handle flows in their range and still have these kinds of MLSS is unusual from everything that most operators have been taught. Although the MBR can handle the average flows extremely well and up to 1.5-2 times their normal flow, I&I is not their friend and that's the reason that most have an EQ tank, pond, etc. But the most incredible thing that I have learned is that the filters can do such a great job of removing the bacteria in the water that disinfection, although it is required, may not be needed.

The sensitive areas around the

state included discharges into protected streams and wetlands are good locations for the MBR plant. MBR plants are normally fully enclosed, and can be hard to find depending on the outside housing of the plant. These plants have a history of being for small to medium size plants, technology is being designed for much larger plants than in the past.

There are some disadvantages of this type of plant and you can expect a larger capital cost and maintenance cost due to the filter cleaning and replacement. Chemicals may also need to be used due to the possibility of decreased sludge settling rates. Operators of this type of plant must also obtain the Advanced Treatment license. Depending on the location, weather conditions, and the discharge, influent heating may also be a costly part with this type of plant.

Whether the MBR is the plant of the future is still yet to be seen, but the technology is here. Some things that you have learned working at a conventional plant don't apply to a MBR, which was strange to me while I was touring these plants, but the effluent doesn't lie. This type of plant under the right circumstances could possibly take your system well into the future. ■



NATIONAL RURAL WATER ASSOCIATION

NRWA *America's Largest Utility Membership*

NOW IS THE TIME TO ACT

Get Started on Your Water Utility Construction Project

Do you have a Water Utility Construction Project? Now is the time to act! Rates are at an all time low, and with the current pricing being opportunistic and taking action can result in benefits not only for your-self but for the customer as well. Consider the below items that detail positive reasons to act now that you can present to your governing body.

- Interest rates are at an all-time low.
- More project contractors are available, increasing the number of bids, potentially lowering project costs.
- Fuel costs are low, lowering pipe related costs.
- Most material costs for projects are down.
- Shipping costs for many have decreased.
- Road and water projects are easier to schedule due to decreased volume in traffic.
- Low construction costs and available contractors are not guaranteed to last.



USDA Rural Development is committed to helping improve the economy and quality of life in rural America. Offering loans, grants and loan guarantees are some of the ways Rural Development is supporting rural America.



Insuring Water & Sewer Entities



- Property & Equipment Liability
- Employee Theft
- Cyber Liability
- Public Officials & Management Liability

**bb Bill Bailey
Insurance Agency**

701 Highland Avenue, Williamstown, WV 26187

bb-ins.com

800-926-8347





RURAL WATER Loan Fund

About The Program

The NRWA Rural Water Loan Fund (RWLF) is a funding program specifically designed to meet the unique needs of small water and wastewater utilities.

The RWLF provides low-cost loans for short-term repair costs, small capital projects, or pre-development costs associated with larger projects. The RWLF was established through a grant from the USDA/RUS, and repaid funds used to replenish the fund and make new loans.

Apply today by contacting your State Rural Water Association or NRWA!



Reasons to Apply

- Reasonable interest rates
- No administrative or processing fees
- Straightforward application process and quick turnaround
- Systems must be public entities serving up to 10,000 persons, or in rural areas with no population limits
- Loan amounts may not exceed \$200,000 or 75% of the total project cost, whichever is less
- Emergency loans are 90-day no interest, with immediate turn around on applications

Eligible Projects

- Pre-development (planning) costs for infrastructure projects
- Replacement equipment, system upgrades, maintenance and small capital projects
- Energy efficiency projects to lower costs and improve sustainability
- Disaster recovery or other emergency loans available

Applications, information and forms can be downloaded from the NRWA website at nrwa.org or by scanning the QR Code above. For help, please call 1.800.332.8715 or email nrwarwlf@nrwa.org.



National Rural Water Association is an equal opportunity provider and employer. This material is based upon work supported by the Rural Utilities Service, United States Department of Agriculture.

USDA WATER & WASTE WATER DISPOSAL LOAN AND GRANT PROGRAM

Improve Your Facility

About the Program

This program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas.

Funding

Long-term, low-interest loan funding is available. If funds are available, a grant may be combined with a loan if necessary to keep user costs reasonable.

USE YOUR FUNDS TO FINANCE THE ACQUISITION, CONSTRUCTION, OR IMPROVEMENT OF:

- 01 Drinking water sourcing, treatment, storage, and distribution
- 02 Sewer collection, transmission, treatment, and disposal
- 03 Solid waste collection, disposal, and closure
- 04 Storm water collection, transmission, and disposal
- 05 Other related activities such as permits and legal fees



Scan the QR code to view more information and start your application.



WaterPlus Coverages Available

Property • General Liability • Auto
Mobile Equipment • Boiler & Machinery
Public Officials & Management Liability
Excess Liability • Workers' Compensation

renee@hayesdonnelly.com

202 Union Square
Marietta, Ohio 45750



Renee D. Parks-Shotwell

Cell: 740.350.5737

Office: 740.373.2347

EMPOWERING WEST VIRGINIA COMMUNITIES

Does your utility system need financing or refinancing to expand services, replace equipment or free up operating revenue? Whatever the reason, you need a trustworthy partner with experience and resources. Consider Crews & Associates for your next funding solution. We'll earn your trust before we earn your business.



Rob Steptoe, Director

304.276.5273 • rsteptoe@crewsfs.com

69 Clay St., Suite 202
Morgantown, WV 26501

Supervisory Office: 521 President Clinton Ave., Suite 800
Little Rock, AR 72201 • 800.766.2000 • crewsfs.com
Member FINRA & SIPC

Lagoons: Problems and Solutions

While traveling the state, I don't hear too many positive comments regarding lagoons. Lagoons seem to come with compliance issues, volume issues, sludge problems, short circuiting and the list goes on. In this article, I would like to look at some ways to deal with the problems lagoons have and some solutions to those problems. The question is can we keep our lagoons and still meet strict compliance now and in the future?

Before this research, I would have most likely been on the side of lagoons will probably not meet the future sampling requirements and it would be best to move on to a more updated wastewater treatment system. The phrase "knowledge is power" comes to my mind just because we don't know other options doesn't mean that there is not a better way to operate, or improve lagoons. This article is to shed some light on options for lagoons to stay in operation and still meet future sampling requirements. In this article I would like to cover 3 ways to improve lagoons

- Installation of Curtain/Baffles
- Aeration and Mixing
- Installation of Clarifiers and RAS to the influent

1. Installation of Curtain/Baffles: Baffles can have several valuable benefits when it comes to improving the treatment of a lagoon. The following can be benefits of using baffles according to IEC Covers.com:

- Improved retention time
- Improved settling time
- Direct water flow
- Preventing short-circuiting
- Better mixing
- Increased food to mass contact, improving wastewater treatment

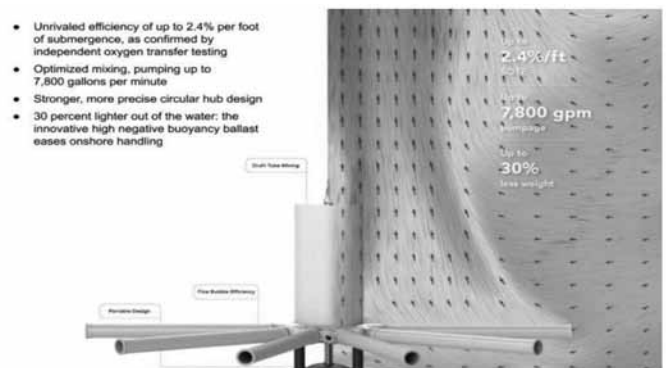
Lagoon baffles can increase (HRT) hydraulic retention time which in return can eliminate short circuiting and improve BOD and TSS removal. Once installed properly and secured, baffles have no real continued maintenance to keep up with. Another benefit of using baffles is to be able to make anaerobic and aerobic cells in the lagoon. I would consider this

option first and it also is the most cost effective to start with if your lagoon is having issues meeting sampling requirements.

2. Aeration and mixing: Many lagoons have very little aeration or mixing going on in any of the lagoon cells. With the advancement in technology regarding wastewater treatment in lagoons, there are more efficient ways to aerate and mix than in times past. Benefits of proper aeration and mixing are:

- Better effluent quality
- Sludge reduction
- Algae control
- Odor control
- Increase hydraulic capacity with same footprint up to 10x with proper modifications

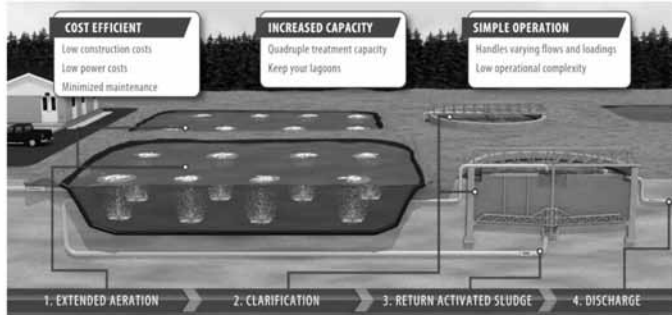
The below picture is an example of an **Ares aeration/mixing unit** that can be installed in lagoons. This system is provided TriplePoint Environment and is very cost effective compared to a different treatment system. It is possible even to eliminate the need for a different treatment system if installed properly. This unit combines fine bubble and course bubble with mixing to have an optimal mixing and aeration in the lagoon. By adding aeration and mixing to your lagoon, you will be able to extend the life of the lagoon along with better effluent quality, faster treatment and more quality control.



3. Installation of Clarifiers and RAS: Yes, you heard it right, a clarifier and a lagoon being used in the same treatment system. I hadn't heard of this before and was skeptical at first, but after you learn about it and give it some thought, it does make sense. Clarifiers, along with a RAS, are typically used in

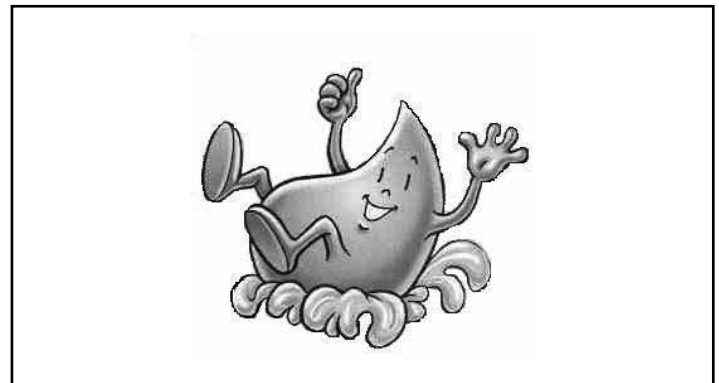
a conventional activated sludge system. Benefits of installation of a clarifier are:

- Returned Activated Sludge (RAS)
 - *Higher MLSS
- Increase capacity of treatment
 - *Better settling of solids



- Sludge reduction
 - *Phosphorus removal
- Waste activated sludge can go to polishing pond without having to use solids handling facility.

Before we go forward with new treatment facilities, we should consider our lagoons and ways to improve them to deal with the issues they may have. There are many new technologies and knowledge out there that can help improve our lagoons treatment system. Remember, “knowledge is power.” If you are having problems with your lagoon and would like to know more about solutions, contact me and I would be glad to get you more resources. Reference: www.lagoons.com. ■





ANOTHER OUTSTANDING

PERFORMANCE

Produced by Master Meter.



See how our custom-designed systems can have your community saying, “Bravo!” We believe that a combination of different underlying communication technologies, which share a common endpoint design is a highly efficient and cost-effective approach that’s like music to your ears.

Allegro Technology addresses issues that utilities often face when implementing AMI, regardless of a particular utility’s nuances and deployment needs. Allegro’s end-to-end solid-state technology optimizes project outcomes and business deliverables to help utilities solve their toughest water management challenges.

Mike Phillips | 937.902.4663 | mphillips@mastermeter.com

www.mastermeter.com

REDUCE SITE LABOR & MULTIPLE VENDORS with COMPLETELY OUTFITTED

PRECAST CONCRETE BUILDINGS

FOR WATER & WASTE APPLICATIONS



PRE-ENGINEERED • STANDARD OR CUSTOM DESIGNS

INSTALLS IN HOURS, LASTS FOR DECADES

Minimal Site Prep • Outperforms Metal, Wood or Masonry

SMITH-MIDLAND®
EXCELLENCE IN PRECAST CONCRETE

SMITHMIDLAND.COM - 540.439.3266

Pump & Lift Stations • Well Houses • Maintenance • HazMat & Chemical Storage • Belt Filter Press, Control, Operations Buildings & More

Customizable solutions with minimal service interruptions

*Manhole Coatings
Wet Wells & Tank Linings
Potable Water Storage Basins
Culvert Lining Installations
Bridge Deck Waterproofing
Secondary Containment*

Contact us today to learn more.



Advanced Rehabilitation Technology

419-636-2684
Advanced Rehabilitation Technology
525 Winzeler Drive, Unit 1
Bryan, OH 43506
www.artcoatingtech.com

Certified Installer of 



Need Information or CD's?
Visit the WVRWA Library To
View the Latest Information
Available



WVRWA website
[@www.wvrwa.org](http://www.wvrwa.org)

WWW.WVRWA.ORG



JABO WATER WORKS DIVISION

SUPPLY CORPORATION

SERVICE IS MORE THAN A PROMISE!

(800) 334-5226

PIPE

- PVC PRESSURE PIPE
- C900
- DUCTILE IRON
- AQUAMINE
- CORRUGATED PLASTIC AND GALVANIZED
- CARBON & STAINLESS STEEL PIPE

VALVES

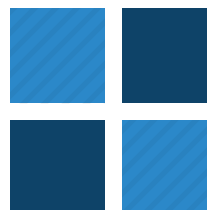
- HYDRANTS
- GATE, GLOBE, & CHECKS
- BALL VALVES
- BUTTERFLY VALVES
- PLUG VALVES

FABRICATION SHOP

- CUSTOM HDPE VALVE VAULTS
- CUTTING & GROOVING SERVICES UP TO 24"
- THREADING CAPABILITIES OF TO 6"
- 10,000 SQ/FT HDPE FABRICATION SHOP
- CUSTOM HDPE FABRICATION UP TO 24" AND SPOOLS UP TO 36"
- HDPE SPECIALIST WILL COME TO YOUR JOBSITE & MEASURE & PROVIDE FULL CAD DRAWINGS
- 2-36" HDPE FUSION MACHINES AVAILABLE TO RENT

ADDITIONAL SERVICES

- IN-HOUSE VALVE ACTUATION SHOP
- IN-HOUSE BULK HOSE AND ASSEMBLY SHOP



Huntington, WV
Phone: (304) 736-8333

Norton, VA
Phone: (276) 679-1224

Parkersburg, WV
Phone: (304) 464-4400

Morganfield, KY
Phone: (270) 389-3430

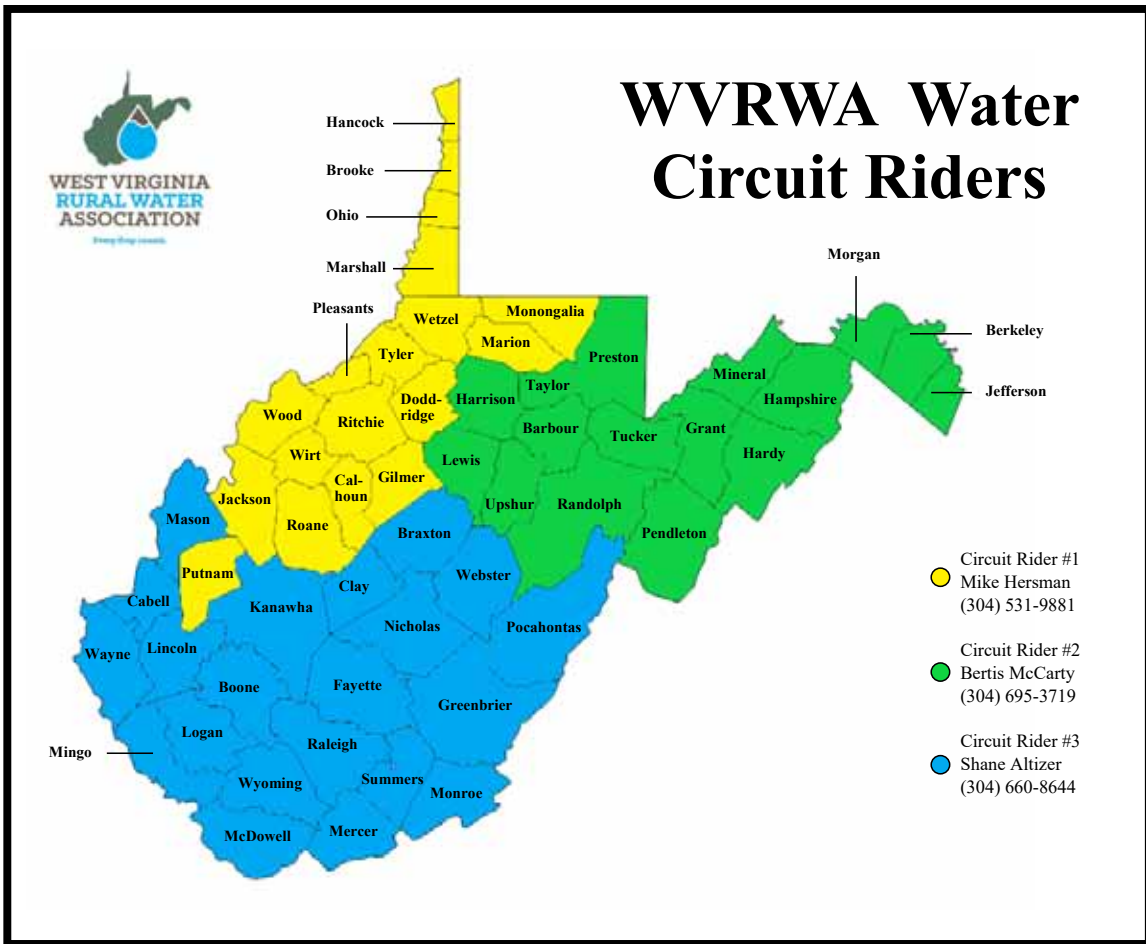
Beckley, WV
Phone: (304) 252-0000



JABO

SUPPLY CORPORATION

www.jabosupply.com





MORE

More inventory.

Hundreds of new products.

One-stop-shop for all your materials.

Expedited delivery.

Professional services, AutoCAD, engineering, planning and more.

Real-time data management and order tracking.

More locations for your convenience.

Bowling Green, KY ◦ Hebron, KY ◦ Huntington, WV ◦ Lexington, KY ◦ Morgantown, WV ◦
Nashville, TN ◦ South Charleston, WV ◦ Triadelphia, WV ◦ Natrona Heights, PA

Two companies with long-standing relationships, great reputations, and quality products have joined forces that **offer you more**—more solutions, more resources, more expertise, and more product offerings to benefit every customer. We are committed in everything we do as your partner in the waterworks industry—taking care of your needs and expectations, every step of the way.

Solutions driven. Commitment given.

CITCO 
WATER CitcoWater.com
800.999.3484

THE EXPERTISE YOU NEED, THE SERVICE YOU DESERVE

THRASHER'S GOT IT



COMMUNITY
FOCUSED



CLIENT
DRIVEN



LONG-TERM
PARTNERS

THRASHER

1-800-273-6541
www.thrashergroup.com



Technology-Driven Operational Insights



Flow Meters | Water Quality & Distribution Monitoring | Data Collection & Analysis



Need confidence in meter accuracy?

Recordall® Disc Series Meters

Ideally suited for any water application, performing with great accuracy over a wide flow range.
Long-Term Metering Solution | Meter Housing Options | Reading System Compatible



No manpower for maintenance?

E-Series® Ultrasonic Plus Meters

The latest advancement in smart water metering that provides utilities with greater control and system visibility.

Integrated Remote Restriction Valve | Flexible Deployment | Smart Water Ready



Need timely data for decision making?

Beacon® Software as a Service (SaaS)

Beacon transforms meter reading data into actionable information for proactive decision making and optimized utility management.

Customizable Solutions | Integrated Consumer Engagement Platform | Seamless Integration
Future-Proof Technology | Increased Visibility | Enhanced Customer Service



Noisy networks, leakage or bursts?

Syrinx

Leakage and burst reduction through data-led network calming.

Detect and Locate Leaks Via Acoustic Leak Detection | Improve Critical Response Times Via Burst Locating Alarms
Extend Asset Lifetimes with Operational Insights | Transformative Insights Into Pumped Main Performance



Need quality, reagent free water monitoring?

s::can & ATi

To water-centric operations, frequent and precise monitoring at critical points in the system is the most cost-effective means of driving down complaints, improving compliance ratings and reducing operating expenditures.

Spectrometric, amperometric, ion-selective, optical and other maintenance-free single and multi-parameter probes.
MetriNet - Customized, modular media flow data collection system with up to 8 industry-leading M-Node sensors
pipe::scan - An NSF-approved, no-waste/no-loss media monitoring station housing multiple probes, attaching directly to distribution piping.



water 855.373.9776 www.fpgwater.co



Valves & Instrumentation

valtronics.com | 304.273.5356

Valtronics.



P.O. Box 7144
Charleston, WV 25356-0144
wcweil.com

office 304.776.5665
dlusk@wcweil.com
304.776.8171

DANNY LUSK
SALES REPRESENTATIVE

Sales - Service - Aftermarket Parts

AQUASTORE
Tanks & Domes
"Glass Tanks with a Heart of Steel™"

- Never needs painting
- Sizes to 6 Million Gallons
- Ground Storage Tanks
- Standpipes
- Composite Elevated Tanks

Atlantic Storage Systems, Inc.

Jim Wery
Cell: 740-606-7787
www.modularwaterstorage.com

Partner with Confidence.

Plan for the Future
Estate planning is a highly personal process. You need a partner you can trust to create a plan that achieves your long-term goals and protects your loved ones. Our team of experienced professional advisors will work with you to create a plan that meets your individual needs.



JENKINS FENSTERMAKER, PLLC
ATTORNEYS & COUNSELLORS

Jenkinsfenstermaker.com
1400 FALCON WAY | HARRIS VALLEY, WV
26043-2181 | 800-962-3476

SCADA
LEAK DETECTION
VALUATIONS
TRANSMISSION

TREATMENT
Leak Detection
Wastewater
Distribution

GD&F
ENGINEERS

GDFENGINEERS.COM

Intakes
Wells
SYSTEM EVALUATIONS
Funding-Rates
Transmission
Pumping
SCADA
WELLS
Collection-Conveyance
Storage

DISTRIBUTION
Leak
WASTEWATER
Treatment
System E
Intak
STORAGE

Pace Analytical

...your full service environmental laboratory (800) 999-0105 pacelabs.com

- Statewide Lab Courier Service
- Drinking Water Analysis
- NPDES Monitoring
- Whole Effluent Toxicity (WET) Testing
- Waste Water Assessments
- Complete Groundwater Monitoring Programs

Beckley, WV 800-999-0105
Morgantown, WV 304-241-5861
Lexington, VA 540-464-1880



Let's Not Forget Annual Updates

When we think of annual updates, there are a few that will come to mind for most everyone. On the wastewater side, you have your Annual Sludge Report, and on the drinking water side, you have your Large Quantity Water User Report. These two reports are most certainly important and your compliance agency will certainly remind you if you have forgotten or are late with them. One annual update that is regularly forgotten is your Asset Management Annual Update.

In recent years, systems that have applied for various loans from USDA/RUS, State Revolving Funds, and various lending agencies for upgrades, line extensions, and/or just about anything to make your system perform better has insisted that the system start and continually maintain an Asset Management Plan program (AMP). If you are not familiar with AMPs, there are several free ones out there, such as the Check-Up Program for Small Systems (CUPSS), which is designed for small drinking water and wastewater systems.

EPA's Office of Groundwater and Drinking Water developed CUPSS with the help of a workgroup that included representatives from state agencies, technical assistance organizations, EPA Regional offices, and small wastewater and drinking water utilities. While still available for use, it is no longer being updated and may not be compatible with the latest computer operating systems. Although, I work with a few systems that still use it and like it, but keep it on older computers which still have the Windows XP operating system. There are several systems that have WVDHHR's Basic Asset Management Plan that is really simple to set up and work with, and the annual updates for it are also easy to maintain. That is really the only two that I have assisted systems with, in getting started and as a go to once a year to assist with their annual update. There are some other AMPs online that you can pay for and a few templates, also.

While thinking about the above title, I had Asset Management in

mind. First, let me mention that when you start your AMP, do not list small priced items, such as anything below \$500. You don't want to have to keep up with small items that you can purchase locally, such as nuts and bolts, spigots, water hoses, etc. You have too many higher priced items and equipment that you will replace and have major repairs on throughout the year to keep up with. Your loan agency will want an annual update report for your AMP, so during the year, someone must keep up with the changing assets of your business. Any time your system changes out a motor, blower, buys a new vehicle, replaces a vehicle, etc., keep a record somewhere. Now, you can update your AMP as you go along, or keep a list and update on a slow day.

The main idea is that you DO NOT FORGET your annual update for your Asset Management Plan because it is required by your lending agency.

Thank You for reading my article! Until next time, Have a Blessed Year!! ■



BUSINESS ESSENTIALS: RELATIONSHIPS

with high-powered
teamwork, the
sky is the limit



**SOLUTIONS FOR YOUR INFRASTRUCTURE
AND ECONOMIC DEVELOPMENT NEEDS**

John C. Stump • Richard L. Lewis • Marc C. Bryson • Todd M. Swanson
Thomas L. Aman Jr. • Katy Mallory (Project Finance Manager)

THIS IS AN ADVERTISEMENT



steptoe-johnson.com

SUDOKU PUZZLE

			5					
	2						4	
	1	5		3		2	7	
	4		7		3	8	5	
1		9	8					
	3	7						
	9	8	1		6	4	2	
3								
				2			8	9

The aim of the canonical puzzle is to enter a numerical digit from 1 through 9 in each cell starting with various digits given in some cells (the "givens"). Each row, column, and region must contain only one instance of each numerical. Completing the puzzle requires patience and logical ability.

Answers can be found on page 38.



Vermeer[®]

Heartland

WEST VIRGINIA
5900 MacCorkle Ave
St. Albans, WV 25177
304-768-5965

EQUIPPED TO
DO MORE.

Trenchers Directional Drills Grinders

*Proud supporter of the
West Virginia Rural Water Association*



THOMPSON
& LITTON

EST. 1956

1105 Mercer Street | Princeton, West Virginia
304.425.9555 | www.T-L.com

LOWE & ASSOCIATES, PLLC

RODMAN G. LOWE

C.P.A.

rlowe@lowecpas.com

1156 South Main Street
Milton, West Virginia 25541

Office 304/743-5573
1-800-720-9629
Fax 304/743-1150

JESSIE O. PARKER, JR., P.E.
Chief Executive Officer
jop@nreiww.com

New River Engineers, Inc.
501 Eagle Mountain Road
Charleston, WV 25311

304.342.7168 Office
304.342.7169 Fax

ENGINEERS - DESIGNERS - SURVEYORS

- WATER
- WASTEWATER
- SITE DEVELOPMENT
- STRUCTURAL
- OIL & GAS
- MINING
- ENVIRONMENTAL
- CONSTRUCTION
- MANAGEMENT
- GPR LOCATE
- SURVEYING

NREIWW.COM

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

ADDRESSING AGING INFRASTRUCTURE

Practical solutions. Customized approach.



Sewers | Mains | Tanks
Wells | Plants | Intakes
Pump Stations

Burgess & Niple, Inc.
4424 Emerson Ave.
Parkersburg, WV 26104
304.485.8541

Learn more at burgessniple.com  

We're on the Web!

For the latest information on what WVRWA is up to,
follow us on Twitter, Facebook, & Lindedin

- Twitter: WV Rural Water
- Facebook: WV Rural Water Association
- Lindedin: West Virginia Rural Water Association





WEST VIRGINIA
Water Development Authority



Marie L. Prezioso
EXECUTIVE DIRECTOR

1009 Bullitt Street
Charleston, WV 25301
mprezioso@wvwda.org

304-414-6500 (X101)
Cell: 304-932-5091
Fax: 304-414-0865

POTESTA
Engineers and Environmental Consultants

www.potesta.com

CORPORATE HEADQUARTERS
CHARLESTON

T: (304) 342-1400
F: (304) 343-9031
Email: potesta@potesta.com

Engineering • Environmental • Remediation • Surveying

BRANCH LOCATIONS

MORGANTOWN, WV
(304) 225-2245

WINCHESTER, VA
(540) 450-0180

AULICK

Exceptional Chemistry.
Personal Support.

With a devotion to problem solving, we'll find the right chemistry for your unique water or wastewater application.

- Odor and Corrosion Control
- Wastewater Treatment
- Water Treatment Technology
- Industrial Solutions

Aulick Chemical Solutions
111 Patton Ct. | Nicholasville, KY 40356
859.881.5422 | aulickchemical.com | info@aulickchemical.com

PREISER **PREISER SCIENTIFIC**
All The Right Stuff For Your Laboratory
An ISO 9001:2015 Certified Company

94 Oliver Street
St. Albans, WV 25177
Office: 1.800.624.8285
FAX: 1.800.919.4353
Website: www.preiser.com

Laboratory Equipment and Supplies

**PRESTRESSED CONCRETE
WATER & WASTEWATER TANKS**

CITY OF EJKINS, WV
CHAPMAN TECHNICAL GROUP



FRANK HOUSTON, P.E.
MID-ATLANTIC REGIONAL MANAGER
717.521.7595
FRANK.HOUSTON@DNTANKS.COM

**STRUCTURE.
& INTEGRITY.**

**PITTSBURG
TANK & TOWER
GROUP**

An ESOP Company Since 1919
"100 years and still climbing"

**CREWS
AVAILABLE
GLOBALLY**



WWW.PTTG.COM

NEW TANKS – Rick DiZinno
[270] 826-9000 ext. 2601

EXISTING TANKS – Jordan Pyles
[270] 826-9000 ext. 4601

**CLOW
VALVE CO.**

Division of McWane, Inc.
<http://www.clowvalve.com>

902 South 2nd Street
Oskaloosa, IA 52577

Jerry Lawman
Territory Sales Manager

Cell: 330-360-4550
E-mail: jerry.a.lawman@clowvalve.com



**DESIGNING
FOR THE
FUTURE...**

When quality matters most, call on us.

www.eadsgroup.com
800.626.0904


THE EADS GROUP
Engineering, Architecture & Design Services

- Planning
- Permitting
- I&I Studies
- Act 537 Sewage Facility Plans
- Site Planning
- Water Systems
- Wastewater Systems
- Stormwater Solutions
- Surveying & Mapping
- Drone UAV Services
- Municipal Engineering
- Geographic Information System
- Environmental Services
- Landscape Architecture
- Construction Inspection/Administration
- Grants/Funding

Altoona • Beaver • Clarion • Johnstown • Lewistown
Pittsburgh • Somerset • Cumberland • Morgantown

Answers to Soduko Puzzle

7	8	4	5	1	2	3	9	6
9	2	3	6	8	7	1	4	5
6	1	5	4	3	9	2	7	8
2	4	6	7	9	3	8	5	1
1	5	9	8	6	4	7	3	2
8	3	7	2	5	1	9	6	4
5	9	8	1	7	6	4	2	3
3	6	2	9	4	8	5	1	7
4	7	1	3	2	5	6	8	9




BRECKENRIDGE
CORPORATION
GENERAL CONTRACTORS
WV001651

breckenridgecorp.com

Bus. (304) 472-3350
Fax (304) 472-8506

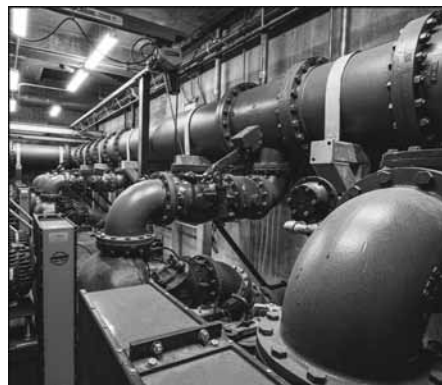
P.O. Box 247 Brickyard Rd.
Buckhannon, WV 26201



Serving all your Water, Sewer, and Gas Needs:

Consolidated Pipe & Supply Co., Inc.
907 Honey Branch Industrial Park, Debord, KY 41214
Phone: (866) 350-4582 • Fax: (606) 298-0299
www.consolidatedpipe.com

Contact us for all your pipe & related needs!



**Chapman
Technical
Group**

a division of
GRW
St. Albans, WV
Buckhannon, WV
Lexington, KY
304.727.5501
www.chaptech.com

Bluefield Sanitary Board
Wastewater System Improvements



Water Rules 150-07

New WV PSC Water Utility Rules went into effect on 3/25/2023.

I haven't read all of them, yet, but I'm sure I will get to experience a few of them with some of the systems out there in the field.

In helping with a LOW PRESSURE WAIVER for a system, I found that the old rule 5.8 no longer exists. I had to reference Rule 7.8.4 in the document. With this in mind, I would suggest a review of all written agreements and forms that have any PSC Rule references. If the changes aren't made, you may be referencing some rules that don't exist anymore.

One of the interesting rules I read was 6.1.7.m. It states that the customer with a structure using a private fire service line shall notify the utility of a system test so they can be present if desired. Might have to do a little informative communication on that one, because I'm sure none of the businesses know it.

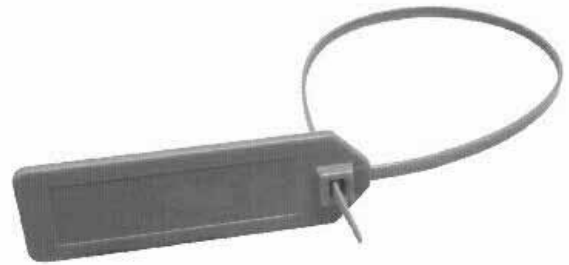


Rule 7.2.3 states that the system will specify the size, kind, quality, and location of all materials used in the utility service pipe. I know of a few people

that do this and inspect the connection before the customer buries it. Good customer communication is key!

Rule 5.2.2 states that when a group of meters are together, every meter shall be tagged to indicate the particular customer served by it.

I have seen many situations where this would be a great idea, Hope everyone follows this rule.



Rule 6.1.7 and all of its many subparts are about Private Fire Service and should be read in their entirety. The information in this rule could make changes in the system's application for private fire service. The "Private Fire Service" part of systems is largely overlooked and I would recommend every system to update their thoughts and policies toward it. From the way to test for leaks on the private line and being present when the fire service is being tested yearly.

I'm sure you will find more interesting new rules as you do your daily work and experience them.

John Maxwell said it best: "The truth is that teamwork is at the heart of great achievement" ■



Insurance Solutions for Water Districts

*Do you have leaks in
your current
insurance coverage?*



BRAY & OAKLEY
INSURANCE AGENCY

Get a quote from Bray & Oakley

Coverages available are Property, Inland Marine, Crime, General Liability, Wrongful Acts, Employment Practices Liability, Auto and Excess. Take advantage of combining all these coverages into a package and save money. Also, if you would like to discuss and review these various coverages, you should obtain a quote to learn more about what Bray and Oakley Insurance has to offer.



(304) 752 - 6850 | www.brayandoakley.com | 213 Main St. | Logan, W.V. 25601



Attention Boards and Managers: Here is What Operators Want You to know

For two years, I have taught classes in over thirty communities in West Virginia and have had the privilege to meet Operators from all over the state. Some of these Operators are new to the business, some have treated water longer than I have been on the planet. Some Operators have worked at several small systems in the state with limited resources, some Operators are employed by large municipalities and can easily get what they need. Despite the differences, there is a common theme I hear from Operators: there is a disconnect between the Operators that run Water and Wastewater Plants and the people that govern them. Regardless of how a utility is structured, whether if run by a Board of Directors, a Mayor and a Council, or a manager of some type, there seems to be a breakdown between what the governing body expects and what the Operators actually do.

Hearing these conversations over and over, I started to directly ask Operators in class, “What do you want these Boards to know” and here are several recurring themes. These are in my own words, but paraphrased from multiple Operators, from every part of this great state.

“BEING A CERTIFIED OPERATOR IS A LIFESTYLE, NOT JUST A JOB”

Most Operators are always on call. Usually this is not in an official capacity where they are

earning a wage. Operators have to respond to leaks and emergencies. They get phone calls when there are fires, if a vehicle hits a hydrant or to address unforeseen water quality issues. They also hear complaints from friends and neighbors when they are attending their child’s ball games or picking up groceries at the store. Again, most of these things are happening regularly with no compensation. Operators with telemetry enabled on their phones habitually check on the water system even on their days off. This level of dedication comes from a high level of commitment to protecting the health of their communities. Operators aren’t doing this for fame or fortune. Most of them will continue to serve without the pay or acknowledgment they deserve. This is important to remember when Operators request tools, safety equipment, or other things vital to their job. Most plants operate 365 days a year to meet never-ending demand. There are few other careers when an employee always feels “on” and rarely gets to physically and mentally check out and get the time away they deserve.

“THIS IS A PROFESSION, NOT JUST A JOB”

To become a Class II Water or Wastewater Operator in the state, an Operator: provides proof they have graduated high school or earned a GED, attends a certification class, passes an exam created by a committee of Class IV Oper-

ators, provides proof of two years of verified experience as an Operator (unless they are able to substitute one year of experience with education), and has their Chief Operator vouch for their readiness to earn a license. Once the state verifies all of the requirements are met, the Operator is granted a Class II license, they must continue honing their skills as an Operator and earn continuing education classes by attending training that is certified by the West Virginia Bureau for Public Health. This regimen of testing, experience, and continuing education is similar to that of accountants, attorneys, pilots and doctors. Certified Operators of all different level of classes are not replaceable.

“WE DON’T WEAR CAPES, BUT WE ARE HEROES”

Ok, there is actually no Operator that is going to say that about themselves – which is why I am going to say it: Operators are invisible superheroes. They work behind the scenes and provide services that are essential to everyday life. Their occupation requires a high level of trust and autonomy. Rarely does an Operator need hand holding and reminders to do their job to the highest standard. They work weekends and holidays and in emergencies. Lots of other occupations get credit for being essential, but not one of those can happen without dutiful Operators keeping the waters safe! ■

Civil Engineering Solutions Powered By 100+ Years of Experience

Family owned and operated since 1902, Hornor Brothers Engineers is the oldest engineering firm in West Virginia. We combine the comprehensive expertise of five Registered Professional Engineers and a dependable support staff with a thorough knowledge of north central West Virginia to provide our customers with value driven results.

100+ years of experience is powerful . . . put it to work for you.



Specializing in:

- Airport Facilities
- Civil Engineering
- Land Surveying and Mapping
- Residential and Industrial Site Development
- Roadways
- Water and Sewer Systems
- Drainage Systems
- Project Management

HORNOR BROTHERS ENGINEERS

HORNOR BROTHERS ENGINEERS • HORNOR BROTHERS ENGINEERS • HORNOR BROTHERS ENGINEERS • HORNOR BROTHERS ENGINEERS

140 S. Third Street • P.O. Box 386 • Clarksburg, WV 26302

Ph. (304) 624-6445 / Fax (304) 624-6448

www.HornorBrosEng.com

Trey Hornor, P.E., *President and Managing Partner*

HONORARY MEMBERS

We would like to give a special thanks to all of our current and former Board Members and Staff who have helped shape WVRWA.

April Atkinson	Dina Foster	Jim Johnson	S.E. "Ed" Moats	Margaret P. Sos
Lew Baker	Jennifer Freeman	George Kallai	Wayne Oates	George Sparks
Joe Blair	Barbara Gerkin	Curtis Keller	Robert L. Pack, Jr.	William A. Spino
Rocky Bragg	Lamar Godbey	Matthew Lamp	Tina Parsons	Debora Starnes
Ron Brill	Todd Grinstead	Tom Landis	Tom Pitman	Grace Stewart
Debbie Britt	Thomas G. Hall	Danny Lewis	Gregory Preece	Fred D. Stottlemeyer
Gary Buckbee	Dreama Hammonds	Randall Lewis	Larry Rader	Tim Stranko
Dwight Calhoun	William Hancock	Clayton Lutz	Jearl Ramsey	David Swain
Dan Campbell	Lowell Hardman	Starla Lynch-Snead	Dwight Reggi	Amy Swann
June Ann Carr	Lynn Hartman	Jeff Martin	Rick Roberts	Floyd Teter, Jr.
Tim Carroll	Calvin Hatfield	Bertis McCarty	Porter Robertson	Ray Tilley
Linda Davis-Adkins	Alan Haught	J. Robert McCarty	Jim Runyon	Daniel Vestal
Ricky Dennison	J. B. Heflin	Amanda McGinnis	Steven Sanders	David Wagner
Mike Dill	Mike Hersman	Jack McIntosh	Dalip Sarin	Darrell Wellman
George S. Evans	Doug Hervey	Mike McNulty	Douglas Schafer	Jim Wesolowski
Joseph Ferrell	C. David Holt	David Miller	Bonnie Serrett	Taylor Whittington
Thomas A. Ferris	John Huddleston	Will Miller	Doug Skeen	Janie Witt
Elaine Flaxer	Mary Hutson	Elbert Morton	Douglas Smith	Bill Yunker
Chet Fleming	Deborah D. Jividen	Herb Montgomery	J. C. Smith	
David Foster	Erica Johnson	Grover Moore, Jr.	Mary Smith	

VOTING MEMBERS

Adrian PSD	East View PSD	Lumberport	Raleigh County PSD
Alderson	Eastern Wyoming PSD	Mannington PSD	Ravencliff-McGraws-Saulsville PSD
Alpine Lake Public Utilities	Eleanor	Marlinton	Ravenswood
Armstrong - Deepwater PSD	Elizabeth	Marshall County PSD #2	Red Sulphur PSD
Arthurdale Water	Elk Valley PSD	Marshall County PSD #3	Reedsville
Athens	Elkins	Marshall County Sewage	Richwood
Belington	Elkins Road PSD	Mason	Ridgeley
Belmont	Ellenboro	Mason County PSD	Ripley
Benwood	Enlarged Hepzibah PSD	Masontown	Rivesville
Berkeley County PSSD	Fairview	Matewan	Romney
Berkeley County PSWD	Farmington	Meadow Bridge	Ronceverte
Berkeley Springs Water	Fenwick Mountain PSD	Middlebourne	Rowlesburg
Bethany Sanitation Board	Flatwoods-Canoe Run PSD	Midland PSD	Rupert
Beverly	Follansbee	Mill Creek	Salem
Big Bend PSD	Fountain PSD	Milton	Salt Rock Sewer PSD
Bingamon PSD	Frankfort PSD	Mineral Wells PSD	Shady Spring PSD
Bluewell PSD	Franklin	Monongah	Shinnston
Bradley PSD	Gauley River PSD	Monumental PSD	Short Line PSD
Branchland-Midkiff PSD	Gilbert Water	Moorefield	Southern Jackson PSD
Bridgeport	Gilmer County PSD	Moorefield Regional Wastewater	Southwestern Water PSD
Brooke County PSD	Glen Dale	Morgantown Utility Board	Spencer
Buckhannon	Glenville	Moundsville Sanitary/Water	St. Albans MUC
Burnsville	Grandview Doolin PSD	Mount Hope	St. Marys
Cairo	Grant County PSD	Mount Hope Water Association	Stonewood
Caledonia Heights	Grant Town	Mountain Top PSD	Sugar Creek PSD
Cameron	Grantsville	Mt. View Water Assoc.	Summersville
Canaan Valley PSD	Greater Harrison PSD	Mt. Zion PSD	Summit Park PSD
Carpendale	Greater St. Albans PSD	Nettie - Leivasy PSD	Sun Valley PSD
Cedar Grove	Green Valley-Glenwood PSD	New Creek Water Assoc.	Taylor County PSD
Central Barbour PSD	Greenbrier County PSD #1	New Haven	Tennerton PSD
Central Boaz	Greenbrier County PSD #2	New Martinsville	Thomas
Central Hampshire PSD	Hammond PSD	Newburg	Tri County Water Assoc.
Century Volga PSD	Hamrick PSD	Northern Jackson County PSD	Triadelphia
Chapmanville	Hancock Co. PSD	Norton-Harding-Jimtown PSD	Tunnelton Municipal
Charles Town	Hardy County PSD	Nutter Fort	Tyler Co. PSD
Chester	Harman	Oak Hill Sanitary Board	Union
Chestnut Ridge PSD	Harpers Ferry	Oakland PSD	Union PSD
Clarksburg Water Board	Harrisville	Oakvale Road PSD	Union Williams PSD
Clay County PSD	Hillsboro	Paden City	Valley Falls PSD
Clay Municipal Water Works	Hodgesville PSD	Page-Kincaid PSD	Village of Beech Bottom
Claywood Park PSD	Hughes River Water Board	Parkersburg Utility Board	Village of Bethlehem
Clinton Water Assoc.	Hundred-Littleton PSD	Parsons	Vienna
Clover PSD	Huntington Water Quality Board	Paw Paw Municipal	Wardensville
Coalton	Huttonsville	Paw Paw Rt. 19 PSD	Washington Pike PSD
Colfax PSD	Huttonsville PSD	Pea Ridge PSD	Wayne
Cool Ridge Flat Top PSD	Ice's Run PSD	Pendleton Co. PSD	Webster Springs PSD
Coolfont Mountainside Assoc.	Jane Lew PSD	Pennsboro	Welch
Cottageville PSD	Kanawha Falls PSD	Petersburg	West Hamlin
Cowen PSD	Kenova Municipal	Philippi	West Milford
Crab Orchard-MacArthur	Keyser	Piedmont	West Union
Craigsville PSD	Kingwood	Pine Grove	Wetzel County PSD #1
Culloden PSD	Lavalette PSD	Pineville	Wheeling
Danese PSD	Leadsville PSD	Pleasant Valley PSD	White Oak PSD
Davis	Lewisburg	Pocahontas County PSD	White Sulphur Springs
Davy Municipal Water Works	Lincoln PSD	Preston County PSD #1	Williamstown
Denver Water Assoc.	Little Creek PSD	Preston County PSD #4	Winfield Sanitary Board
Doddridge County PSD	Logan	Preston County Sewer PSD	
Downs PSD	Logan County PSD	Putnam PSD	
East Bank	Lubeck PSD	Rainelle	

WVRWA Associate Members - Summer, 2023

*Associate Member • **Sponsoring Associate Member
*** Sustaining Associate Member

ACCOUNTING/FINANCIAL

***Griffith & Associates, CPA's**

950 Little Coal River Road
Alum Creek, WV 25003
Phone: (304) 756-3600
See Our Ad Page 2

***Lowe & Associates, PLLC**

1156 South Main Street
Milton, WV 25541
Phone: (304) 743-5573
See Our Ad Page 35

***Piper Sandler & Company**

405 Capitol Street, Suite 613
Charleston, WV 25301
Phone: (304) 343-7101
See Our Ad Page 24

ATTORNEYS

***Bowles Rice, LLP**

600 Quarrier Street
Charleston, WV 25301
Phone: (304) 347-1100
See Our Ad Page 6

*****Jackson Kelly PLLC**

500 Lee Street, E., Suite 1600
Charleston, WV 25301
Phone: (304) 340-1000
See Our Ad Page 4

***Jenkins Fenstermaker, PLLC**

325 8th Street
Huntington, WV 25701
Phone: (304) 523-2100
See Our Ad Page 32

***Kay Casto & Chaney, PLLC**

707 Virginia Street, E
Charleston, WV 25301
Phone: (304) 345-8900
See Our Ad Page 24

*****Steptoe & Johnson, PLLC**

P.O. Box 1588
Charleston, WV 25301
Phone: (304) 353-8000
See Our Ad Page 34

INSURANCE

*****Bill Bailey Insurance Agency, Inc.**

701 Highland Avenue
Williamstown, WV 26187
Phone: (304) 375-4900
See Our Ad Page 19

*****Bray & Oakley Insurance Agency, Inc.**

P.O. Box 386
Logan, WV 25601
Phone: (304) 752-6850
See Our Ad Page 40

****Hayes Insurance Agency**

202 Union Square
Marietta, OH 45750
Phone: (740) 373-2347
See Our Ad Page 22

CONSULTANTS

****Burgess & Niple, Inc.**

4424 Emerson Avenue
Parkersburg, WV 26104
Phone: (304) 485-8541
See Our Ad Page 36

***Cerrone & Associates, Inc.**

97 14th Street
Wheeling, WV 26003
Phone: (304) 232-5550
See Our Ad Page 24

***Chapman Technical Group**

200 Sixth Avenue
St. Albans, WV 25177
Phone: (304) 727-5501
See Our Ad Page 38

****Crews & Associates, Inc.**

69 Clay Street, Suite 202
Morgantown, WV 26501
Phone: (304) 292-6600
See Our Ad Page 22

*****E.L. Robinson Engr. Co.**

5088 Washington Street, West
Charleston, WV 25313
Phone: (304) 776-7473
See Our Ad Page 12

****Gwin, Dobson & Foreman, Inc.**

3121 Fairway Drive, Suite B
Altoona, PA 16602-4475
Phone: (814) 943-5214
See Our Ad Page 32

*****Hornor Brothers Engineers**

P.O. Box 386
Clarksburg, WV 26302
Phone: (304) 624-6445
See Our Ad Page 42

***New River Engineers, Inc.**

501 Eagle Mountain Road
Charleston, WV 25311
Phone: (304) 342-7168
See Our Ad Page 35

***Potesta & Associates, Inc.**

7012 MacCorkle Avenue, SE
Charleston, WV 25304
Phone: (304) 342-1400
See Our Ad Page 37

****RK&K**

159 Plaza Drive
Keyser, WV 26726
Phone: (304) 788-3370

***Rockacy & Associates, Inc.**

2528 Thrush Road
Charlottesville, VA 22901
Phone: (800) 836-1011
See Our Ad Page 10

***Stantec Consulting Services, Inc.**

320 Southview Drive, Suite 102
Bridgeport, WV 26330
Phone: (304) 816-5199

***Stiffler, McGraw and Assoc., Inc.**

1731 N. Juniata Street
Hollidaysburg, PA 16648
Phone: (814) 696-6280
See Our Ad Page 16

****The EADS Group, Inc.**

250 Scott Avenue
Morgantown, WV 26508
Phone: (304) 212-5927
See Our Ad Page 38

*****The Thrasher Group, Inc.**

600 White Oaks Blvd.
Bridgeport, WV 26330
Phone: (304) 624-4108
See Our Ad Page 30

CONTRACTORS

***Breckenridge Corporation**

P.O. Box 247 Brickyard Road
Buckhannon, WV 26201
Phone: (304) 472-3350
See Our Ad Page 38

***Pleasants Construction, Inc.**

24024 Frederick Road
Clarksburg, MD 20871
Phone: (301) 428-0800
See Our Ad Page 10

Laboratories

***Analabs, Inc.**

P.O. Box 1235
Crab Orchard, WV 25827
Phone: (304) 255-4821

***Pace Analytical**

225 Industrial Park Road
Beaver, WV 25813
Phone: (800) 999-0105
See Our Ad Page 32

***Preiser Scientific**

94 Oliver Street
St. Albans, WV 25177
Phone: (800) 624-8285
See Our Ad Page 37

Services and Products

***120Water**

250 S. Elm Street
Zionsville, IN 46077
Phone: (317) 507-2024
See Our Ad Page 13

****Advanced Rehabilitation Technology**

525 Winzeler Drive, Unit 1
Bryan, OH 43506
Phone: (419) 636-2684
See Our Ad Page 26

WVRWA Associate Members - Summer, 2023

*Associate Member • **Sponsoring Associate Member
*** Sustaining Associate Member

**American Cast Iron Pipe/

American Flow Control

2257 Clairmont Drive

Suite 220-222

Pittsburgh, PA 15241

Phone: (412) 721-9509

See Our Ad Page 3

*AMS

1127 Judson Road, Unit 233B

Longview, TX 75601

Phone: (844) 475-8343

**Appalachian Software, Inc.

44 Amber Way

Scott Depot, WV 25560

Phone: (304) 757-1260

See Our Ad Page 16

*Atlantic Machinery, Inc.

2628 Garfield Avenue

Silver Spring, MD 20910

Phone: (301) 585-7681

*Aulick Chemical Solutions, Inc.

111 Patton Ct.

Nicholasville, KY 40356

Phone: (859) 881-5422

See Our Ad Page 37

*Benchmark Construction Co., Inc.

P. O. Box 1018

Hurricane, WV 25526

Phone: (304) 881-1735

See Our Ad Page 15

*BissNuss, Inc.

7 Court Street, Suite 260

Canfield, OH 44406

Phone: (330) 533-5531

See Our Ad Page 15

*Buchanan Pump Service & Supply Co., Inc.

P.O. Box 827

Pound, VA 24279

Phone: (276) 796-5473

See Our Ad Page 24

*Carboline Global

2150 Schuetz Road

St. Louis, MO 63146

Phone: (314) 644-1000

*Charles Morrow & Associates

1429 Three Degree Road

Valencia, PA 16059

Phone: (412) 400-5517

***CITCO Water

4034 Altizer Avenue

Huntington, WV 25705

Phone: (800) 999-3484

See Our Ad Page 29

*Clow Valve Co.

5908 Sodom Hutchings Road

Farmdale, OH 44417

Phone: (330) 360-4550

See Our Ad Page 37

*Concrete Pipe & Precast, LLC

210 Stone Springs Road

Harrisonburg, VA 22801

Phone: (540) 434-6979

See Our Ad Page 10

*Consolidated Pipe & Supply Co., Inc.

907 Honeybranch Industrial Park

Debord, KY 41214

Phone: (606) 298-0333

See Our Ad Page 38

*Core & Main

2825 Fairlawn Ave.

Dunbar, WV 25064

Phone: (304) 768-0086

See Our Ad Page 16

*Daman Superior, LLC

2333 Zinn Chapel Road

Reedsville, WV 26547

Phone: (304) 972-1936

*DAS Group

3251-C Old Frankstown Road

Pittsburgh, PA 15239

Phone: (724) 327-8979

See Our Ad Page 15

*DN Tanks, Inc.

39 East Main Street

Mechanicsburg, PA 17050

Phone: (717) 356-0491

See Our Ad Page 37

*Dorsett Technologies, Inc.

100 Woodlyn Drive

Yadkinville, NC 27055

Phone: (540) 494-0833

*Dutchland, Inc.

160 Route 41

Gap, PA 17527

Phone: (717) 442-8282

See Our Ad Page 15

*Eastcom Associates

185 Industrial Parkway, Suite G

Branchburg, NJ 08876

Phone: (908) 722-7774

*Edmunds GovTech

301 Tilton Rd.

Northfield, NJ 08225

Phone: (609) 645-7333

*EnviroScience, Inc.

5070 Stow Rd.

Stow, OH 44224

Phone: (330) 414-6552

***Extreme Endeavors

1063 Hickory Corner Rd.

Philippi, WV 26416

Phone: (304) 457-2500

See Our Ad Page 14

*Fehr & Cuda Sales, Inc.

P.O. Box 127

Greensburg, PA 15601

Phone: (724) 838-9394

See Our Ad Page 15

*Ferguson Waterworks

698 Middletown Rd.

White Hall, WV 26554

Phone: (681) 404-2857

See Our Ad Page 10

*Ford Meter Box

775 Manchester Avenue

Wabash, IN 43056

Phone: (260) 563-3171

See Our Ad Page 15

*Fortiline Waterworks

7025 Northwinds Drive NW

Concord, NC 28027

Phone: (704) 788-9800

***FPG

605 Sheridan Rd., Suite 100

Noblesville, IN 46060

Phone: (317) 565-5012

See Our Ad Page 31

*Frey Municipal Software

40 North Grand Avenue, Suite 303

Fort Thomas, KY 41075

Phone: (859) 441-6566

See Our Ad Page 6

*Gilson Engineering Sales, Inc.

535 Rochester Road

Pittsburgh, PA 15237

Phone: (304) 342-0012

*Golden Equipment Co., Inc.

P.O. Box 873

Mars, PA 16046

Phone: (800) 242-1494

*Infratech Solutions, LLC

6004 Wellesley Drive

Wilmington, NC 28409

Phone: (910) 617-0291

See Our Ad Page 16

***JABO Supply Corporation, Inc.

5164 Braley Street

Huntington, WV 25705

Phone: (304) 736-8333

See Our Ad Page 27

WVRWA Associate Members - Summer, 2023

*Associate Member • **Sponsoring Associate Member
*** Sustaining Associate Member

*JHA Companies

362 W, Burr Blvd., Suite 3
Kearneysville, WV 25430
Phone: (844) 542-5012
See Our Ad Page 15

*Maryland Biochemical Co., Inc.

712 Tobacco Run Drive
Bel Air, MD 21015
Phone: (800) 771-7252
See Our Ad Page 2

***Master Meter, Inc.

101 Regency Parkway
Mansfield, TX 76063
Phone: (937) 902-4663
See Our Ad Page 25

*McWane Ductile

2266 South 6th Street
Coshocton, OH 43812
Phone: (330) 260-9292
See Our Ad Page 6

*Mid Atlantic Storage Systems, Inc.

1551 Robinson Road
Washington C.H., OH 43160
Phone: (740) 335-2019
See Our Ad Page 32

*Miller Environmental, Inc.

320 S. 17th Street
Reading, PA 19602
Phone: (610) 376-9162

*Neptune Technology Group

1600 Alabama Highway 229
Tallassee, AL 36078
Phone: (334) 415-9682
See Our Ad Page 10

*Nexbillpay, LLC

2416 Green Springs Highway
Birmingham, AL 35209
Phone: (800) 639-2435

*Pennoni

117 E. Piccadilly St.
Winchester, VA 22601
Phone: (540) 771-2091
See Our Ad Page 10

*Pittsburg Tank & Tower Co.

P.O. Box 913
Henderson, KY 42419
Phone: (270) 826-9000
See Our Ad Page 37

*John P. Place, Inc.

90 Clairton Boulevard
Pittsburgh, PA 15236
Phone: (304) 343-2607
See Our Ad Page 6

***Precision Pump & Valve Service, Inc.

P.O. Box 7027
Charleston, WV 25356
Phone: (304) 776-1710
See Our Ad Page 8

*ProSource Water Products, Ltd.

14680 Pleasant Valley Road
Chillicothe, OH 45601
Phone: (888) 772-5478
See Our Ad Page 6

*Quality Water Services, LLC

160 John Street
Weston, WV 26452
Phone: (304) 452-9883
See Our Ad Page 10

*Romac Industries, Inc.

21919 20th Ave. SE, Suite 100
Bothell, WA 98021
Phone: (412) 295-7167

*Service Pump & Supply Co.

P.O. Box 2097
Huntington, WV 25721
Phone: (304) 429-6731
See Our Ad Page 10

*Shafer, Troxell & Howe, Inc.

97D Monocacy Blvd.
Frederick, MD 21701
Phone: (301) 682-3390

**Smith-Midland Corporation

P.O. Box 300
Midland, VA 22728
Phone: (540) 439-3266
See Our Ad Page 26

**Southern Corrosion, Inc.

738 Thelma Road
Roanoke Rapids, NC 27870
Phone: (252) 535-1777

*State Equipment Inc.

P.O. Box 3939
Charleston, WV 25339
Phone: (304) 776-4405
See Our Ad Page 6

*Tepco-Trombold Equipment Co., Inc.

P.O. Box 897
Mars, PA 16046
Phone: (724) 625-4260
See Our Ad Page 6

*Thompson & Litton

1105 Mercer Street
Princeton, WV 24740
Phone: (304) 425-9555
See Our Ad Page 35

*Tri State Industrial Coating Contractors Alliance

1591 Washington Street, East
Charleston, WV 25311
Phone: (304) 546-1909
See Our Ad Page 15

*United Systems & Software, Inc.

P.O. Box 547
Benton, KY 42025
Phone: (800) 455-3593
See Our Ad Page 6

*U.S. Pipe & Foundry Co., Inc.

2247 Maiden Lane
Roanoke, VA 24015
Phone: (540) 353-7425

***USABlueBook

3781 Burwood Drive
Waukegan, IL 60085
Phone: (800) 548-1234
See Our Ad Back Cover

*Utility Solutions, Inc.

327 Curtis St.
Delaware, OH 43015
Phone: (740) 369-4300
See Our Ad Page 16

**Utility Technologies, LLC

1054 Monroe Rd., Suite 105
Lebanon, OH 45036
Phone: (513) 488-1940
See Our Ad Page 13

*Valtronics, Inc.

P.O. Box 490
Ravenswood, WV 26164
Phone: (304) 273-5356
See Our Ad Page 32

*Vermeer of West Virginia

5900 MacCorkle Avenue
St. Albans, WV 25177
Phone: (304) 768-5965
See Our Ad Page 35

*Warren Pump & Supply

1551 Jackson Avenue
Huntington, WV 25704
Phone: (304) 429-6723
See Our Ad Page 24

*Water Development Authority

1009 Bullitt Street
Charleston, WV 25301
Phone: (304) 414-6500
See Our Ad Page 37

*W.C. Weil Company

P.O. Box 7144
Charleston, WV 25256-0144
Phone: (304) 776-5665
See Our Ad Page 32

WVRWA Welcomes New Members



Associate Member
Infratech Solutions, LLC



NON-COMMUNITY MEMBERS

Big Bear Lake
National Radio Astronomy Observatory

Peterkin Camp & Conference Center
Valley Vista Adventist Center

AFFILIATE MEMBERS

Ashland Scenic Campground
Global Capital of World Peace

Mettiki Coal (WV) LLC
Newell Company

INDIVIDUAL MEMBERS

Kelly Arnold	Bruce Darner	Hamrick, Jr.	Patricia Lee	Jason Roberts	Kristina Ward
Timothy Bennett	Matt Dawson	Michael Hawranick	Jessie Linville	Jonathan Stanley	Frank Welch
Tom Brown	Mark Dearman	Mary Hutson	Kelly Ann Naylor	Matthew Stanley	Lisa Wells
Travis Callaway	Samme Gee	John Inghram	Richard Ohalek	Paul Stover	Louis Wooten
Kennon Chambers	Kevin Hamrick	Ernie Jack	Brenton Pannell	Shawn Thompson	Gary Young
John Cobb	Kevin "Ricky"	Loren Jordan	Andrew Reel	Doug Urling	

WEST VIRGINIA RURAL WATER ASSOCIATION
100 YOUNG STREET
SCOTT DEPOT, WV 25560
1-800-339-4513

Change Service Requested

PRESORT STD
U.S. POSTAGE
PAID
CHARLESTON, WV
PERMIT NO. 1013

The Sourcebook for **Water & Wastewater Systems**

The **NEW USABlueBook 2023 Catalog** features thousands of products from the brands you trust, backed by our commitment to delivering the **Best Treatment**.

- Free Expert Technical Support
- Dedicated Account Managers
- 100% Satisfaction Guarantee



Request your FREE catalog today!

Contact your USABlueBook account manager,
scan the QR code or visit usabluebook.com/C133.



27
PRODUCT
CATEGORIES
1776
PAGES

USABlueBook®
GET THE BEST TREATMENT™

800.548.1234 • usabluebook.com