



Building TMF Capacity
for Small Wastewater Systems

Sponsor



Initial Webinar to Introduce:
Training and Technical Assistance for Small
Wastewater Systems and On-
lot/Decentralized Wastewater Treatment
Systems

Presented by:

Heather Himmelberger, P.E.

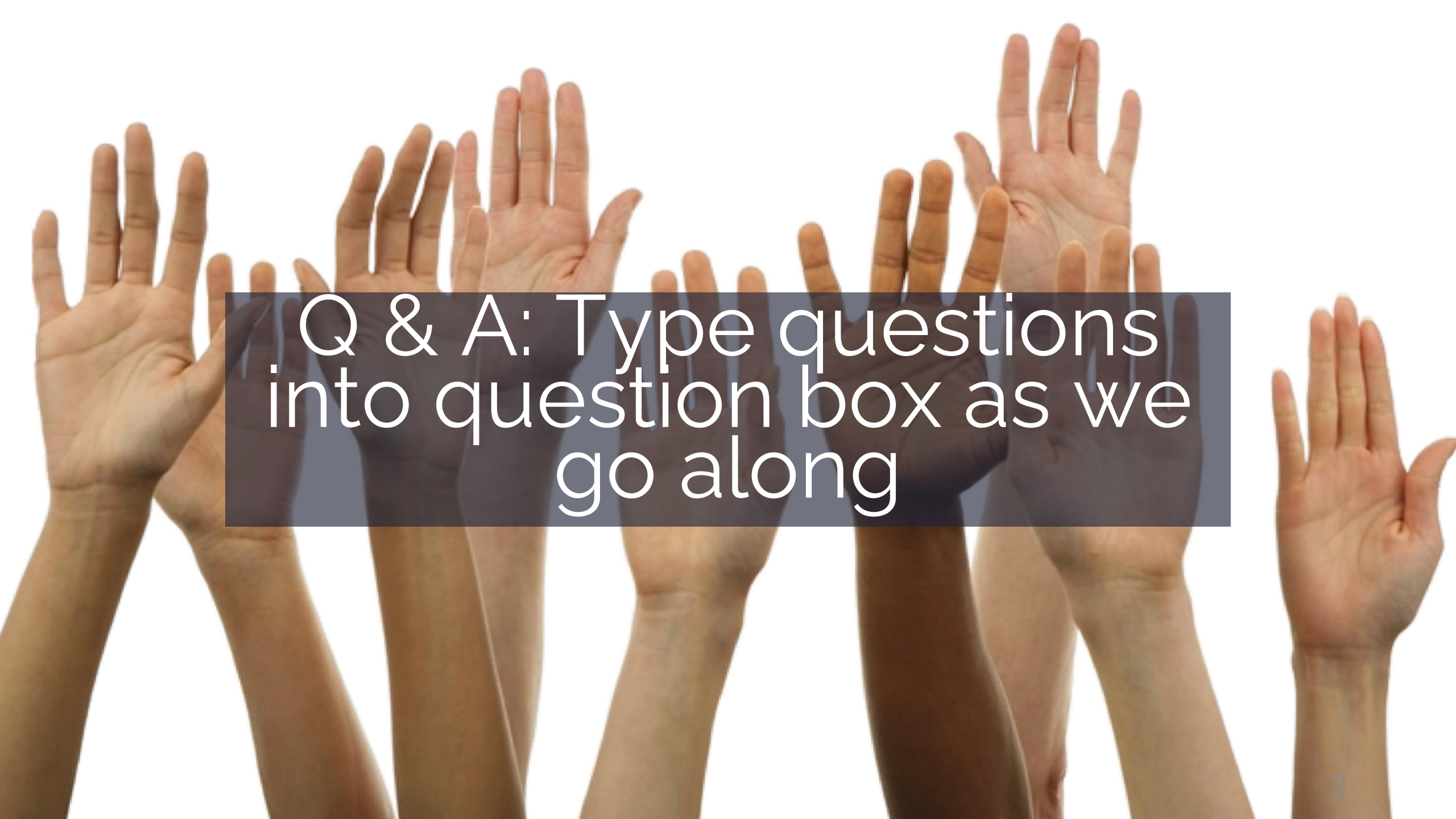
Director, Southwest Environmental Finance Center
Environmental Finance Center Network



SOUTHWEST
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FINANCE CENTER

Thanks to EPA!!



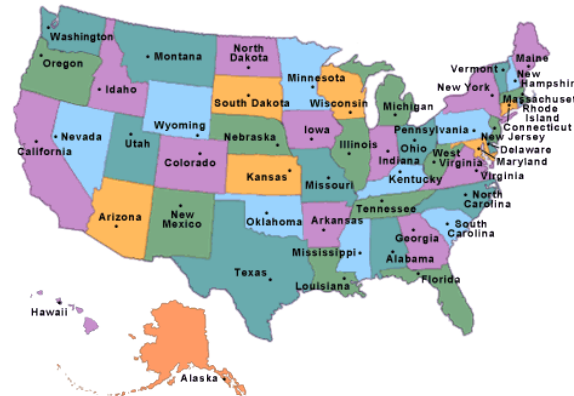


Q & A: Type questions
into question box as we
go along



Heather Himmelberger

Director, SW EFC
PI for the EFCN Work



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Environmental
Finance
Center
Syracuse University



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MISSISSIPPI STATE UNIVERSITY™
MISSISSIPPI WATER RESOURCES
RESEARCH INSTITUTE



**Great Lakes
Environmental
Infrastructure Center**
Environmental Finance Center for EPA Region 5



UNC

SCHOOL OF GOVERNMENT

Environmental Finance Center

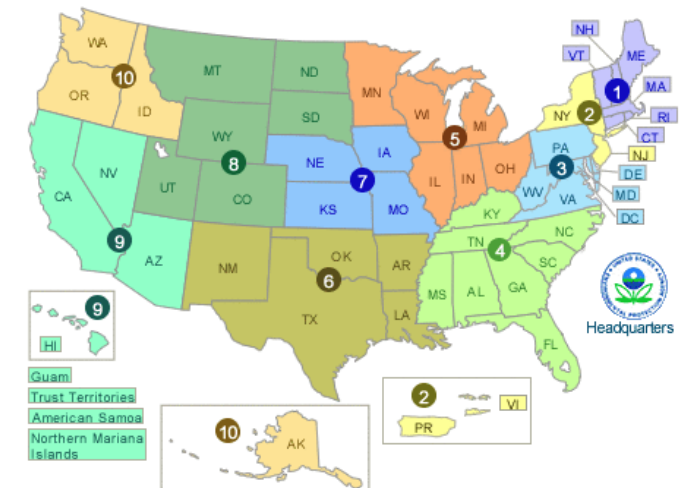
About Us



The Environmental Finance Center Network (EFCN) is a university-based organization promoting innovative and sustainable environmental solutions while bolstering efforts to manage costs.

Started in **1992** at the **University of New Mexico (SW EFC)**. We've been working together and independently for almost **30 years**.

The EFCN has a **National Focus** meaning that any EFC person on the project can work in any state, tribe or territory. We match needs with expertise to provide the best service.



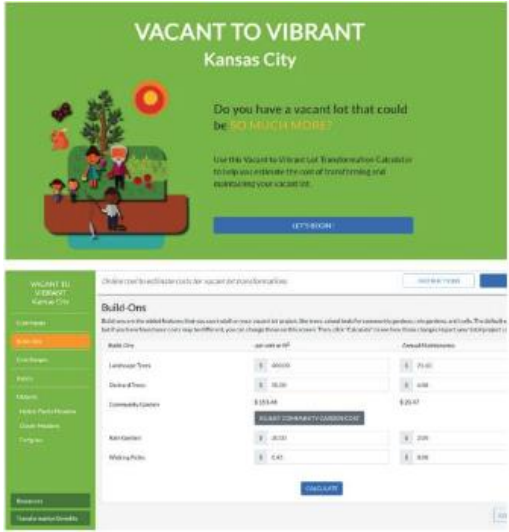
About Us



Syracuse University Environmental Finance Center Uses Art to Inspire Pollution Prevention



Tribal Drinking Water Program



Climate Adaptation & Resiliency

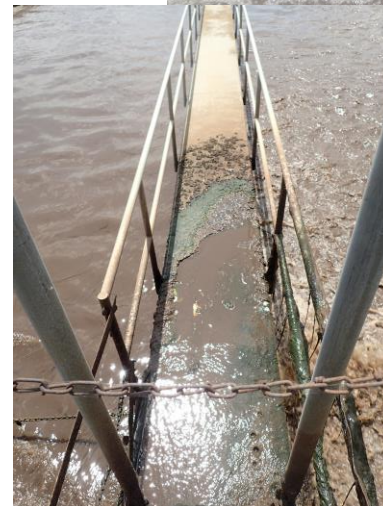
The EFCN has a wide array of environmental services delivered across the country to small, medium, and large communities. Our long history of working at all levels (federal, regional, state, and local) gives us an excellent vantage point to address issues in this project.



National Priority Areas

NPA 1: Small Water Systems

NPA 2: Small Wastewater Systems



Today's Focus: NPA 2

Who is eligible for assistance?

Small Publicly-Owned Wastewater Systems

- ❖ with permitted or actual flows of less than 1 Million Gallons Per Day (1 MGD)
- ❖ Owned by a public entity or not for profit
- ❖ Serving Tribal communities (Except for those owned by Federal entities)



Who is eligible for assistance?

Onsite/decentralized Systems

- ❖ On-site or clustered systems used to collect, treat, and disperse or reclaim wastewater from a small community, tribe or service area
- ❖ Publicly owned or privately owned
- ❖ Serving Tribal communities (Except for those owned by Federal entities)



Types of Services from The EFCN



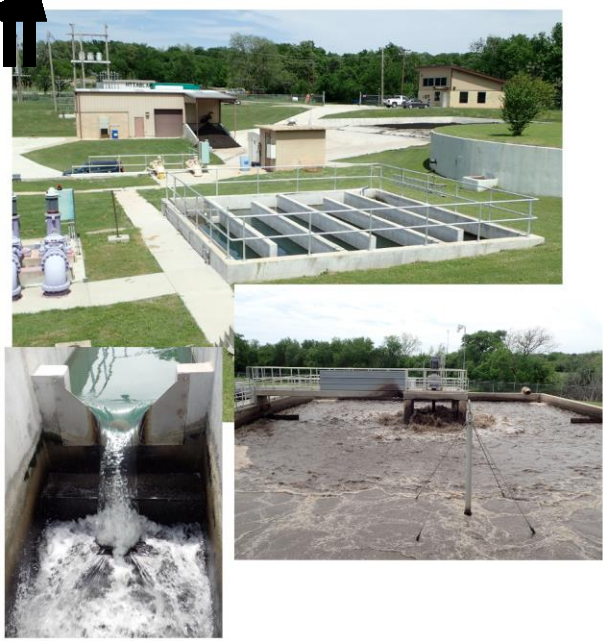
BROUGHT TO
YOU BY...

amwua
ONE FOR WATER

Training: In Person

Zoom Meeting

View



Wastewater Training

Heather Himmelberger

Mute Start Video Security Participants Chat Share Screen Record Breakout Rooms Reactions More End

The image shows a Zoom meeting window. At the top left, there are three black silhouettes of people. The main content area displays a presentation slide titled 'Wastewater Training'. The slide features three photographs: a large wastewater treatment facility with multiple rectangular tanks, a close-up of water flowing over a weir, and a view of a circular tank with a central vertical pipe. Below the slide, the Zoom interface shows the name 'Heather Himmelberger' and a toolbar with icons for Mute, Start Video, Security, Participants, Chat, Share Screen, Record, Breakout Rooms, Reactions, and More. A red 'End' button is located at the bottom right of the toolbar.

Virtual Training: Synchronous or Asynchronous

Live Q&A;
Potential for
CEUs; must
attend at a
specific time

Attend on your
own time at
your
convenience



Technical Assistance: Remote or In-Person

Topics: Full Array of T, M, & F Topics

Regulatory
Compliance

Operator
Certification &
Education

Asset
Management

Effective Utility
Management

Workforce
Development

Rates and Fiscal
Sustainability

Affordability

Operation and
Maintenance

Resilience and
Planning for an
Uncertain Future

Green and
Natural
Infrastructure

Water Efficiency

Access to
Funding Sources

Subtopics are also available and some mixing and matching is possible. A full list will be provided to states and EPA in the follow-up.



Innovative Finance Solutions for Environmental Services

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Click here for
COVID-19
Resources

covid resources

For Water and
Wastewater
Systems

<https://efcnetwork.org/>

Availability of Resources



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We promote self-reliance through innovative training
and assistance focused on actionable results.

[Visit our new Integrated Asset Management Framework Website](#)

<https://swefc.unm.edu/home/>

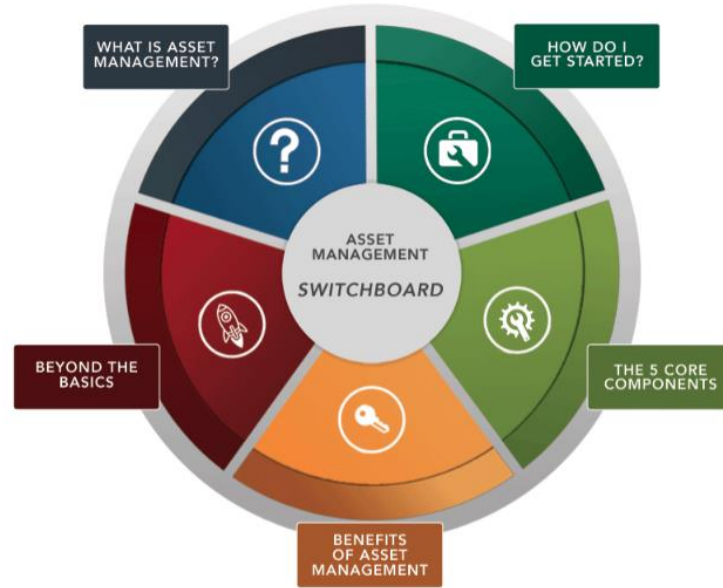
Asset Management Switchboard

The Southwest Environmental Finance Center has partnered with EPA to create a repository of documentation and tools related to Asset Management.

Whether you are [new to the Asset Management process](#) or just need a refresher on a specific topic, the resource you are looking for is probably here. If you're unable to find what you're looking for, reach out and tell us about it.

If you would like to contribute by having a resource added to the repository, please email the Southwest Environmental Finance Center (by clicking on the link below) and tell us about it. We welcome your feedback and strive to serve your utility and water systems at large.

This is a collection of Asset Management Resources from a variety of sources. Some of them are from the SW EFC, many are not.

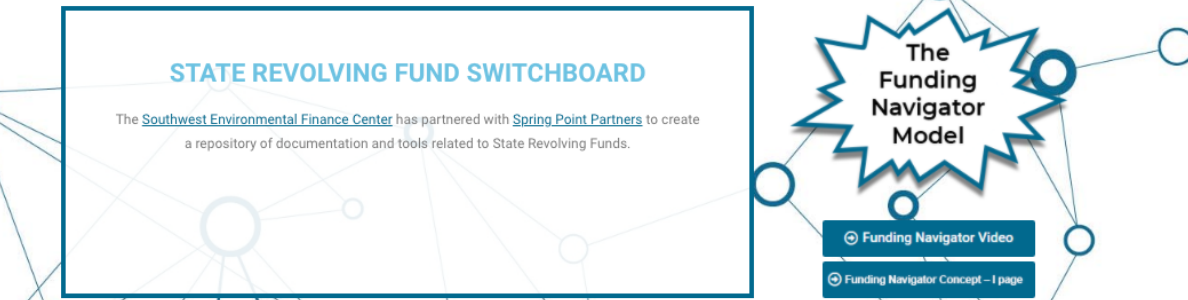


Email SW EFC

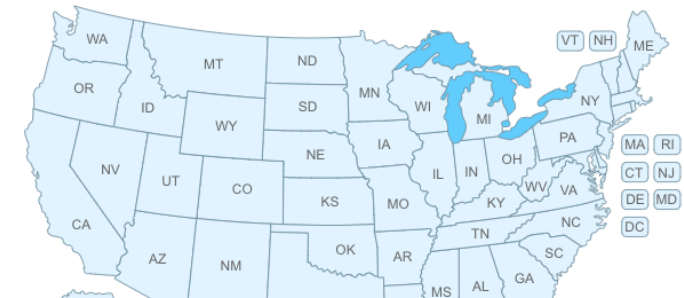
Phone (505) 277-0644

[Why should I Implement](#)

Switchboards:
Coming Soon On-
site &
Decentralized



(Click on a state to navigate to its resources)



<https://swefcsrfswhitchboard.unm.edu/srf/>

<https://swefcamswitchboard.unm.edu/am/>



Septic Systems: How Do They Work?

Septic systems are a common method of waste treatment that are implemented in millions of homes across the United States alone. But how do they work?

Full Interview – 24:35 min



Other:
Podcasts,
Videos,
Animations,
Peer to
Peer
Sessions



John Stomp of ABCWUA Discusses Water Operators as Essential Workers During Covid-19

by **Dr. Joni Palmer** | University of New Mexico

▶ ● ————— 00:00 🔊 —————

Social Media Outreach for On-site/Decentralized



<https://commons.wikimedia.org/wiki/File:Socialmedia-pm.png>

University of Maryland MOST Center



Municipal Online Stormwater Training Center

[ABOUT](#) [COURSES](#) [VIDEOS](#) [CASE STORIES](#) [RESOURCES](#) [FEATURES](#) [CONTACT](#)

HOW IT WORKS



CHOOSE A COURSE

Select one of the available courses below.



ENROLL

Click the blue "Enroll" button and "Create an Associate Account". Confirm and ACCEPT your login ID.



SIGN IN

Click on the e-mailed link and create a password. Return to the course listing, click "Enroll", and "Sign in Here" using your new credentials.



ACHIEVE RECOGNITION

Complete the course modules, final quiz, and evaluation to receive a MOST Center Certificate of Completion.

Will be Adding Content and Options for Water and Wastewater

COURSE CATALOG

Some of
the Current
Topics

Funding Urban Forestry Programs



Making Pet Waste Management
Work for Your Water Quality Goals



Landscaping for Resilience
in a Changing Climate



Dig Once



Economic Ecology™



User's Guide to
Urban BMPs in the Bay



Green Infrastructure and Low
Impact Development 101



Erosion and Sediment
Control for Construction Sites



Asset Management
for Stormwater



Environment-Focused Learning Academy (EFLA)



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[Learning Academy](#) ▾

[Blog](#)

[SW EFC](#)



Expanding knowledge about the value and stewardship
of water within our communities.



EFLA Types of Content

Learning Academy ▾ Blog SWI

Animations

Podcasts

Resources

Science to Art

Videos

Something worth reading

Blog



Tap Into Water Animation Commentary

JUN 21, 2021 | EFLA, STUDENTS
I pitched the idea of exploring the difference between tap water and bottled water
[read more](#)



Social Media for EFLA: Bridging Science and Marketing

JUN 21, 2021 | EFLA, STUDENTS
When I was asked to help launch EFLA's social media presence at the beginning of this year, I was excited, but somewhat wary. As a someone in my...
[read more](#)



Our April Fool's Water Joke Social Media Challenge

APR 20, 2021 | EFLA, STUDENTS
At the beginning of April 2021, EFLA made its social media debut on our Instagram and Twitter platforms. Although social media marketing isn't...
[read more](#)



Water my views about the Grand Challenges research?

JUL 20, 2020 | EFLA, STUDENTS
'When I first heard about the Grand Challenges, I was excited to see change, but it seemed like a process that only experienced professors and...
[read more](#)



Water Grand Challenges: My Interdisciplinary Experience

JUL 20, 2020 | STUDENTS
Group projects have been the bane of many a college student's existence. In most of my classes, the announcement of a group project has elicited a...
[read more](#)



The inspiration for EFLA?

JUL 20, 2020 | EFLA, MENTORING STAFF
My journey to create EFLA involves two parallel paths. The first was having to relearn all that math I took millions of years ago when I was in...
[read more](#)

Rates Dashboards

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

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Environmental Finance Center

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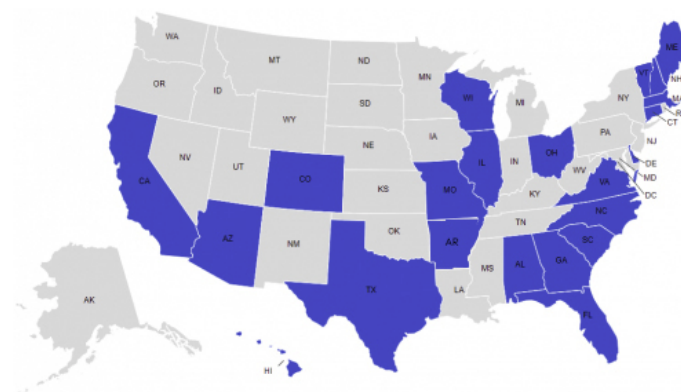
[Engage With Us](#) ▾

Financial Sustainability and Rates Dashboards are interactive tools designed to assist water, wastewater, and stormwater utility managers and local officials benchmark rates/fees and financial performance of the utility based on comparisons to utilities of similar characteristics.

These dashboards are designed and produced by the Environmental Finance Center at UNC. Rates and financial performance data are collected from hundreds of utilities in many states, combined with system characteristics, customer base socioeconomic conditions, geographical information, and other data. All of the data are loaded into the dashboards which visualize each utility's information in simple graphics to convey a comprehensive benchmarking assessment of the utility's rates and financial performance. Metrics are sometimes benchmarked against specific targets or by comparison to other utilities of similar characteristics.

The EFC conducts surveys and achieves higher than 85% participation from all utilities in the states, or partners with other organizations that conduct surveys. Data displayed on the dashboard are available for download from links provided on the dashboard webpages.

Water and wastewater rates and finance dashboards are available for the states below. Stormwater fees dashboards are listed where available.



[Alabama](#)

[Arizona](#)

[Arkansas](#)

[California](#)

[Canada \(not online\)](#)

[Colorado \(not online\)](#)

[Connecticut](#)

[Delaware](#)

[Florida](#)

[Georgia water &](#)

[wastewater](#)

[Georgia stormwater](#)

[Hawaii](#)

[Illinois](#)

[Maine](#)

[Massachusetts](#)

[Missouri](#)

[New Hampshire](#)

[North Carolina water &](#)

[wastewater](#)

[North Carolina](#)

[stormwater](#)

[Ohio](#)

[South Carolina](#)

[Texas](#)

[Vermont](#)

[Virginia](#)

[Wisconsin](#)

Rutland City - Rutland Economic Development Corporation Park

Rates Comparison

Characteristics

Links

Select residential bill and monthly consumption amount

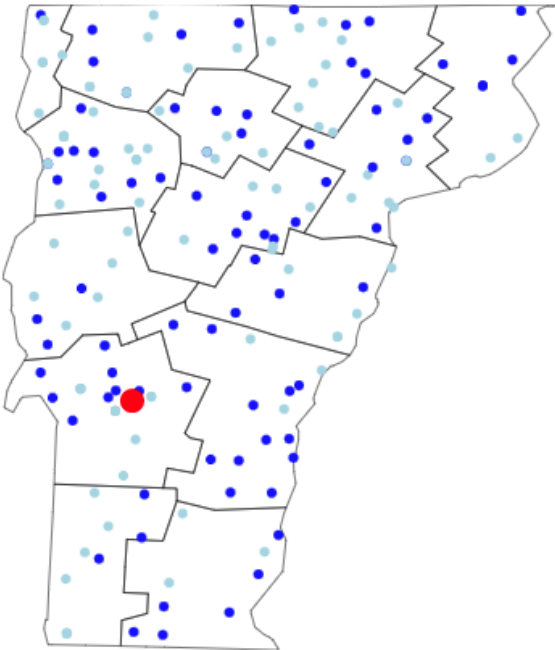
☐ Water Bill ☒ Sewer Bill ☐ Water + Sewer Bill



Monthly Sewer Bill: \$38.52

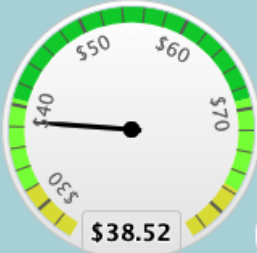
Select comparison group: All Utilities

Comparing to all utilities in survey



Bill Comparison

Sewer Bill at
5,250 gallons
Median: \$50.58



Conservation Signal

Sewer Price/1,000 gallons,
after 10,000 gallons
Median: \$4.75



Cost Recovery

Operating
Ratio Incl. Deprec.



Median Affordability

Annual Sewer Bills as % MHI



Effects of raising rates by: 0%

Example:
Vermont

Service Delivery Methods

In person

Virtual –
Synchronous

Virtual –
Asynchronous

Peer to Peer
Sessions

On-Demand,
On-Line
Learning
Platform (MOST)

Environment-
Focused Learning
Academy (EFLA)

Resource and
Tool Access

Podcasts

Videos

Rates
Dashboards

Switchboards
(AM, SRF,
WW)

Blogs

Focus of Our Assistance

Any Small Wastewater system or On-Lot
Decentralized That Meets Eligibility Criteria

States can indicate an audience they would
like us to focus on for training and/or TA

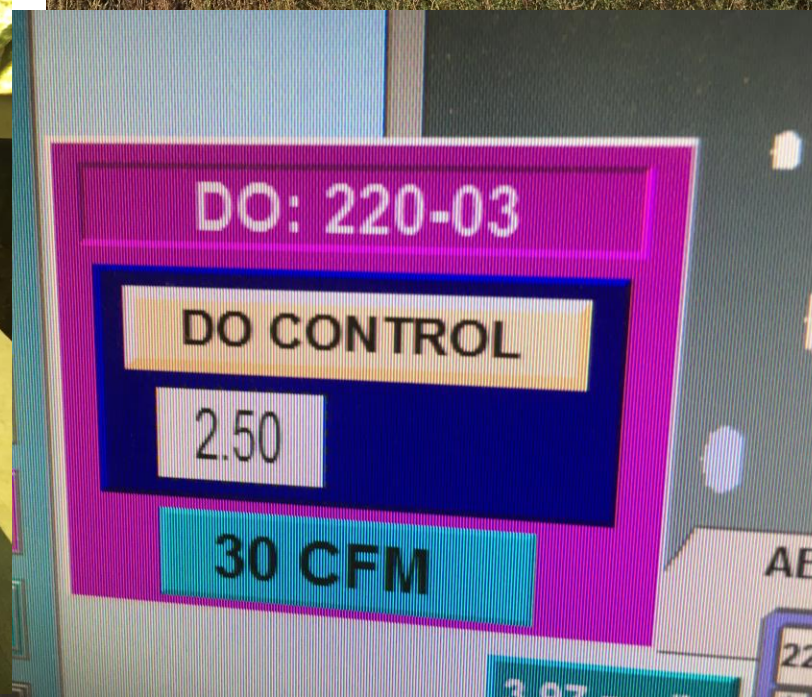
e.g., systems having similar treatment types,
elected leaders, systems of a particular
ownership type

Reach of Assistance

Technical Assistance will be first come-first served

We won't be able to in-person trainings in every state given budget constraints but with virtual trainings, systems in all states will have access to trainings

Case Study #1: A Small Wastewater System




Assistance Provided

Understanding of how treatment process was intended to work

Asset management assistance

Mapping assistance

Assistance with choosing a software for AM

A decorative graphic on the left side of the slide consisting of several light gray hexagons of varying sizes. One hexagon is solid, while others are outlined or partially overlapping, creating a geometric pattern.

Case Study #2: Assistance in Collaboration

Note: Pictures intentionally withheld

Some Participant Feedback

“

Thank you so much for this webinar and offer to help! It makes us feel like we are not alone in getting through this time. Thank you so much!!! You Rock!

- System Manager
A Conversation Regarding
Coronavirus and How it
Might Affect Your Small
Water System's Finances &

“

As someone who is new in this field, I found all of the components very informative. It helps to understand how water systems are affected and what they can do in response to the coronavirus emergency.

- Regulatory and Compliance Engineer
A Conversation Regarding Coronavirus
and How it Might Affect Your Small Water
System's Finances & Management

“

Thank you very much for reaching out to me, and our System, with this excellent and helpful webinar. If we are able to implement even 1/2 of the things I learned about tonight, that will be a start in the right direction; the future of our Water Company depends on such information, and such developments from our Board.

- System Manager
Water System Financial Management for California Board
Members, Local Elected Officials, and System Owners

“

The map of states and funding available was fantastic. As an engineer, I didn't know about any of the EPA tools available and will be sure to share with clients to make their jobs easier and help make infrastructure last longer.

- Engineer
EPA Tools for Small Public
System Water Operators/

“

I am really looking forward to receiving the email of the presentation so I can use it for reference as I create our first asset management plan.

- Water Operator, Ohio

“

This class helped me to set up a better way of presenting our needs and goals to the community and will help explain why our rates may have to go up to keep the system solvent.

- Chairman and operator |
Oklahoma

“

I really appreciate these topics being covered so well with your staff. We have limited access to information in our rural area and it's nice to find more options all around.

- Clerk/Treasurer |
Preparing for a Sanitary
Survey

Next Steps



<https://pixabay.com/photos/phone-make-a-phone-call-735062/>

Topic

Delivery
Method

TAs

Audience

Timing

Next Steps

Dawn Nall will be sending an e-mail to everyone to let you know of the training topics and to set up follow-up calls

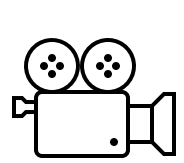
Please share contact names and e-mails in the question box for anyone you would like to be included in the initial outreach
(They won't be visible to anyone else and they will only be used for this purpose)

Alternatively, please share contacts with Dawn Nall via e-mail at dnall@unm.edu

Introducing DAWN --- NALL

How it all
began





This session is being recorded and we will share a link. Feel free to share it with your staff or other contacts.



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