EPA’s Decentralized Wastewater Program

2019 ONSITE MEGA-CONFERENCE

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U.S. EPA, Office of Wastewater Management,
www.epa.gov/septic
EPA Decentralized Program

- Approximately 20% of homes in the U.S. utilize decentralized (onsite/septic) systems (AHS, 2015)

- Decentralized systems can provide the same level of treatment, and may be less expensive than centralized wastewater (sewer) treatment

- EPA Program Goal: to provide small, rural, and low-income communities with the tools, technology, and financing options to address immediate and long-term decentralized wastewater needs
Decentralized Wastewater MOU Partnership

- **Goal**: To collaborate in encouraging proper decentralized system management and protect the nation’s public health and water resources

Image: 2017 MOU Partnership Renewal
Decentralized Partnership Renewal November 2017
MOU Partnership Priorities

1) Ensure systems are maintained and functioning properly to protect water quality and public health

2) Obtain accurate, updated statistics on system usage in the US

3) Expand opportunities to emphasize utility of decentralized systems

4) Leverage existing funding mechanisms for decentralized systems

5) Emphasize decentralized wastewater treatment education
Partnership Priority #1

Ensure systems are maintained & functioning properly

The goal is to expand outreach and education to the public

Current initiatives:

• SepticSmart Week outreach
• Partnering with other organizations
SepticSmart Week

• September 16 – 20, 2019

• Current products available to the public at epa.gov/septic
SepticSmart Week 2019: New and Noteworthy

Highlights include:

• #SepticSmart: 347 tweets; 1.7 million impressions
• More than 70,000 people were reached via newsletters and listservs
• 12 proclamations: 10 states, 1 County Health Department and 1 MOU Partner
  • Three New States: New Hampshire, New Mexico, Rhode Island
• New public outreach:
  • Suffolk County, New York event
  • Lansing, Michigan event
  • Fairfax County, Virginia podcast
Proclamations Declared

States:
- Idaho
- Indiana
- Michigan
- New Hampshire*
- New Mexico*
- North Carolina
- Oregon
- Rhode Island*
- Virginia
- Washington

NGOs:
- Ground Water Protection Council

County:
- La Porte County Health Department, Indiana*

* Indicates the first time the state has had a proclamation.
State Proclamations
News Coverage

SepticSmart Week 2019 shows how to care for, maintain household septic systems

By: Julie Leidig, The CHES News / 10/14/19

Septic tank maintenance is often ignored but imperative to keeping homes households healthy.

To bring light to this subject and encourage homeowners and communities to take better care of septic tank systems, the U.S. Environmental Protection Agency has designated Oct. 19-25 SepticSmart Week.

"SepticSmart Week is a great opportunity for homeowners and those with septic systems to think about how to maintain their systems to prevent failure problems," said Gary J. Howes, University of Georgia water resources management and policy specialist and extension professor in the Department of Crop and Soil Sciences.

Working septic systems are an important role in protecting Georgia’s waterways from harmful bacteria and other pathogens, Howes noted. We are what we think about...our septic systems. As professionals working to protect them not only saves money but protects marine shrimp, rivers and aquatic wildlife, he said.

Homeowners can visit the USA Cooperative Extension water resources website for more information regarding septic systems in Georgia.

For more information on maintaining your septic system and protecting municipal sewer systems, please contact your local USA Extension agent by calling 1-800-446-USA.
Spotlight: Turning the Tide

- Suffolk County, New York, hosted “Turning the Tide” Water Quality Summit at Stony Book University
  - Discussed local water quality challenges, opportunities, and scientific research.

Basil Seggos, New York State Department of Environmental Conservation Commissioner. Photo courtesy of Kristina Heinemann
Spotlight: Medication Disposal Event at the Capitol
• Michigan Department of Environment, Great Lakes, and Energy (EGLE) hosted a booth at this year’s Medication Disposal Event
• Explained the harms of disposing medications on septic systems.

Recent Products – Quick Tips!

Don’t Strain Your Drain!
Use water efficiently and stagger use of water-based appliances (such as a washing machine) to avoid a backup of your septic system into your house. Learn more at www.epa.gov/septic.

Don’t Overload the Commode!
A toilet is not a trashcan. Disposable diapers and wipes, feminine hygiene products, cigarettes, cat litter, and more can damage your septic system. Learn more at www.epa.gov/septic.

Shield Your Field!
Tree and shrub roots, cars, and livestock can damage your drainfield. Learn more at www.epa.gov/septic.

Protect It and Inspect It!
Regular septic system maintenance can save homeowners thousands of dollars and protect public health. Learn more at www.epa.gov/septic.

Keep it Clean!
If you have a well, many things can contaminate your drinking water, such as a failing septic system. Test your well water regularly. Learn more at www.epa.gov/septic.

Pump Your Tank!
Ensure your septic tank is pumped at regular intervals as recommended by a professional or your local permitting authority. Learn more at www.epa.gov/septic.

Think at the Sink!
What goes down your drain has a big impact on your septic system. Avoid harsh chemicals and use cleanser detergents in moderation. Learn more at www.epa.gov/septic.
Recent Products – Spring Postcard

Have a septic system?
Call your service provider to have your septic system serviced today.

Regular septic system maintenance can save you thousands of dollars!

Don’t wait for your system to fail to call for service!
Avoid the hassles and headaches of a failing system by calling your service provider today.

A typical septic system should be serviced every one to three years by a septic system service provider. Follow recommendations from your service provider and requirements from your town, county, or state on having your septic tank pumped.

Do your part. Be SepticSmart!
SepticSmart Week is September 17-21, 2018
Learn tips and tricks on how to maintain your septic system at www.epa.gov/septic.

EPA
United States Environmental Protection Agency

Our Customer
12345 Main Street
Clean Town, USA 86753

www.epa.gov/septic
Recent Products – Updated Infographic!

Do Your Part. Be SepticSmart!

- Shield Your Field: Divert rain and surface water away and avoid parking vehicles and planting trees on your drainfield.
- Don’t Overload the Commode: Don’t flush diapers, wipes or other items meant for a trashcan down the toilet.
- Think at the Sink: Limit use of your garbage disposal and avoid pouring fats, grease, solids and harsh chemicals down the drain.
- Don’t Strain Your Drain: Use water efficiently and stagger use of water-based appliances, such as your washing machine or dishwasher.
- Protect It and Inspect It: A typical septic system should be serviced every one to three years by a septic service professional.
- Pump Your Tank: Ensure your septic tank is pumped at regular intervals as recommended by a professional.
- Keep It Clean: If you are on a well, test your drinking water regularly to ensure it remains clean and free of contamination.

EPA
United States Environmental Protection Agency
Recent Products – Posters!

**BE SEPTIC SMART**

**THINK AT THE SINK**

**OK DOWN THE DRAIN**

The following can go down a commercial kitchen drain in limited quantities.

- **CLEANING PRODUCTS** Follow manufacturer’s instructions.
- **DISHWATER** Wipe off large food remnants before loading dishwasher.
- **WASH WATER FROM PRODUCE** Rinse off dirt before doing fresh-produce dishes.

**NOT OK DOWN THE DRAIN**

The following cannot go down the drain as they can clog pipes and/or damage septic systems.

- **FOOD WASTE** Limit food waste by disposing of any excess waste.
- **CHROME** Avoid pouring hot chemicals down the drain.
- **GREASE** Dispose of excess grease in a receptacle or container.
- **CARGAGE DISPOSAL** Properly dispose of solid food debris and limit using a garbage disposal.

Limit what you pour down the drain. Remember, anything other than water can impact your septic system.

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**BE SEPTIC SMART**

**PROTECT YOUR PIPES**

**DO Flush**

The following can be flushed down the toilet.

- **Toilet paper**

**DO NOT Flush**

The following cannot go in the toilet as they can clog pipes and septic systems.

- **Paper towels**
- **Cigarette butts**
- **Disposable diapers**
- **Wipes** (Baby or flushable)
- **Feminine hygiene products**
- **Plastics**
- **Medications**
- **Cotton** (Cotton swabs or balls)
- **Dental floss**
- **Toxic Substances**

Dispose these items in the trash.
Recent Products – Septic System Diagrams!
¡No recargue el drenaje!

Sea eficiente: los aparatos que usan agua (como la lavadora de ropa) usense uno por uno para evitar el sistema séptico de su casa. Obtiene información en www.epa.gov/sod.

¿Tiene un sistema séptico?

Llame a un proveedor de servicios de mantenimiento para que le revise el suyo.

Los 10 hábitos para mantener su sistema séptico en buen estado

- Haga que un profesional calificado inspeccione su sistema séptico cada tres años, o según las recomendaciones de su estado o el departamento de salud de su lugar.
- Bombee su tanque séptico cuando sea necesario, por lo general entre tres a cinco años.
- Evite echar productos irritantes por la tubería (por ej., ácido, grasas, químicos, pinturas, medicamentos).
- Tire los productos no degradables en la basura (por ej., hilo dental, pañales desechables, arena sanitaria para gatos) en lugar de echarlos en el inodoro.
- Estacione los automóviles y vehículos pesados lejos del área de drenaje y del tanque.
- Siga las indicaciones del fabricante cuando utilice limpiadores y aditivos para el tanque séptico.
- Repare las fugas y utilice accesorios eficaces para evitar sobrecargar el sistema.
- Cuido las plantas y vegetación cerca del sistema para asegurarse de que las raíces no bloqueen los drenajes.
- Use jabones y detergentes de poca espuma, biodegradables y sin (o con poco) fosfato.
- Evite que el sistema se congele en épocas de temperaturas bajas para lo cual deberá inspeccionar y aislar las partes más delicadas (por ej., el tubo de inspección y el área de tratamiento del suelo).

Si desea más consejos SepticSmart, visite www.epa.gov/septic.
Just Released – New Magnet

Protect Your Septic System!

- **AVOID FLUSHING**
  Disposable diapers and wipes, sanitary products, medications, cat litter, etc.

- **AVOID POURING**
  Harsh chemicals, grease, and coffee grounds down the drain.

Regular septic system maintenance can save thousands of dollars!

- Service Date
- Service Company Name
- Phone

Learn more at [www.epa.gov/septic](http://www.epa.gov/septic) or contact your local environmental office.
Welcome! Did you know this property is served by a septic system?

Do Your Part, Be SepticSmart

To protect this home’s plumbing, please keep grease, fats, and harmful chemicals out of the drain.

Do Your Part, Be SepticSmart

This home has a septic system. To prevent plumbing problems, keep hygiene products, hair, wipes, medicine, trash, and other products out of the toilet and drain.
Under Development

• New video series
Partnership Priority #2

Obtain accurate, updated statistics on system usage

The goal is to obtain national, county-specific data

Current Initiatives:

• US Census - American Community Survey
• Leverage Existing Data sources
American Community Survey & Septic Question

• The proposed question on septic systems has been evaluated as having merit

• Will be included in the Census process of cognitive and field testing

2022 ACS Content Test Timeline
Leverage Existing Data Sources and Contacts

- SORA state representatives
- NESC 2017 survey
- ASTHO State Environmental Health Services Survey
Partnership Priority #3

Expand opportunities to emphasize utility of decentralized systems

*The goal is to inform wastewater industry on benefits of decen.*

**Current Initiatives:**

- Technology Fact Sheets (WEF and WRF)
- Website updates ([http://www.decentralizedwater.org/](http://www.decentralizedwater.org/))
- Wastewater Technology Clearinghouse
MOU Partnership Factsheets

- Joint WEF/ WRF/ MOU Partnership project

- Additional factsheets are currently in planning phase
Wastewater Technology Clearinghouse

- Authorized under America’s Water Infrastructure Act of 2018

- Currently under development via internal EPA working group

- There will be a Decentralized Wastewater component
Partnership Priority #4

Leverage existing funding mechanisms for decent.

The goal is to identify and share information on options to fund (homeowner, state, county levels)

Current Initiatives:
- Clean Water SRF “Pathways to Success” guidance
- Pilot projects with states

Existing Resources:
- WIRFC Clearinghouse
- Septic Finance Learning Module
Clean Water State Revolving Fund and Decentralized work

- Clean Water SRF “Pathways to Success” guidance
- Pilot projects with states for technical assistance
WATER FINANCE CLEARINGHOUSE

ONE STOP SHOP FOR ALL THINGS WATER FINANCE

Launched in July 2017
CONTENT

**WATER FINANCE RESOURCES**

Reports, websites, trainings, and other types of information about water infrastructure financing.

**WATER FUNDING SOURCES**

Current federal, state, local, private, or other sources of funding for water infrastructure projects.

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EPA Environmental Protection Agency

www.epa.gov/septic
Water Finance Center Septic System Learning Module

• Interactive learning module on financing septic systems including:
  • Septic system basics (terminology, maintenance and repair, design, and costs)
  • Available resources for funding septic system projects
  • Federal, state, and local examples/ case studies
Partnership Priority #5

Emphasize decentralized wastewater treatment education

The goal is to collaborate across industry, academia and technology experts to expand decentralized focus in college/university programs.

Current Initiatives:
• Decentralized Wastewater Workforce effort

Future goals:
• Incorporate decentralized wastewater treatment education in STEM classes, student internships or engineering challenges
National Decentralized Workforce Efforts

• Listening sessions held at NOWRA mega-conference 2018 (Minneapolis, MN)

• National Meeting on July 9, 2019 at NEHA’s 2019 Annual Education Conference (Nashville, TN)

• Objectives of meeting: Discuss challenges and identify opportunities to explore options for workforce competency and recruitment
National Decentralized Workforce Efforts (con’t)

• Topics that were discussed included:
  • Key Jobs and Associated Competencies
  • Education and Training
  • Recruitment and Retention

• Fall 2019: Prioritizing potential actions and building action strategy

• Finalize action strategy by end of year
Questions??

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