“After the Flush” Homeowner Septic System Education Program

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Why is there a need for a Septic System Education Program through Extension?

Prevalence in Florida

Source of nitrate to groundwater

2016 Florida Water Bill
  New regulations regarding onsite wastewater treatment systems (OSTDS)
How prevalent are OSTDS in Florida?

2.6 million systems in the state

Over 30% of the population relies on an OSTDS for wastewater removal

DOH estimates that OSTDS discharge more than 400 million gallons of treated wastewater per day

Source: Florida Water Management Inventory Project- DOH
How much nitrogen flows out of a septic tank per day?

11.2 g N/person/day (4.08 kg/yr)

The conventional septic system only removes about 30% of N input

7.8 g N/person/day (2.8 kg/yr)
2016 Florida Water Bill created the Florida Springs and Aquifer Protection Act

Creates a **new category** of protected waters in the state...

**Outstanding Florida Springs**

- **Historic First Magnitude Springs** (30)
  
  Flow ≥ 100 cubic ft./second, which is about 64 million gallons/day

- 24 out of 30 Outstanding Florida Springs have been identified as **N-impaired**

- TMDLs set and Basin Management Action Plans (BMAPS) developed
Where do we stand with BMAPS?

• 26 adopted
• 5 challenged: Suwannee, Santa Fe, Silver River/Rainbow Volusia Blue, Wekiwa

Place more than 14 million acres under basin management, affecting 6.5 million people

Source: FDEP Statewide Annual Report, 2019
If septic systems contribute 20% or more of N to BMAP, then a septic system remediation plan must be put into place.
Septic System Remediation Plans

If sewer is already available to lots in the Priority Focus Area, new or repair permits will not be issued. Connection to sewer service is required when such service is available.

On lots of less than one acre in the PFA...
• Installation of new systems have to include enhanced nitrogen treatment
• For existing systems, if replacing, repairing, or modifying the system, it has to include enhanced N treatment
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Increase knowledge about:

- OSTDS Function, Maintenance, Advanced N-reducing Treatment Options, Regulations, Permitting

- Available cost-share programs

Provide Extension Agents with educational program materials
Program Needs Assessment

Of 87 respondents:

• 55 agents (34%) were interested in having factsheets, infographics and online information to share with clients.

• 26 agents (16%) were interested in hosting or co-teaching homeowner workshops and demonstrations on septic systems and how to properly maintain them.

• 34 agents (21%) were interested in teaching residents about connections between septic systems and water quality impacts
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**Extension Agent Resources**
- PPT Presentations with notes
- Evaluation tool
- Septic system models

**EDIS Publications: OSTDS**
- Overview
- Nitrogen
- Phosphorus
- Bacteria and Protozoa
- Viruses
- Trace Organic Chemicals

**Fact sheets**
- How do septic systems function?
- Maintenance
- What to do if flooding occurs?
- Landscaping on the drainfield

**Videos**
- How do septic systems work?
- Environmental impact of systems
  - English and Spanish

**Website**
- Hosts material and provides links to additional resources