



Florida Onsite Sewage Nitrogen Reduction Strategies (FOSNRS) Study

Plan to Reduce Nitrogen Contributions from Onsite Sewage Treatment and Disposal Systems

Goal:

Make tools available to reduce nitrogen contributions from onsite sewage treatment and disposal systems (OSTDS).

Process overview:

The Department of Health (DOH) will use the results of the Florida Onsite Sewage Nitrogen Reduction Strategies (FOSNRS) study to develop strategies to promote nutrient reduction in OSTDS.

These strategies will provide planning-level tools to help the Department of Environmental Protection (DEP) and local governments including the ability to:

- assess nutrient loading from OSTDS,
- select enhanced designs for OSTDS which provide a range of options for nitrogen removal, and
- facilitate education and training for industry professionals and the public.

DEP and local governments are expected to limit nutrient loading via:

- Total Maximum Daily Load allocations (TMDL - maximum amount of a pollutant that a body of water can receive while meeting water quality standards), and
- Basin Management Action Plans (BMAP – "blueprint" for restoring impaired waters by reducing pollutant loading) processes.

The different options identified by the FOSNRS will enable resource managers, regulators, land use managers, and engaged community partners to make informed and scientifically appropriate decisions on the most effective strategies to limit nutrient inputs in environmentally sensitive and important watersheds.

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	Strategy	Estimated Timeframe	Description
1	Develop standards for a baseline conventional OSTDS enhanced with nitrogen reduction capabilities	12/31/ 2015	Less complex in-ground passive nitrogen reducing system requiring no operating permit and additional nitrogen reduction. Requires development of system specifications for additional layers under the drainfield and a small number of rule changes. Rule change process could likely be complete by December 2015. Requires public meetings of the Technical Review and Advisory Panel and the Variance Review and Advisory Committee.
2	Incorporate FOSNRS study systems as approved performance-based treatment systems (PBTS)	Immediate once developed	Existing tested high-performing (95% nitrogen reduction) passive systems added as approved components of PBTS. Development of system specifications for several systems. No rule changes required. Once added to the list, systems can be designed, permitted, and installed under the current PBTS regulatory scheme.
3	Create new rule section on Nitrogen Reducing Systems (NRS)	9/1/2016	New section in Chapter 64E-6, F.A.C. providing details on the new category or reclassification of nitrogen reducing systems, i.e., incorporating the systems mentioned in strategies one and two above. This section provide for a range of performance levels, costs, complexity, monitoring, and performance consistency. Rule change process could likely be complete by September 2016. Requires multiple public meetings of the Technical Review and Advisory Panel and the Variance Review and Advisory Committee. May require statutory changes to either create a class of nutrient-reducing systems that is not performance-based or to allow sliding scale of design, permitting, and oversight requirements for this new class of performance-based treatment system.
4	Provide education and training on nitrogen reducing strategies	Immediate	DOH will work with DEP, industry professionals, the public, and other stakeholders to provide education on the study results, septic system impacts, proposed and any resulting rule changes, and training on how to install and maintain resulting nitrogen reduction system designs.
5	Provide planning-level tools to assess nitrogen reducing strategies	Immediate	Tools available to help determine nitrogen loading from OSTDS are the Florida Water Management Inventory , which is an electronic parcel-based map showing the drinking water source and wastewater treatment method for every built property in the state, and the nitrogen fate and transport model developed as a part of the FOSNRS project. These tools can be used in the BMAP process to further refine nitrogen loading estimates in areas with a TMDL.
6	Determine funding solutions for nitrogen reduction efforts	7/1/2016	Work with DEP to determine funding options to assist homeowners requiring nitrogen reducing systems, funding to test system performance, funding for refinement of planning-level tools, and funding the costs of educational and training activities. Possible options are the State Revolving Fund, federal grant funds, or state appropriated funds.