

# Nitrogen-Reducing Systems for Areas Affected by the Florida Springs and Aquifer Protection Act (updated May 2021)

The “Florida Springs and Aquifer Protection Act”, passed during the 2016 legislative session, directed the Department of Environmental Protection (DEP) to develop restoration plans, known as Basin Management Action Plans (BMAPs). Under these plans, new septic systems on lots of less than one acre and located in some sensitive springs areas (Priority Focus Areas, or PFAs) are required to be nitrogen-reducing. New conventional systems are no longer permitted in these areas except when a sewer will be available within five years. For more information about DEP’s BMAPs, go to this link: [www.floridadep.gov/springs/protect-restore/content/protecting-floridas-springs](http://www.floridadep.gov/springs/protect-restore/content/protecting-floridas-springs).

## Which new septic system permits are affected?

New septic system construction permits issued after the date BMAPs become effective on lots less than one acre and located in a PFA require nitrogen-reduction. For information on what is considered a “new” system, please see [www.floridahealth.gov/environmental-health/onsite-sewage/forms-publications/documents/dceh19-004.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/forms-publications/documents/dceh19-004.pdf).

## How do I know if a lot is in a PFA?

DEP provides a tool to find whether a lot is within a PFA or not: [www.floridadep.gov/PFAmap](http://www.floridadep.gov/PFAmap).

## When do these new requirements come into effect?

In January 2019, the spring BMAPs for Crystal River, DeLeon, Gemini, Homosassa-Chassahowitzka, Wakulla, Weeki-Wachee, Jackson Blue and Wacissa became effective. Five other BMAPs (Suwannee, Santa Fe, Volusia, Wekiwa and Silver/Rainbow) were challenged, which “stayed” the requirements of these BMAPs. On May 18, 2021 the DEP Secretary signed the final order making the BMAP nitrogen-reducing requirements effective in the challenged BMAPs.

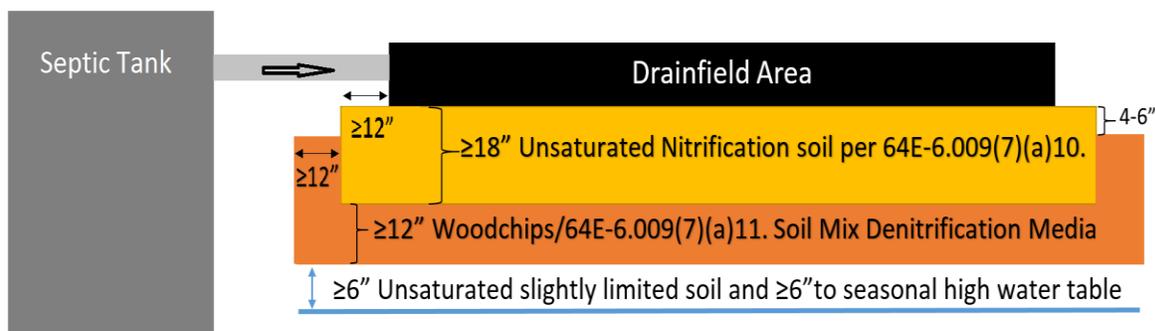
## What Florida Department of Health (DOH)-approved nitrogen-reducing septic systems exist?

Nitrogen-reducing options include in-ground nitrogen-reducing biofilters (INRBs), nitrogen-reducing (NSF 245-certified) aerobic treatment units, and nitrogen-reducing Performance-Based Treatment Systems. Each of these options is described below.

### *In-Ground Nitrogen-Reducing Biofilters (INRBs)*

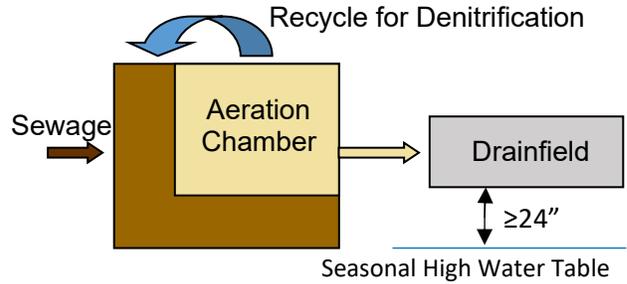
- Include a nitrate-reducing filter layer below the drainfield with material that reacts with nitrate.
- Reduce nitrogen in sewage by around 65%.

DOH adopted rules allowing for INRBs as Rule 64E-6.009(7), Florida Administrative Code (FAC) on July 31, 2018. See page 22 of Rule 64E-6, [www.floridahealth.gov/environmental-health/onsite-sewage/forms-publications/documents/64e-6.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/forms-publications/documents/64e-6.pdf) for the rule language. The Florida Onsite Wastewater Association (FOWA) sometimes offers courses on how to construct, install, and maintain these systems. For more information, visit [www.fowaonsite.com](http://www.fowaonsite.com).



***Nitrogen-Reducing (NSF-245 certified) Aerobic Treatment Units***

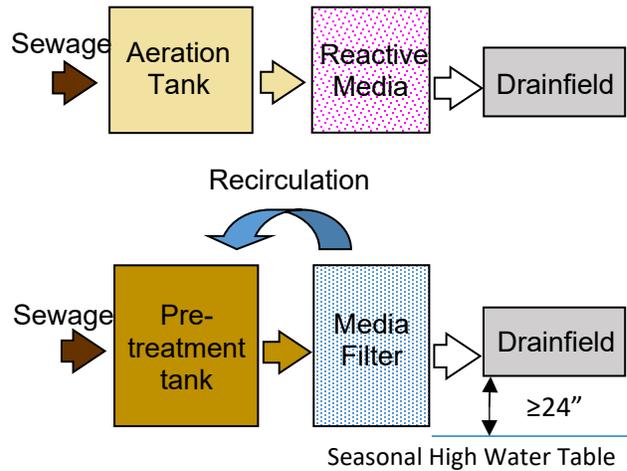
- Include recirculation or some other method of reducing nitrate.
- Require a maintenance contract and operating permit from the county health department.
- Are certified by NSF International as capable of providing at least 50% nitrogen reduction under test center conditions before treated wastewater is discharged to the drainfield.
- When installed with less than 24” between the bottom of the drainfield and the seasonal high water table in compliance with 64E-6 Florida Administrative Code (FAC), must be capable of reducing nitrogen by at least 65% before discharge to the drainfield.



For a list of DOH-approved, NSF 245-certified aerobic treatment units, see [www.floridahealth.gov/environmental-health/onsite-sewage/products/\\_documents/245cert-atu-18.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/245cert-atu-18.pdf).

***Nitrogen-Reducing Performance-Based Treatment Systems***

- Vary widely, but sometimes include a nitrogen-reducing aerobic treatment units and other components.
- Must be engineer-designed and require a maintenance contract and operating permit from the county health department.
- When installed with at least 24” between the bottom of the drainfield and the seasonal high water table, must be capable of reducing nitrogen by at least 50% before discharge to the drainfield, for at least 65% overall treatment, including the drainfield.
- When installed with less than 24” between the bottom of the drainfield and the seasonal high water table in compliance with 64E-6 Florida Administrative Code (FAC), must be capable of reducing nitrogen by at least 65% before discharge to the drainfield.



For a list of DOH-approved, nitrogen-reducing Performance Based Treatment System components and associated nitrogen-reduction data, see [www.floridahealth.gov/environmental-health/onsite-sewage/products/\\_documents/npbts-components.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/npbts-components.pdf).