

Septic Systems in the Save Our Indian River Lagoon Project Plan Brevard County

This fact sheet is one in a series of articles addressing components of the Brevard County Save Our Lagoon Project Plan. You can read the plan at Brevard County Natural Resources Management Department website: <http://brevardcounty.us/NaturalResources>

What are septic systems and why can they be a problem?

Domestic wastewater contains a mixture of contaminants and must be treated before being discharged to the environment. Onsite sewage treatment and disposal systems, commonly referred to as septic systems, are often used in areas where central sewer doesn't exist. Septic systems are relatively simple in design and usually consist of a septic tank and a drain field. They are a cost-effective and reliable means of reducing contaminants but they still add nutrients even when they are sited, designed, and functioning properly. All septic systems must be regularly maintained to prevent build up and clogging of the drain field. If septic systems are failing or not maintained, are installed in porous soils, or are too close to the water table, they can become a large contributor of nutrients, bacteria, and other pathogens to the groundwater.

In Florida, only 30-40% of effluent nitrogen is typically removed by septic systems.

How many septic systems are in Brevard County?

There are over 80,000 septic systems in Brevard County. Of these, approximately 59,400 contribute to groundwater that migrates to the IRL. Septic systems within 55 yards of surface waters have the greatest impact to the lagoon and contribute an average of 27 pounds of total nitrogen per year to the water, whereas systems more than 219 yards from a surface water contribute very little.

How does the plan address septic systems?

The Save Our Lagoon Project Plan takes a two pronged approach to address problem septic systems in Brevard County. The plan addresses both removing and upgrading septic systems.

What is the cost to remove septic systems?

Costs associated with removing septic systems includes electrical work, plumbing, removing the septic tank, extending the sewer lines, and sewer connection fees. The estimated cost per lot is approximately \$20,000 but varies depending on site conditions. The areas of focus in the Save Our Lagoon Plan were chosen by selecting the most cost-efficient connections that will provide the greatest amount of total nitrogen removal. The funding is meant to offset most if not the entire cost per customer of septic system removal.

What are the areas of focus for removing septic systems?

Opportunities for removing septic systems include those areas where limited infrastructure is needed to connect a lot to an existing sewer service. These areas include lots in Sykes Creek, Cities of Cocoa, Melbourne, Palm Bay, Rockledge, Titusville and West Melbourne, South Beaches, and Viera. There are approximately 2,300 septic systems that can be removed in these areas.

What if connecting to sewer is not feasible?

For areas where it is not feasible to connect to a sewer service, upgrading septic systems to a passive treatment system provides a higher level of nutrient removal efficiency without a high cost or complex maintenance. Passive treatment uses biosorption activated media (BAM) to increase nutrient removal before the effluent gets to the drain field or groundwater. The estimated cost for retrofitting a septic system is \$16,000. There are approximately 1,300 septic systems that are in the plan for potential upgrading.

The long-term success of reducing nutrient input to the IRL from septic systems is dependent on selecting the most cost-effective locations and methods. Managing septic systems is just one part of the entire process to reduce excess nutrients reaching the Indian River Lagoon and restore ecosystem health.

Questions? Contact

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