Located in Clay County connected to the west bank of the St. Johns River, the Doctors Lake Basin covers approximately 23 square miles. The basin’s former agricultural and forested lands now support medium and high density residential areas, commercial properties and golf courses.

Doctors Lake has experienced water quality issues due to “legacy loads” of excess nutrients, ongoing loading of chemicals and nutrients through runoff from nearby residential neighborhoods, and nutrients received from the St. Johns River. Because of its narrow connection with the St. Johns River, the 3,400-acre lake has poor circulation, and lake water is not adequately able to naturally filter pollutants.

Contributing factors include:

- Basin population of 35,000 (2000 Census)
- 12,000-plus housing units
- 847 units on septic tanks (as of 2008)
- Mixture of development prior to and after environmental resource permitting established

During the 2018 legislative session, Sen. Rob Bradley, R-Fleming Island, Senate Budget Chairman, and Rep. Travis Cummings, R-Orange Park, secured specific funding during the budget process for the St. Johns River to implement projects that will help restore the river, its tributaries and the Keystone Heights Lake Region, as well as improving public access and recreation projects within the St. Johns River Water Management District.

With Governor Scott’s support and approval of the budget, the St. Johns River Water Management District, Clay County and Clay County Utility Authority (CCUA) partnered to identify potential projects in the area.

Three potential projects identified are:

- Septic-to-sewer projects extending the CCUA infrastructure to serve lakeside neighborhoods currently on septic systems. An estimated 100 homes converted to central sewer would reduce total nitrogen entering Doctors Lake by 1,881 pounds per year.
- Replacing old or failing septic tanks with Individual Distributed Sewer Systems in areas where conventional sewer service is not available or feasible, which will provide treatment that is comparable to that of wastewater treatment facilities. Utilizing this new technology may provide onsite nitrogen reduction up to an estimated 1,125 pounds per year.
- The Doctors Lake Enhanced Effluent Treatment Project, which will provide innovative technology to remove phosphorus from wastewater effluent. The proposed project will treat a minimum 2 million gallons per day on an annual average basis. This project will remove an estimated 6,500 pounds per year of total phosphorus.

Estimated total nitrogen reduction is between 2,200 and 3,000 pounds per year and estimated total phosphorus reduction is 6,500 pounds per year. Total cost for the projects is $4.5 million.