

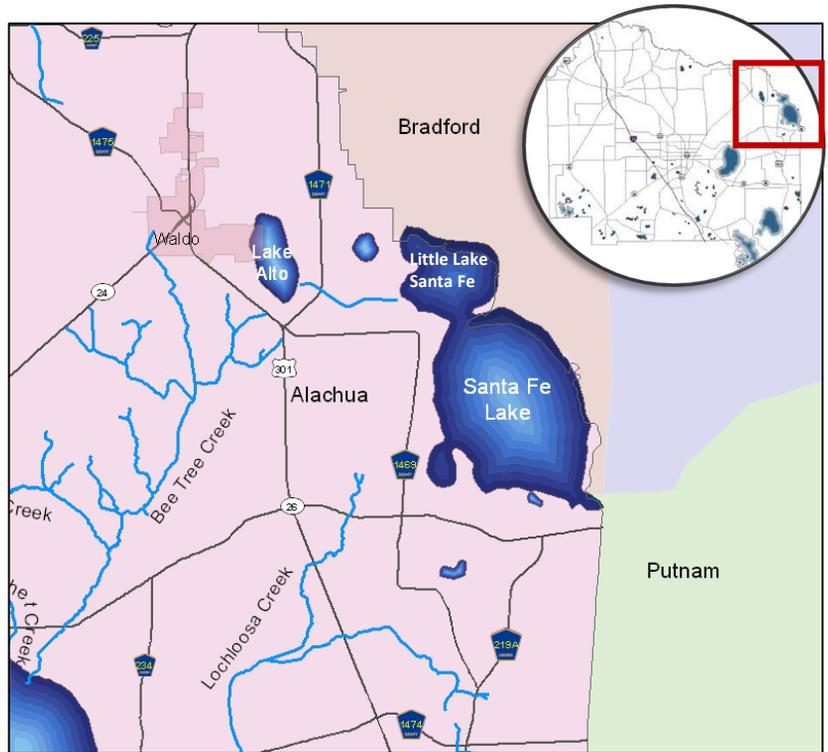


Lake Santa Fe

Fact Sheet

The Watershed

- Lake Santa Fe is the headwaters of the Santa Fe River, and is designated as an Outstanding Florida Water (OFW).
- The surface area of the lake is ~5,180 acres and at its deepest point is about 26 feet deep.
- The primary source of water to the lake is rainfall, discharge from the nearby wetlands, and surficial aquifer flow.



Map of Lake Santa Fe.

Potential Pollution

- Nitrogen and phosphorus runoff due to residential landscaping and agricultural practices.
- Failing septic systems and wildlife can introduce fecal material which is a source of nitrogen, phosphorus, and fecal coliform bacteria.



Cypress trees growing in Lake Santa Fe.

Biology

Historically, water levels in the lake have fluctuated greatly, allowing cypress trees to establish along the shores. The cypress shores of the lake are home to several notable species such as the Southern Bald Eagle, Florida Black Bear, Flatwoods Salamander, and the Wood Stork. The vegetation along the banks serves as a diverse rookery for many species of birds throughout the year. The tremendous density of the fish inhabiting the lake is known to many fishermen.

Water Quality

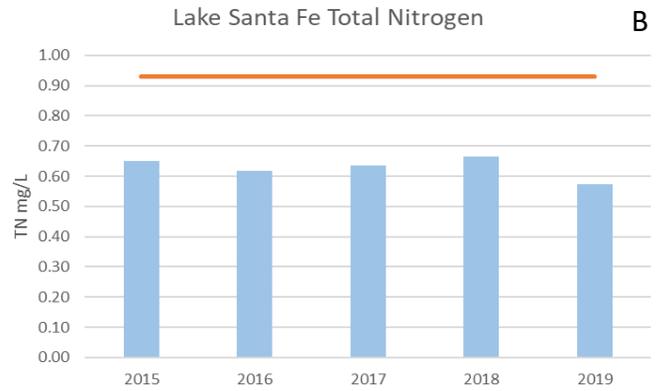
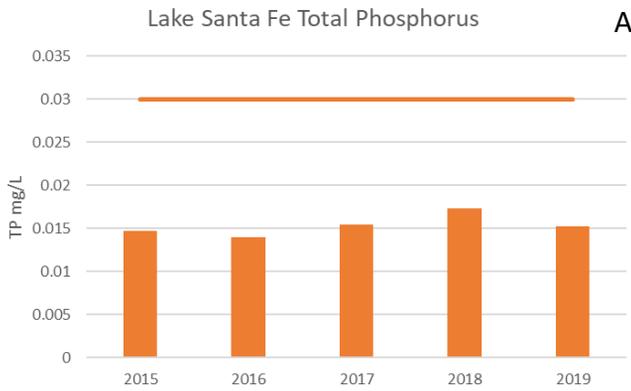


Figure 1. Annual Mean of A) total phosphorus (TP) and B) total nitrogen (TN) with Numeric Nutrient Criteria (NNC) denoted by orange line.

Nutrients: Lake Santa Fe is considered a clear, low alkalinity lake based on data from Florida Lakewatch, despite its tannic nature. The current FDEP water quality rule on nutrient standards went into effect February 2016. Based on annual mean concentrations, Lake Santa Fe is not exceeding these nutrient criteria. Lake Santa Fe and the swamp both lie in the Santa Fe River Basin Management Action Plan (BMAP) area, adopted July 2018.

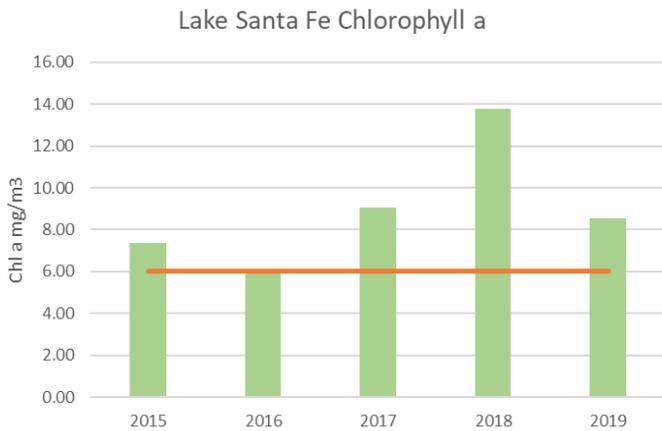


Figure 2. Annual mean Chlorophyll- α .

Chlorophyll- α :

Algal abundance is commonly measured in the amount of chlorophyll- α in water. Lake Santa Fe is considered a clear, low alkalinity lake and has requirements for lower concentrations of chlorophyll- α . The lake hovers around the criteria and the annual mean exceeded 6 mg/m³ in 2017. Rainfall influences the chlorophyll- α abundance in the lake.

Current Human Impacts

- Septic tanks in the watershed can lead to elevated nitrogen concentrations.
- Invasive plants are often found in Lake Santa Fe. These plants can disturb the habitat of native organisms. The Florida Fish and Wildlife Conservation Commission uses invasive species programs to control invasive populations.



Facing north on Lake Santa Fe.