

# Santa Fe Lake



**The Lake can be accessed and enjoyed at** the Santa Fe Lake Park on the south side of the lake. Here a short nature trail and boat ramp (off SR 26) provide opportunities to explore the forested shore line and the lake. Also, there is a boat ramp at the Bradford county park on 21-B and a nice view at the Melrose Beach on Trout St.



**Figure 2.** Map of Santa Fe Lake with neighboring counties: Alachua (pink), Putnam (Green), Clay (Purple), and Bradford (orange).

### Fun Facts

•Santa Fe Lake is the headwaters of the Santa Fe River and is designated as an Outstanding Florida Waters and worth of special protection because of natural attributes.

- The surface area of Santa Fe Lake is approximately 497 acres and deepest points are about 26 ft.
- The primary source of water into the lake is rainfall and discharge from surrounding wetlands. Seeping groundwater from the surficial aquifer also contribute water to the lake.
- Historically water levels in this lake fluctuate dramatically, allowing cypress trees to establish along the shore.
- •Land use: The northern end of the lake is dominated by a natural conservation area and the rest is surrounded by a mixture of undeveloped and residential communities.

#### Ways you can help!

- Dispose of oils and chemicals properly at the Hazardous Waste Collection Center.
- Properly maintain your septic system.
- •Scoop, bag, and trash pet waste.
- •Use fertilizers and pesticides sparingly, or not at all.
- •Keep grass clippings out of storm drains, swales, and ditches put it back on the lawn or bag it.
- •Not burning on the beaches will prevent potash from entering lake.
- Report illicit discharges or dumping to 246-6800.

## Water Quality



Figure 3. Cypress forest along the shores of Lake Santa Fe.

**Nutrients:** The proposed FDEP water quality nutrient standards will be effective in 2012. When these standards are effective, Santa Fe Lake will be considered a clear, low alkalinity lake based on data from Lake watch, despite its tannic nature. Santa Fe Lake is not impaired for either TP or TN.



**Figure 4.** Graph of annual geometric mean of a) total phosphorus (TP) data and b) total nitrogen data (TN) collected by Lake Watch and ACEPD. Nutrient standards for clear low alkalinity are represented by the red line a) TP of 0.03 mg/L and b) TN of 0.93 mg/L.

**Chlorophyll a:** When the proposed FDEP standard come into effect Lake Santa Fe will not be considered impaired for Chlorophyll a. Chlorophyll a is a measure of the algae in the water column. High chlorophyll a can indicate a nutrient imbalance.



**Figure 5.** Graph of annual geometric mean of Chlorophyll **a** collected by Lake Watch and ACEPD. Nutrient standards for lakes with color <40 Platinum Cobalt Units and alkalinity  $\leq$  20 mg/L CaCO<sub>3</sub> are represented by the red line 6 µg/L.

### **Current Human Impacts:**

•Septic tanks in the watershed can lead to elevated nitrogen concentrations.

• Exotic invasive plants are often found in Santa Fe lake. These plants can disturb the habitat of the native organisms. Florida Wildlife Commission has invasive removal programs in place.

•There are advised fish consumption warnings for mercury in Santa Fe Lake, for further information see website below.

**Lake Level:** Surface water elevation of Santa Fe Lake is monitored by the Suwannee River Water Management District and fluctuates dramatically with rainfall. The graph below is the recorded stage (water level) from March 1988 to Feb 2012.



Figure 6. Graph of stage in Santa Fe Lake (1988-2012) data collected by SRWMD.

### To learn more:

Visit the Suwannee River Water Management District website at <u>www.SRWMD.com</u>

For fish consumption advisories visit

http://www.doh.state.fl.us/Environment/medicine/fishconsumptionadvisories/2012Brochure.pdf •Visit Lake Watch website at <a href="http://lakewatch.ifas.ufl.edu/">http://lakewatch.ifas.ufl.edu/</a>