LAKE FORREST

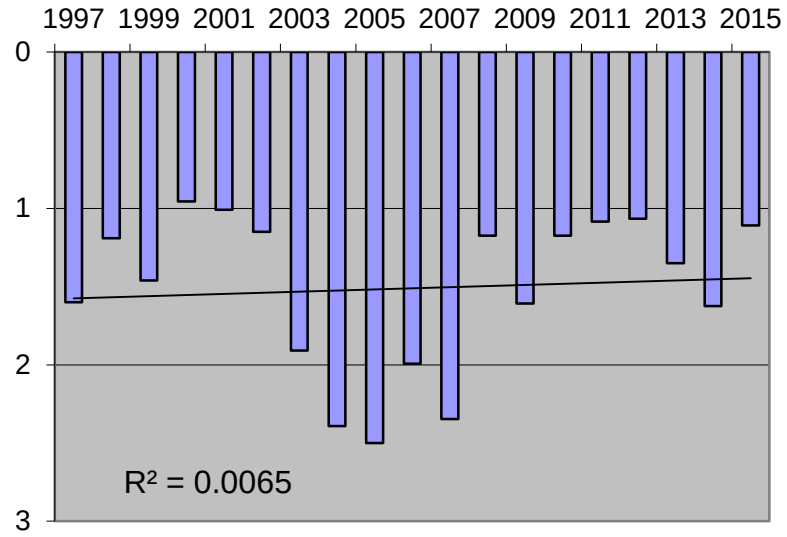
Size:
3.8 acres

Drainage Basin:
35 acres

Average Depth:
10 feet (approx.)

OHW Elevation:
100.8 feet NGVD

Lake Forrest water clarity 1997 through 2015 (in meters)



General Information: Lake Forrest appears to be a geologically older, sinkhole lake. The water level in the lake is dependent on groundwater levels, which are ultimately dependent on rainfall. Four stormwater outfalls convey runoff to Lake Forrest. There are no permanent surface inflows to the lake. High water levels are controlled by a drainage well on the eastern side of the lake that conveys water to the aquifer once the lake level exceeds the control elevation (100.8 feet above sea level). There is no public access to Lake Forrest, and access for management purposes is over private property.

Water Quality: Water quality in Lake Forrest is primarily affected by stormwater runoff, although the timing of algae blooms indicate that internal cycling of phosphorus may be contributing significant loads during part of the year. Annual average Secchi disk transparency data from 1997 through 2015 show no statistical trend.

Management Efforts: A phosphorous reduction treatment was performed in early 2012 to help reduce the severity and frequency of algae blooms. The city maintains leaf traps on two of the three outfalls to help slow the amount of organic material entering the lake, but the efficiency of end of pipe treatment systems is limited. The City recently constructed a modern treatment system on the remaining and largest outfall to the lake. A floating wetland system, design to remove additional phosphorus was also installed last year.

Other management activities include the installation of an aeration system in 2000 to reduce filamentous algae blooms, and infestations of floating plants such as floating fern (*Salvinia rotundifolia*) and duckweed (*Lemna minor*).