PPM TP

Figure 1. Lake Okeechobee’s parts per million Total Phosphorus [ppb TP] increase over the most recent 4 decades demonstrates a steady increase in the water column with time. Concentrations over 0.1 ppm TP are highly correlated with cyanophyte blooms. The 1980’s cattle ranch removals along the lake’s shore and the Kissimmee River had no long-term reduction in the lake’s TP concentration. The 4 direct hurricane hits [2004, 2005] as red arrows effect on the lake’s water column is pronounced [from SFWMD data, 2019].



The annual mean TP budget for lake Okeechobee for the POR 1974-2017. The maximum desorption of 162 Mt TP for 1998 from the lake’s sediment is increasing in frequency but at a lower load transfer with sediment matrix saturation from decades of TP river inflow 3.3 times larger than TMDL.