

# **LAKE MANAGEMENT REPORT- MARCH 2024**

**LAKE STATUS: This month's lake report highlights significant challenges posed by unprecedented rainfall and subsequent accumulation of debris within the lake.**

## **WATER QUALITY MONITORING:**

**Westlake water quality analysis is conducted on a monthly basis at four monitoring sites. Field analysis for parameters of Temperature, Dissolved Oxygen, Chlorophyll-a, (the predominant type of chlorophyll found in green plants and algae) ORP (Oxidation Reduction Potential) TDS (Total Dissolved Solids) and pH (potential of Hydrogen) are performed using a Portable Multi-Parameter meter with an 82ft probe cable. Nutrient samples are collected and sent to a state certified lab for analysis. Water clarity is measured with a Secchi disk. How does a Secchi disk measure water clarity?**

**A Secchi disk is a black and white disk connected to a rope, the rope is marked in 1-foot increments and is lowered by hand into the water to the depth at which it vanishes from sight. The distance to vanishing is then recorded. The clearer the water, the greater the distance.**



**RAINFALL ANALYSIS: February witnessed an exceptional volume of rainfall, approximately 16 inches. The excessive precipitation has contributed to increased runoff, with debris flow entering the lake from numerous drain locations. Undercutting of Concrete shoreline has been observed in various locations, along with poor water clarity.**

**DEBRIS ACCUMULATION: The heavy rainfall has exacerbated the issue of debris accumulation in the lake. The influx of branches, foliage and miscellaneous items poses a significant challenge to aquatic ecosystems, and overall lake aesthetics. The lake crew have worked very hard scooping debris onto their boats and filling many 25-yard dumpsters. To address the urgent need for debris removal from the lake, it is crucial to deploy rapid and efficient cleanup strategies to prevent as much debris as possible from sinking and becoming sediment. Implementing a coordinated effort involving tools such as nets, booms and skimmer boats can significantly enhance the speed and effectiveness of debris collection. With that, lake**

***management staff are in the process of researching what additional tools Westlake Lake could benefit from to improve this process.***

