

# Onondaga Lake, New York WATER QUALITY



"Onondaga Lake is roughly 4.5 miles long, 1 mile wide, and lies in Central New York, next to the city of Syracuse."<sup>i</sup> Once considered one of the most polluted waters in the U.S., scientists declared in 2015 that the water is "clean enough for swimming".<sup>ii</sup> This analysis of water quality from 2016-2018 compares the data with recommended benchmarks.

## Overview

The water quality was measured from 2016 - 2018 for the following:

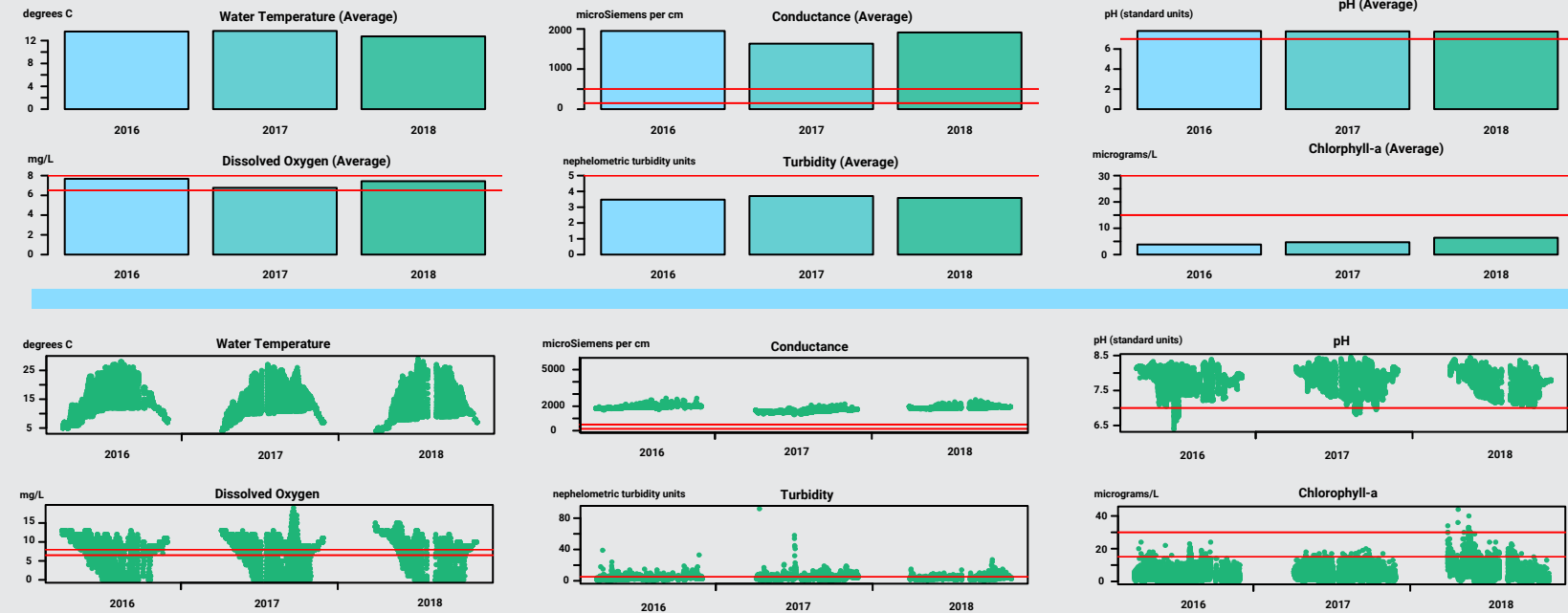
- Temperature
- Conductance ("saltiness")
- pH ("acidity")
- Oxygen
- Turbidity ("cloudiness")
- Chlorophyll ("algae content")

The purpose of this poster is to provide information on the water quality as of 2018 and any improvements

## Questions

1. Has the significant investment to clean the water in Onondaga Lake made a difference?
2. Where is the quality of the water within recommended guidelines?
3. What areas still need attention as measured by the recommended guidelines?

## Quality Metrics 2016-2018<sup>iv</sup>



## 2018 Average Data

- 282%** Above Recommended CONDUCTANCE
  - 11%** Above Recommended pH
  - 7%** Below Recommended OXYGEN
  - 28%** Below Recommended TURBIDITY
  - 57%** Below Recommended CHLOROPHYLL
- Green = Good, Yellow = Fair, Red = Bad

## Areas for Improvement



## Sewage Dumped in Lake Onondaga from Pipe Breaks in millions of gallons<sup>iii</sup>



## Sources

- Sources:
- <sup>i</sup> <https://www.onondagana-tion.org/land-rights/onondaga-lake/>
  - <sup>ii</sup> <https://www.syracuse.com/news/2015/04/onondaga-lake-is-clean-enough-for-swimming-ny-state-scientists.html>
  - <sup>iii</sup> <https://www.syracuse.com/news/2019/07/for-90-million-gal-lions-of-sewage-spills-into-onondaga-lake-county-fined-5300.html>
  - <sup>iv</sup> <https://www.deq.idaho.gov/water-quality/surface-water/water-quality-criteria/common-measures/>  
<https://en.wikipedia.org/wiki/Turbidity>  
[https://www.enr.gov.nt.ca/sites/enr-files/dissolved\\_oxygen.pdf](https://www.enr.gov.nt.ca/sites/enr-files/dissolved_oxygen.pdf)  
<https://archive.epa.gov/water-archive/web/html/vms59.html>  
[http://ongov.net/wep/AMP\\_Report\\_2010\\_FINAL.htm](http://ongov.net/wep/AMP_Report_2010_FINAL.htm)