

This report is a state-level version of the National Lakes Assessment, coordinated by the US Environmental Protection Agency, which aims to monitor and assess the status and trends of ecological conditions in the Oregon's lakes and reservoirs.

Project Goals:

- Assess the percent of Oregon lakes that support healthy ecosystems and recreation
- Identify common water quality problems including potentially toxic contaminants
- Make this information available to the public

Sample Collection:



49 lakes sampled

Lakes had to be at least 2.47 acres in area, at least 3.3 feet deep, and with at least a quarter acre of open water.



12 EPA indicators + Toxics

Indicators include trophic state, biological, chemical, and physical attributes of lakes. Toxics included 9 chemical groups.



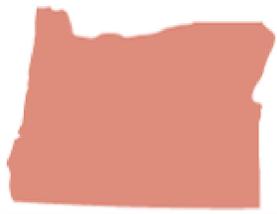
3 sampling locations per lake

Sampling each lake took a full day. Crews sampled each lake at three locations (mid-lake, nearshore, and shoreline).

Key Findings:

- Measures of eutrophication were the most widespread indicators in poor condition, similar to nationwide results
- Lakeshore habitat represented the second highest class of stressors in poor condition
- 26% of zooplankton and 22% of benthic macroinvertebrate communities estimated to be at risk in Oregon lakes
- All *E. coli* and microcystin concentrations were below recreational contact criteria

Indicator Comparisons:



Oregon

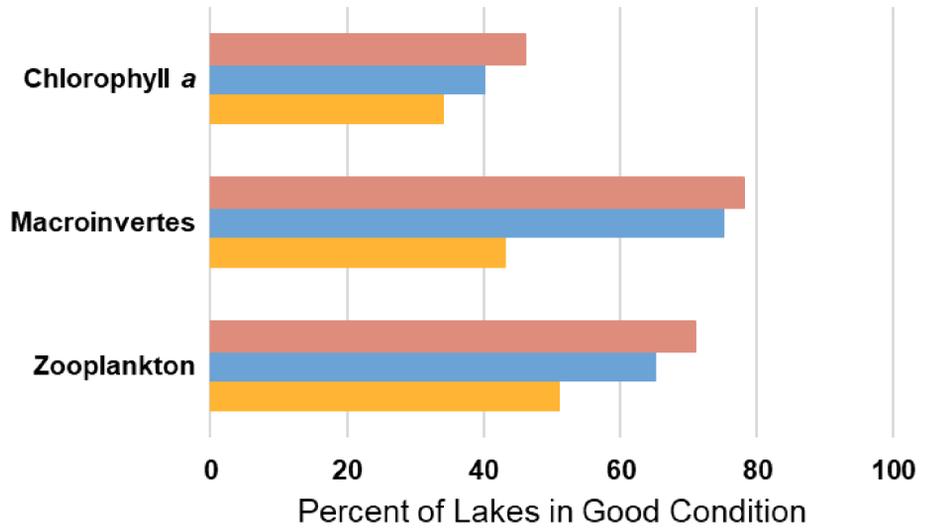


Pacific Northwest

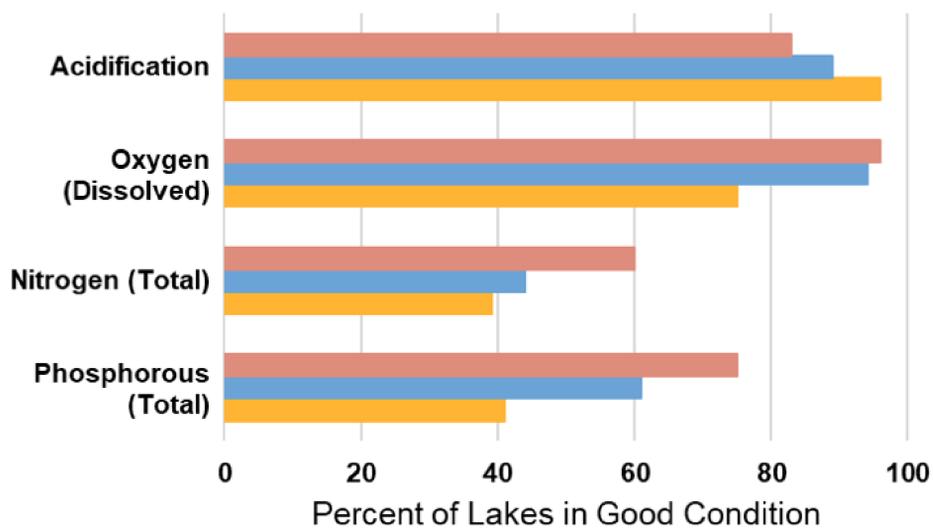


Nationwide

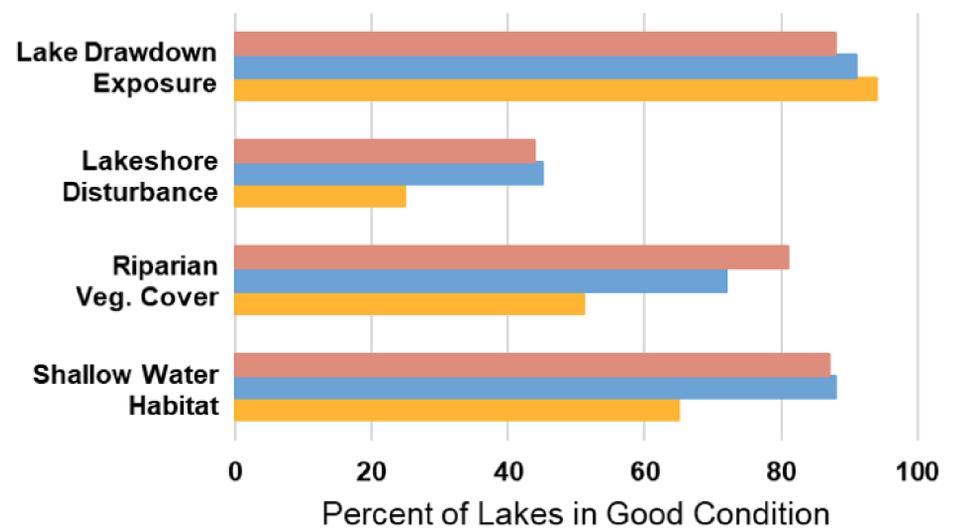
Biological



Chemical



Physical



Toxics Assessment Results:

Regional and national comparisons are not available for toxic contaminants.



96% of toxics compounds rarely exceed human health or aquatic life criteria



Mercury was estimated to exceed its sediment background level in 2650 (55%) of Oregon's lakes.



Sediment samples contained 72 of the 172 PCB compounds tested. Water samples contained none.



DDT was estimated to exceed its sediment bioaccumulation level in 2120 (44%) of Oregon's lakes.



To view the full report or for more information on DEQ's Biomonitoring Program visit:
<https://www.oregon.gov/deq/wq/Pages/WQ-Monitoring-NARS.aspx>