



Oregon DEQ Water Quality Division


Updated DEQ CyanoHABs strategy and new workflow prioritizations

Oregon Harmful Algae Meeting  
March 8, 2024

Daniel Sobota on behalf of the DEQ Harmful Algal Blooms Coordination Team  
*Oregon Department of Environmental Quality*




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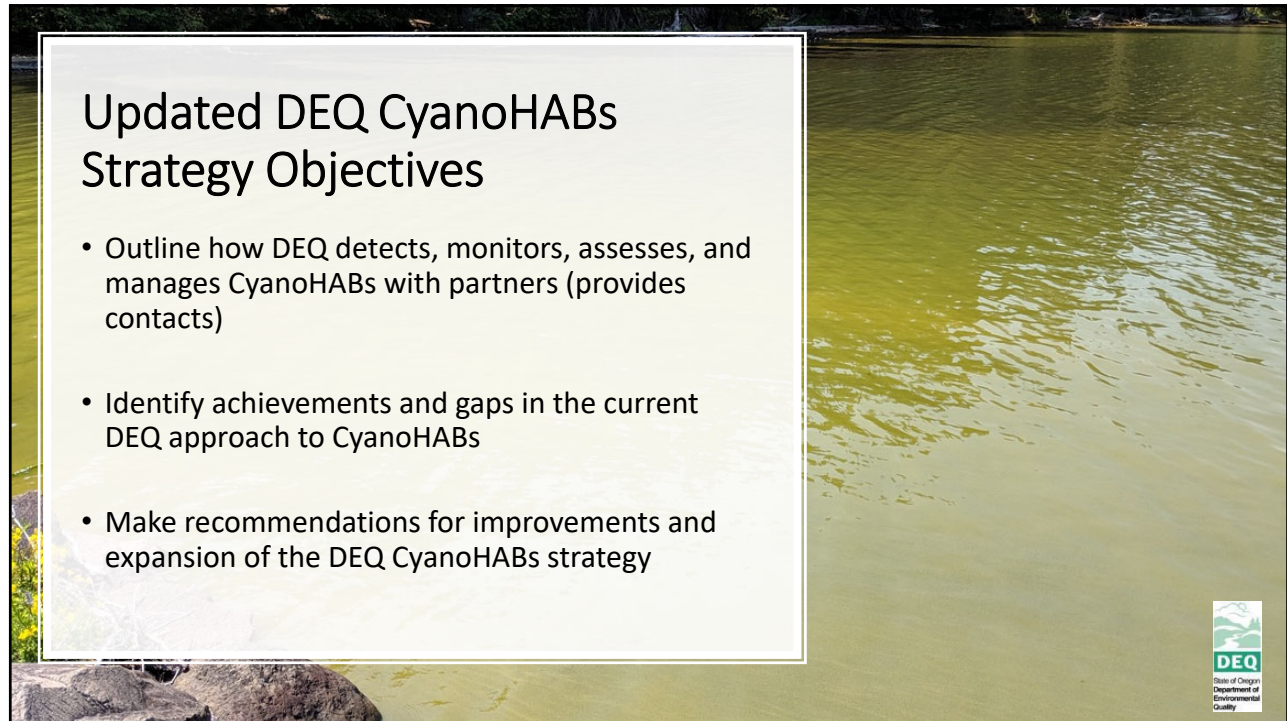


Updated DEQ CyanoHABs Strategy

- <https://www.oregon.gov/deq/wq/pages/harmful-algal-blooms.aspx>
- Provides current workflow within DEQ and interactions with partner agencies and communities
- Outlines some emerging agency issues in need of attention when monitoring and assessing HABs




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## Updated DEQ CyanoHABs Strategy Objectives

- Outline how DEQ detects, monitors, assesses, and manages CyanoHABs with partners (provides contacts)
- Identify achievements and gaps in the current DEQ approach to CyanoHABs
- Make recommendations for improvements and expansion of the DEQ CyanoHABs strategy



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## Strategy Components

- Drinking Water: Monitoring and Public Response
- Recreational Use: Public Health Response
- Clean Water Act: Assessment and Actions
- Recommendations based on agency priorities
  - Considering effects of climate change
  - More directly incorporating environmental justice



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## DEQ HABs Coordination Team

- Cross-program DEQ group with OHA participation
- Monthly calls to discuss DEQ and, as needed, OHA work on HABs
- Sometimes invite external presentations (e.g., Ross Island Lagoon)
- Consists of 28 members currently (state agency only)
- Lead contact: [daniel.sobota@deq.oregon.gov](mailto:daniel.sobota@deq.oregon.gov)



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## New HABs subcommittee for the DEQ monitoring and assessment committee

- Similar in structure to other subcommittees that evaluate and make recommendations to DEQ leadership
- Formed because of the cross-program nature of HABs work at DEQ
- Not an avenue to provide external funding for agency work on HABs
  - However, allows for alignment of HABs work with other agencies, governments, universities, and groups



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# Web-Based weekly reports continuing and expanding in 2024

<https://rstudioconnect.deq.state.or.us/Oregon-cyanobacteria-satellite-report/>



## Satellite Estimates of Cyanobacteria in Oregon Lakes and Reservoirs

Reporting Period: Feb. 6, 2023 - Feb. 12, 2023

### Introduction

This report provides an update to estimates of cyanobacteria abundance derived from satellite imagery for 49 large Oregon waterbodies. Updates are scheduled to occur weekly from March to October each year. Estimates derive from the **Cyanobacteria Assessment Network (CyAN)** project. Three levels illustrate cyanobacteria abundance (cells/mL): Low: <20,000, Moderate: 20,000-100,000, and High: >100,000. The levels correspond to the World Health Organization (WHO) exposure guideline values (WHO, 2003). For more information on Harmful Algal Blooms in Oregon, please visit websites from the **Oregon DEQ** and the **Oregon Health Authority**.  
 All data presented in this report are provisional and subject to change. Estimates of cyanobacteria from satellite imagery do not imply the presence of cyanotoxins or other water quality impairments and do not have regulatory implications. Visit the **Oregon Health Authority** to learn about recreational use and drinking water advisories related to cyanobacteria blooms. Additional assessments with imagery from the **Sentinel 2** Satellites, local visual assessment, and/or water quality sampling are needed to provide additional information on potential human health and environmental effects of cyanobacteria. Please note that estimates of cyanobacteria abundance presented in this report may be skewed by cloud cover, ice cover, sun glint, water surface roughness, dry lake beds, algal mats, and shoreline effects.

### Highlighted Waterbodies

Waterbodies with high cyanobacteria abundance (>100,000 cells/mL) based on the average of daily maximum estimates during the 7-day reporting period (7DADM).  
 Reporting Period: Feb. 6, 2023 - Feb. 12, 2023

Waterbody_ONSID*	Basin	7DADM (cells/mL)	Days of Data
Green Peter Lake_01158876	South Santiam	656,271	4
Lost Creek Lake_01158890	Southern Oregon Coastal	187,599	5
Siltcoos Lake_01158483	Northern Oregon Coastal	181,026	4
Upper Klamath Lake_01151685	Klamath	119,702	7



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# Questions?

Thanks to OHA and EPA Region 10!

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email [deq@deq.state.or.us](mailto:deq@deq.state.or.us).



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