



Forest Service Cyanobacteria Bloom Monitoring for Recreational Waters in Oregon

Oregon Cyanobacterial Harmful
Algae Bloom Stakeholder Meeting

March 17, 2023

Al Johnson

USDA Forest Service

Direction for National Forests in Oregon and Washington

- Emphasis of monitoring is on high use developed recreation sites
- On affected waterbodies, educational posters should be placed at public access points prior to the recreational use season
- When visual assessment of a water body indicates a potentially toxic bloom may be present, a Forest Service approved caution sign will be posted.
- If samples are collected for laboratory toxin analysis, results will be shared with state and local health authorities.
- If a public health advisory is issued the Forest Service will promptly post the appropriate notices. Removal will follow establish procedures

HARMFUL ALGAE BLOOMS IN OREGON WATERS

What is this stuff?

Harmful algae blooms (HABs) are not algae at all. They're actually made of cyanobacteria, also called blue-green algae. Many cyanobacteria species create toxins that can make people and pets sick.



So, what's the problem? HABs can:

- Create toxins that can cause illness in humans and animals
- Pollute Oregon lakes and other fresh waters with scums
- Limit recreational activities in lakes, reservoirs and rivers
- Cause challenges for public water suppliers including taste and odor problems and water filtration difficulties



How can I help prevent a HAB?

- Be sparing in fertilizer and pesticide application
- Don't leave animal waste on the ground — pick up after your pet
- Regularly check and maintain septic tanks
- Maintain native plants along shorelines or ponds when possible



How can I keep my family and pets safe?

- Do not wade, swim or water ski in waters that have signs of an algae bloom
- Never drink lake or river water
- If you decide to eat fish from affected waters, remove all fat, skin and organs before cooking
- Never cook with natural water from areas suspected to have a harmful algae bloom
- If you or your pet becomes ill, seek medical or veterinary attention immediately

When in doubt, stay out!

Know the signs of an algae bloom. Don't go in water that is foamy, scummy, thick like paint, pea-green, blue-green or brownish red.



Oregon Health
Authorities

PUBLIC HEALTH DIVISION
Oregon Harmful Algae Bloom Surveillance

Learn more about HABs at healthoregon.org/hab or call 971-673-0400.

OREGON DEPARTMENT OF HUMAN SERVICES: PUBLIC HEALTH DIVISION

Dog safety alert

Algae are common in fresh waters.

One type, blue-green algae, sometimes grows into a large bloom that may contain dangerous toxins.

If you arrive at a lake or river and find thick, brightly colored foam or scum, do not let your pet drink or swim in the water!

Dogs have become very sick and even died after swimming in and swallowing bloom-affected water.


If your dog goes into the water:

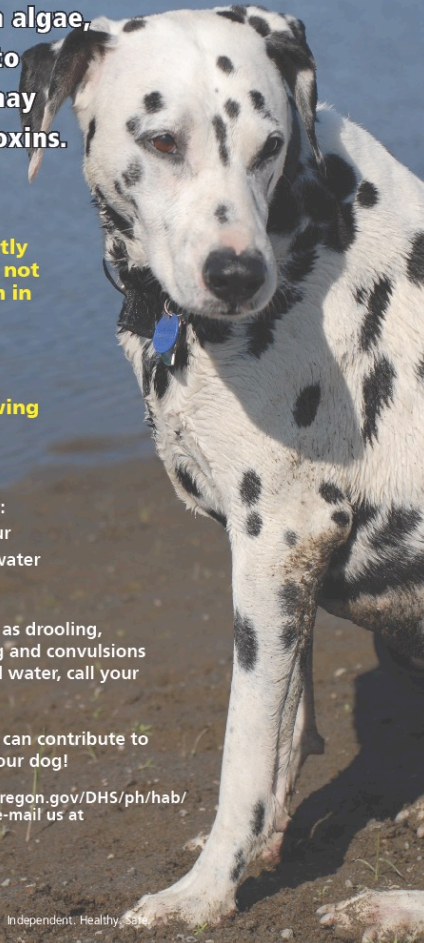
- Don't let your pet lick his fur
- Wash your pet with clean water as soon as possible.

If your dog has symptoms such as drooling, weakness, vomiting, staggering and convulsions and has been in bloom-affected water, call your veterinarian immediately.

Improper disposal of pet waste can contribute to algae problems. Pick up after your dog!

For more information visit www.oregon.gov/DHS/ph/hab/ or call toll free 1-877-290-7676 or e-mail us at Hab.health@state.or.us.

 DHS | Independent. Healthy. Safe.



CAUTION

TOXIC ALGAE MAY BE PRESENT
Lake may be unsafe for people and pets

Until further notice:

- **Do not swim or water ski in areas of scum.**
No nade o practique el esquí acuático en áreas con espuma o verdín.
- **Do not drink lake water.**
No tome el agua del lago.
- **Keep pets and livestock away.**
Mantenga alejados las mascotas y el ganado.
- **Clean fish well and discard guts.**
Limpie bien el pescado y deseche las tripas.
- **Avoid areas of scum when boating.**
Evite las áreas con espuma o verdín cuando ande en lancha.
- **Toxins may be present even when there is no visible scum.**
Toxinas pueden estar presentes aunque no haya espuma visible.

Call your doctor or veterinarian if you or your animals have sudden or unexpected sickness or signs of poisoning.

For health information contact the Oregon Health Authority at: 971-673-0400 or www.healthoregon.org/hab

Call your local health department:

For local information contact the Forest Service at:



HEALTH ADVISORY AVISO DE SALUD

Detroit Reservoir

**Toxins Produced by Blue-Green Algae
Are Present**

Debido a la presencia de algas verde azules tóxicas

AVOID AREAS WITH VISIBLE SCUM THAT LOOKS THICK LIKE PAINT, PEA-GREEN OR BLUE-GREEN

HOW AM I EXPOSED?

By swallowing affected water in and around a bloom.
Toxins are not absorbed through the skin.

DO NOT USE this water for drinking or cooking.
No use el agua para beber o cocinar.

Toxins are not removed by boiling or using camping filters or treatment. Local water supplies should not be affected.

CHILDREN and ANIMALS are at greatest risk.
Los niños y las mascotas corren mayor riesgo.



For more information contact:

Oregon Health Authority at: 877-290-6767 or www.healthoregon.org/hab

Willamette National Forest, Detroit Ranger District: 503-854-4239 or www.fs.usda.gov/alerts/willamette/alerts-notice

Linn County Department of Health Services at: 541-475-4456 or www.linncountyhealth.org

Marion County Health Department at 503-588-5342 or www.co.marion.or.us/HLT



Cyanotoxin Monitoring and Sampling in 2022

- Due to limited resources, most lakes with a history of HABs were not monitored
- Some lakes were posted with educational signs and in some cases caution signs were posted for the entire recreational use season

Diamond Lake toxin Monitoring

August 1, 2022 – bloom dominated by *Gloeotrichia sp.* with some *Microcystis sp.*
Microcystins not detected above the method reporting limit

August 8, 2022 – bloom dominated by *Gloeotrichia sp.*
Microcystins detected at 0.43 ng/mL

Partner agencies providing monitoring information to the Forest Service on high priority waterbodies

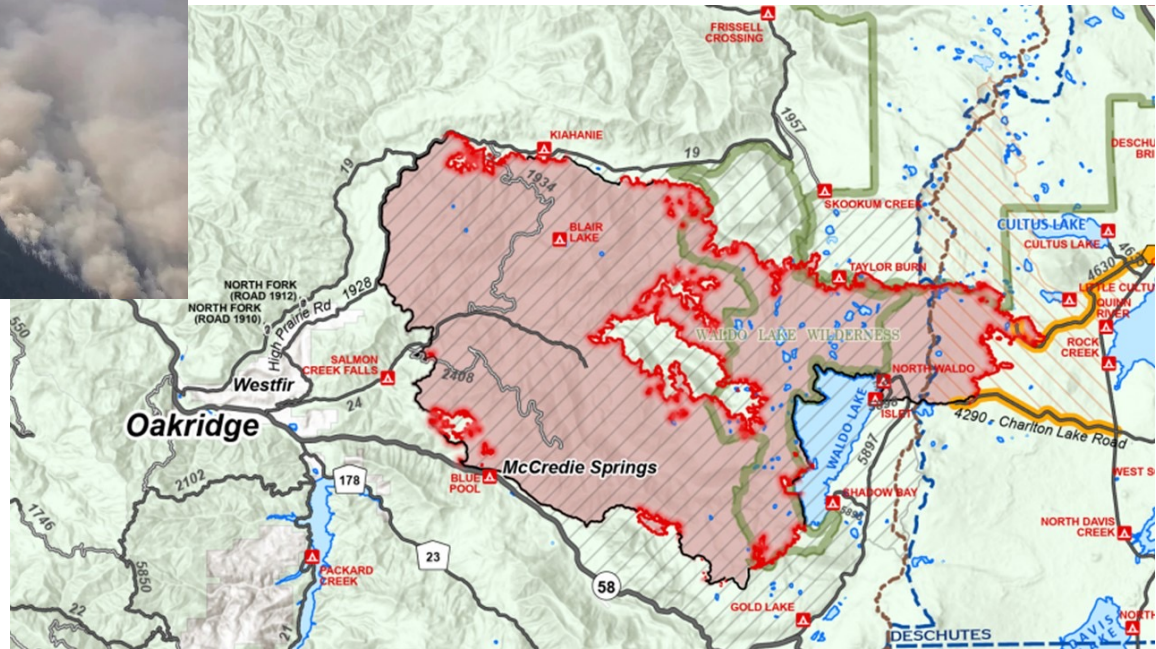
City of Salem - Detroit Reservoir

Eugene Water and Electric Board - Blue River and Cougar Reservoirs

Oregon Department of Environmental Quality

– Odell, Crescent, Lava, Crane Prairie

Army Corps of Engineers



Cedar Creek Fire – September 9, 2022

127,311 acres



Questions?