

Reporting and Responding to Algal Blooms in Your Water

Algal blooms occur naturally in waterbodies, but some are a risk to public health. These are known as harmful algal blooms (HABs). It's important that landowners and managers do what is needed to protect people and animals who use their water. Visit azdeq.gov/azhabs to see examples of what they look like.

When you spot a bloom:

Step 1: Post signs to protect public health

As a landowner or land manager, you should consider posting a health advisory warning against contact with the affected water. For your convenience, ADEQ provides a printable flyer in English and Spanish to download at azdeq.gov/azhabs.

- ★ For popular public waterbodies or drinking water sources, we highly encourage you to post advisory signs immediately in high traffic areas, such as beaches and boat launches.

Step 2: Report the bloom

ADEQ and the Arizona Department of Health Services (ADHS) track potential HABs.

You can report algal blooms by:

- ★ Using the Arizona Water Watch app on your mobile device, which automatically geo-locates photos and the information is sent directly to ADEQ staff.

Get the app: Find ArcGIS Survey123 in your device's app store and install it.

Then, visit bit.ly/azwaterapp on your device web browser, or use your device camera to scan this QR code, and follow the instructions.



- ★ Contacting ADEQ by email at habs@azdeq.gov.

Please provide as much information as possible, such as:

- Location name
- Waterbody name
- Latitude and longitude
- Date first observed (estimate if you're not sure)
- Date last observed (leave blank if it's ongoing)

- Is scum or algal matter present?
- Observational data: water color, clarity, odors, and flow and stagnation
- Has an advisory notification been posted?
- Was there a fish kill?
- Sampling info (sampling results in a PDF report preferred)
- Any follow-up actions planned, with contact info

★ Leaving a phone message at 602-739-7449

ADEQ will use the information provided, including photos, to confirm the potential of a HAB. Along with landowners and land managers, we collaborate with state and county health departments, along with any water treatment facilities, Tribal Nations, and neighboring states that may be affected by the bloom.

Step 3: Continue to monitor the bloom

Inform ADEQ if the bloom improves or worsens through the app, email, or by phone. Continue monitoring until the bloom appears to have subsided.

You may decide to sample the bloom to determine extent or if harmful algae is present. We may also recommend sampling depending on various factors. If you decide to sample, we can provide technical assistance.

Determining the Necessary Level of Response Action

Following are questions used when assessing the response level needed for a reported HAB:

Is the bloom ongoing?

- If “yes”, continue reporting to ADEQ.
- If “no”, no further communication or action is needed if the bloom has dissipated.

Is access restricted? Are there permanent restrictions on swimming or contact with the water in place (as in some urban lakes)?

- If “yes”, you may still want to post signage to ensure people and pets do not have contact with the water.
- If “no”, ADEQ recommends posting signage in high traffic areas to ensure people are aware of the risk.

What is the extent of the bloom? Is it localized or lake-wide? Can you estimate the size?

Compare the bloom size to familiar objects (such as a hot tub, swimming pool, football field, etc.) for a visual estimate. Action may not be required if the bloom is in an isolated location away from people, but a swimming beach, for example, which would require follow-up.

Was there a fish kill? Approximately how many fish?

Dead fish in the water may indicate a high level of toxicity and require further action by the Arizona Game and Fish Department (AZGFD). Visit azgfd.gov for contact information.

What does the bloom look like?

- “Blue-green algae blooms,” which can look like spilled green paint, can be toxic. Notify ADEQ and post health advisory signage in high traffic areas.
- “Golden algal blooms” are brown and are not harmful to humans, but can cause fish kills. For golden algal blooms, notify AZGFD, then no further action is needed.

Has sampling been done to determine toxicity of microcystin or other algal toxin?

- If “yes”, report the results to ADEQ.
- If “no”, you may consider sampling but it is not required. ADEQ can provide technical assistance if you have a desire to sample.

Has any treatment to the waterbody been implemented?

Some landowners and land managers may choose to treat the surface water to mitigate the bloom. This is common in smaller waterbodies, such as urban lakes.

- If “yes”, ADEQ recommends sampling be conducted over time to assist in determining the cause of an algal bloom. This ensures the best and most effective remedial strategies are chosen. For information about remedial strategies please refer to EPA’s *Preventative Measures for Cyanobacterial HABs in Surface Water* guidance (visit azdeq.gov/azhabs to view).
- If “no”, no further actions are needed.

We’re here to help. Contact the HABs team at habs@azdeq.gov, or 602-739-7449