

Toxic Algae

SWAMP Responds to an Emerging Problem

Cyanobacterial blooms have been increasingly in the news recently. Warm temperatures, increased nutrients and other conditions are favoring these toxin-producing species, and a number of fresh water systems are suffering as a result. Toxic blooms are threatening drinking water supplies and causing wildlife and domestic animal deaths. In humans they can cause a wide range of symptoms, from rashes and allergic reactions to liver damage and even death. Persistent blooms in Clear Lake, the Klamath watershed, Sacramento River, San Joaquin River and Delta, East San Francisco Bay Area lakes, Pinto Lake and others present serious challenges to water supply providers and water body managers.

The California Cyanobacteria Harmful Algal Bloom Network (CCHAB) was established in 2006 to provide a forum for coordination of harmful algal bloom (HAB) response efforts by agencies, organizations, and tribes dealing with these blooms. CCHAB developed and is now updating guidance on voluntary posting of blooms, and has taken responsibility for developing a web data portal on the California Water Quality Monitoring Council's [My Water Quality website](#).



Toxins produced by cyanobacterial blooms threaten both human- and wildlife-related uses of our surface waters.

California lacks any systematic bloom assessment efforts to aide in bloom tracking and management, but as the “monitoring arm” of CCHAB, SWAMP program managers have been working since 2011 to resolve this problem. In 2014, SWAMP set aside funding to initiate a cyanobacteria monitoring support and assessment program and associated strategy development for the State of California. The program will build an infrastructure to support local agencies in managing and monitoring blooms. Infrastructural elements will include:

- *Satellite imagery* to identify and track cyanobacteria blooms
- *Centralized website and reporting system* to provide data management, visualization, and reporting capabilities
- *Guidance documents* on event response and management strategies
- *Laboratory resources* to support local event response
- *Training* on HAB characteristics and use of guidance documents
- *Applied research and tool development*
- *Outreach* aimed at providing educational materials to policymakers, health care professionals, veterinarians, and the public

In the Spring 2016 SWAMP newsletter, we will provide more details on this new and evolving program, as well as links to newly developed products to aide in bloom management. Please see the [CCHAB webpage](#) for more information about our CyanoHABs monitoring activities.