

Status of EPA's Cyanotoxin Criteria

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Water Quality Criteria For Cyanotoxins

- EPA has identified draft human health recommended concentrations of cyanotoxins
- Draft document was released last year for public comment
 - Revised document based on public feedback has been completed, but not yet released
- SCCWRP commission asked for summary of criteria and how this will affect California



Related Topics: [Water Quality Criteria](#)

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Draft Human Health Recreational Ambient Water Quality Criteria and/or Swimming Advisories for Microcystins and Cylindrospermopsin Documents

| Microcystins | Cylindrospermopsin |
|--------------|--------------------|
| 4 µg/L | 8 µg/L |

- Swimming Advisory: not to be exceeded on any day
- Recreational Criteria for Waterbody Impairment: not exceeded more than 10% of days per recreational season per calendar year
- Applies to both fresh and marine recreational waterbodies

How Will The EPA Criteria Affect California?

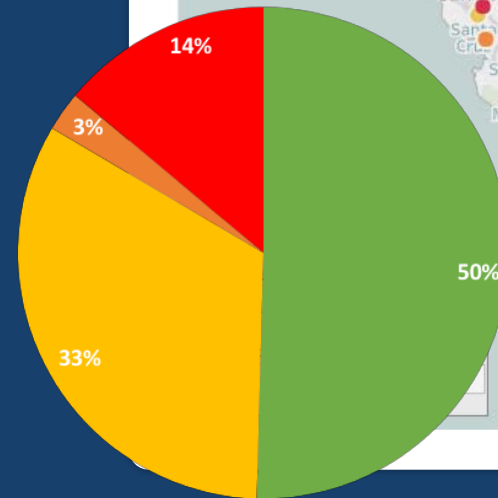
Table 1. CyanoHAB Trigger Levels for Human Health

| | Caution Action Trigger | Warning TIER I | Danger TIER II |
|---------------------------------|---------------------------|-------------------|-------------------|
| Primary Triggers ^a | | | |
| Total Microcystins ^b | 0.8 µg/L | 6 µg/L | 20 µg/L |
| Anatoxin-a | Detection ^c | 20 µg/L | 90 µg/L |
| Cylindrospermopsin | 1 µg/L | 4 µg/L | 17 µg/L |

If CA adopts EPA criteria, recreational activities would be restricted at lower concentrations of microcystins

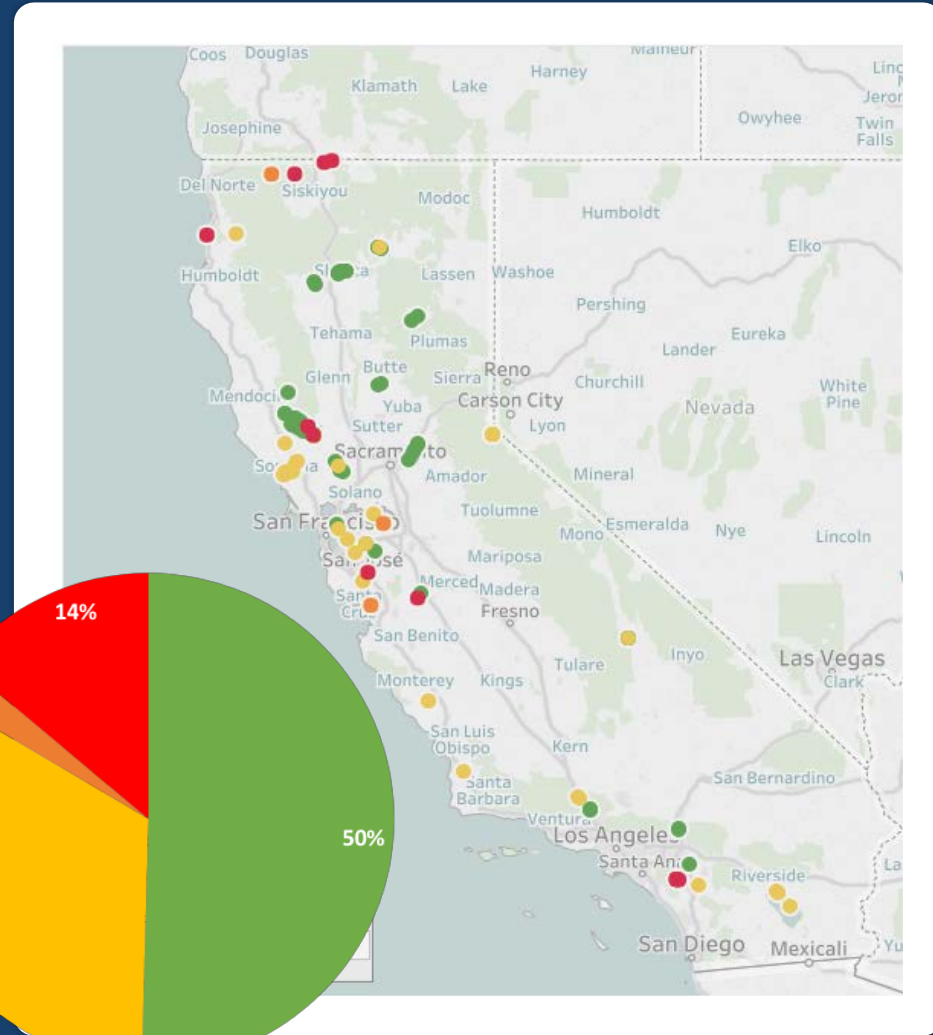
Holiday Assessment Survey

- Targeted sampling locations:
 - High recreational use
 - History of HABs
- 43 waterbodies
 - Over 100 sampling locations



Health Advisory Thresholds

■ No Advisory ■ Caution ■ Warning ■ Danger



Two Overriding Concerns for Freshwater HABs

1. CA health thresholds are voluntary
 - EPA is recommending Water Quality Criteria
2. California does not have an effective statewide monitoring program
 - Difficult to determine HAB trends in CA

Bloom Reports Doubled in 2017

2016

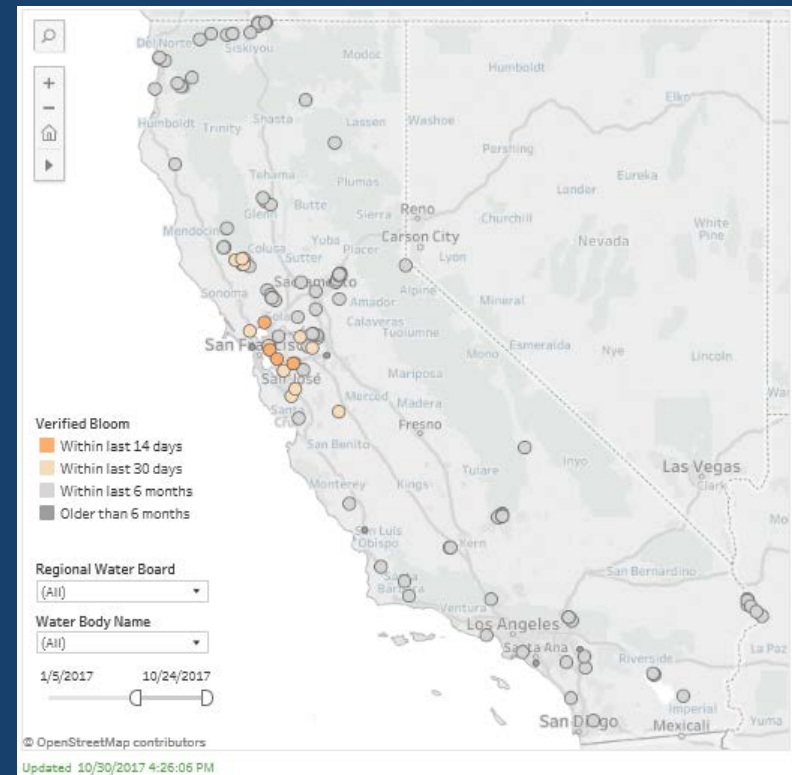
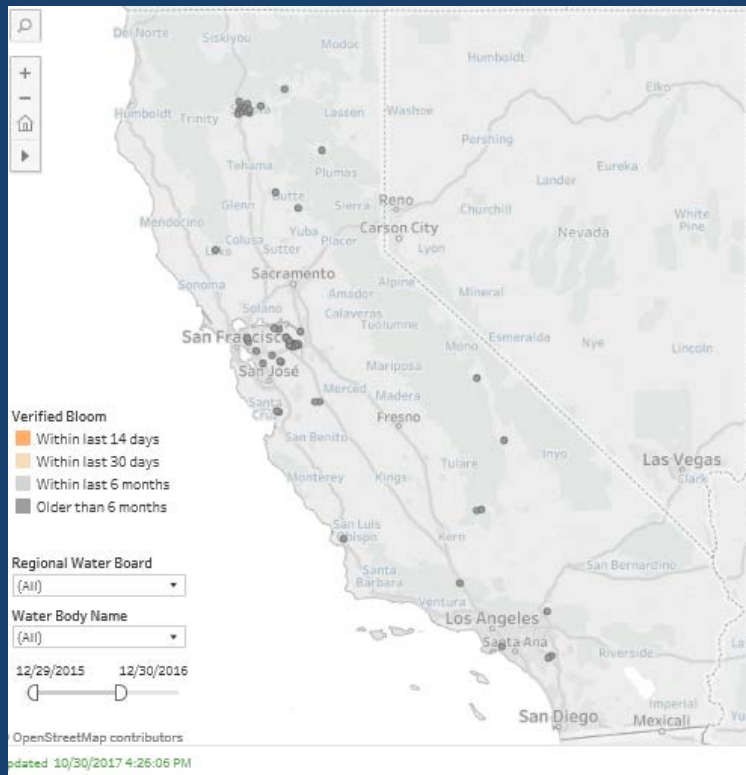
Total No. Reports = 91

Approx. Advisory Signs = 80

2017

Total No. Reports = 181

Approx. Advisory Signs = 141



Tracking HAB Impacts: Reported Illnesses in 2017

Human Illness

- 8 incidents

Animal deaths (dog & livestock)

- 25 animals

Fish and wildlife

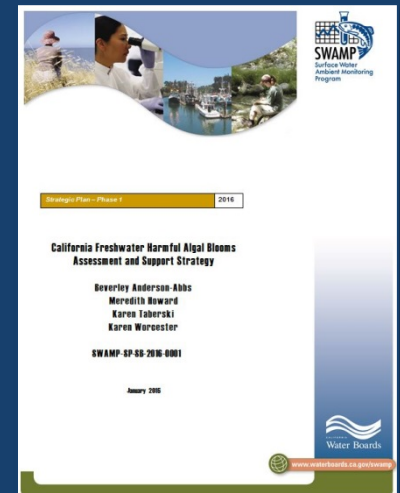
- Numerous incidents statewide

California Cyanobacteria Harmful Algal Bloom Network (CCHABs)

- Workgroup under the CA Water Quality Monitoring Council
- Develop a comprehensive, coordinated program to manage freshwater HABs
 - HAB assessment and support strategy



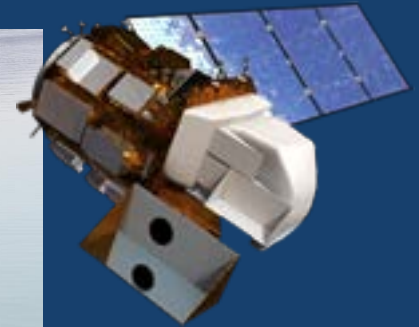
The screenshot shows the website for the California Water Quality Monitoring Council. The header includes the CA.GOV logo, the Water Quality logo, and the text "My Water Quality". The main heading is "Are harmful algal blooms affecting our waters?" with a sub-heading "CYANOBACTERIA AND HARMFUL ALGAL BLOOM NETWORK OF THE CALIFORNIA WATER QUALITY MONITORING COUNCIL". A search bar is visible in the top right. The navigation menu includes "Portals", "About Us", "Work Groups", and "HABs Links". The main content area is titled "California Harmful Algal Blooms (HABs)" and contains a paragraph of text: "HAB events represented below are voluntarily reported to the State Water Board's Surface Water Ambient Monitoring Program. Data provided are for general information purposes only and may contain errors. The exact location, extent and toxicity of the reported bloom may not be accurate and may not be affecting the entire waterbody. The data are subject to change as new information is received. Please check back for updates." To the right of this text is a "Toolbox" section with a list of links: "Report a Bloom", "Signs and Guidance for Posting", "Field Guide and Forms", and "Resources for Labs".



The image shows the cover of a report titled "California Freshwater Harmful Algal Blooms Assessment and Support Strategy". The cover features a photograph of a person looking through binoculars at a body of water. The report is dated 2014 and is part of the "Strategic Plan - Phase 1". The authors listed are Beverly Anderson-Abbs, Meredith Howard, Karen Taborski, and Karen Worcester. The report number is SWAMP-07-08-2014-001 and it was published in January 2015. The cover also includes the SWAMP logo (Surface Water Ambient Monitoring Program) and the Water Boards logo. The website address www.waterboards.ca.gov/swamp is visible at the bottom.

SCCWRP Focus on Freshwater HABs

- Develop enhanced monitoring technologies
- Develop HAB mitigation strategies for CA



Questions?

