

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Karen Taberski)
MEETING DATE: January 13, 2016

ITEM: 8

SUBJECT: **Freshwater Harmful Algal Blooms in California and the Bay Area, and the Development of a Statewide Strategy by the Surface Water Ambient Monitoring Program (SWAMP) to Address This Problem – Status Report**

DISCUSSION: Harmful algal blooms (HABs) and the algal toxins they create have increased globally in geographic range, frequency, duration, and severity in recent years. These increases have been attributed to various anthropogenic factors; the most significant include increasing water temperatures due to climate change, high nutrient loading, and shorter water residence times due to drought. HABs are problematic because they can affect multiple beneficial uses including contact and non-contact water recreation, aquatic habitat, and municipal and domestic drinking water supply by lowering dissolved oxygen concentration, causing taste and odor problems, reducing aesthetics, and producing potent toxins.

The last four years of drought have brought concerns about cyanobacteria blooms (CyanoHABs), the most common freshwater HABs in California, into focus for our region with multiple large blooms occurring in a number of our freshwater waterbodies that provide recreation and water supply to local residents. This item provides an overview of our concerns about CyanoHABs and the development of a coordinated strategy to begin to address how to identify and respond to this water quality concern.

California has had a Marine Biotxin Program to address marine HABs for over 15 years but currently has no program to address freshwater HABs despite the fact that CyanoHABs have been a recurring and escalating issue throughout the State. Although there have been regional efforts, particularly in the Klamath River Basin, there has not been any coordinated statewide strategy for surveillance or reporting HABs to protect public health and safety and no clear approach to addressing how to manage or remediate for HABs outbreaks.

In 2006 a statewide interagency workgroup was assembled, now called the California CyanoHAB Network, to begin to address this problem. This workgroup has issued draft voluntary guidance on blue-green algae blooms, which is currently being revised. In 2012, SWAMP sponsored a statewide workshop in response to the growing concern about cyanotoxins. One of the key recommendations from the workshop was to develop a statewide long-term vision and strategic plan to address CyanoHABs and other freshwater HABs. Since then, SWAMP, with input from federal, State, and local agencies, tribes, and scientists, has developed a statewide strategy that will be released later this

January. The goal of the strategy is to articulate a coordinated and widely supported long-term program to assess, communicate, and manage CyanoHABs, cyanotoxins, and other nuisance freshwater HABs. A local regional response is also necessary and options for next steps in the Bay Area will be discussed.

**RECOMMEN-
DATION:**

This report is presented for information purposes only – no action is needed.