Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
Wednesday, June 15, 2016
Regional Water Board Office
Santa Rosa, California

ITEM: 3

SUBJECT: Update on Freshwater Cyanobacteria Harmful Algal Blooms Response Efforts (*Katharine Carter*)

BOARD ACTION: This is an informational item only. No action will be taken by the Regional Water Board.

BACKGROUND: Algae and cyanobacteria, commonly known as blue green algae, are natural components of healthy marine and fresh water ecosystems. Under certain water quality conditions algae and cyanobacteria can rapidly multiply, causing nuisance "blooms." A small number of cyanobacteria species are capable of producing toxins that can be harmful to animals and humans; however, not all blooms include these toxin-producing cyanobacteria.

Cyanobacteria harmful algal blooms (cyanoHABs) are of special concern because of their potential impacts to drinking water, recreation in lakes and rivers, and effects on fish, domesticated animals and wildlife.

In recent years, there has been an increased frequency and severity of cyanoHABs around the world, including the North Coast Region. In recent years, the North Coast Regional Water Quality Control Board (Regional Water Board) has received reports of nuisance blooms and algal scums, animal illnesses and deaths, and on occasion, human health impacts within the North Coast Region.

The risk factors that contribute to cyanoHABs and nuisance blooms include nutrient (phosphorus and nitrogen) enriched waters, warming climate, and lower flows. The Regional Water Board is working to reduce risk factors through its water quality improvement and protection programs. However, there is a current need to manage cyanoHAB blooms through improved monitoring, assessment and increased educational outreach.

DISCUSSION: The US Environmental Protection Agency, State Water Resources Control Board, and Regional Water Board staff are developing procedures and implementing actions to respond to cyanoHABs. In order to facilitate collaboration and partnerships on monitoring, assessment, response, and outreach in the North Coast Region,

Regional Water Board staff hosted a freshwater cyanoHAB public workshop and workgroup meeting in February 2016. Over sixty people from federal, state, county and city agencies, tribes, non-governmental organizations (NGOs), and the public attended the meetings.

The workshop provided an overview of cyanoHABs and the toxins they can produce, the State's strategy and guidance for assessing and responding to cyanoHABs, and several lake and river cyanoHAB monitoring and response case studies. The workgroup meeting was an opportunity for information sharing and began the process of collaboration on response actions among those working on this issue in the North Coast Region.

Since the workshop and workgroup meeting, Regional Water Board staff has continued to facilitate coordination and collaboration between federal, state, county, tribal, and NGO partners working on cyanoHAB issues in our region. Staff is currently engaged in the process of outreach and coordination with those in the Russian River, Eel River, and Klamath River who are responsible for public and environmental health, monitoring, and public education.

Regional Water Board staff is also participating in the California CyanoHAB Network (CCHAB), which is a statewide workgroup of the California Water Quality Monitoring Council that are collaborating to create a statewide framework to respond to and address cyanoHABs. As part of that group, staff is assisting in the development and review of outreach and education products, field sampling standard operating procedures, and response strategies.

RECOMMENDATION: No action will be taken by the Regional Water Board.

SUPPORTING DOCUMENTS:

Regional Water Board Surface Water Monitoring Webpage:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/swamp.shtml

CA Water Quality Monitoring Council's CCHAB Webpage:
http://www.mywaterquality.ca.gov/monitoring_council/cyanohab_network/index.shtml

USEPA CyanoHAB webpage:
https://www.epa.gov/nutrient-policy-data/cyanohabs