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*A Joint Powers Public Agency*

## Information on Algae Bloom in San Francisco Bay

August 17, 2023

Beginning the week of July 24, 2023, discolored waters were observed in areas throughout the San Francisco Bay. Indications of an algal bloom were first observed in Albany and Emeryville, and there were additional reports of a red tide in other parts of the Bay, including near the San Francisco airport, Muir Beach, Tiburon, and in San Pablo Bay. Observations indicated that the algal species was *Heterosigma akashiwo*, the same organism that caused the harmful algal bloom in the summer of 2022.

*Heterosigma akashiwo* has been observed intermittently in various locations around the Bay over the past 20 years, after first being detected here in 2002. It is possible that this year's bloom was caused by *Heterosigma akashiwo* cysts remaining as a result of last year's event. *Heterosigma akashiwo* can be toxic to fish, although the nature of that toxicity is not well understood. While toxicity to humans or pets has not been documented in the scientific literature, some local jurisdictions are warning residents to avoid water contact on a precautionary basis.

Concentrations of algae peaked in late July/early August 2023 and did not reach the levels observed during the 2022 bloom. Local scientists from the San Francisco Estuary Institute last conducted an observational cruise on August 10, and concentrations of algae continued to be lower than both the 2022 bloom and the 2023 peak. A limited number of dead fish were observed along the SF Bay shoreline in late July/early August, and these dead fish may have been associated with the bloom.

Although we do not fully understand the causes of blooms like this, public wastewater utilities in the Bay Area are funding ongoing scientific studies to better characterize how specific conditions, such as weather and hydrologic patterns, climate change, nutrient concentrations, and other factors, can initiate and sustain algal blooms. Since nutrients contribute to magnitude of algal blooms, we are also planning and implementing projects to reduce nutrients discharged to the San Francisco Bay, which may lessen the extent or duration of these events in the future.

Wastewater is a byproduct of human society – we all flush – but there are ways we can do more to treat it to remove nutrients and to reuse it. EBDA's member agencies all have projects recently completed or underway to upgrade our wastewater treatment plants for these purposes. It takes time and money, but progress is being made. We look forward to continued partnership with the community to improve water quality in the Bay.

More information on EBDA agencies' projects to reduce nutrient discharges can be found here:

[City of San Leandro](#)

[Oro Loma/Castro Valley Sanitary Districts](#)

[City of Hayward](#)

[Union Sanitary District](#)

Additional information on the algae bloom can be found here:

[https://www.waterboards.ca.gov/sanfranciscobay/HAB\\_FAQ.html](https://www.waterboards.ca.gov/sanfranciscobay/HAB_FAQ.html)