

Dead fish are piling up on San Francisco Bay Area shores: A toxic algae bloom is the likely cause

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Credit: Pixabay/CC0 Public Domain

Thousands of dead fish and other marine life carcasses are washing ashore in the San Francisco Bay Area, creating a foul smell. Experts

point to an unprecedented "red tide" algae bloom as the mostly likely cause.

Abnormal numbers of dead crabs, bat rays, striped bass, white sturgeon and more have been spotted throughout the Bay area over the last week, officials say, notably at Oakland's Lake Merritt. The start of the fish die-off could date back even further—as the harmful algae bloom has been spreading since late July.

The carcasses are worrying environmental scientists, as they mark a devastating loss to [marine life](#). Experts also fear that the impacts could worsen over the weekend's expected heatwave, which could cause the harmful algae bloom to grow even more.

What is a red tide? Why is it killing fish?

While many algae blooms are beneficial to ocean life, a "red tide" is a [harmful algal bloom](#)—which can produce powerful, fatal toxins and/or cause a water's oxygen to fall past levels needed for survival, the National Ocean Service notes. The Bay area's current bloom was formed by a microorganism called *Heterosigma akashiwo*.

"This species is associated with massive fish kills elsewhere," Jon Rosenfield, fishery ecologist at the environmental nonprofit San Francisco Baykeeper, told the Stockton Record, part of the U.S. TODAY Network. "It is unknown, at this point, whether the bloom is causing a drop in dissolved oxygen ... or producing a toxin that kills fish, or both."

Algae blooms are not uncommon, but Rosenfield added that the Bay Area's current red tide is "unprecedented in its spatial extent and duration."

"Small, short-lived algal blooms around the Bay's margins are not uncommon. ... But nothing of this scope has been reported before in the Bay-proper," he said.

When did the Bay Area's harmful algae bloom start?

This harmful algae bloom was first spotted in the Alameda Estuary, executive officer of San Francisco Bay Regional Water Quality Control Board Eileen White told The Associated Press. White added that the bloom has been spreading since late July.

Most [algae blooms](#) end after about a week. But a triple-digit heat wave forecast for the upcoming Labor Day weekend may cause the Bay Area's bloom to grow even more, White said. "We don't know when it's going to end," she said.

White noted that treating the water for nutrients would cost billions of dollars. Water districts are currently funding studies to understand the effects of nutrients that have been present in the water since people settled in the area, she said. "The goal is to make the appropriate regulations based on sound science."

How many fish have died?

There's no way to know the total number of fish that have died so far, Rosenfield said, noting that people are seeing just a fraction of the affected fish wash up dead on the Bay's shores.

Damon Tighe, a self-described citizen scientist, has been among those monitoring the fish kill in Lake Merritt. On Sunday, Tighe posted a map to show locations around the lake where fish had perished—as part of a project for naturalists, biologists and more to collect sightings on

iNaturalist, a social network from the California Academy of Sciences and National Geographic Society used to share biodiversity observations worldwide.

Tighe estimates that more than 10,000 fish have died since August 28.

"I have never seen an event this bad," he told the Stockton Record.
"Everything is dying; gobies, flounders, crabs, polychaete worms, shrimp, everything."

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