

## Fighting for Better Dredging in the Bay



Photo: Gail Odum

A valuable natural resource that can help the Bay Area withstand sea level rise is being wasted. With your support, Baykeeper is working to protect San Francisco Bay's sand and mud.

This sediment washes down from mountains and riverbeds, and then covers the floor of the Bay and replenishes shorelines and beaches, where it provides habitat for wildlife and creates a natural buffer between the water and the land.

Sediment also fills shipping lanes, marinas, and harbors. To keep these areas of the Bay navigable, dredging removes three to four million cubic yards of mud and sand every year.

### ***Dredgers are wasting sediment that could be used to restore the Bay's wetlands.***

The Army Corps of Engineers, which conducts 70% of dredging in the Bay, takes their dredged material and dumps it far out in the ocean, because that's the cheapest disposal method. But this sediment could instead be used to fortify one of the most important lines of defense against sea level rise, Bay wetlands.

Baykeeper is advocating in court to require that clean dredged sediment no longer be wasted—and instead be used to restore the Bay's wetlands.

Wetlands are adapted to variable tides, soak up water like a sponge, and provide natural protection from rising water, flooding, and storm surges.

Wetland restoration efforts are ongoing and increasing, but they have been delayed by a lack of necessary soil and mud. Moreover, rising sea levels threaten to completely submerge the Bay's wetlands, and when wetlands are constantly submerged, they can no longer protect shorelines against rising water. That makes it even more urgent to build up new and existing wetlands now.

We're also fighting to end another harmful practice by the Army Corps of Engineers, suction dredging. Rather than mechanically scooping up sediment, suction dredging vacuums up everything in its path on the Bay floor. In sensitive habitat areas, suction dredging kills large numbers of Bay fish, including delta and longfin smelt, both of which are on the brink of extinction.

There's no need to kill fish and other wildlife to keep shipping channels open. Many other dredging operators use safer methods, and the Army Corps should, too.


With a lot at stake, we'll continue our long court fight and ongoing advocacy to improve dredging practices in San Francisco Bay. Thank you for standing with Baykeeper to protect wetlands and wildlife. 



Photo: Tracy Corbin

***Building up wetlands with dredged sediment will help protect the Bay from sea level rise.***



SAN FRANCISCO  
**BAYKEEPER®**

***Safeguarding San Francisco Bay from pollution since 1989.***

***Fall/Winter 2018***

# Letter From the Executive Director



Thanks to your support, Baykeeper joined cutting-edge investigations of microplastic pollution in San Francisco Bay when we hosted *National Geographic* researchers aboard our boat this summer. Microplastics are emerging as a big pollution threat to water bodies worldwide, and the Bay is no exception.

Using specialized equipment, our scientists helped collect and analyze hundreds of plastic particles from the Bay, ranging from large chunks to microscopic pieces. This research will quantify the extent of the problem in the Bay and identify some of the sources of these microplastics. We'll then use that information to develop legal and policy solutions to reduce the alarming amount of plastic pollution that enters San Francisco Bay every year.

Also thanks to you, Baykeeper is fighting on many other fronts for the Bay. We've made more progress to hold industrial polluters accountable. We're advocating for healthier dredging practices that require clean sediment to be used to restore wetlands, the Bay's natural buffer against rising tides.

Plus, our ShoreView project identifies solutions to sea level rise that will further protect the Bay's shoreline and prevent pollution. We'll be advocating for improvements all around the Bay.

I'm honored that you entrust Baykeeper to defend the Bay you cherish. As you look through this issue of *Baykeeper News*, please know that you make it possible for Baykeeper to be a champion for San Francisco Bay.

Sejal Choksi-Chugh, *Executive Director*

## Preparing Bay Area Communities for Climate Change

In 2015, Baykeeper began our unique ShoreView project to identify which areas of Bay shoreline are most at risk of flooding and increased pollution from sea level rise. We partnered with Google to photograph the Bay shoreline using our patrol boat and a remote-controlled trekker camera—the spherical photo mapper technology that captures imagery for Google Maps Street View.

The resulting Bay images are now available online to help residents, urban planners, elected officials, developers, and other key stakeholders assess vulnerabilities and plan for the future. The ShoreView website highlights key shoreline areas threatened by sea level rise in the Bay and provides an in-depth analysis of many of the economic, recreational, wildlife, and pollution impacts expected from projected sea level rise.

As climate change causes sea levels to rise and storms to become more severe, the Bay ecosystem faces new, complex hazards. Essential infrastructure like roads, sewer lines, and housing, as well as thousands of pollution hotspots along the shoreline, are all at risk of being damaged or flooded. Low-lying wetland habitat and recreational areas along the shore will become increasingly vulnerable.

Most critically, ShoreView outlines the adaptation steps needed to prevent widespread urban and ecological damage from sea level rise and storm surges. Baykeeper's priorities for preparing the Bay are listed below. Visit Baykeeper's ShoreView website to learn more about how sea level rise will impact San Francisco Bay, and what can be done to prepare: [baykeeper.org/shoreview/home](http://baykeeper.org/shoreview/home)



**Essential Bay Area infrastructure, like the onramp to the Bay Bridge pictured here, lies close to the Bay shoreline and is vulnerable to sea level rise.**

### Baykeeper will use ShoreView to advocate for:

- A single regional planning approach to prepare Bay shorelines for sea level rise;
- Wiser use of the Bay's sand and mud, to restore wetlands that can prevent flooding and protect habitat;
- Broader adoption of green infrastructure measures, such as natural flood plains and open shorelines, to prevent polluted runoff and minimize flooding;
- Expedited cleanup and containment of contaminated areas along the shoreline; and
- More flexible zoning regulations to allow for creative adaptation to rising tides.

# Stopping More of the Bay's Industrial Polluters

Birds at Don Edwards National Wildlife Refuge and fish in local creeks will contend with less toxic industrial contamination, thanks to a recent Baykeeper victory you helped us win.

Since 2012, rainwater polluted with heavy metals and other dangerous substances has been running off Newby Island Resource Recovery Park into creeks that enter San Francisco Bay near the wildlife refuge. Now, as a result of Baykeeper's Clean Water Act lawsuit, the owners of Newby Island will improve operations to protect the Bay from contamination.

Photo: Don DeBoid, Flickr/CC



***A Great Egret sits above Penitencia Creek. The Newby Island landfill and recycling facility lies adjacent to Penitencia and Coyote Creeks, both tributaries of the Bay.***


Newby Island is a major landfill and recycling facility near the shoreline of the Bay, adjacent to Coyote Creek and Lower Penitencia Creek, between San Jose and Milpitas. Stopping contamination from the facility will improve the area for birds and make nearby waters healthier for the steelhead and salmon that spawn in the creeks.

This victory is part of six years of progress in Baykeeper's Bay-Safe Industry Campaign, made possible by your support. The campaign stops industrial polluters from allowing illegal rainy-season runoff to flow into San Francisco Bay.

We targeted the most significant industrial polluters, and we've now achieved legally-binding agreements requiring cleanup at 44 facilities. Baykeeper advises each facility on pollution controls that are the least costly and most effective.

***We targeted the Bay's most significant industrial polluters and have required 44 facilities to stop their illegal contamination.***

So far, 26 of these facilities have completed their cleanups. That means the Bay can now begin to recover from the years of illegal contamination from these sites. We're continuing to monitor progress at the remaining 18 facilities, and will require further controls if the initial improvements aren't enough to stop the pollution.

Baykeeper is working toward more victories like the one at Newby Island Resource Recovery Park. Thank you for helping to stop toxic industrial pollution in San Francisco Bay! 

## Tip for a healthy Bay: Help end plastic pollution

- Choose non-plastic, reusable water bottles.
- Request drinks without plastic straws or stirrers at restaurants and coffee shops.
- Carry reusable bags for groceries—and all other shopping trips.
- Bring your own reusable coffee cups, utensils, and non-plastic to-go containers.
- Dispose of contact lenses in the trash, not down the toilet or sink.

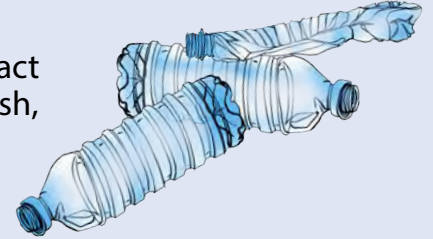


Photo: Meg Sedlak

**San Francisco Baykeeper  
defends the Bay from polluters  
through science, legal action,  
advocacy & patrols.**

*Make a gift today to protect the Bay*

Use the attached envelope  
or give online at

**[baykeeper.org/donate](https://baykeeper.org/donate)**



SAN FRANCISCO

**BAYKEEPER**®

1736 Franklin Street., Suite 800  
Oakland, CA 94612

## Fall/Winter 2018 Baykeeper News

# Action around San Francisco Bay



(From left): **Over 300 swimmers, paddlers, boaters, and volunteers participated in Baykeeper's 5th annual Bay Parade** in San Francisco Bay on July 15, 2018. Thank you to everyone who helped make the event a huge success for the Bay, including event sponsors United Airlines, Levi Strauss & Co., the San Francisco Giants, Anchor Brewing, and the Dolphin Club. Baykeeper hosted a shoreline cleanup at San Francisco's India Basin Shoreline Park for Coastal Cleanup Day on September 15. **Thank you to our volunteers for cleaning up hundreds of pounds of trash!** Baykeeper usually investigates Bay pollution from our patrol boat. But after receiving reports of possible pollution discharges from a shallow shoreline site, Baykeeper's Field Investigator Sienna Courter, along with Managing Attorney Erica Maharg and Staff Attorney Nicole Sasaki (pictured), **conducted a recent pollution investigation by kayak.**



Photos, clockwise from left, by Clay Schmitz, Robb Most, and Sienna Courter



Follow us on Facebook and Twitter  
Sign up for e-mail updates at [baykeeper.org](http://baykeeper.org)

[baykeeper.org](http://baykeeper.org)  
[info@baykeeper.org](mailto:info@baykeeper.org) | 510-735-9700  
Pollution Hotline: 1-800-KEEP BAY



100% post consumer waste  
processed chlorine free