News dykeeper

Key New Victories to Reduce Sewage Spills to the Bay



Recent San Francisco Baykeeper victories in the East Bay and South San Francisco will help significantly reduce sewage spills to San Francisco Bay and its tributaries. Baykeeper has been working for more than ten years to reduce

sewage spills, which are a major threat to the health of the Bay and local communities.

In March, Baykeeper, along with the U.S. Environmental Protection Agency (EPA) and the California State Water Boards, negotiated an agreement that requires ten East Bay cities to dramatically reduce illegal sewage spills. The agreement applies to Oakland, Emeryville, Piedmont, Berkeley, Alameda, Albany and the cities served by the Stege Sanitary District, Kensington, El Cerrito and the Richmond Annex section of Richmond.

Baykeeper has worked for many years to reduce sewage overflows from East Bay cities. Every rainy season, these cities' debilitated sewer systems allow rainwater to infiltrate leaky sewer pipes, sending massive amounts of rainwater mixed with raw sewage to the East Bay Municipal Utility District (EBMUD) treatment plants, which are then forced to discharge the mixture to the Bay before it is fully treated.

This winter, more than 232 million gallons of undertreated sewage were discharged to the Bay because of these cities' failure to upgrade their polluting infrastructures.

In This Issue

Page 2

Letter from the Baykeeper and Executive Director

Page 3

Sea Level Rise King Tides in the Bay

Page 4

Keeping Everyday Chemicals
Out of the Bay

Page 5

Micro-Plastics Pilot Program Baykeeper Member Survey

Page 6

Hotline Tip Leads to Cleaner Streets in Redwood City Join the TransBay Relay

Page 7

Bay Species Spotlight

Back Page

Sharks of the Bay

Under the settlement agreement, the cities must develop individual plans for repairing and operating their sewage pipes. "We're very pleased with the agreement, but on-the-ground work remains to be done," said Baykeeper Staff Attorney Jason Flanders. "Baykeeper aims to ensure that the cities adopt aggressive timetables for repairs and that the fixes are successful in stopping spills." **Continued on page 4**

The America's Cup Comes to San Francisco Bay



Photo by TJ Teru/Flickr

Baykeeper is thrilled that San Francisco has been chosen as the location for the 34th America's Cup. This world-class sailing event will be a remarkable opportunity for the Bay's sailing community – and indeed all residents of the Bay Area – to celebrate San Francisco Bay, the Bay's spectacular waterfront and our dedication to protecting the marine environment.

Fifteen teams will participate in America's Cup races around the world over the next few years, sailing 45-foot catamarans until fall of 2012, when teams will begin racing giant 72-foot catamarans. The Louis Vuitton Cup will take place on San Francisco Bay in summer 2013, followed by the final America's Cup match in September.

Hundreds of thousands of spectators are expected to visit the Bay Area to watch the thrilling spectacle. Event organizers have promised to hold an environmentally friendly series, with a carbon neutral footprint, a focus on marine conservation and careful environmental planning. *Continued on page 2*

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San Francisco Baykeeper is the pollution watchdog for San Francisco Bay, using science and advocacy to reform policy and enforce clean water laws for the benefit of the Bay ecosystem and Bay Area communities.

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Baykeeper News is a publication of San Francisco Baykeeper, a 501(c)(3) nonprofit organization.

Letter from the Baykeeper and Executive Director



Welcome to the Spring 2011 issue of Baykeeper News! I'm excited to provide updates on all of San Francisco Baykeeper's latest initiatives to protect the water quality and wildlife of San Francisco Bay.

In this issue you'll read about some of our exciting victories and new initiatives to build on our decades of work to protect the Bay from pollution. It's been a busy 2011 here at Baykeeper as we have continued reining in sewage pollution, participated in oil spill drills, organized support for a healthy America's Cup and been out on the

Baykeeper boat during many rainy nights to collect water samples.

Thank you so much to all the dedicated supporters who help make this work possible. I hope you enjoy reading about our latest initiatives in this issue of Baykeeper News. Be sure to follow all our progress on Facebook and Twitter, and sign up for our e-news updates at www.baykeeper.org. I look forward to our continued partnership on behalf of the Bay!

Deb Self Baykeeper and Executive Director

The America's Cup Comes to San Francisco Bay

(Continued from page 1) To help ensure that the environmental legacy of the 34th America's Cup is a positive one, Baykeeper and Clean Water Action have convened the America's Cup Environmental Council, a coalition of environmental, transit, waterfront preservation and neighborhood groups, to help with the environmental planning.

The consortium has identified key areas of environmental concern, along with proposals for avoiding or mitigating problems, and submitted them to City and Port officials responsible for analyzing and addressing environmental impacts related to the event.



Photo by Chris Alexander/Flickr

Key suggestions include:

- crowd control measures to prevent damage to sensitive shoreline habitat;
- increased public transit to reduce traffic and greenhouse gas emissions;
- restrictions on plastic items for sale along the Embarcadero, including single-use water bottles; and
- adequate containers and signage for composting and recycling.

Baykeeper is particularly focused on clean boating education for the increased number of residents and visitors who will be on the Bay for the races. We will also be working to ensure that local boatyards are using best practices to prevent toxic copper, lead and zinc pollution from washing off of their sites and into the Bay.

We'll keep you updated on all our America's Cup initiatives at www.baykeeper.org.

Advocating for Bay Protections in the Face of Sea Level Rise

Recently San Francisco Baykeeper has been advocating in favor of a new sea level rise policy prepared by the San Francisco Bay Conservation and Development Commission (BCDC). The policy would amend the existing Bay Plan to sensibly require that planning

Supporting Smart Planning for Sea Level Rise

Baykeeper is:

- Supporting the State Coastal Conservancy's climate change adaptation pilot project, San Francisco Bay Living Shorelines
- Opposing the Saltworks development in Redwood City, which is susceptible to sea level rise and flood risk

We recently:

- Objected to Regional Water Board approval of Suisun City Wal-Mart without wetland mitigations, and joined in a petition to the State Water Board
- Provided technical assistance on progressive land use planning for Point Molate and testified at the Richmond City Council hearing against development at the site

Visit www.baykeeper.org to sign up for Baykeeper's E-News and learn how you can speak up for healthy shorelines. ibly require that planning for new developments along Bay shorelines take into account the potential

impacts of sea level rise.

In coming decades, sea level rise caused by climate change has the potential to dramatically alter the Bay's shorelines. It's estimated that water levels in the Bay may increase by as much as 16 inches by 2050. As water levels in the Bay rise, more and more shoreline areas will be subject to storm surge and regular flooding. Low-lying pollution sources – such as wastewater treatment plants, landfills and industrial facilities that

are at or below sea level – will be at greater risk of contributing pollution to the Bay. Wetlands, which help to filter pollution and buffer storm surges, may become completed submerged.

It is therefore vital that developers and public agencies consider any future growth along shoreline areas in light of the risk of flooding and increased pollution, and be required to implement reasonable environmental protections.

Predictably, BCDC's proposal is facing opposition from development interests led by Cargill, the company behind the controversial Saltworks project in Redwood City. These development interests have greatly exaggerated the amendment's threat to economic recovery, and they have pressured some municipalities into opposing the amendment by claiming it undermines a city's authority to manage shoreline development – when in fact it does not include such restrictions.

The amendment is now in danger of being weakened in order to appease development interests. These concessions would weaken BCDC's authority to protect Bay shorelines from irresponsible development and curb local efforts to preserve wetlands and reduce flood risk in the face of future sea level rise. Baykeeper, along with other environmental groups including Save the Bay and Citizens Committee to Complete the Refuge, will continue to stand firm in support of the amendment. The Commission is expected to vote on the amendment in May or June; we'll keep you updated on opportunities for public comment in support of the policy.

King Tides: A Preview of Sea Level Rise in the Bay

In January and February, the Bay Area experienced King Tides, extreme high tide events that happen twice a year in the winter and summer. These high tides can provide a preview of the potential impacts of sea level rise to San Francisco Bay's shorelines.

Baykeeper staff members joined local journalists on the water to document the event. Baykeeper Staff Attorney Jason Flanders reported, "It was a rough ride as huge swells rocked the Baykeeper boat. We saw big waves going over San Francisco's downtown seawall and on to the Embarcadero."

The Bay Area King Tides Photo Initiative collected photos of the King Tides' impact around the Bay and coastal areas in order to build awareness of the threat of climate change; visit www.flickr.com/groups/bayareakingtides to see more photos online.

Top: A flooded intersection in Marin County provides a glimpse of what could be a regular occurrence around the Bay as the sea level continues to rise. Photo by Yanna B./Flickr

Bottom: The high tide in San Francisco Bay breaches the seawall and overflows on to the Embarcadero in downtown San Francisco.

Photo by Mike Schweitzer/Flickr

These photos were collected as part of the Bay Area King Tides Photo Initiative.





Baykeeper Victories Against Sewage Polluters

(Continued from page 1)

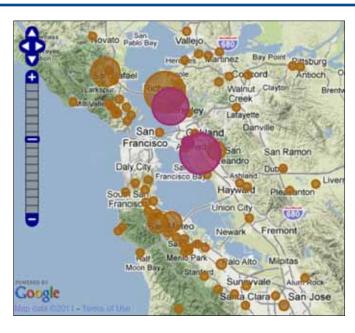
Across the Bay in South San Francisco, Baykeeper reached an agreement to reduce the city's sewage spills to the Bay. Under our settlement agreement, South San Francisco will decrease sewage spills over a five-year period and improve its operations and maintenance practices to meet or exceed industry standards.

Additionally, the City will fund a \$300,000 grant program for eligible homeowners seeking to replace broken household lateral lines (the sewer pipes that connect a house to the city's sewer mains), which can contribute to sewage spills. South San Francisco will also provide \$150,000 to fund environmental projects by other nonprofit organizations working to benefit Bay water quality.

These settlements are the latest in a series of lawsuits Baykeeper has filed as part of its "Sick of Sewage" campaign aimed at reducing the number of sewage spills to the Bay. Wastewater contains pathogens, toxins and other pollutants that poison the Bay's food web and local wildlife and cause a variety of illnesses in humans that come into contact with contaminated water.

Many sewer systems around the Bay are more than 40 years old and in dire need of repair. During the rainy season, these leaky pipes become inundated with rainwater, leading to overflows and spills to local streams, creeks and the Bay. This winter, more than 11 million gallons of raw sewage and contaminated rainwater have spilled to the Bay and its tributaries from cities throughout the Bay Area. Visit www.baykeeper.org to see the full extent of these sewage spills.

Learn more about Baykeeper's efforts to reduce sewage spills to the Bay, and how you can help stop sewage spills, at www.baykeeper.org.



Get Updated Sewage Spill Information Online

Baykeeper has been tracking all of this year's sewage spills on our online interactive map. To see the latest spill totals, visit www.baykeeper.org/sewage-map.

Keeping Our Everyday Chemicals Out of the Bay



Did you know that your daily routines can impact the Bay? Recent research has found that many commonly used pharmaceuticals and personal care products that are washed down sink and shower drains will eventually reach waterways, resulting in harmful impacts to the marine environment.

Most wastewater treatment plants were designed to meet standards created in the 1970s by the Clean Water Act. At that time, scientists and regulators were not aware of the impacts of the tens of thousands of chemicals contained in medications and personal care products, so municipal treatment plants weren't designed to remove contaminants like hormone disrupters, antibiotics and antibacterial agents.

Today, these contaminants are referred to as "chemicals of emerging concern." Engineers are now beginning to create ways to modify or redesign treatment plants to be capable of removing these chemicals from wastewater.

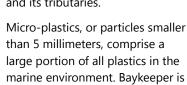
Until our wastewater treatment plants can be upgraded, we can all work to reduce the toll on local waterways caused by our everyday activities.

- Do not flush unused or leftover medications down the toilet or sink drain. Take them to a designated pharmaceutical disposal site, such as some local pharmacies, or simply dispose of them in your trash.
- Many of the pharmaceuticals found in waste streams are the result of individuals ingesting more than their bodies can process. Ask your doctor if you can safely reduce the quantities of pharmaceuticals you are currently prescribed.
- Limit your use of products containing triclosan and other antibacterial agents, including cleansers and hand soaps.
 Antibacterial agents have been detected in surface waters, soil, fish tissue and human breast milk.
- Look for cosmetics, sunscreens, moisturizers and other personal care products that do not contain hormone disruptors or other potentially harmful chemicals.
- Support efforts by your local wastewater agency to upgrade treatment technology or implement wastewater recycling. These infrastructure changes are key to reducing our collective chemical impact on the marine environment.

Visit www.baykeeper.org to sign up for Baykeeper's E-News and stay informed of our work to protect San Francisco Bay from chemicals of emerging concern.

Pilot Program Aims to Study Micro-Plastics in the Bay

San Francisco Baykeeper is collaborating with the San Francisco Estuary Institute on the first-ever program aimed at quantifying the amount of plastic trash floating in San Francisco Bay. Plastic debris is a growing threat to the health of urban waterways including the Bay and its tributaries.



attempting to quantify the current level of micro-plastics in the Bay in order to assess whether they are a cause for concern and eventually to judge the success of efforts to reduce plastic. For instance, under the 2009 San Francisco Bay Area Municipal Regional Stormwater Permit, cities are required to reduce the amount of trash entering the Bay through runoff from city storm drains – but there is no baseline data to determine whether those efforts are effective.



To capture the micro-plastics, we use the Baykeeper boat to drag a device known as a manta trawl, a fine net attached to an aluminum frame – shaped like a manta ray – that skims the surface of the water, since most micro-plastic floats at the surface. The samples collected from this initial outing will be analyzed according to National Oceanic and Atmospheric Administration guidelines that allow us to quantify the relative concentration of plastic particles in terms of the total amount of

debris collected, as well as the concentration of plastic debris within the volume of water that passes through the trawl.

Pending the results of this pilot study, we intend to continue monitoring for plastic debris throughout the Bay to determine

when and where plastics are most abundant, and what measures must be taken to reduce the impact of trash in the Bay.

Top: The manta trawl skimming the surface of the Bay as part of a pilot project to study the prevalence of micro-plastics in San Francisco Bay. **Center:** Baykeeper Staff Scientist Ian Wren pulls the trawl from the water. **Bottom**: Plastic particles are carefully collected and sent to a laboratory for analysis.



BAYKEEPER MEMBER SURVEY

Tell us how you enjoy the Bay! Baykeeper would like to know more about where and how you use our watershed.

Please detach and return this survey in the enclosed envelope. Surveys received by 7/1/11 will be entered in a drawing to receive a free Baykeeper stainless steel water bottle!

Ad	dress
Cit	y State Zip
Pho	one
Em	ail
Ho	w long have you been a supporter of San Francisco Baykeep
	Less than 1 year
	1 – 2 years
	3 – 5 years
	6 – 10 years
	Over 10 years
Но	w did you first learn about Baykeeper?
	Talk/event
	Cleanup
	Mailing
	Through a friend
	Local news or newspaper
	Not sure
	Other

How do you interact with San Francisco Bay and its tributaries, and how often? (check all that apply)

	Daily	Weekly	Monthly	few months	Rarely
Biking					
Birding					
Fishing					
Kayaking/Rowing					
Paddleboarding					
Power Boating					
Riding the Ferry					
Sailing					
Surfing					
Swimming					
Walking/Hiking					
Windsurfing					
Other					
Other					
Other					

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Baykeeper News - 4 5 - Summer 2011

Baykeeper Member Survey

(continued from previous page)

What places do you regularly visit around the Bay and its watershed? Check all that apply.

SAN FRANCISCO

- Ocean Beach
- Baker Beach
- Crissy Field/Marina Green/Aquatic Park

PENINSULA

- San Mateo Creek
- San Francisquito Creek
- San Mateo Sloughs (Corkscrew, Steinberger, etc)

SOUTH BAY

- Don Edwards San Francisco Bay National Wildlife Refuge
- Coyote Creek

EAST BAY

- Coyote Hills Regional Park
- Alameda Creek
- Hayward Regional Shoreline Park
- San Lorenzo Creek
- Oyster Bay Regional Shoreline Park
- San Leandro Creek
- Crab Cove and Robert Crowne Memorial Beach on Alameda
- Oakland Inner Harbor
- Emervville Marina
- Cesar Chavez State Park
- Albany Bulb
- Point Ísabel Regional Shoreline
- George Miller Jr. Memorial Regional Shoreline
- Point San Pablo
- San Pablo Creek
- Point Pinole Regional Park
- Carquinez Strait Regional Shoreline
- Martinez Regional Shoreline Park
- Walnut Creek

NORTH BAY

- Napa River
- Sonoma Creek
- San Pablo Bay National Wildlife Refuge
- Novato Creek
- Miller Creek
- China Camp State Park
- San Rafael Creek Corte Madera Creek
- Richardson Bay Arrovo Corte Madera del Presidio
- Angel Island State Park

OTHER LOCATIONS

Other comments:

Have you been harmed by Bay pollution or impacted in some way? If so, how?				

Thank you for your time and your support of a clean and healthy Bay!

Hotline Tip Leads to Cleaner Streets in Redwood City

In January, San Francisco Baykeeper received a call to our pollution hotline from a concerned resident who was biking in Redwood City. She noticed oil on the street next to several garbage collection locations and eventually spotted oil near almost every house's collection site throughout several neighborhoods. She called us, and we immediately contacted Redwood City to track down the source of

The City notified its garbage and recycling company, Recology, which promptly began an investigation. The company determined which truck had been leaking and repaired the problem. Recology also started a new training program for its employees to help them recognize and respond to oil or fuel leaks from their trucks. Redwood City staff documented the incident and will be on the lookout for any future problems.

Oil that's left on roadways will eventually be washed into storm drains, where contaminants and polluted storm water get emptied into local creeks and the Bay without being filtered or treated.

Thanks to an observant resident and to Redwood City and Recology's quick and effective action, one source of potential Bay pollution has

If you see pollution in your neighborhood, please call Baykeeper's hotline at 1-800-KEEP-BAY, send an email to hotline@baykeeper.org or fill out our incident report form online at www.baykeeper.org.

Swim for the Bay!



TransBay Relay benefit swim for BAYKEEPER.

Join the TransBay Relay Saturday, September 10, 8 am

Open water swimmers take on the challenge of crossing San Francisco Bay to raise money and awareness for San Francisco Baykeeper. The 9-mile relay swim begins in the shadow of the Golden Gate Bridge and ends in the East Bay at the Emeryville Marina.

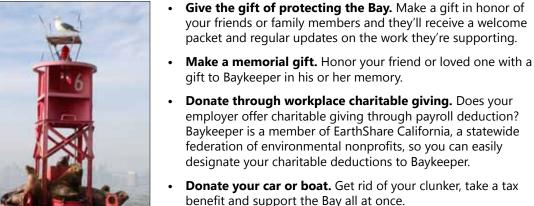
Visit www.baykeeper.org/transbayrelay to register, donate or volunteer.

Make your donation to support San Francisco Baykeeper today!

Since 1989, Baykeeper has been the pollution watchdog for San Francisco Bay. As the only on-the-water nonprofit dedicated to safeguarding our local waterways, we're proud to work on behalf of the Bay Area community to improve the health and sustainability of San Francisco Bay.

There are many ways you can donate to support San Francisco Baykeeper.

- · Use the enclosed envelope. It only takes a moment to send in your gift by mail.
- Make a donation online at <u>www.baykeeper.org/donate</u>.
- **Become a recurring donor.** Signing up for monthly or quarterly recurring gifts helps your contribution go even further by allowing Baykeeper to save money on administrative costs. Your gifts are processed automatically, and you'll receive fewer fundraising appeals. It's the simplest and most effective way to support Baykeeper's work to protect the Bay.



- **Donate through workplace charitable giving.** Does your employer offer charitable giving through payroll deduction? Baykeeper is a member of EarthShare California, a statewide federation of environmental nonprofits, so you can easily designate your charitable deductions to Baykeeper.
- **Donate your car or boat.** Get rid of your clunker, take a tax benefit and support the Bay all at once.
- **Donate stock.** Baykeeper's work will benefit from your contribution, while you will not be required to pay capital gains tax on the stock's increase in value.
- Bequests and planned gifts. Help Baykeeper now and in the future through bequests and other planned giving options. The advantages include tax benefits, recognition and the satisfaction of knowing that you are leaving a legacy of environmental protection for San Francisco Bay.

Your support is vital to Baykeeper's work to protect the Bay. Thank you for making a gift to help us restore the Bay to a vibrant, thriving estuary!

Bay Species Spotlight: Salt Marsh Harvest Mouse

A tiny native of the Bay Area, the Salt Marsh Harvest Mouse is found only in the marshlands around San Francisco Bay. Unfortunately, the destruction of 85% of its habitat over the past 150 years has landed it on the federal and state endangered species lists.

This little rodent measures only about six inches long from nose to tail and weighs about as much as a nickel. Like its relative the Western Harvest Mouse, the Salt Marsh Harvest Mouse has a brown back and grayish undersides, except for members of the subspecies found in the South Bay, which have a reddish belly. Salt March Harvest Mice feed primarily on pickleweed — also known as glasswort, a succulent native plant that is abundant in the Bay's marshy grasslands — and have the unusual ability to drink salt water. They're also adept swimmers.

The Salt Marsh Harvest Mouse's habitat is in the fragmented tidal marshes that ring the Bay, including the Napa Sonoma Marsh, Sausalito and San Rafael baylands, Don Edwards National Wildlife Refuge, Palo Alto Baylands and Alviso slough. Because so many of San Francisco Bay's tidal marshes have been subject to development, the Salt Marsh Harvest Mouse's range has been broken up and degraded, leading to its decline. Rising sea levels and invasive marsh grass species also threaten the species' prospects for survival.

Fortunately, some regional and city planning efforts are beginning to implement habitat protection strategies to prevent land development close to the shoreline, which could help protect the Salt Marsh Harvest Mouse, as well as other species which thrive in the marshlands. (See "Advocating for Bay Protections in the Face of Sea Level Rise" on page 3.)

In addition to its shrinking habitat, the Salt Marsh Harvest Mouse is also at risk from predators such as hawks, owls, herons, snakes, foxes and feral cats in its brief 9-month lifespan. Females typically bear only one litter of three to four young in their lifetimes. Due to its small size and nocturnal tendencies, the Salt Marsh Harvest Mouse can be difficult to spot but is thought to be more active on moonlit nights.

Perhaps the next time you are taking a walk near the Bay's shorelines, you may be lucky enough to catch a glimpse of this interesting little mouse!

The Salt Marsh Harvest Mouse makes its home in the tidal marshlands surrounding San Francisco Bay. Photo: U.S. Department of the Interior





Summer 2011 Baykeeper News



SAVING THE SHARKS OF THE BAY

Baykeeper recently observed a shark-tagging operation with Sea Stewards, a nonprofit organization that advocates for increased protections for sharks in San Francisco Bay and throughout the world. The Bay is home to several shark species, including the Sevengill shark, pictured at right. Sea Stewards catch the sharks, implant a tracking tag and release them back into the Bay in order to learn about the size, range and biology of local shark populations.

As top predators, sharks are an extremely important part of the ecosystem, and their removal from the Bay can impact the entire food chain. Recreational shark fishing has becoming more popular in the Bay as the populations of fish such as salmon and sturgeon have dwindled.

Worldwide, the shark population has been severely depleted by the global demand for shark fin soup. Tens of millions of sharks are killed annually after being finned and returned to the water to die. Baykeeper is joining with Sea Stewards and other environmental groups in supporting state legislation which would protect shark populations by banning the possession, sale, trade and distribution of shark fins. While the practice of shark finning is banned in the United States, current laws do not address the import and sale of shark fins from other parts of the world. A ban on shark fins sales is an important measure for protecting sharks and preserving the health of marine ecosystems and biodiversity – both around the world and here in the Bay.

Clockwise from top: The Sea Stewards research team releases a Sevengill shark back into the Bay after being tagged. Baykeeper and Executive Director Deb Self observes as Sea Stewards Director David McGuire films the shark-tagging operation from the Baykeeper boat. Sea Stewards researchers work quickly to tag and measure each shark. Photos by Tracy Corbin, Baykeeper Membership Coordinator









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