

## Clean Bay Campaign Fact Sheet

### *Welcome*

Thank you for agreeing to participate in the Clean Bay Campaign launch. We want you to enjoy the morning while you learn more about Bay ecosystems and the pollutants we're trying to reduce. Spending time on the water will remind us how imperative it is to understand how to be good stewards of San Francisco Bay and our many local creeks and waterways. We hope you come away from the morning with renewed appreciation for the Bay and a sense of urgency to protect it.

In the 20<sup>th</sup> Century, the lands around San Francisco Bay were used as garbage dumps and later as discharge sites for untreated sewage from residents, heavy industry, and the canneries that were an important part of Silicon Valley's agricultural past.

We now know how to reduce many biological pollutants and some heavy metals, such as copper, by cleaning water at sewage treatment plants and working with industry to minimize pollutant discharges. With those successes, however, we continue to struggle with legacy pollutants such as mercury.

In the 21<sup>st</sup> Century, our biggest concern for the health of the Bay is the behavior of the many people living in our Bay watershed. The Clean Bay Campaign informs residents about how their daily activities can impact local waterways and describes proper disposal for household wastes. We must appeal to the region's growing population to choose good day-to-day habits that prevent newer pollutants of concern from entering any of our waterways.

### *Why We're Concerned*

- The United States Geological Survey analyzed water samples from waterways for 95 organic chemicals usually found in wastewater samples nation-wide. In 80% of the samples analyzed, one or more of the following pharmaceuticals were detected at low concentrations: Acetaminophen, steroids and hormones, hormones used in birth control pills, blood pressure medications, codeine, antibiotics and antimicrobials.
- A separate 1999 study detected acetaminophen (pain-killer and anti-inflammatory) in Bay samples. Based on test results from other waterways, it is anticipated that similar studies here would find concentrations of other pharmaceuticals. Studies show increasing evidence that compounds from medicines and personal care products enter local waterways and can have **negative impacts on fish** and other aquatic organisms. Some of these compounds can cause abnormal thyroid function, sex alteration, poor hatching success, decreased fertility, and altered behavior.
- It is estimated that an average acre of a well-maintained urban lawn receives an annual input of **five to seven pounds of pesticides**. (An estimated **43 million Americans use pesticides** and **38 million Americans over-fertilize** their gardens.)
- Half of all **pesticide use** in California occurs in urban areas. Most pesticide use is for ant control, but it is extremely ineffective, killing less than 1 percent of the targeted ant population.
- All **creeks in Santa Clara County** are listed by the California State Water Resources Control Board as impaired because of the presence of diazinon and chlorpyrifos, which were found to pose health threats to children and water quality. Both were banned in recent years.

- Bay Area use of **pyrethroid products**, a common family of pesticides for ants and other insects doubled between 2001-2003. These pesticides also pose a potential threat to water quality.
- Rain and irrigation can wash **pesticides into storm drains**, which take these toxins straight to the Bay.
- One small **sewage overflow** occurs nearly every single day in the RWQCP service area. Fats, oil, or grease are a contributing factor in half of them. Each year, four or five significant sewage overflows threaten water quality and wildlife.
- **Fewer than 10 percent** of California households take advantage of household hazardous waste disposal programs.
- Because of elevated levels of mercury, PCBs, and other chemicals, adults should eat no more than **two meals per month** of sport fish caught in the Bay, according to the Office of Environmental Health Hazard Assessment.

### ***About San Francisco Bay***

- The **San Francisco estuary** encompasses the Sacramento-San Joaquin Delta and San Francisco Bay, including San Pablo and Suisun Bays, stretching nearly 50 miles from north to south and varying in width from 12 miles down to about one mile.
- **40 percent of California's rivers and streams** drain into the Bay watershed.
- Each year, more than **one million migrating birds** visit the Bay, which also supports more than **130 species of fish**.
- The Bay covers 550 square miles. Because of bay-fill and development, it is **one-third its original size**.
- More than 200 miles of Bay shoreline are **open to the public**, up from only four miles of public access in the 1960s.
- The **average depth of San Francisco Bay is 14 feet**.

### ***About the Campaign***

The Clean Bay Campaign appeals to residents to prevent household hazardous wastes (e.g., pesticides, mercury-containing items) and pollutants such as kitchen oils and unwanted medicines from entering San Francisco Bay. See [www.cleanbay.org](http://www.cleanbay.org).

The campaign is a collaboration of Regional Water Quality Control Plant (RWQCP) and partner agencies (East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford University), with support from Save The Bay.

***Facts compiled from: Association of California Water Agencies; Regional Water Quality Control Plant, Palo Alto; Save The Bay; and Stormwater Manager's Resource Center***

### ***Background Information***

The Regional Water Quality Control Plant (RWQCP) service area includes East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Palo Alto, Mountain View, and Stanford University. Its approximate profile:

- 25 square miles
- 220,000 residents
- 290 miles of storm drains
- six miles of bayfront
- six creeks that feed into the bay
- 147,000 motor vehicles

**RWQCP** cleans 25 million gallons wastewater each day from showers, sinks, toilets, and industrial and laboratory processes before it enters the Bay.