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FOR IMMEDIATE RELEASE

STUDY OF POLLUTION AT PILLAR POINT HARBOR COMPLETED

(Half Moon Bay, CA- February 12, 2014) The Resource Conservation District in San Mateo County has released its final report providing information about sources of fecal contamination and recommendations for cleaner beaches at Pillar Point Harbor. The study took place between 2007 and 2013.

The primary focus of the study was Capistrano Beach due to its well-documented, chronically high levels of bacteria found in the digestive tract and feces of warm-blooded animals. Testing for these bacteria can be a reasonable indication of whether more dangerous pathogens may be present. Signs at the beach, posted by San Mateo County, warn that it is a potential health hazard. The State Water Resources Control Board included the beach on a list of impaired water bodies submitted to the US EPA as required by the federal Clean Water Act. The secondary focus was the other five beaches of the harbor and the live-aboard boats within the harbor.

Within the local community there were numerous opinions regarding the sources of contamination in the harbor, including human contamination from leaking sewer lines, large flocks of gulls and other birds, a lack of flushing of the harbor due to two breakwalls, dog waste at the harbor's beaches, and more.

The study focused on three primary components: (1) monitoring beaches, creeks, and culverts for the amount of fecal indicator bacteria; (2) genetically testing the bacteria to determine if they originated from human, bovine, dog, horse, bird, or marine mammal sources; and (3) modeling the circulation of the harbor. The research was overseen by Dr. Stefan Wuertz of University of California, Davis. A total of 514 water samples were collected for analysis of the amount of fecal indicator bacteria and a total of 225 samples of water, sediment, and biofilm were collected for genetic analysis. Seventeen sites were sampled, including sites at the harbor and the urbanized upland area that drains into the harbor.

The study provided significant insights into fecal contamination at Pillar Point Harbor, including:

- The high counts of bacteria are a landscape-level issue, not based at or in the harbor itself but rather entering the harbor through storm drains and creeks.
- Regardless of the original source, the bacteria accumulate and persist inside storm drains and on the surrounding vegetation at the outflows. These bacteria are released when flushed by waves and stormwater.

- Humans, birds, marine mammals, and horses are not significant sources of bacteria to the harbor. This is valuable information to prevent the expenditure of resources on efforts that would not have reduced contamination.
- Dogs are a significant- but not the main- fecal source at Capistrano Beach and Deer Creek. Dog inputs are from upland sources, not at the beaches.
- Bovine inputs are the primary source at Deer Creek and were significant nowhere else.

The report provides seven recommendations to reduce the contamination at the harbor. Top priorities include:

- Work with property owners throughout the watershed to make the connection between the landscape, stormwater runoff, and the harbor. A primary focus is to manage dog and livestock waste in the upland areas.
- Manage stormwater before it enters the storm drain system and local creeks using techniques such as vegetated filters and capturing rainwater.
- Upland wildlife may play a significant role in some of the contamination at the harbor via creeks and storm drains, but there are not reasonable ways to prevent wildlife waste from entering the storm drainage system. Recommendations focus instead on preventing contaminated stormwater from entering the harbor.

\$909,338.45 for the project was provided by the State Water Resources Control Board via Proposition 50: the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. An additional \$15,000 was provided by the San Mateo County Harbor District.



Aerial view of Pillar Point Harbor.
(Photo by San Mateo County RCD)



People collecting clams at low tide at Capistrano Beach beyond the County sign that warns "Digging or disturbing the sand/ sediment or contact with the water... may pose health risks."
(Photo by San Mateo County RCD)

For the full report and more information about the RCD, visit www.facebook.com/sanmateorcd and www.sanmateorcd.org.

About the RCD: The Resource Conservation District in San Mateo County acts as a focal point for local conservation efforts and assistance to agriculture. It is a non-regulatory special district to help people protect, conserve, and restore natural resources through information, education, and technical assistance programs. 99 RCDs statewide provide assistance to landowners wishing to best manage their natural resources and accomplish thousands of practical, hands-on conservation projects every year. In San Mateo County, the RCD manages a wide array of projects, including soil and water conservation, wildlife habitat enhancement and restoration, control of exotic plant species, watershed restoration, conservation planning, education, rural road improvements, and many others.

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