

Community volunteers aid circulation study at Pillar Point

By Greg Thomas [greg@hmbreview.com]

Outgoing outdoor enthusiasts trekked from as far south as Monterey and as far north as Sacramento over the weekend to volunteer assistance in a massive circulation study of Pillar Point Harbor.

Coordinated by the county Resource Conservation District, the study was aimed at mapping the flow of dye in and around the harbor as a model for how fecal contaminants might travel. More than 15 gallons of colored dyes were released along with floating citrus fruit, both of which were observed and collected by volunteers throughout the three-day experiment. Experts hope the samples will provide intelligence as to the sources, magnitude and circulation of fecal pollutants in harbor waters.

“The information we’re getting about the genetic source, abundance and the evidence about circulation are all being taken at the same locations, at the same time, so that we’re not getting data sets that don’t coincide with one another,” said Kellyx Nelson, Resource Conservation District executive director. “We want (the data) to coincide under the same (dry weather) conditions.”

To achieve thorough and relevant sample gathering, RCD members recruited more than 100 volunteers from around Northern California, all of whom were instrumental in the success of the effort, Nelson said.

“I cannot underscore the value of what they contributed,” she said. “It couldn’t have happened without them. We hope they feel rewarded by the experience.”

From 5 a.m. to 5 p.m., harbor district officials, boaters, kayakers, scientists, high school students and RCD directors all helped in an effort they hope will lead to a better understanding of water conditions in the harbor.

Volunteers said they were proud to contribute.

Onie Burge, a chocolatier from San Francisco, heard about the opportunity from Nelson, her friend from college, and signed up both herself and a visiting friend from Portugal for a total of eight hours of kayaking and sample collecting.

“I definitely learned a lot trying to understand what the study is for,” Burge said. “I’m from San Francisco, so I wasn’t as familiar with what was going on down (at Pillar Point). On the whole, it was a great way to spend the afternoon and a way to volunteer for a great cause. I’d be happy to volunteer for any other project that the RCD coordinates in the future.”

The interesting and inspiring thing about volunteer recruitment, Nelson said, was the variety of enthusiastic participants.

“Everyone had different skill sets and were assigned to do different things,” she said. “It was a great group of people, some of whom didn’t know much about the study and others who were closely involved, all of whom seemed to share an interest in the environment.”

Bridget Hoover of Marina, director of the water quality protection program at Monterey Bay National Sanctuary, has partnered with the RCD professionally. She said she was swept up to Pillar Point by the idea

of personally contributing to the study's success.

"When these opportunities arise it's great to get out and help our partners, but also to know what's going on," she said. "I'm really interested to learn more about their findings."

Hoover said she now has a vested interest in the project and would "definitely (volunteer) again."

"Several people asked if (the RCD was) going to be doing something like this again because they feel excited about contributing information," Hoover said. "They said they'll come back, and I really got that sense of that (enthusiasm) on Saturday."

Nelson said she is confident that, due to the "citizen-science" coordination of qualitative observations and quantitative data, the study was a success. Now it's on to the next phase of the larger picture: to create a model that depicts circulation.

"We'll convene our (Technical Advisory Committee) with the analysis that's done by the hydrologists, overlay the findings with the anecdotal evidence we gathered, and tech experts will put it all together and tell us about the flow," Nelson said. "Perhaps (we'll discover) how permeable the breakwater is, perhaps how long water resides in the harbor — all of that is proxy information for us about how pollutants reside, travel and flush.

"On the one hand, what are the sources of contamination in the harbor? Also, it might be evidence about how the pollutants are growing in the harbor. Locations where you're finding them aren't necessarily where there's a source, sometimes it's about where it grows."

Nelson said she hopes the data crunching will be complete by the end of the year.