

THE SURFRIDER FOUNDATION'S BLUE WATER TASK FORCE

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The Surfrider Foundation is a grassroots, non-profit environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches for all people, through conservation, activism, research and education. The Surfrider Foundation operates through a system of over 80 chapters located in almost every coastal state and internationally.

The Blue Water Task Force (BWTF) is the Surfrider Foundation's volunteer water quality monitoring, education and advocacy program. Designed to take advantage of the daily presence of surfers and beachgoers in coastal waters, it is the Surfrider Foundation's most visible and successful program to date.

The BWTF program serves many purposes beyond providing a record of beach water quality. Chapters are educating students about water-quality issues and promoting a coastal stewardship ethic. Our chapters are also utilizing this program to alert citizens and officials in their communities about water quality problems and to work toward solutions.

BWTF volunteers often become advocates for the beaches and watersheds they are monitoring and bring their data to local decision makers when water quality issues are discovered. Many Surfrider chapters have been very successful at elevating public awareness of water quality issues and integrating science into local management schemes aimed at solving beach pollution problems.

Newport, Oregon

The Blue Water Task Force laboratory in Newport, Oregon is located at the Oregon Coast Aquarium. Nearly thirty Surfrider volunteers participate in this program by collecting weekly water samples from Newport's beaches and upstream waterways. Past BWTF data have revealed consistently high bacteria counts at Nye Beach and in Nye Creek. Concerned by the lack of public awareness of this pollution problem, the local chapter approached the City with their data. In 2005, the City of Newport responded by forming the Mayor's Water Quality Committee to deal with the issues Surfrider was raising.

The chapter worked cooperatively with the Mayor's Water Quality Committee to improve public notification of the creek's contamination through newly developed signage. Nye Beach and the Nye Creek outfall were also included in the State of Oregon's Beach Monitoring Program for the first time. This was a pretty significant achievement as these locations were not even being tested previously, and Nye Creek became the first freshwater site ever to be included in

the State's regular beach monitoring program. The Committee also developed watershed education leaflets that were distributed with the City's utility bills.

In early 2007, the mayor concluded the Water Quality Committee but the chapter has continued to push local and state authorities to investigate and to start solving the pollution problems in Nye Creek and Nye Beach.

As part of their efforts to identify the sources of pollution, the chapter has been working on a watershed characterization that has included mapping and hot-spot testing. Illegal dumping of waste from trailers and homeless camps were identified as one possible source of contamination in the upper watershed of Nye Creek. The city responded by removing the trailers and fining their owners. A nuisance ordinance was also passed to move the homeless camps away from the creek.

Newport has also received approval from the Oregon Department of Environmental Quality (DEQ) to install a biopond to improve water quality in the watershed. Newport is able to use 80% of a past fine levied by the state for water quality violations to fund this Supplemental Environmental Project. The Newport Surfrider chapter was involved in the design phase of this project.

The work to identify the source of pollution continues, however, as the greatest concentrations of bacteria are found in the lower watershed. The City has been investigating the storm water basin and suspects that some individual properties may be hooked up to the storm water system instead of the city sewer. Smoke and dye testing will be conducted soon to determine which properties are affected.

Meanwhile, the chapter is currently campaigning for revisions to Newport's municipal code to mandate best management practices for water quality improvements through sewer, storm water and other non-point source pollution controls. Recently the city unanimously passed an animal waste removal ordinance and watershed protection ordinances regulating stormwater runoff. Additionally, the city passed code for a stormwater utility and an opt-out incentive program for residents and businesses that participate in stormwater disconnect projects on their property.

The Newport chapter's BWTF program has also branched out beyond the Nye Creek watershed to participate in the Mid-Coast Basin Total Maximum Daily Load (TMDL) program. Located on Oregon's central coast, the Mid-Coast Basin contains urban areas, agricultural lands, and public and industrial forests. Approximately 500 of its 2,765 stream miles are in violation of water quality standards for fecal coliform or *E. coli* bacteria. Volunteers throughout the Mid-Coast Basin are collecting water samples, and Surfrider will be providing its bacteria data to the DEQ to establish TMDL Load and Wasteload Allocations.

San Vicente Creek, California

The San Mateo County Chapter has also successfully used their BWTF program to raise awareness of water quality issues and initiate change in the San Vicente Creek watershed in California. The San Vicente Creek flows entirely within San Mateo County and drains to the ocean in the James V. Fitzgerald Marine Reserve. The Chapter's interest in this watershed began when they noticed that the beach in the Reserve was almost constantly posted with a swimming advisory due to high bacterial counts. Despite the advisory, the Fitzgerald Marine Reserve is a very popular beach for school field trips, and children were observed washing their hands in the creek on numerous occasions.

The Chapter decided to contact local authorities at the San Mateo County Health Department to investigate the source of the bacterial pollution. Together with the County and landowners along the creek, they began testing the water quality upstream to identify hot spots of pollution in San Vicente Creek watershed. This collaborative study identified numerous sources of bacteria including old septic and sewer systems, animal pens, illegal agricultural residences, equestrian facilities and illegal discharges.

All landowners were very keen to take action to reduce their impact on the San Vicente Creek Watershed. The chapter and county worked with the equestrian facilities to install Best Management Practices (BMPs) such as moving fences away from the creek, moving manure piles, composting manure, changing how horses are pastured and altering the farms' drainage. The chapter conducted monthly water quality monitoring at the equestrian facilities and brought middle school students to Moss Beach Ranch to demonstrate the BMPs as part of the chapter's Watershed Discovery Workshop.

The water quality at the beach in the Fitzgerald Marine Reserve has improved. The beach isn't posted as often as it once was. Even when the water quality does not meet the bathing standard, the bacteria levels aren't as high as they once were. The chapter continues to participate in the San Mateo County Department of Health's Recreational Water Quality Program by collecting water samples from area beaches.

Other Chapter Efforts

There are many other examples throughout Surfrider where chapters have successfully applied scientific data and studies to raise community awareness of water quality issues. In doing so, Surfrider volunteers are motivating local governments and stakeholders to locate and take action to eliminate sources of beach water pollution.

After a source tracking study identified pet waste as the major source of fecal pollution in a section of the inter-coastal waterway near Charleston, SC, the

Charleston Chapter obtained a small grant from the City of Folly Beach to make and install plastic bag dispensers at beach access points for dog owners' use. The Chapter's "Love Dogs, Hate Poop" campaign includes an education element and has led to the design of the Dog Rocket (patent pending). Chapter volunteers continue to maintain the plastic bag dispensers.

In California, the San Luis Bay Chapter noticed an interesting trend when they evaluated three years of water quality testing data from Pismo Beach. The results showed that higher levels of bacteria were being measured during the dry summer months than during the winter when storm water is more likely to flush pollutants from the landscape. The Chapter brought this to the attention of the City, who responded very favorably by forming a Pismo Beach Water Quality Group. This Group has already improved the public notification system of beach closures at Pismo Beach and has applied for a state grant to fund a source tracking study.

In addition to using their own BWTF data to highlight water quality issues, Surfrider chapters are also helping to get agency beach data out to the public by posting it on websites, sending out email alerts, and putting up posters at beaches, schools, and other community bulletin boards. Through these efforts, the Blue Water Task Force is linking the regulatory agencies with concerned citizens and resource users.

Summary

The Surfrider Foundation is a grass-roots network of volunteers that come from all walks of life and backgrounds. Surfrider's diverse global membership is motivated by their common love for the ocean and a strong desire to protect our beaches for everyone's enjoyment. The Blue Water Task Force Program provides a vehicle for volunteers to participate in science and to motivate coastal communities to take action to clean up our watersheds and improve the water quality at our beaches.

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