

Chapter Blue Water Task Force Water Quality Monitoring Programs

The purpose of this survey is to better understand how the chapters are implementing the Blue Water Task Force and to make improvements to the program based on chapter suggestions. I spoke to nearly 50 chapters over the phone and asked them questions about how they are running their water quality testing programs. I also solicited recommendations on how the BWTF program could be improved and how the national office can provide more support to the chapters for this program.

Program Participation

There are 24 chapters and organizing committees with active BWTF programs.

Table 1. Chapters with BWTF Water Testing Programs

New Hampshire
Rhode Island
New York City
Jersey Shore
Delaware
South Florida
Texas
Seattle
Northwest Straights
Newport
Coos Bay/Charleston
Portland
Port Orford Organizing Committee
Mendocino
Marin
San Mateo
Santa Cruz
Isla Vista
South Bay
Huntington
Newport Beach
South Orange County
Oahu
Tamarindo Organizing Committee, Costa Rica

While the chapter BWTF programs do have some things in common, for example all marine samples are tested for *Enterococcus* usually with a quantitray sealer, the chapter water testing programs are very diverse in purpose, sampling effort, and participation. Chapter programs range from individual members collecting water samples at nearby beaches and running the samples out of their homes (NYC & Texas Chapters) to Newport's monitoring program with a water testing laboratory located in an aquarium with approximately 24 Surfrider volunteers and 60 youth volunteers participating.

Sampling schedules vary from weekly, biweekly to monthly. Some chapters have only one sampling site, while San Mateo has 40+ sites.

Purposes & Use

The following table lists the reported uses of the chapter BWTF programs, in descending order.

Table 2. BWTF Uses

Purpose	Positive Responses
Education (water quality awareness)	13
Volunteer activity	12
Fill in data gaps (spatial or temporal)	11
Management (participate in agency testing program or data accepted by agency)	8
Recruitment	4
Identify water quality problems	4
Provide a record of water quality	2

The most common use of the chapter BWTF programs is education. Thirteen chapters are using this program to educate students about water quality pollution and testing procedures. Most educational BWTF programs are run by science teachers in high school science classes or environmental clubs. Some chapters, such as Marin County, have taken their program to one school. Newport Beach on the other hand, is coordinating BWTF programs in 5 schools with hopes of expanding to 10 schools this year. Additionally, South Florida has a volunteer performing water testing with visiting students at a nature center, while Newport’s BWTF laboratory is set-up in an aquarium reaching youth volunteers.

The chapters are also using the BWTF to get volunteers involved and to raise awareness of water quality issues. Many chose their sampling sites to fill in the gaps of agency beach monitoring programs. The Oregon BWTF programs are included in the State’s Beach Monitoring Program and use the water testing as a way to get people involved in and to join Surfrider. Mendocino and San Mateo are provided supplies and collect samples for their county health departments. The samples are analyzed by the agencies, and the data are used to make management decisions on beach openings and closings. The Delaware Chapter has just started participating in the State’s newly expanded, year-round beach monitoring program. Chapter volunteers collect water samples from 7 ocean beaches and deliver them to the University of Delaware’s College of Marine Studies for analysis. The State posts this data on their recreational water monitoring website.

Several chapters have also used their water testing programs and data to support specific campaigns and issues.

Table 3. Campaigns Supported by Chapter BWTF Programs

Chapter	Campaigns
Newport	Agate & Nye Beach, Toledo Paper Mill
Port Orford	Port Orford Marine Protected Area
San Mateo	San Vicente Creek Watershed
Santa Cruz	Cowell Beach Stormwater Diversion
Orange County	Powell Beach Pollution
Jersey Shore	Wreck Pond
Rhode Island	Newport Beach
Tamarindo	Sewage in Beach Water

Data Management

The chapters manage and share their data through many different media. Chapters post their water quality data on their chapter and partnering organization websites. Data are sent to local government officials and health departments, especially if any samples test high, and are distributed through email. Some chapters also post their data at surfshops, beaches and in their local newspapers.

Most chapters do use the national BWTF data-entry page to store their data, but there are still a few chapters who do not use this resource. The Mendocino, San Mateo and Delaware chapters post their data on their partnering agency websites (health departments and Earth 911). The Jersey Shore chapter has started two new laboratories, but isn't posting data on the national website yet. The Santa Cruz Chapter also uses their chapter website only to store their data.

Funding

Most chapters are supporting their BWTF programs with chapter funds, but others been successful in forming partnerships or obtaining grant funding.

Table 4. Funding Sources

Chapter	BWTF Funding Source/Partner
New Hampshire	New Hampshire Department of Environmental Service/ EPA Grant
Rhode Island	University of Rhode Island Watershed Watch
Jersey Shore	Wachovia Grant
Delaware	Delaware Department of Natural Resources and Environmental Control & University of Delaware College of Marine Studies
Oregon	Packard Foundation Grant
Mendocino	Mendocino County Public Health Department
San Mateo County	San Mateo County Environmental Health Department/ State Water Quality Control Board

	Grant
Isla Vista	UC Santa Barbara Shoreline Preservation Fund

Chapters without BWTF Programs

Of the approximately 30 chapters who responded that they do not have a BWTF program, twelve have performed water testing in the past, but were unable to maintain the program due to a lack of committed volunteers or because the testing became redundant as agency beach monitoring programs became more robust. Other chapters have never pursued this program because their ocean water quality is good, and their beaches are regularly monitored by local agencies. Five other chapters are considering starting a BWTF program, but are worried about sustaining volunteer effort, the cost of the program, a lack of technical expertise, and redundancy with other water testing programs.

Several chapters that are not running BWTF programs have performed water testing for parameters other than bacteria or are participating in water testing programs managed by other organizations.

Table 5. Chapter Participation in other Monitoring Programs

Chapter	Program Description
Grand Strand	Chapter members occasionally bring water samples to the Baruch Marine Lab for testing.
Sebastian Inlet	Dr. Peter Barile has surveyed nutrient levels at area beaches for the chapter.
Florida Panhandle	Chapter member collects water samples for a USGS research lab in St. Petersburg. Samples are tested for Brevetoxin.
Crescent City	Chapter tests the first seasonal flush of rivers & creeks for <i>E. coli</i> .
Ventura	Channelkeeper Stream Team – Freshwater samples are analyzed for bacteria, nutrients and a suite of physical parameters
South Orange County, Huntington and Newport Beach	Grunion Greeters – Coordinated by Pepperdine University, volunteers observe grunion spawning activity at local beaches. http://arachnid.pepperdine.edu/grunion/ggproject.htm
San Diego	San Diego Coastkeeper watershed testing program
Oahu	Ocean IT – Surf zone monitoring program run by a County consultant. Data sondes collect data in situ. Surfrider volunteers collect wet weather water samples.
Oahu	Chapter volunteers collect sediment and deep water samples for a State University run monitoring & research program.

Chapter Recommendations

Many of the chapter chairs and BWTF coordinators offered ideas on how to improve the program or ways in which the national office can provide more technical assistance to the chapters in support of either their water testing programs or water quality campaigns.

Rhode Island, Texas and Massachusetts all asked for technical assistance with their chapter websites. San Mateo needs to have an internet connection installed at their water testing laboratory.

The Jersey Shore and Delaware chapters wished for more volunteers; Virginia for faster testing methods.

Joe Geever suggested that a program plan template be developed on how to set up a program and get it into schools and how to target the testing around a water quality issue. Newport Beach asked for the same model.

Marin County suggested improving the BWTF program by developing a curriculum based outline for schools to go along with the water testing. Topics should include water quality issues, sources of pollution, watershed info and ways kids can contribute. Jersey Shore suggested combining the Respect the Beach Program with the BWTF water testing. A chapter volunteer in Portland, Oregon has been working on this.

Six chapters said more funding could improve their programs. The Marin County chapter suggested a national Surfrider BWTF grant program that would provide matching funds to the chapters. The Newport Beach chapter has been running a successful BWTF/Teach and Test program in five schools for many years now, but has not been able to expand their program because of the time commitment required of a BWTF coordinator. The chapter chair feels that a paid position is really needed to coordinate and expand this program, but the chapter does not have the funds to pay for staff. The Newport, Oregon BWTF coordinator asked for National to provide assistance with grant writing and identifying funding sources.

The Ventura chapter chair expressed that a paid staff person that can dedicate more time to the issues, go to meetings during the day and form partnerships with other environmental groups that have paid staff, is critical to running successful campaigns. Volunteers do not have enough time and can easily become overwhelmed.

The Santa Cruz BWTF Coordinator suggested a program or issue director operating at the chapter level could help focus BWTF data on campaigns. The Maui chair wished for a Surfrider staff resource person in Hawaii and a BWTF video to give to local TV stations to play.

Some chapters would like to see the BWTF programs expanded to include more parameters or to be more issue driven. The Coos Bay/Charleston coordinator would like to do more investigative work and source tracking; find sources, solve problems. Orange County had similar comments and wants to expand the program to test for other parameters or move further up the watershed, testing upstream. Jersey Shore suggested adding visual parameters such as the presence of debris, litter & algal blooms.

The former San Diego coordinator suggested that the national BWTF database would be more useful if it allowed you to perform queries. Currently you can only search by site.

He would like to be able to pull up all the data for one year or a specific date to include in a report. He also suggested linking the BWTF data to the ocean illness form.

The Newport coordinator in Oregon would like to be able to use the less than sign (<) on the BWTF data entry page as the zero values that are necessary to input now are misleading.

Many chapters would like more national assistance in managing their data and communicating water quality results. Rhode Island has difficulty explaining the health risk to the media and public. Texas would like help making the data more useful and getting water quality results data to the public. The South Orange County coordinator would like the BWTF programs to have more meaningful data analysis and more emphasis on data interpretation. He would like to see what other chapters are doing with their data.

The San Diego coordinator has been frustrated in making the data useful when local agencies do not accept the validity of their data. He asked for National assistance to help chapters evaluate their programs and to provide training for volunteers on how to use data to push policy.

Isla Vista would like assistance and/or training on how to use their water quality data more proactively and to help solve pollution problems, rather than just reporting if the water quality at their beaches is good or bad. As most of this chapter's members are college students, the BWTF coordinator thought that a mentoring program for newer and younger programs could be set up with more experienced chapters.

Jersey Shore suggested that national organize a regional water quality summit or session at a regional chapter conference on water quality issues and the Blue Water Task Force program. John Tiedemann has offered to host this summit and would like to involve the local sea grant programs. He also suggested compiling a list of water testing experts and professionals to provide support to chapters. The San Mateo Coordinator found a previous session held at a regional workshop very useful in sharing lessons learned and common obstacles amongst chapter programs.

The Outerbanks chapter is investigating several water quality issues in their area. The chapter chair would like guidance on how to organize and carry out a campaign, technical advice on water quality issues, and examples of how other chapters are dealing with local water quality issues.

