



***Surfrider
Foundation***[®]

**Surfrider Foundation's Blue Water Task
Force – Volunteer Water Quality Monitoring
That Leads to Change**

Rick Wilson

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Mission Statement

The Surfrider Foundation is a non-profit environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches through conservation, activism, research and education.

Surfrider Stats

- Founded in 1984
- 50,000 members
- Over 60 Grassroots Chapters
- 5 International Affiliates
 - Australia
 - Brazil
 - Canada
 - Europe (France)
 - Japan

Blue Water Task Force

The Blue Water Task Force (BWTF) is Surfrider Foundation's water quality monitoring, education and advocacy program. It is utilized by our Chapters and members to alert citizens and officials in their communities about water quality problems and to work toward solutions.

How Does BWTF Fit In?

- Hands-on involvement with an environmental problem solving effort
- Gather coastal water samples on a regular basis to determine pollution patterns in the near shore environment
- Raise public awareness regarding the extent and severity of coastal water pollution
- Use the data collected to bring polluters into compliance
- Develop a model program that could influence national legislation and enforcement.

Evolution of Testing Methods

- Started in 1991-92 with Millipore Coli-Count Sampler (total coliform)
- Next was Hach's multiple tube fermentation (total coliform and e. coli)
- Then IDEXX DST method using tubes (total coliform/e.coli or enterococcus)
- IDEXX DST method using Quanti-trays







PSORLEN-P
X-L
UV

Schleichert & Schuell

GOOD



BAD



Options for Implementation

- Chapter Activists
- Students (“Teach and Test”)
- Special Groups or Facilities
- Sample Only
- Other Parameters (nutrients, TSS, turbidity, pH, conductivity, ...)
- Extent of Pollution (into the surf and along beach)
- Sources of Pollution
- Duration after Rain

Change

National and State Level

- National – BEACH Act (October 2000)
- State – A.B. 411 in CA (1999)
- State – Design and Implementation of Beach Monitoring Program in Oregon (2004 to present)
- State – Expansion of Monitoring Program in WA (2004 to present)

Change Local Level

- San Diego, CA – stop sewer spills; map storm drains
- San Clemente, CA – control landfill leachate
- Laguna Beach, CA – route storm drain to sewer; post signs on polluted beach
- Newport Beach and Long Beach, CA – install trash nets on rivers. Prototype “teach & test” program.
- Newport Beach and Huntington Beach, CA – end of OCSD’s 301(h) waiver
- South Bay, CA – route storm drain to sewer; extend industrial outfall pipe
- Ventura, CA – identify industrial polluter; stop discharge

More Local Change

- San Mateo County, CA – supplement county's program → I.D. fecal sources in San Vicente Creek → lower bacteria levels
- Humboldt, CA – Stop pulp mill discharge to ocean
- Oregon – helped design state program; continuing to suggest changes (beaches, notification); collaborative environmental education (Newport Aquarium)
- Washington – supplement state program (NW Straights)



3,250,000 TONS of OIL-
14,000,000,000 POUNDS of GARBAGE-
*Recycled into new products and
used to generate power*

5,900,000,000,000 GALLONS of WASTEWATER-
*Amounts to 100 million gallons
of water per person per day*

\$22 MILLION each YEAR-
*U.S. spends each year on
pollution control*

POLLUTION



Even More Local Change

- Delaware – Sampling by Surfrider and testing by Univ. of N. Carolina revealed the presence of *chantanella verruculosa* in Bald Eagle Creek – responsible for fish kills. Also helped blow the whistle on the presence of *pfiesteria piscicida* in inland waterways and the relationship between the discharge of nutrients to algae blooms and *pfiesteria*.
- New Jersey – Watershed study of Many Mind Creek in Monmouth County – I.D. potential sources of *e. coli* or total coliform.
- Florida – nitrogen isotope testing by Harbor Branch Oceanographic Institution to evaluate the presence of sewage contamination in coastal waters and raise the issue of sewage injection wells which may be contaminating drinking water aquifers and/or the ocean.

Supporting Materials

- BWTF Manual
- Sea to Summit video
- Watershed Works (RTB)
- Shifting Baselines in the Surf video
- “20 Ways” brochure
- More at www.surfrider.org



THAT'S IT