

# Washington's Swimming Beach Program:

**Bacterial Monitoring in Puget Sound** 

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BEACH Program: www.ecy.wa.gov/programs/ear This poster: www.ecy.wa.gov/biblio/1003065.html



## WASHINGTON BEACH PROGRAM

### What Is The BEACH Program?

The goal of the WA Beach Environmental Assessment, Communication, and Health (BEACH) Program is to reduce the risk of disease to users of saltwater beaches. The program tests heavily used beaches and notifies the public when there is an increased risk of illness from swimming. It is funded through the federal BEACH Act of 2000 which amends the Clean Water Act.



## A Cooperative Project

The BEACH Program is managed by both the Washington State Departments of Ecology and Health. They work together with counties and tribes to design optimal sampling plans for each county and tribal government. Some counties use volunteers and non-profit organizations such as the Surfrider Foundation and Beach Watchers, while most counties use county staff to collect samples from the beaches.



#### WHY MONITOR ENTEROCOCCUS?

The BEACH Program monitors beaches weekly for enterococcus throughout the summer (Memorial Day to Labor Day). Enterococcus is an indicator bacteria that helps us to determine if there are pathogens (disease-causing organisms) present. Enterococcus is the indicator bacteria that EPA recommends to state recreational water sampling programs.



## SWIMMABLE PUGET SOUND?

**Core Beaches Meeting Water Quality Standards** 2004-2010



Public notification of sewage spills and individual county guidelines for posting beaches are inconsistent from county to county. Weekly sampling data more accurately depicts the health of our beaches.



## **IDENTIFYING PROBLEMS & FINDING SOLUTIONS**

#### What are core beaches?

Core beaches are those that the BEACH Program has monitored nearly every year since 2004. They are considered to be the most high-risk beaches of the state. They are shown on the map and colored based on how many years the beach met standards out of the seven years the BEACH Program has monitored. The BEACH Program considers a beach to have "met" water quality standards for a year if one or no weekly sample results are above the 104 colonies/100mL standard for enterococcus. The beaches in red on the map are "repeat offenders" and most have clean-up or pollution-identification actions underway.

#### Are they swimmable?

Washington State, in general, has some of the cleanest waters in the United States. The core beaches are only a subset of the many beaches in WA. They were picked specifically because of their high risk of disease to swimmers. When any beach that the BEACH Program monitors has high bacteria results, we recommend the county post an advisory or closure sign.

## **Core Puget Sound Marine Swimming Beaches Meeting Water Quality Standards**



#### WHERE IS THE BACTERIA COMING FROM?

Bacteria can come from a wide range of sources, human and natural. Mechanical failures at wastewater treatment plants, septics, combined sewage overflows (CSOs), recreational boaters, and the swimmers themselves are the most direct sources of pollution. Stormwater runoff, sediments, and beach wrack can serve as a safe haven for bacteria to harbor and grow but are not the "source" of fecal bacteria. Finding the original source that seeds these areas with bacteria can be extremely difficult

