



Marine Beach Sanitary Survey

Summary

EPA has made available a Marine Beach Sanitary Survey to provide managers of marine beaches with a technically sound and consistent approach to identify pollution sources and share information.

EPA developed the new survey to help beach managers in coastal states synthesize all contributing beach and watershed information—including water quality data, pollutant source data, and land use data—so that they can improve water quality for swimming.

Beach managers can also use sanitary survey data (e.g., bacteria levels, source flow, turbidity, rainfall) to develop models to predict daily bathing beach water quality, if appropriate.

The information gathered in the survey can also benefit stormwater program managers, wastewater facility managers, local elected officials, local planning authorities, academic researchers, and other beach and water quality professionals.

Background

EPA's BEACH Act Program

The Beaches Environmental Assessment and Coastal Health (BEACH) Act program focuses on the following three goals:

- 1) Support the use of sound, up-to-date science in the beach monitoring programs through greater use of beach sanitary surveys, predictive modeling, and rapid methods.
- 2) Improve communication of public health messages by providing more timely beach water quality information and advisory notifications to the public and other agencies.
- 3) Support beach programs by facilitating the sharing and transfer of information among beach stakeholders.

This activity falls under the first goal, supporting the use of sound, up-to-date science. A beach sanitary survey is a step toward solving the pollution problems through identifying unknown sources of beach contamination. By investigating the beach area and contributing watershed areas, potential pollution impacting a beach can be identified and documented for decision making.

What is a Sanitary Survey?

A sanitary survey is a method of investigating the sources of fecal contamination to a water body. Sanitary surveys traditionally have been used for drinking water, shellfish, and watershed protection programs. More recently, they have been adapted for use at beaches.

Sanitary surveys help state and local beach program managers and public health officials identify sources of beach water pollution, assess the magnitude of pollution, and identify priority locations for water testing.

Beach managers can use sanitary survey results to prioritize state or county resource allocations to help improve bathing beach water quality. In addition, they can use sanitary survey data (e.g., bacteria levels, source flow, turbidity, rainfall) to develop models to predict bathing beach water quality using readily available data.

What's Involved in Performing a Sanitary Survey?

Performing a beach sanitary survey involves collecting information at the beach, as well as in the surrounding watershed.

Information collected at the beach may include:

- number of birds at the beach,
- slope of the beach,
- location and condition of bathrooms, and
- amount of algae on the beach.

Information collected in the watershed may include:

- land use,
- location of storm water outfalls,
- surface water quality, and
- residential septic tank information.

The New Marine Sanitary Survey

This marine beach sanitary survey is modeled after the 2008 survey, but is tailored to the marine beach environment. The new survey forms include detailed questions on winds, tides, and other characteristics that affect marine beaches and were not included on the surveys for the Great Lakes.

The survey consists of two forms, in paper and electronic formats: a routine on-site sanitary survey, and an annual sanitary survey. These survey forms are backed by an extensive user manual containing additional technical information.

The Routine On-Site Sanitary Survey

The routine on-site sanitary survey is designed to be filled out each time water quality samples are taken. The information for this form is collected by observation and measurement at or near the beach, for use in short-term beach assessments.

The Annual Sanitary Survey

The annual sanitary survey records more comprehensive information about factors in the surrounding watershed that might affect water quality at the beach. It was designed for use in long-term beach assessments. This form includes, for example, information on septic tanks in the contributing watershed or land use information, depending on the beach being surveyed.

For More Information

For more information on the marine sanitary survey, please contact Rick Hoffmann (202-566-0388 or hoffmann.rick@epa.gov).

For the survey instruments, and for information about an introductory webinar, go to: http://water.epa.gov/type/oceb/beaches/sanitarysurvey_index.cfm

For general information about beaches go to: <http://water.epa.gov/type/oceb/beaches/>

For information about a specific beach go to: <http://watersgeo.epa.gov/beacon2/>.

To find your EPA Regional or state beach program representative go to: water.epa.gov/type/oceb/beaches/whereyoulive_state.cfm.
