Great Lakes Beach Sanitary Survey Tool

Summary

EPA is announcing the availability of the Great Lakes Beach Sanitary Survey Tool. This tool helps beach managers in the Great Lakes identify sources of bacterial contamination at their beaches so that these sources can be corrected or cleaned up, and thus results in more days that beaches are open. The tool consists of a User's Manual and three types of beach sanitary surveys in paper and electronic form.

EPA expects that use of the tool will result in cleaner beaches in the Great Lakes. Although the Great Lakes Beach Sanitary Survey was developed and piloted in the Great Lakes, the concept is applicable in any beach environment (marine and inland waters).

Background on Sanitary Surveys

A sanitary survey is a method of investigating the sources of fecal contamination to a water body. Sanitary surveys are typically used for drinking water, shellfish, and watershed protection programs. They can also be used at beaches that do not meet water quality standards.

Sanitary surveys help identify sources of pollution, assess the magnitude of pollution, and identify priority locations for sampling.

Utility of Beach Sanitary Surveys

A beach sanitary survey is an evaluation of the beach area and surrounding watershed for existing and potential pollution sources and safety hazards that might influence the quality of bathing beach water, with a focus on fecal pollution. Beach sanitary surveys help state and local beach program managers and public health officials gather information to use in identifying sources of bacterial contamination at beaches. Information is collected at the beach, as well as in the contributing 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.

Beach managers can use the data obtained during the process of conducting a sanitary survey to prioritize state or county resource allocation 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.

Great Lakes Regional Collaboration Strategy

A May 2004 Presidential Executive Order created the Great Lakes Interagency Task Force to improve federal coordination in addressing Great Lakes issues and encouraged creation of a Regional Collaboration of National Significance to address environmental problems in the Great Lakes. The federal Great Lakes Interagency Task Force, the Council of Great Lakes Governors, the Great Lakes Cities Initiative, Great Lakes tribes and the Great Lakes Congressional Task Force convened a group now known as the Great Lakes Regional Collaboration (GLRC).

In December 2005, the Great Lakes Regional Collaboration (GLRC) published the Great Lakes Regional Collaboration Strategy (http://www.glrc.us/strategy.html) to protect and restore the Great Lakes. Of the Strategy's eight priority elements, the Coastal Health Chapter specifically addresses beach water quality. To that end, EPA is working with the states to develop beach sanitary surveys to identify sources of contamination at Great Lakes beaches.

The Great Lakes Beach Sanitary Survey Tool

The Beach Sanitary Survey Tool was developed as an action under the 2004 GLRC. The GLRC is a cooperative effort to design and implement a strategy for the restoration, protection, and sustainable use of the Great Lakes. EPA worked in collaboration with state beach managers to develop a draft Beach Sanitary Survey Tool in 2006. In the summer of 2007, the Beach Sanitary Survey Tool was tested at 61 beaches in the Great Lakes, under a onetime grant amount of \$525,000. The state and local governments testing the tool provided comments to EPA, who then used these comments to develop this final Beach Sanitary Survey Tool.

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/sanitarys urvey_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.