



ALASKA

10th in Beachwater Quality

5% of samples exceeded national standards in 2010

Polluted urban and suburban runoff is a major threat to water quality at the nation's coastal beaches. Runoff from storms and irrigation carries pollution from parking lots, yards, and streets directly to waterways. In some parts of the country, stormwater routinely causes overflows from sewage systems. Innovative solutions known as green infrastructure enable communities to naturally absorb or use runoff before it causes problems. The U.S. Environmental Protection Agency is modernizing its national rules for sources of runoff pollution and should develop strong, green infrastructure-based requirements.

Alaska has nearly 34,000 miles of coastal shoreline. While low water temperatures discourage swimming, recreational shoreline activities do occur, and more than 200 recreational beaches have been identified. The Alaska Department of Environmental Conservation administers the state's beachwater quality program.

KEY FINDINGS IN ALASKA

Beachwater Contamination

(% of samples exceeding state standards in 2010)

- South Kenai Beach (14%)
- Bishop's Beach (5%)
- North Kenai Beach (3%)

Monitoring Results

In 2010, Alaska reported 23 coastal beaches, 4 (17%) of which were monitored more than once a week, 6 (26%) of which were monitored once a week, 1 (4%) was monitored less than once a month, and 12 (52%) were not monitored. For this section of the report, NRDC looked at the percent of monitoring samples that exceeded the state's daily maximum bacterial standards (all reported samples were used to calculate the 2010 percent exceedance rates, including duplicate samples and samples taken outside the official beach season, if any). In 2010, 3%* of all reported beach monitoring samples exceeded the state's daily maximum bacterial standards. The beaches with the highest percent exceedance rates in 2010 were South Kenai Beach (14%), Bishop's Beach (5%), and North Kenai Beach (3%).

Sampling Practices: Agencies that choose to participate in the program are encouraged to sample for eight weeks during the summer season.

Sampling practices are uniform throughout the state. Samples are collected 12 inches below the surface in water that is 3 feet deep, at high tide if possible. When selecting beaches to be monitored, factors such as proximity to an established road system and distance from a laboratory are considered,¹ along with the types of recreational activities that occur, the level of use, and the types of nearby pollution sources.²

No advisories have been issued in Alaska due to exceedances of a bacterial standard, but if a beach were to be placed under advisory, monitoring would occur daily until standards were met.³

Advisories

There were no advisories in 2010.

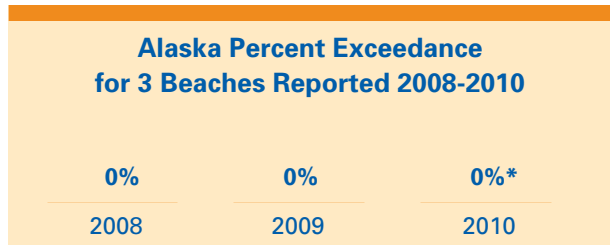
Standards and Procedures: Alaska's program recommends advisories (rather than closings) based on water quality. Water quality standards for the monitoring program include Alaska's fecal coliform standard (in a 30-day period, the geometric mean of five samples may not exceed 100 cfu/100 ml, and not more than one sample may exceed 200 cfu/100 ml) and an enterococcus standard (single-sample maximum of 276 cfu/100 ml; 30-day, five-sample geometric mean of 35 cfu/100 ml). The enterococcus standards match the EPA criteria for full-body-contact recreation in lightly used marine waters. Alaska does not have an *E. coli* standard, but the results from field-based analysis methods for quantifying *E. coli*

can be used as a stand-in for analysis methods for quantifying fecal coliform in remote locations. If this were to occur, the fecal coliform standard would be applied to *E. coli* results.

While the state encourages participating municipalities to issue an advisory when a sample exceeds the standards, the authority for issuing advisories is delegated to the local governments that choose to participate in the program. A

bacterial exceedance is one of many factors that can be used to determine whether to issue a beach advisory.³

Alaska has no preemptive standards for issuing beach closings or advisories due to rainfall or known sewage spills.³



* Why don't the 2010 percent exceedance values in this summary match? The value at the top of the first page (5%) reflects the proportion of samples exceeding the national single-sample maximum standard for designated beach areas. The value in the "Monitoring Results" section (3%) reflects the proportion of samples exceeding the state standard, which in Alaska's case is less stringent than the designated beach area standard. Some samples exceeded the national standard but not the state standard. Also, only samples from a common set of beaches monitored each year from 2008–2010 are included in the bar chart. Because some beaches were not monitored in each of those years, the percent exceedance for this subset of beaches (0%) did not have the same value as the percent exceedance for all of the beaches monitored in 2010 (3%).

Alaska 2010 Monitoring Results and Closing or Advisory Days					
Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
No County Data Available					
Anchor Point to Happy Valley Creek	no data	none	20	0%	0
City Park	no data	none	0	NA	0
Harris and Aurora Harbors	no data	none	0	NA	0
Letnikof Cove	no data	none	0	NA	0
Lutak Inlet	no data	none	0	NA	0
Naknek River	no data	none	0	NA	0
North Kenai Beach	no data	none	39	3%	0
Petroglyph Beach	no data	none	0	NA	0
Portage Cove	no data	none	0	NA	0
Sandy Beach Park	no data	1/wk	0	NA	0
West Beach	no data	none	0	NA	0
Whisky Bill Beach	no data	none	20	0%	0
Bristol Bay County					
Kanakanak Beach	1	1/wk	3	0%	0
King Salmon Beach (North Naknek)	1	4/yr	0	NA	0
Scandinavian Beach	no data	none	3	0%	0
Snag Point	no data	1/wk	3	0%	0
Juneau County					
Sandy Beach 5, Douglas	3	1/wk	0	NA	0
Kenai Peninsula County					
Bishop's Beach	no data	2/wk	22	5%	0
Homer Spit	no data	1/wk	52	0%	0
Homer Spit-Land's End	no data	1/wk	52	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Kenai Peninsula County					
North Kasilof Beach	no data	2/wk	24	0%	0
South Kenai Beach	no data	2/wk	35	14%	0
Warren Ames Bridge	no data	2/wk	26	0%	0

NOTES

- 1 Alaska Department of Environmental Conservation. Annual Performance Report for the Alaska Department of Environmental Conservation BEACH Monitoring Program (Agreement #CU97023701) Activity Period FFY 2007: October 1, 2006–September 30, 2007. Not dated.
- 2 Alaska Department of Environmental Conservation, Beach Water Quality Monitoring and Pathogen Detection 2007 Quality Assurance Program Plan, prepared by Shannon & Wilson, Inc., April 2007.
- 3 Erin Strang, Alaska Department of Environmental Conservation. Personal communication. February 2009.

Testing the Waters 2011 reflects data as of June 27, 2011.