

**Freshwater Beach Inspection Program
Summer Sampling 2014 Annual Report**



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2014 Public Bathing Beach Inspection Program: Freshwater Beaches

In 2014, freshwater beaches were inspected by the Public Bathing Beach Inspection Program from June 16 to August 21. The goal of the freshwater beach program is to inspect each beach in the program three times over between Memorial Day and Labor Day. In 2014, NHDES personnel performed 626 beach inspections at 169 freshwater beaches in 11 weeks. Drinking Water & Groundwater Bureau personnel conducted 36 routine inspections at juvenile camp beaches. The 626 inspections conducted yielded a total of 1,356 E. coli samples analyzed by the state laboratory, including field duplicates. Towns and federal agencies that sample water at New Hampshire beaches also reported collecting 452 samples looking for bacteria at beaches. In 2014, 235 E. coli samples exceeded the state standards, resulting in the issuance of 59 freshwater beach advisories (Table), a reduction of 20 percent from the summer of 2013 which had the highest number of bacteria advisories issued in one summer. Rainfall was just slightly above average in June and August of 2014 while twice as much rain fell in July 2014 than in previous years. The slightly more than average amounts of rainfall during the summer of 2014 accounts for slightly more than average number of advisories this summer, 59 freshwater beaches this summer compared to a ten-year average of 55 beach advisories.

Of the 43 beaches with elevated bacteria levels leading to advisories, 24 also had advisories in 2013. Twelve additional beach advisories were issued for cyanobacteria, four more than issued in 2013.

However, not all cyanobacteria blooms occur on a beach. Since 2008, NHDES has issued cyanobacteria lake warnings if an algae bloom occurs far away from a beach or on a lake without a public beach. Cyanobacteria warnings were issued for Long Pond, Henniker; Otternic Pond, Hudson; Showell Pond, Sandown and Hunkins Pond, Sanbornton. Four warnings were issued, as twice as many as in 2013, but significantly less than 2008 when 16 warnings were issued.

Eleven pre-emptive fecal bacteria advisories were issued at Ahern State Park, Laconia, four fewer than in 2013. Pre-emptive advisories are issued when >0.25 inches of rain falls in a 6 hour period at the state park. The decrease was due to the decreased rainfall over the summer. Additional sampling was not conducted in the summer of 2014 to determine if the efforts to reduce the goose population by letting the grass grow tall have been successful. Future sampling will be conducted after heavy rainfall at Ahern State Park in 2015 to determine if this pre-emptive advisory system can be eliminated.

Not all freshwater beaches sampled by the NHDES program are accessible to the general public. Of the 145 town and private beaches that are sampled by the NHDES inspection staff, 102 limit entry to residents and guests only. Seven of the beaches charge entry fees to everyone. Only 36 of 145 private and town beaches allow unrestricted access to the swimming areas.

In preparation for the 2015 sampling season, the NHDES Beach Program staff will continue to improve the tools implemented in 2014:

1. Refinements of the beach advisory map searchable by advisory status:
http://www2.des.state.nh.us/WaterShed_BeachMaps/WaterShed_BeachMaps.aspx
2. Annual reports for each freshwater beach found through the OneStop data search:
<http://www2.des.state.nh.us/DESOnestop/BasicSearch.aspx>

Table. *E. coli* and cyanobacteria advisories issued for New Hampshire beaches in 2014. Advisories issued when a single sample was over 158 cts/100ml of water or two samples were over 88 cts/100ml of water. (#) indicates the number of advisories in 2013.

Town	Beach	2014 <i>E. coli</i> Advisories	2014 Cyano Advisories	Total Days Posted
Allenstown	Day-Use Beach on Catamount Pond at Bear Brook State Park	1	0	2
Andover	Highland Lake Town Beach	1	0	2
Barnstead	Camp Fatima Beach (1)	1	0	8
	Colony Beach on Locke Lake (2)	1	0	10
Bradford	French's Park Town Beach	1	0	2
	Massasecum Casino Beach (1)	1	0	4
Canterbury	Sherwood Forest Shores Beach 2 on New Pond (1)	1	0	2
Carroll	Twin Mountain Beach - Tuttle Brook (2)	1	0	2
Center Harbor	Center Harbor Town Beach on Winnipisaukee	1	0	3
Conway	First Bridge Recreation Area Beach	1	0	5
Derry	Chase's Grove Beach on Island Pond (2)	1	0	5
Dublin	Dublin Lake Club Beach	0	1	1
Enfield	Shakoma Town Beach on Mascoma Lake (2)	1	0	4
Franklin	Griffin Beach on Webster Lake	2	0	5
	Lagace Beach on Webster Lake (1)	0	1	7
Gilford	Ellacoya State Park Beach (2)	1	0	4
Gorham	Moose Brook State Park (2)	1	0	2
	Libby Town Pool on Peabody River (1)	1	0	2
Greenfield	Otter Lake State Park - Picnic Beach (2)	2	0	7
Hampstead	Hampstead Town Beach on Sunset Lake	2	0	4
Harrisville	Chesham Beach on Russell Reservoir	1	0	4
Hillsborough	Beard's Brook Town Beach	2	0	5
	Eastman Park Beach (1)	1	0	3
	Emerald Beach (1)	1	0	3
	Hummingbird Beach	1	0	3
Hollis	Silver Lake State Park Beach (1)	1	4	43
Hudson	Robinson Pond Town Beach (1)	1	0	4

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Town	Beach	2014 <i>E. coli</i> Advisories	2014 Cyano Advisories	Total Days Posted
Laconia	Bartlett Beach (2)	1	0	22
	Cove Beach at Opechee Park (1)	1	0	8
	Endicott Park Beach, AKA Weirs Beach (2)	1	0	2
	Point Beach at Opechee Park	1	0	2
Manchester	Crystal Lake Town Beach	6	0	10
Moultonboro	Moultonboro Neck Town Beach on Lake Winnepesaukee	1	0	5
Newbury	Sunapee State Park Beach	1	0	3
Northfield	Glines Park Beach on Sondogardy Pond (2)	1	0	3
Nottingham	Pawtuckaway State Park Beach (3)	4	0	28
Pelham	Long Pond Town Beach	0	2	4
Piermont	Bean Brook Town Beach	1	0	7
Rindge	Pearly Lake Beach (1)	1	0	6
Salem	Camp Hadar Beach	1	0	2
	Camp Otter Swim Beach	1	0	3
Sanbornton	Sanbornton Town Beach on Lake Winnisquam	1	0	6
Sandown	Seeley Town Beach on Phillips Pond	0	1	7
Surry	Surry Mountain Recreation Area Beach	1	0	1
Troy	Troy Town Beach on Village Pond	2	0	8
Washington	Mill Pond Town Beach (2)	1	0	4
Weare	Chase Park Beach on Horace Lake	0	2	5
Winchester	Forest Lake Town Beach	1	1	6
Wolfeboro	Brewster Beach on Lake Winnepesaukee	1	0	4