

**Freshwater Beach Inspection
Annual Report
Summer 2009**



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2009 Public Bathing Beach Inspection Program Freshwater Beaches

In 2009, Freshwater beaches were inspected by the Public Bathing Beach Inspection Program from June 15 to August 28. During that time, 153 public beaches were inspected at least three times. An additional nine beaches were only inspected once or twice during the summer because either the weather prevented sampling or the beach manager requested sampling be halted for the summer. One new beach, Pearly Pond in Rindge, was added late in the season and only inspected once. Additionally, 86 beaches at juvenile camps were inspected once during the summer. There were a total of 752 beach inspections during 2009. Of the 751 inspections, there were 248 initial inspections, 306 subsequent inspections, 78 advisory inspections, 32 safety inspections, 4 complaint inspections, and 83 microcystin inspections. Sixty advisories were posted at 43 beaches due to elevated *E. coli* levels above the state standard of 88 counts per 100 milliliters (Table 1). Beach operators were able to remove the posting after subsequent tests showed reduced *E. coli* levels. Nineteen pre-emptive rainfall advisories were issued at Ahern State Park.

The summer of 2009 was cooler and much wetter than previous summers. June's average temperature, 63°F, was 1.9 degrees cooler than normal, and the total rainfall for the month was 6.46 inches, more than double of the normal rainfall of 3.1 inches. July was also colder and wetter than previous years. The average temperature for July of 66.5°F, 3.5 degrees cooler than average, and 7.55 inches of rain, twice the average of 3.37 inches of rainfall. August was warmer than a typical August and continued the trend of a wetter than average month. The average August temperature was 69.2°F, 1 degree higher than normal. The rainfall for August, 4.18 inches, was slightly higher than average, 3.21 inches. The increased rainfall for the summer of 2009 is the most likely cause of increased amounts of *E. coli* levels resulting in 60 advisory postings throughout the 2009 season, 8 more than in 2008.

Due to flooding in 2006, Vilas Pool Beach in Alstead remained closed in 2009. The town hopes to open the swimming area for the summer of 2010. The New Hampshire Division of Parks and Recreation requested the beach program not sample three beaches due to the economic downturn. The state parks not sampled were Clough, Lake Tarleton, and Forest Lake. If revenue is increased in 2010, these beaches should be included in the sampling program. Carroll Lake Beach in Raymond has been permanently closed by the town of Raymond and will most likely not be added to the inspection program in the near future.

The presence of cyanobacteria at freshwater beaches resulted in 15 advisories posted at 12 beaches in 2009, up from 14 postings in 2008 (Table 2). Nine advisories were posted for less than a week. Four of the postings were for eight to seventeen days. Two beaches had cyanobacteria advisories posted for 3 months. Of the 12 beaches with cyanobacteria advisories in 2008, only three, Robinson Pond, French Pond and York Pond had advisories again in 2009. Robinson Pond in Hudson, again has scums in both July and August, but for only 14 days total instead of 21 days as in 2008. French Pond in Henniker and York Pond in Berlin were both posted multiple months as in 2008. When visited in mid September, both ponds had active blooms. When the ponds were re-visited in mid-October, the blooms had finally dissipated.

Baboosic Lake in Amherst again did not have a cyanobacteria advisory posted in 2009 even though advisories were posted every summer from 2004 to 2007. Cyanobacteria scums were not observed during the June 29th, July 27th, or August 14th inspection. No blooms were reported at the beach which is a departure from past summers where previous blooms lasted from 3 to 104 days.

The lake warning for cyanobacteria developed in the summer of 2008 to alert lake users of cyanobacteria blooms on lakes without designated beaches or for areas of a lake away from the designated beach was successful again in 2009. Ten cyanobacteria warnings were issued this summer (Table 3). Lakes with cyanobacteria warnings were re-inspected weekly through August. Only Lake Monomonac in Rindge had a warning in both 2008 & 2009.

The Beach Inspection Program was busy again in during the summer of 2009. Many staff members shared the responsibility of sampling freshwater beaches this summer. The program functioned well again this summer and we hope it will continue in 2010.

Goals for Summer of 2010:

1. Provide more thorough information about the sampling program to Beach Managers through brochures, web site improvement, and emails.
2. Continue to improve advisory communication between DES and beach managers after hours and on weekends by collecting after hour phone numbers for beach managers.
3. Add more designated beaches to the Beach Inspection Program.
4. Develop an Adopt-A-Beach program to encourage volunteers to regularly cleanup and monitor beaches.

Table 1. *E. coli* advisories issued for New Hampshire Lakes in 2009. Advisories issued when a single sample was over 158 cts/100ml of water or two samples were over 88 cts/100ml of water.

Beach Name	Town	Sample Date	Post Start Date	Post End Date	<i>E. coli</i> (cts/100ml)			Total Days Posted
					LF	CR	RT	
Bartlett Town Beach	Laconia	6/23/09	6/24/09	7/10/09	390	36	52	16
Opechee Park Cove Town Beach	Laconia	6/23/09	6/24/09	6/26/09	140	36	120	2
Lucas Pond	Northwood	6/24/09	6/25/09	6/27/09	68		200	2
Catamount Pond in Bear Brook State Park	Allenstown	6/24/09	6/25/09	7/11/09	58	84	230	16
Pawtuckaway State Park	Nottingham	6/24/09	6/25/09	6/30/09	>400	236	96	5
Moose Brook State Park	Gorham	6/24/09	6/25/09	6/27/09	230		12	2
Goss Park Town Beach on Stony Brook	Wilton	6/29/09	6/30/09	7/7/09	162	102	84	7
Picnic Beach at Otter Lake State Park	Greenfield	6/30/09	7/1/09	7/7/09	315	10	64	6
Middle Beach at Otter Lake State Park	Greenfield	6/30/09	7/1/09	7/7/09	>400	244	38	6
Lake Contoocook Town Beach	Jaffrey	6/30/09	7/1/09	7/3/09	2	22	180	2
Pawtuckaway State Park	Nottingham	7/1/09	7/2/09	7/7/09	16	14	>400	5
Laurel Lake Town Beach	Fitzwilliam	7/1/09	7/2/09	7/7/09	170		114	5
Village Pond Town Beach, Sand Dam	Troy	7/1/09	7/2/09	7/7/09	100		>400	5
Milville Lake Town Beach	Salem	7/1/09	7/2/09	7/7/09	227		240	5
Captain's Pond	Salem	7/1/09	7/2/09	7/7/09	180		120	5
Cummings Beach	Bristol	7/2/09	7/3/09	7/7/09	46	20	>400	4
Pawtuckaway State Park	Nottingham	7/8/09	7/9/09	7/11/09	10	330	>400	2
Beard's Brook Town Beach	Hillsborough	7/9/09	7/10/09	7/11/09	>400		>400	1
Storrs Pond Rec Area	Hanover	7/10/09	7/11/09	7/16/09	168		208	5
Catamount Pond in Bear Brook State Park	Allenstown	7/13/09	7/14/09	7/16/09	76	88	172	2
Robinson Pond Town Beach	Hudson	7/16/09	7/17/09	7/18/09	230	370	>400	1
Ahern State Park	Laconia	7/21/09	7/21/09	7/24/09	2	130	>400	3
Opechee Park Cove	Laconia	7/21/09	7/22/09	7/28/09	8	10	220	6
Pawtuckaway State Park	Nottingham	7/22/09	7/23/09	7/28/09	170	76	16	5
Catamount Pond in Bear Brook State Park	Allenstown	7/22/09	7/23/09	7/28/09	>400	>400	>400	5
Island Pond Sanborn Shore Acres	Hampstead	7/23/09	7/24/09	7/25/09	>400		52	1
Hood Pond Town Beach	Derry	7/24/09	7/25/09	8/7/09	>400		>400	13
Island Pond Chase's Grove	Derry	7/24/09	7/25/09	7/28/09	>400		>400	3
Rainbow Lake Karen-Gena Beach Association	Derry	7/23/09	7/25/09	7/28/09		TNTC interfering growth		3
Lovell Pond Town Beach	Wakefield	7/24/09	7/25/09	7/28/09	204		46	3
Crystal Lake Town Beach	Gilmanton	7/24/09	7/25/09	7/28/09	214	248	180	3
Middle Beach at Otter Lake State Park	Greenfield	7/28/09	7/29/09	7/31/09	400	200	160	2

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					LF	LF		
Zephyr Lake	Greenfield	7/28/09	7/29/09	8/4/09	230		110	6
Norway Pond	Hancock	7/28/09	7/29/09	7/31/09	110		200	2
Highland Lake Boat Launch	Washington	7/28/09	7/29/09	8/4/09	>400 (CR & PIPE)			6
Laurel Lake Town Beach	Fitzwilliam	7/29/09	7/30/09	8/1/09	50		340	2
Pierce Lake Manahan Park	Hillsborough	7/29/09	7/30/09	8/1/09	>400	24	20	2
Legace Town Beach on Webster Lake	Franklin	7/30/09	7/31/09	8/4/09	224	26	10	4
Mill pond Town Beach	Washington	7/30/09	7/31/09	8/6/09	>400		>400	6
Silver Lake Reservoir	Warner	7/30/09	7/31/09	8/4/09	>400		>400	4
Beard's Brook Town Beach	Hillsborough	7/31/09	8/1/09	8/4/09	130		140	3
Pearly Lake Beach	Rindge	8/3/09	8/4/09	8/8/09	36		240	4
Canaan St Lake Town Beach	Canaan	8/4/09	8/5/09	8/15/09	290		84	10
Wanakee United Methodist Church	Meredith	8/4/09	8/5/09	8/7/09	4		320	2
Otter Brook Park	Keene	7/27/09	7/28/09	8/5/09	130	108	138	8
Second Street Beach	Salem	8/5/09	8/6/09	8/11/09	250		250	5
Massasecum Lake, French Park Town Beach	Bradford	8/5/09	8/6/09	8/8/09	10	160	150	2
Griffin Town Beach on Webster Lake	Franklin	8/11/09	8/12/09	8/14/09	200	170	280	2
Melvin Village Town Pier	Tuftsboro	8/12/09	8/13/09	8/15/09	94		110	2
Opechee Park Cove Town Beach	Laconia	8/13/09	8/14/09	8/15/09	200	>400	>400	1
Baboosic Lake Town Beach	Amherst	8/13/09	8/14/09	8/20/09	>400			6
Clark (Whites)Pond, FB Argue Rec Area	Pittsfield	8/14/09	8/15/09	8/18/09	90	100	68	3
Ellacoya State Park	Gilford	8/14/09	8/15/09	8/19/09	110	122	70	4
Hood Pond	Derry	8/18/09	8/19/09	8/21/09	117		190	2
Kingston State Park	Kingston	8/20/09	8/21/09	8/22/09	20	>400	>400	1
Norway Pond	Hancock	8/20/09	8/21/09	8/22/09	38		>400	1
Camp Otter Swim Area	Salem	8/21/09	8/22/09	8/28/09	120		170	6
Village Pond Sand Dam Town Beach	Troy	8/24/09	8/25/09	8/27/09	110		160	2
Pearly Lake Beach	Rindge	8/24/09	8/25/09	8/29/09	170		130	4

Table 2: Cyanobacteria advisory notices issued for New Hampshire Beaches in 2009.

Beach	Town	Dominant Cyanobacteria	Date Posted	Date Removed	Total Days Posted
Hermit Lake Town Beach	Sanbornton	<i>Anabaena circinalis</i>	6/11/09	6/15/09	4
		<i>Anabaena circinalis</i>	7/10/09	7/13/09	3
Robinson Pond Town Beach	Hudson	<i>Oscillatoria</i>	8/31/09	9/11/09	11
York Pond, Barry Conservation Camp	Berlin	<i>Aphanizomenon</i>	7/14/09	10/26/09	104
Horace Lake, Chase Park Town Beach	Weare	<i>Anabaena circinalis</i>	7/17/09	7/20/09	3
Pearly Pond Beach	Rindge	<i>Anabaena circinalis</i>	7/29/09	8/7/09	9
Country Pond Town Beach	Newton	<i>Anabaena circinalis</i>	8/6/09	8/14/09	8
Dartmouth Yacht Club Beach	Enfield	<i>Anabaena circinalis</i>	8/12/09	8/15/09	3
Cobbett's pond Town Beach	Windham	<i>Anabaena circinalis</i>	8/12/09	8/18/09	6
Shakoma Town Beach	Enfield	<i>Anabaena circinalis</i>	8/12/09	8/15/09	3
Kingston SP	Kingston	<i>Anabaena circinalis</i>	8/18/09	8/20/09	2
Phillips Pond	Sandown	<i>Microcystis</i>	8/19/09	8/20/09	1
French Pond	Henniker	<i>Anabaena circinalis</i>	8/25/09	10/15/09	51
			8/25/09	8/28/09	3
Sodogardy Pond Glines Park	Northfield	<i>Oscillatoria</i>	9/1/09	9/18/09	17

Table 3: Cyanobacteria warnings issued for New Hampshire lakes in 2009.

Lake	Town	Dominant Cyanobacteria	Date Posted	Date Unposted	Total Days Posted
Lake Monomonac	Rindge	<i>Anabaena circinalis</i>	6/4/09	6/15/09	11
Goose Pond	Canaan	<i>Anabaena circinalis</i>	6/5/09	6/22/09	17
			9/4/09	9/15/09	11
Harvey Lake	Northwood	<i>Anabaena circinalis</i>	6/8/09	6/16/09	8
Lake Mascoma	Enfield	<i>Anabaena circinalis</i>	6/10/09	6/17/09	7
Locke Lake	Barnstead	<i>Anabaena circinalis</i>	6/11/09	6/19/09	8
			7/22/09	7/29/09	7
Willand Pond	Dover Somersworth	<i>Anabaena circinalis</i>	6/12/09	7/14/09	32
Cobbett's Pond	Windham	<i>Anabaena circinalis</i>	8/14/09	8/27/09	13
Waukewan	Meredith	<i>Anabaena circinalis</i>	8/24/09	8/28/09	4