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**Coastal Beach Inspection
Annual Report
Summer Sampling 2012**



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2012 Coastal Beach Program Summary

The BEACH Program is a federally funded program that provides resources for coastal beach research and monitoring. DES inspected 16 coastal public swimming beaches in 2012. During the swim season, Memorial Day through Labor Day, ten beaches were inspected twice weekly and four were inspected weekly according to their tiered monitoring assessment. Sampling at the final two beaches, Hampton Harbor and Northside Park (a.k.a. Plaice Cove), occurred every other week in 2012. Sampling frequency was reduced because Hampton Harbor Beach has very few visitors and Northside Park has never had any violations.

Staff members conducted 290 inspections and collected 1006 samples for Enterococci analysis during the swim season. No off-season sampling was conducted in 2012. During the swim season, ten Enterococci samples exceeded the state standard, resulting in three coastal beach advisories. Only three coastal beaches were under advisories for a total of 6 days in 2012, a decrease from 9 total advisory days in 2011. The swim season in New Hampshire was 99 days long in 2012 which translates into 1,584 beach days for all 16 beaches. The 6 advisory days account for only 1% of the days of the beach season while the remaining 99% of the days were suitable for primary recreational use.

The summer of 2012 was slightly warmer and much wetter than previous summers. June's average temperature, 64.4°F, was 0.5 degrees cooler than normal, and the total rainfall for the month was 3.92 inches, 0.82 inches more than the normal monthly rainfall of 3.1 inches. July was warmer and drier than previous years. The average temperature for July of 72.0°F, was 2.0 degrees warmer than average, and with 1.22 inches of rain was one-third of the average of 3.74 inches of rainfall. August was slightly warmer than average and much wetter than average. The average August temperature was 69.9°F, 0.6 degrees higher than normal. The rainfall for August, 7.52 inches, was more than twice the average rainfall of 3.18 inches. ***Although more rainfall was measured in the summer of 2012 than in 2011, two fewer advisories were issued for elevated bacteria levels.*** Two of the four advisories were posted at the same beach, North Hampton State Beach.

Annual risk-based beach evaluations were conducted and the tiered monitoring system continued in 2012. Beaches with more visitors are sampled more often. Tier I beaches are

Beach Name	Town	Sample	Advisory	Advisory	Enterococci cts/100 ml
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sampled twice a week. Tier II beaches are sampled once a week. Tier III beaches are sampled once every other week. If a beach has had many elevated bacteria samples and listed as impaired per the 2012 Consolidated Assessment and Listing Methodology (CALM), the beach moves up one level in the tier structure for more frequent sampling. Ten beaches were categorized at Tier I, four beaches were categorized as Tier II, and three beach were categorized as Tier III. The only beach not sampled in 2012 was Star Island, a tier III beach. The off shore location of Star Island prohibits regular visits by the beach inspection staff.

Table 1. 2012 Coastal Beach Advisories

		Date	Start Date	Stop Date	Left	Center	Right
Seabrook Harbor	Seabrook	6/4/12	6/5/12	6/7/12	9	140	120
Jenness State Park	Rye	6/11/12	6/12/12	6/14/12	390	270	240
New Castle Town Beach	New Castle	8/1/12	8/2/12	8/4/12	<10	30	340

Three coastal beach advisories were posted this season at three beaches, one less advisory than in 2011 (Table 1).

Program Accomplishments (2012)

- A total of 1155 samples were collected and analyzed for Enterococci. Of these samples, 52 were trip blanks and 66 were field duplicates.
- The bacteria source project which estimates pathogen sources to coastal beaches has been completed. A stormwater modeling project was initially proposed in the 2002 grant proposal work plan to cover both land and marine contributions to bacteria at coastal beaches. The scope of the project has been modified to fit the technology available and usefulness of the project's end products. The final reports from this special study are watershed management plans for the Little River and Parsons Creek watersheds and an illicit discharge detection and elimination report for the New Castle Beach watershed. All of the reports have been forwarded to the coastal towns and are available on the beach website.
- Sixteen coastal beach reports for sampling done in 2012 was be finalized and mailed to coastal beach managers in March. The reports are available for viewing online at <http://des.nh.gov/organization/divisions/water/wmb/beaches/index.htm>.
- On April 30, the Beach Program presented materials at the Wild NH Day, sponsored by NH Fish and Game Department. The Beach Program conducted an interactive project where children drew an outline of their hand on a poster and signed their first name thereby pledging to lend a hand to pick up trash at beaches. The total number of outlines was 381 human hands and 1 service dog paw, all of participants pledging to remove any waste they see at beaches. Additionally, 161 pocket ashtrays were distributed to encourage smokers to remove their trash properly instead of dropping waste on the beach. Approximately 4,800 people attended the event.
- The partnership with the Blue Ocean Society on their Coastal Beach Adopt-a-Beach Program continues to be a success. Volunteers adopted have all coastal beaches except for Seabrook Town Beach and three sections of Hampton Beach. Again cigarette butts were the most often collected garbage at all beaches. Volunteers collected 7,085 butts in 2012. The beach program has provided the state beaches with 34 cigarette snuffers since 2008; without these additional cigarette butt receptacles, even more butts would have been left behind.

Future Goals

- Maintain an Adopt-a-Beach program in conjunction with the Blue Ocean Society at currently adopted beaches and encourage the public to adopt the unclaimed coastal beaches.
- Maintain effective monitoring efforts at coastal beaches and review the tiered monitoring evaluation process to ensure effective sampling schedules are completed.
- Additional efforts are needed to communicate to the public how the beach program works, what it samples, and what advisories indicate. After two years in a row of top water quality as recognized by the Natural Resources Defense Council, not all of the public is aware of the recognition.

Beach Name	Alternate Name	Town	Visits per week
Hampton Harbor Beach	–	Hampton	Every other week
Hampton Beach State Park	–	Hampton	2
North Beach State Park	–	Hampton	1
Northside Park	Plaice Cove	Hampton	Every other week
Sun Valley Beach	Part of Seabrook Town Beach	Hampton	1
New Castle Town Beach	Great Island Common Beach	New Castle	2
Bass Beach	–	North Hampton	1
North Hampton State Beach	–	North Hampton	2
Foss Beach	–	Rye	1
Jenness Beach at Cable Road	Cable Beach	Rye	2
Jenness Beach State Park	–	Rye	2
Sawyer Beach	–	Rye	2
Wallis Sands Beach at Wallis Road	Pirates Cove Beach	Rye	2
Wallis Sands State Park	–	Rye	1
Seabrook Town Beach	–	Seabrook	2
Seabrook Harbor Beach	–	Seabrook	1