

Board of Health Meeting Minutes  
Wednesday, August 16, 2023  
Virtual Meeting

Received by Town Clerk's Office  
September 14, 2023 8:43am

**BOARD OF HEALTH MEMBERS PRESENT**

Marianne Hartmann, Peter Sheckman, Alicia Reddin

**MEMBERS ABSENT**

None

**OTHER TOWN OFFICIALS PRESENT**

Jeffrey Vaughan, Director of Public Health; Neia Illingworth, Public Health Nurse

**OPEN MEETING**

- The meeting was called to order at 6:07 PM.

**REVIEW/APPROVE MINUTES OF PRIOR MEETINGS**

- On MOTION by Sheckman and SECONDED by Reddin, the Board of Health voted to approve prior meeting minutes from June 12, 2023. The motion passed unanimously.

**HEALTH DEPT EDUCATIONAL PRESENTATION ON SEASONAL AND CSO BEACH SAMPLING**

- Jeff gave a presentation on testing and water quality at Swampscott public beaches to answer some common questions.
- Q: Why are beaches tested?
  - A: In the United States, most swim-related illnesses are associated with disease-causing organisms (pathogens) that are linked to fecal contamination. To protect public health, the Massachusetts Department of Public Health (MDPH) requires tests for certain "indicator organisms", or specific microscopic bacteria that indicate harmful pathogens may be present at public beaches.
- Q: Are all beaches in MA monitored?
  - A: Each beach is monitored for a specified period where it is considered officially open for swimming. Public and semi-public beaches are required by state and federal regulations to monitor indicator bacteria during their operational dates.
- Q: How do bacteria get in beach water?
  - A: Bacteria in the water can come from a variety of sources such as stormwater (rain) runoff, failing or malfunctioning septic systems, combined and sanitary sewer outflows, leaking sewer pipes, illegal sewer hookups, wildlife and pet waste, agricultural runoff, etc.

- Q: How is beach water tested?
  - A: Local boards of health, Barnstable County Department of Health and the Environment, and the Massachusetts Department of Conservation and Recreation collect the majority of water samples in MA. The local BOH oversees all water testing within its jurisdiction at approved sampling locations.
- Q: What is the sample collection and analysis process?
  - A: Samples should be taken within the area of greatest usage, remain consistent (sampled from the same location each week), and be collected in the following manner:
    - Wade to a depth of 3 feet and wait for debris to settle.
    - Remove cap of sterile sample bottle and plunge the bottle 12 inches under the surface, filling it in one downward sweeping motion, moving away from your body. Discard a few millimeters to allow air space.
    - Place bottle in cooler with ice packs.
    - Field data must be recorded at time of collection on a form provided by DPH.
    - Samples should be delivered within six hours to a laboratory certified by the MA Department of Environmental Protection to conduct the analysis. Laboratory testing takes 24 hours to perform, so water quality results are typically reported the next day. A list of laboratories can be found here: [www.mass.gov/certified-laboratories](http://www.mass.gov/certified-laboratories).
- Q: How often is beach water tested?
  - A: The majority of beaches in MA are tested once a week following sampling frequency guidelines from the US EPA. Required sampling begins within five days prior to opening and at least weekly thereafter during operation. In Swampscott, testing is done weekly on Wednesdays from mid-June through Labor Day.
- Q: What/how many beaches are in Swampscott?
  - A: Swampscott has six beaches: King's, Eisman's/New Ocean, Phillip's, Whales, Fishermen's, and Preston
- Q: What is the cost for beach testing?
  - A: Each local Board of Health must pay for beach testing and retesting. Each local BOH contracts with a state provided private vendor through an EPA grant to pay for beach water quality testing and retesting at each beach for each week that the beach is operational during the summer.
- Q: Why do beaches close?
  - A: When levels of Enterococci or E. coli exceed the limits set for beaches, it is called an exceedance. Water is considered unsafe for swimming at a majority of beaches in Massachusetts when two exceedances occur following one after another without an interruption (consecutive days). Beaches with a history of multi-day exceedances are required to post after a single exceedance. Beaches can also be closed to swimming for reasons not related to bacteria, such as concerns for other physical or chemical hazards like riptides, poor visibility within the water, harmful algae blooms, heavy rainfall, combined sewer overflow events, hazardous materials, and etc.
- Q: How do I know if a beach is closed?
  - A: MDPH maintains a list of beach postings during swimming season. Links are available on the MDPH website and the Town of Swampscott website. Signs are also posted at the beach when a beach is closed in Swampscott
- Q: Can I still go to the beach if it is posted closed to swimming?

- A: A beach posting does not mean that a person cannot go to the beach. If a beach is posted, it simply means swimming is not allowed. Individuals are welcome to do other recreational activities such as walking, sunbathing, collecting seashells/sea glass, and playing sports
- Q: When will a closed beach re-open?
  - A: Beaches remain posted until test results from laboratory analysis show indicator bacteria levels are back within the acceptable range for water being safe to swim. As this laboratory analysis takes approximately 24 hours, it is common for a beach closure to last a day or two following an exceedance
- Q: What is the testing process for King's Beach, which is partially in Lynn?
  - A: Lynn side – maintenance and testing is done by the Department of Conservation and Recreation (DCR). Testing is done more than once a week throughout the entire summer.
  - Swampscott side – testing is done by the Swampscott Health Department. Testing is done weekly throughout the summer during swimming season. Retesting is done when notified by the lab that the beach sample(s) exceed the acceptable limit. The Health Director does the beach testing, retesting, notifications, and posting of signage for beach closures.
- Q: What is a sanitary sewer system?
  - A: Sanitary sewers are systems of pipes and pumps that transport wastewater to wastewater treatment plants. Water used in homes or industry is flushed through their pipes until it reaches local sewer mains owned and operated by municipal or regional sewer departments. Sanitary sewer systems are required by MassDEP to be in compliance with the requirements of the MA Clean Waters Act and the regulations adopted under 314 CMR 1.00 through 9.00
- Q: What are combined sewer outflows?
  - A: Combined sewer outflows, or CSOs, were built as part of sewer collection systems that were designed to carry both sewage and stormwater in the same pipe. Combined sewer systems have regulator structures that allow overloaded systems to discharge into rivers, lakes and coastal areas subjecting them to higher pollutant loads. When there is not a lot of stormwater, this mix is transported to a wastewater treatment plant where it is processed
- Q: How does someone know if untreated sewage is flowing into MA waters?
  - A: In January 2021, then Governor Baker signed An Act Promoting Awareness of Sewage in Public Waters into law
- Q: How is the public notified of sewage discharges/CSO events at King's Beach?
  - A: The City of Lynn is responsible for initial notifications of CSO events that occur on King's beach as outflow pipes in Lynn go directly into King's beach. Once Lynn provides the initial notifications, then the Swampscott Health Department will begin it's notification process which consists of: notification of other town officials, sending message(s) through call/email to residents, posting CSO event information online, and posting signage at the affected beach
- Q: What are the risks associated with bacteria in beach water?
  - A: Swimming in unsafe waters may result in illnesses with the following characteristics: gastrointestinal symptoms (nausea, vomiting, diarrhea, and abdominal pain), respiratory symptoms (sore throat, cough, runny nose, and sneezing), dermatological symptoms (skin rash and itching), eye and ear symptoms (irritation, earache, itching), and/or flu-like symptoms (fever and chills)
- Q: How do I know if it is safe to swim?

- A: Check the MDPH website for a list of beach postings during the swimming season, look for signs posted at the beach, avoid swimming after heavy rain events, avoid swimming next to drainpipes, outlets, or other obvious sources of pollution, watch for “signs” of water pollution such as discolored, fast flowing, and strong-smelling water, do not swim near trash or street litter flowing in the water, swim only in areas designated as “swim beaches”
- Hartmann asked if signage will be available in Spanish as well as English. Jeff stated that he is not sure because he is not designing them
- Sheckman asked if there are standards for contamination of sand. Jeff stated that he asked the State and that they said they said there is not
- Sheckman asked why things are done differently by Swampscott and Lynn when they have a shared beach (King’s). Jeff stated that it is because the town is following the DEP and MDPH regulations. Sheckman would ask what happens if Lynn tests after Swampscott’s Wednesday testing and finds contamination. Jeff stated that Swampscott would go off Lynn’s testing and close the beach.
- Sheckman asked if it was possible for tonight’s presentation to be sent to people rather than residents have to visit the town website and look for it. Jeff stated that he will look into it. Sheckman also asked if it was possible for people to receive alerts on their phones in a similar way to extreme weather alerts. Jeff stated that he could send a text notification to those who have subscribed to them, but that it is sometimes difficult because of low character limits

## **RESIDENT PRESENTATION – OVERVIEW OF KING’S BEACH**

- Resident Liz Smith gave a presentation on public beach monitoring and CSO events
- Liz stated that she asked why Swampscott does not have to test at the outfall and was told that it was because Lynn tests at that site. Liz stated that she does not understand why that is the case if Swampscott does not utilize Lynn’s test results
- Liz stated that both DCR and Swampscott BOH post signs but that the date of posting on them does not always align and she finds it confusing
- Liz gave an overview of the 2015 EPA Swampscott Consent Decree (slide 14)
- Liz stated that she believes not enough enforcement action is being taken by the EPA. She stated that if Lynn does not make some corrections by a deadline in 2024, they will begin to pay daily fines
- Liz provided a recap of Lynn testing procedures (slide 16)
- Liz provided a comparison between Lynn and Swampscott for testing procedures (slide 17)
- Sheckman stated that some of this information is impacted by recent changes Jeff discussed earlier in the meeting (that Swampscott will go by Lynn results for shared beaches if Lynn finds contamination)
- Liz reviewed the Town’s current CSO protocol:
  - Advisory by email, reverse phone call, and on the Town’s Facebook page and website
  - Compliant temporary signs placed at beach entrances
  - Large red warning flags hung at access points
  - Caution tape placed on stairs and ramp access
  - Signs removed after 48 hours, Town website banner to note end of CSO
- Liz made the following recommendations for Swampscott CSO protocol:
  - Install required permanent CSO signs at beach entrances and outfall seawall



- Test outfall and beach water for 7 days after a CSO
  - Test sand at CSO for possible bacteria or toxins
  - Remove caution tape after 48 hours or after safe testing results
- Liz stated that she believes everything near the outfall is hazardous and/or unsafe so she would recommend that the BOH enforce the “minimum standards for bathing beaches” (slide 41)
- Liz made the following recommendations for King’s beach (slide 42):
  - Swampscott follows Lynn/DCR status unless Lynn/DCR is open and Swampscott has tested high for bacteria, in which case Swampscott would be closed
  - Installation of permanent signs warning of CSO at Stacey Brook outfall and KB entrances
  - Outfall area is always closed to swimming due to high bacteria (with signage indicating such)
  - Upon CSO notice, Swampscott will follow previously-described protocol
  - All signs to contain QR code/website URL to beach test data and translation
- Liz made the following recommendations for other Swampscott beaches:
  - Permanent beach testing signs at all entrances per DPH regulations
  - Test all beaches for 2 days after heavy rain events to establish pattern
  - Temporary signs after heavy rain to warn of potential high bacteria
  - Temporary signs to state not to swim at beach or play in storm drain outfall
  - All signs to be in multiple languages and to include QR code, website link to beach test data, and more options for language translation
- Hartmann talked about source elimination/pipe issue solutions/mitigation. Source of issue is clay pipes in Swampscott. To replace the pipes will take years. In the meantime, Swampscott may be able to use other mediums such as UV lights, increasing signage and public education, etc.
- Resident Wayne Spritz stated that he would like to see the BOH enact a policy regarding using DCR testing results, taping of the beaches for 48 hours following a CSO event, and signage with clear markings of CSO events in English and Spanish and a QR code linking the beach status in multiple languages. Wayne stated that he would also like to see testing at other beaches (Fisherman’s and Eisman’s) 48 hours following rain events with and without CSO to see if it is creeping up the coast

## **PH NURSE / PH EMERGENCY MGMT. COORDINATOR UPDATE**

### **COVID UPDATES**

- Neia gave a presentation on Covid updates
- Since the last BOH meeting on June 12, 2023, Swampscott has had 37 new lab confirmed cases. This number does not include probable cases or close contacts under quarantine and/or any positive home test results, which are not reported to the state. This number is a bit high considering the fact that much of the COVID testing is no longer free.
- Currently, the new omicron variant EG.5 is the dominant variant, but it was also noted that with the changes in testing, coverage, etc., this may not be fully accurate.
- A new booster dose should be available at the end of September/early October. The vaccine will be for XBB.1.5 and provide some coverage for the EG.5 as it is of the same omicron lineage
- No change to isolation and quarantine/exposure guidance since fall of 2022 and still waiting for update(s) from the state to see if there will be any changes to the school isolation and exposure guidance for upcoming school year.

- Hartmann asked if the new strain of covid is more contagious. Neia stated that it is highly contagious but that severity is varying based on the individual, underlying conditions, etc.

#### **OTHER PUBLIC HEALTH UPDATES**

- Swampscott Public Health Department has been meeting with other Health Departments as a region as part of the Public Health Excellence (PHE) grant and the Public Health Nurses in the region have also been meeting regularly.
- Working on climate change initiative with senior center as well as a countertop bin liner exchange program for composting at the Senior Center. There are many great informative flyers and other educational/promotional materials available on the Health Department's website as well as on the Senior Center's website.
- Narcan distribution program efforts are ongoing. Two trainings were held in June. Additional trainings are scheduled for town employees next week. Individuals can also call Neia on a dedicated phone line to leave a message about scheduling individual or group training. Neia also stated that in March, the FDA approved OTC Narcan. It is not yet available OTC and pricing information is not yet available, but for now, the Swampscott Health Department is still able to receive Narcan for free through the State to distribute to those who have received a training
- Neia is in the process of becoming a certified CPR instructor
- Neia shared the resource [airnow.gov](http://airnow.gov) for individuals to check air quality online as well as the CDC's heat and health tracker
- Hartmann asked how information about the Narcan distribution initiative is being shared. She asked if the Swampscott Police are doing follow up visits following overdose calls and if so, if residents are being referred to Neia for Narcan training. Neia stated that that is not currently a procedure she is aware of but that she is sharing the information on the town website and Facebook. She will follow up with SPD about Hartmann's idea

#### **OTHER BUSINESS/ITEMS NOT REASONABLY ANTICIPATED BY THE BOH**

- Wayne Spritz from the Solid Waste Advisory Committee asked about the funding status for senior housing composting. Wayne suggested using RDP funds and Jeff stated that he is looking into this, but the person that he needs to talk to has been out of the office and Jeff also stated that he will discuss this more at their next (SWAC) meeting.
- Sheckman asked if the town will do a flu vaccine clinic this year. Neia stated that the Health Departments in our area will be holding regional flu clinics starting in September. Neia stated that the first flu clinic in Swampscott will be a high dose flu clinic (over 65 years of age) and then regular dose flu clinics for those under 65 but over 18 will be held.
- Sheckman asked if there will be a combination flu/covid vaccine. Neia stated that there is not as vaccines for the fall flu clinics have to be pre-ordered in the spring and at that time, covid vaccines were funded by the federal government but that the State may purchase some and distribute them to municipalities to administer
- Hartmann read an email to the board from the Town Administrator's office requesting any recommendations for bylaw changes or revisions. Hartmann stated that every year there is discussion of changes or revisions for the bylaw regarding dogs on the beach but that she would rather that be initiated by citizens rather than the BOH. Reddin stated that she may want to consider changing the BOH to be a five person board. Hartmann stated that she is not sure if that would be a charter change but that she will ask TA Sean Fitzgerald

**SCHEDULE NEXT MEETING DATE**

- The next meeting has been scheduled for Tuesday, September 12, 2023 at 6 PM

**ADJOURN**

- On MOTION by Reddin and SECONDED by Sheckman, it was VOTED by roll call to adjourn the meeting. The motion passed unanimously.
- The meeting adjourned at 8:19 PM

True Attest,

Brittney Jones

# Public Beaches Testing and Water Quality Updates



**Public Health**  
Prevent. Promote. Protect.

**Swampscott Health Department**  
**8/16/23**

# **Public Beaches**

## **Testing and Water Quality Updates**

### **Overview**

- **Beach testing**
- **Closing of beaches**
- **King's Beach**
- **Combined Sewerage Overflow (CSO) events**
- **Public information and education**



# Beach Testing

## Why are beaches tested?

- In the United States, most swim-related illnesses are associated with disease-causing organisms (pathogens) that are linked to **fecal contamination**.
- To protect public health, the Massachusetts Department of Public Health (MDPH) **requires** that certain “indicator organisms”, or specific microscopic bacteria that indicate harmful pathogens may be present.
  - This **monitoring data** helps local health officials determine **when to close a beach due to unsafe conditions** and to **notify the public** so that beach visitors can make **informed decisions** about swimming at the beach.

# Beach Testing (cont.)

- The water quality at beaches in Massachusetts is **required** to be monitored.
- The Massachusetts Department of Public Health (MDPH) and local boards of health (BOHs) regulate public and semi-public beaches under **105 CMR 445.000**.
  - **105 CMR 445.000: MINIMUM STANDARDS FOR BATHING BEACHES (STATE SANITARY CODE, CHAPTER VII)**  
<https://www.mass.gov/doc/105-cmr-445-state-sanitary-code-chapter-vii-minimum-standards-for-bathing-beaches/download>
- The regulations do not apply to private beaches.

105 CMR: DEPARTMENT OF PUBLIC HEALTH	
105 CMR 445.000:	MINIMUM STANDARDS FOR BATHING BEACHES (STATE SANITARY CODE, CHAPTER VII)
Section	
445.001:	Purpose
445.002:	Authority
445.003:	Citation
445.004:	Scope
445.010:	Definitions
445.020:	Operation
445.030:	Bathing Water Quality
445.031:	Indicator Organisms
445.032:	Collection of Bathing Water Samples
445.033:	Laboratory Analysis and Reporting
445.034:	Bathing Beaches Operated by the Commonwealth
445.035:	Sampling and Analysis at Semi-public Beaches
445.036:	Public Request for Testing
445.040:	Posting and Reopening Notifications
445.100:	Variance
445.101:	Variance to be in Writing
445.300:	Permit Required to Operate
445.400:	General Administration
445.500:	Severability
445.001:	<u>Purpose</u>
The purpose of 105 CMR 445.000 is to protect the health, safety and well-being of the users of bathing beaches, to establish acceptable standards for the operation of bathing water and to establish a procedure for informing the public of any bathing water closures.	
445.002:	<u>Authority</u>
105 CMR 445.000 is adopted under the authority of M.G.L. c. 111, §§ 3, 5S and 127A.	

<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

<https://www.mass.gov/doc/105-cmr-445-state-sanitary-code-chapter-vii-minimum-standards-for-bathing-beaches/download>



# Beach Testing (cont.)

- As previously stated, the **MA Department of Public Health (DPH)** and **local boards of health (BOHs)** regulate public and semi-public beaches under 105 CMR 445.000
- **The BOH oversees all water testing within its jurisdiction at approved sampling locations.**
- Operators of semi-public beaches pay for their own sample collection and analysis.



<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

<https://www.mass.gov/doc/105-cmr-445-state-sanitary-code-chapter-vii-minimum-standards-for-bathing-beaches/download>



# Beach Testing (cont.)

## Are all beaches in Massachusetts monitored?

- Each beach is monitored for a specified period where it is considered officially open for swimming.
- **Public and semi-public** beaches are required by state and federal regulations to monitor indicator bacteria during their operational dates.
  - A “**Public beach**” is beach open to the general public that permits access to bathing waters regardless of whether a fee is charged
  - A “**Semi-public**” beach is a beach with common access and shared use by a group or organization (e.g., beaches at hotels/motels, summer camps, clubs, condominiums, or neighborhood associations).
- **Private** beaches that are owned by individuals and/or families are not subject to these regulations.

# Beach Testing (cont.)

- Pathogens in the water are difficult to measure directly, so indicator organisms are used to predict the presence of pathogens associated with **fecal contamination**.
- Enteric bacteria are a type of indicator organism found in the intestines of warm-blooded animals and humans and are often associated with **fecal contamination**.
- The **bacteria** used as indicator organisms to test the waters at beaches are **Enterococci** and **E. coli**.
  - **Marine beaches** are tested for the presence of **Enterococci**.
  - Freshwater beaches are tested either for the presence of E. coli or Enterococci.



Enterococci image taken from: <https://www.cdc.gov/hai/organisms/vre/vre.html>

# Beach Testing (cont.)

## How do bacteria get in beach water?

- Bacteria in the water can come from a variety of sources. These include:
  - **Stormwater (rain) run-off**
  - Failing or malfunctioning septic systems
  - **Combined and sanitary sewer overflows**
  - Leaking sewer pipes
  - Illegal sewer hookups
  - **Wildlife and pet waste**
  - Agricultural runoff

<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>



Image taken from: <https://www.neponset.org/do-your-part/reduce-stormwater/>



# Beach Testing (cont.)

## How is beach water tested?

- **Local boards of health**, Barnstable County Department of Health and the Environment, and the Massachusetts Department of Conservation and Recreation **collect the majority of water samples in Massachusetts.**
- **The Local BOH oversees all water testing within its jurisdiction at approved sampling locations.**



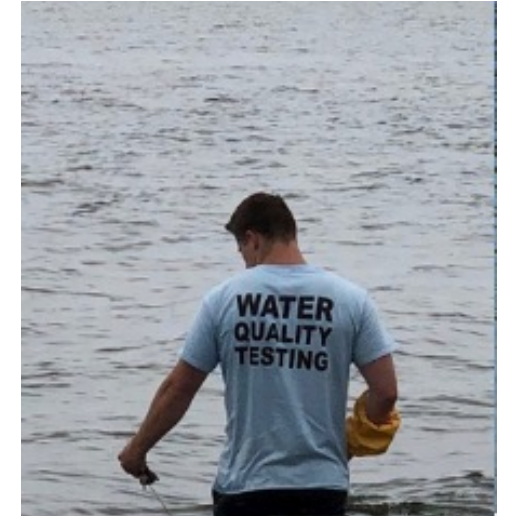
[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)



# Beach Testing (cont.)

## Sample Collection and Analysis

- Samples should be taken within the area of greatest usage, remain consistent (sampled from the same location each week), and be collected in the following manner:
  - **Wade to a depth of 3 feet** and wait for debris to settle.
  - Remove cap of sterile sample bottle **and plunge the bottle 12 inches under the surface**, filling it in one downward sweeping motion, moving away from your body. Discard a few millimeters to allow air space.
  - Place bottle in cooler with ice packs.
  - Field data must be recorded at time of collection on a form provided by DPH.
  - Samples should be delivered **within six hours** to a laboratory certified by the MA Department of Environmental Protection to conduct the analysis. Find laboratories here: [www.mass.gov/certified-laboratories](http://www.mass.gov/certified-laboratories).



Images taken from: <https://www.capecod.gov/departments/health-environment/programs-services/water-and-wastewater/bathing-beach-water-quality/>

<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

# Beach Testing (cont.)

How often is beach water tested?

- The majority of beaches in Massachusetts are tested once a week following sampling frequency guidelines from the US EPA.
  - Testing frequency depends on how likely the beach is to have water quality issues.
  - Beaches must be sampled within 5 days prior to opening and at least weekly thereafter during operation.
  - Swampscott beaches: Testing done weekly on Wednesdays from mid-June through Labor Day





# Beach Testing (cont.)

Beaches in Swampscott = 6

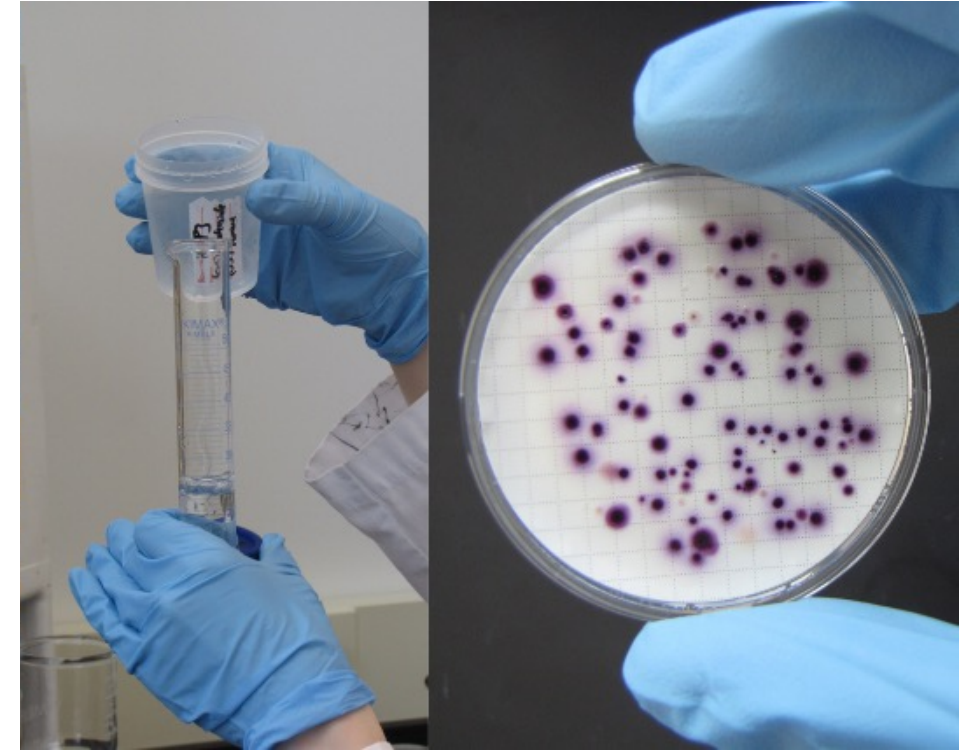
King's, Eisman's/New Ocean, Phillip's, Whales, Fishermen's and Preston



<https://www.google.com/maps/@42.4686858,-70.9011364,4780m/data=!3m1!1e3?entry=ttu>

# Beach Testing (cont.)

- Testing is done at accredited laboratories using laboratory methods approved by the U.S. Environmental Protection Agency (EPA).
  - The laboratory testing takes **about 24 hours** to perform, so water quality **results** are typically reported the **next day**.



Images taken from: <https://www.capecod.gov/departments/health-environment/programs-services/water-and-wastewater/bathing-beach-water-quality/>

<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>



# Beach Testing (cont.)

## What is the cost for beach testing?

Each LBOH must pay for beach testing and retesting

- Each LBOH contracts with a state provided private vendor (ex. G&L Labs) through an EPA grant to pay for beach water quality testing and retesting at each beach for each week that the beach is operational during the summer.
- Each beach sample collected from each beach costs: covered by EPA grant
- Retesting a beach sample at each beach costs: approximately \$50/sample/beach



# Beach Testing and Closures

## Why do beaches close?

- When levels of Enterococci or *E. coli* exceed the limits set for beaches, it is called an **exceedance**.
  - Water is considered unsafe for swimming at a majority of beaches in Massachusetts when two exceedances occur *following one after another without an interruption* (consecutive days).
  - Beaches with a history of multi-day exceedances are required to post after a single exceedance.
- Beaches can be closed to swimming for reasons not related to bacteria.
  - When there are concerns for other physical or chemical hazards, including riptides, poor visibility within the water, cyanobacteria and harmful algae blooms, heavy rainfall, combined sewer overflow events, or hazardous materials (like an oil slick), beach closures may also occur.



# Beach Testing and Closures (cont.)

## Why do beaches close? (cont.)

- At **marine beaches**, the accepted level of Enterococci for a single sample is **104** colony forming units per 100 milliliters (cfu/100 ml) of water or below.
- MDPH also has a limit for the last 5 test results at a beach known as the **geometric mean**, or geomean for short.
  - The geomean is intended to reflect water quality found during a previous time frame (typically a month).
  - At marine beaches, the geomean for Enterococci is **35 cfu/100 ml**.





# Beach Testing and Closures (cont.)

## How do I know if a beach is closed?

- MDPH maintains a list of beach postings during the swimming season:
  - <https://www.mass.gov/info-details/current-public-beach-postings?auHash=9joLmMGmy0u1HpJGlrfizLbqzdX6HS3CDLdDntdLJUw>
  - <https://www.mass.gov/info-details/interactive-beach-water-quality-dashboard>
- Look for signs posted at the beach
  - Check for any warnings or beach closures indicating that the water is not safe because of bacteria, riptides, or other hazards.
    - Swampscott beaches will have SIGNS posted if/when a beach is CLOSED



<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

# MDPH Websites to check if a Beach is Open or Closed



Environment > Environmental Exposure Topics > Beach Water Quality

OFFERED BY Environmental Toxicology Program | Bureau of Climate and Environmental Health | Department of Public Health

## Interactive Beach Water Quality Dashboard

MDPH's Interactive Beaches Dashboard provides water quality testing results for the current beach season. It will tell you which beaches are open or closed. If a beach is closed, do not swim or enter the water at that location to avoid risk of illness.

### Interactive data dashboard

Updated twice daily at 9:30 a.m. and 12:30 p.m.

See All Closures | See Test Results | See All Beaches (Map)

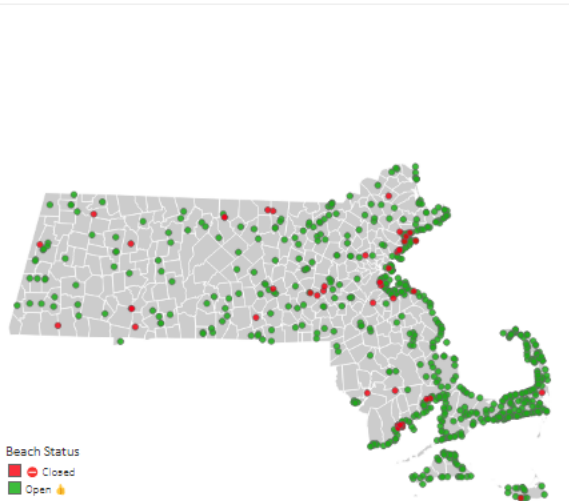
#### Town

Abington  
Acton  
Agawam  
Amesbury  
Amherst  
Andover  
Aquinnah  
Arlington  
Ashburnham  
Ashby  
Ashfield  
Ashland  
Athol  
Auburn

#### Beach

40th Pole  
333 Commercial Street  
400 Beach  
451 Commercial Street  
593 Commercial Street  
637 Commercial Street

#### Map



<https://www.mass.gov/info-details/interactive-beach-water-quality-dashboard>



Environment > Environmental Exposure Topics > Beach Water Quality

OFFERED BY Bureau of Climate and Environmental Health | Department of Public Health

## Current public beach postings

The water quality at public beaches in Massachusetts is required to be monitored. When the water quality is unsafe, the beach is required to be "posted" with a sign that indicates swimming is unsafe and may cause illness.

Last updated: August 10, 2023

Show 10 entries

Search:

Municipality	Beach	Beach Type	Posting Reason
Agawam	Robinson Pond Beach (DCR)	Freshwater	Bacterial Exceedance
Ashby	Damon Pond Beach (DCR)	Freshwater	Bacterial Exceedance
Ashland	Ashland Reservoir - Main Beach (DCR)	Freshwater	Bacterial Exceedance
Ashland	Hopkinton Reservoir - Main Beach (DCR)	Freshwater	Bacterial Exceedance
Ashland	Hopkinton Reservoir-Upper Beach (DCR)	Freshwater	Bacterial Exceedance
Beverly	Brackenbury	Marine	Bacterial Exceedance
Boston	Constitution Beach (DCR)	Marine	Bacterial Exceedance
Boston	Savin Hill Beach (DCR)	Marine	Bacterial Exceedance
Braintree	Smith Beach	Marine	Bacterial Exceedance
Charlmont	Cold River Pool (DCR)	Freshwater	Bacterial Exceedance

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<https://www.mass.gov/info-details/current-public-beach-postings?auHash=9joLmMGmyOu1HpJGlrfizLbqzdX6HS3CDLdDntdLJUw>

# Beach Closures (cont.)

## Can I still go to the beach if it is posted closed to swimming?

- A beach posting does not mean that a person cannot go to a beach, or that a posting prevents anyone from entering onto a beach.
- If a beach is posted, it simply means **swimming is not allowed**.
- There are plenty of safe recreational activities people can still do at the beach that don't involve contact with the water, including: walking along the shore; sunbathing; collecting seashells/sea glass; and playing sports such as paddleball, volleyball, football, frisbee, etc.



# Beach Re-opening

## When will the beach re-open?

- Beaches remain posted until test results from laboratory analysis show indicator bacteria levels are back within the acceptable range for water being safe to swim.
- Laboratory analysis for all beach samples takes approximately 24 hours, so it is common for a beach closure to last a day or two following an exceedance.



# King's Beach

Located in both Lynn and Swampscott



Image taken from: <https://www.nps.gov/places/king-s-beach.htm>



# King's Beach (cont.)

- Lynn side – maintenance and testing done by the Department of Conservation and Recreation (DCR)
  - Testing is done more than 1x/week throughout the entire summer
  - Testing also done before officially open for swimming
  - DCR staff does the beach water testing and retesting
- Swampscott side – town's responsibility; testing done by the Swampscott Health Department
  - Testing done weekly throughout the summer during swimming season
  - Retesting is done when notified by the lab that the beach sample(s) exceed the acceptable limit
  - Health Director does the beach testing, retesting, notifications, and posting of signage for beach closures

# Combined Sewerage Overflow (CSO) events



NEWS SPORTS OPINION POLICE/FIRE OBITUARIES LIFESTYLE CLASSIFIEDS ARCHIVES E-EDITION

## SIX MILLION GALLONS OF SEWAGE DUMPED ON COAST

Lynn, Swampscott, and Nahant beaches polluted after Tuesday's storm.

BY ANTHONY CAMMALLERI | August 8, 2023

Share Tweet Share



Image taken from: <https://itemlive.com/2023/08/08/six-million-gallons-of-sewage-dumped-on-coast/>

# Combined Sewerage Overflow (CSO) events

## Background:

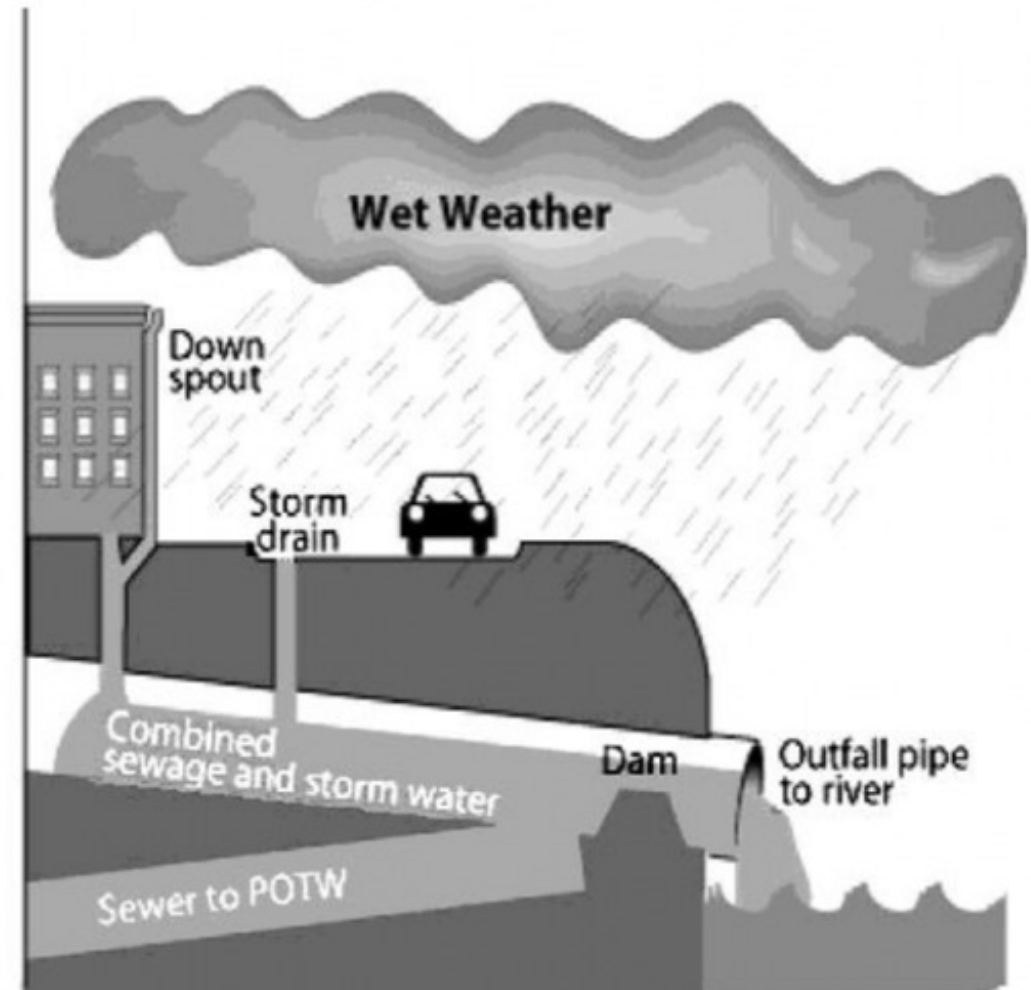
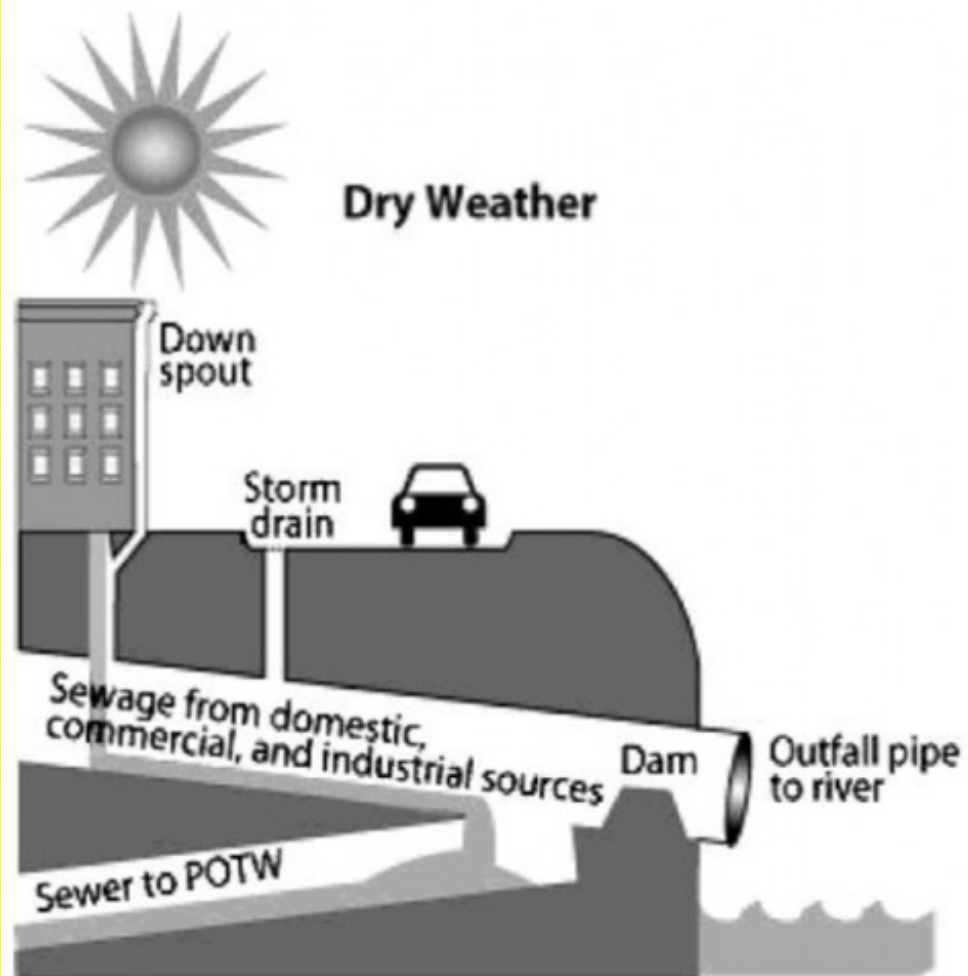
### Sanitary Sewer Systems & Combined Sewer Overflows

- Systems of pipes and pumps that transport wastewater to wastewater treatment plants are called sanitary sewers. Water used in homes or industry is flushed through their pipes until it reaches local sewer mains owned and operated by municipal or regional sewer departments.
  - Sewer mains flow into progressively larger pipes until they reach the wastewater treatment plant. In the ideal case, a sewer system is completely gravity-powered. In situations where gravity cannot do all the work, the sewer system includes grinder-pumps or lift stations to move the wastewater to the treatment plant. Manholes allow access to the sewers by means of vertical openings and covers.
- MassDEP has responsibility for ensuring that sanitary sewer systems are in compliance with the requirements of the Massachusetts Clean Waters Act and the regulations adopted under 314 CMR 1.00 through 9.00.

# Combined Sewerage Overflow (CSO) events (cont.)

## Sanitary Sewer Systems & Combined Sewer Overflows

- Infiltration and inflow (I/I) is groundwater, rainwater and snow melt that enter sewer systems through defects in sewers or illegal connections.
- This reduces the capacity of sewer systems and treatment facilities to transport and treat wastewater.
- During periods of high groundwater and large or sudden storm events, I/I entering sanitary sewers may cause surcharging, wastewater backups into homes and businesses, and inadequate treatment.



*Figure from EPA.gov*

# Combined Sewerage Overflow (CSO) events (cont.)

## Sanitary Sewer Systems & Combined Sewer Overflows

- Older cities across the state may still have combined systems designed to carry both sanitary sewage and stormwater in the same pipes.
- Combined sewer overflows, or CSOs, were built as part of sewer collection systems that were designed to carry both sewage and stormwater in the same pipe.
  - Combined sewer systems have regulator structures that allow overloaded systems to discharge into rivers, lakes and coastal areas subjecting them to higher pollutant loads.
  - When there is not a lot of stormwater, this mix is transported to a wastewater treatment plant where it is processed.



# Combined Sewerage Overflow (CSO) events (cont.)

## Notifications for Sewage Discharges

- In January 2021, the Governor signed *An Act Promoting Awareness of Sewage in Public Waters* into law:  
<https://malegislature.gov/Laws/SessionLaws/Acts/2020/Chapter322>
- This new law will make sure the public knows when untreated sewage flows into Massachusetts waters.
  - This includes releases known as combined sewer overflows (CSOs).

# **Combined Sewerage Overflow (CSO) events – King's Beach ONLY**

## **Notifications for Sewage Discharges – King's beach only**

- Outflow pipes in LYNN go directly into King's beach
- LYNN is responsible for initial notifications of CSO events that occur on King's beach
  - Once LYNN provides the initial notifications, then the Swampscott Health Department will begin its notification process:
    - Notification of other town officials
    - Sending message(s) through call/email to residents
    - Posting CSO event information online
    - Posting signage at the affected beach



# Combined Sewerage Overflow (CSO) events – King's Beach ONLY Notifications

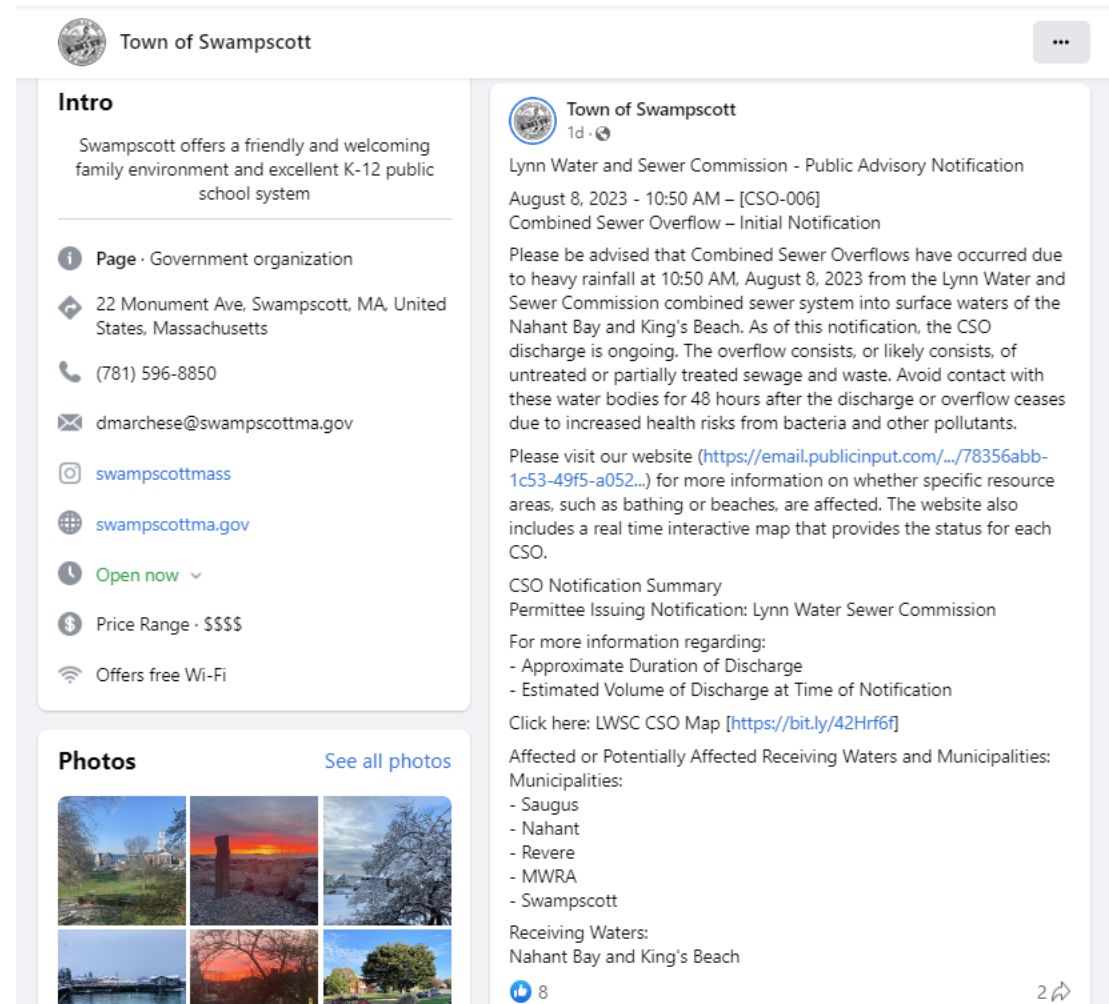
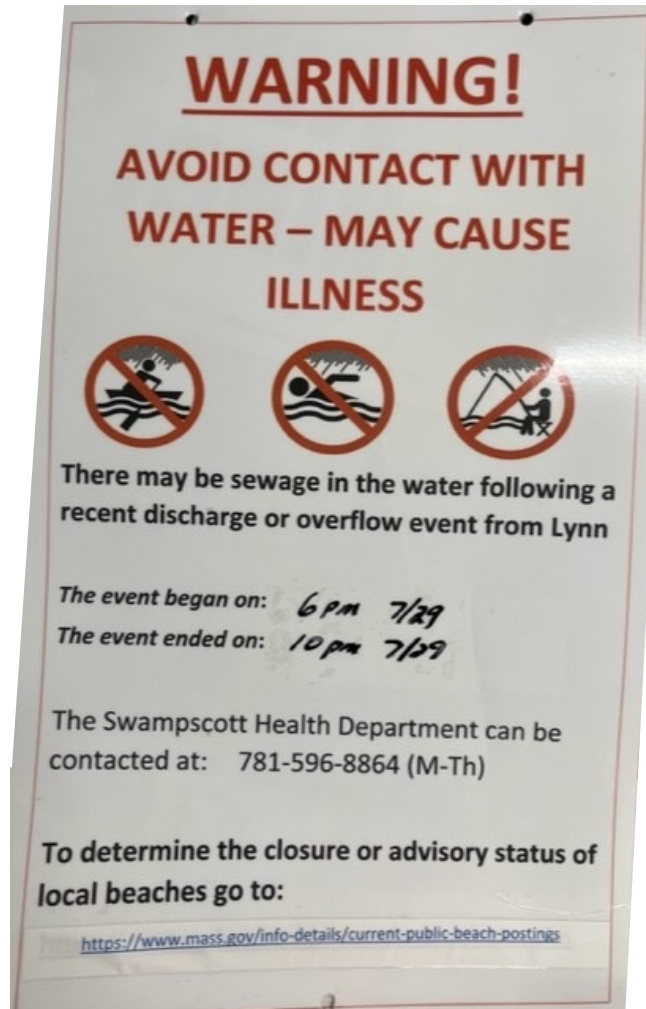


Image taken from: <https://www.facebook.com/SwampscottMA01907/>

# Public Information and Education

## What are the risks associated with bacteria in beach water?

- Swimming in unsafe waters may result in illnesses with the following characteristics:
  - **Gastrointestinal symptoms** - nausea, vomiting, diarrhea, and abdominal pain
  - **Respiratory symptoms** - sore throat, cough, runny nose, and sneezing
  - **Dermatological symptoms** - skin rash and itching
  - **Eye and ear symptoms** - irritation, earache, itching
  - **Flu-like symptoms** - fever and chills
- Most of these symptoms are minor, but occasionally a more serious illness may occur.
- **Children, the elderly, and those with weakened immune systems are at greater risk for illness.**



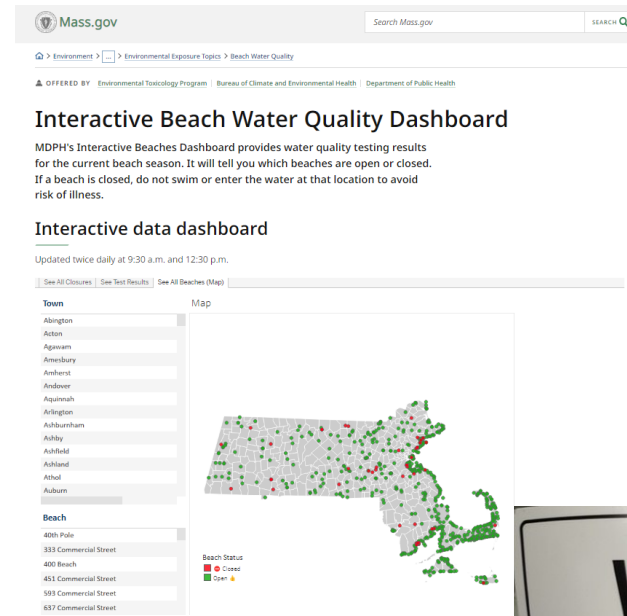
<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

# Public Information and Education (cont.)

## How do I know if it is safe to swim?

- Know before you go.
  - MDPH maintains a list of beach postings during the swimming season:
    - <https://www.mass.gov/info-details/current-public-beach-postings?auHash=9joLmMGmy0u1HpJGIrfizLbqzdX6HS3CDLdDntdLJUw>
    - <https://www.mass.gov/info-details/interactive-beach-water-quality-dashboard>
- Look for signs posted at the beach
  - Check for any warnings or beach closures indicating that the water is not safe because of bacteria, riptides, or other hazards.
    - Swampscott beaches will have SIGNS posted if/when a beach is CLOSED



Mass.gov

Search Mass.gov

Environment > Environmental Exposure Topics > Beach Water Quality

OFFERED BY: Bureau of Climate and Environmental Health | Department of Public Health

### Current public beach postings

The water quality at public beaches in Massachusetts is required to be monitored. When the water quality is unsafe, the beach is required to be "posted" with a sign that indicates swimming is unsafe and may cause illness.

Last updated: August 10, 2023

Show 10 entries

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Ashland	Hopkinton Reservoir - Upper Beach (DCR)	Freshwater	Bacterial Exceedance
Beverly	Brackenbury	Marine	Bacterial Exceedance
Boston	Constitution Beach (DCR)	Marine	Bacterial Exceedance
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<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

# Public Information and Education (cont.)

## How do I know if it is safe to swim?

- Swimming conditions can also vary throughout the day. Below are a few recommendations for deciding when and where to swim:
  - Check the weather
  - **Avoid swimming after heavy rain events - bacterial levels tend to rise due to runoff after heavy rains**
  - Watch for "signs" of water pollution such as discolored, fast flowing, and strong-smelling water
  - **Avoid swimming next to drainpipes, outlets, or other obvious sources of pollution**
  - Do not swim near trash or street litter floating in the water
  - Avoid swallowing the water - when waterborne pathogens are present, most swimmers are exposed when they swallow the water. You will be less likely to get sick if you wade or swim without putting your head under water.
  - Swim only in areas designated as "swim beaches". Do not swim in rivers or streams unless they are designated swim beaches.

<https://www.mass.gov/info-details/frequently-asked-questions-about-monitoring-water-quality-at-beaches>

<https://www.mass.gov/service-details/marine-and-freshwater-beaches>

# Swampscott Board of Health Public Beach Monitoring

August 16, 2023

Elizabeth Smith

[smith.liz@gmail.com](mailto:smith.liz@gmail.com)



# Public Beach Monitoring - Overview

- Mass General Law Citation - BOH beach authority
- Code of Massachusetts Regulations Citation - regulatory authority
- Swampscott Beaches
- King's Beach and Stacey Brook
- Recommendations
- Wrap Up and Questions

# Department of Public Health & Beaches

## [Chapter 111 Section 5s of Massachusetts General Law](#)

- Covers public bathing waters
- The Department determines minimum sanitation standards for public safety
- Local BOH responsible for testing to Department specifications
- Local BOH may set stricter standards than the Department
- Local BOH responsible for posting signs per Department regulations

# DPH Beach Oversight - MGL Ch.111 Sect. 5S

DPH determines which beaches to test based on:

- Previous test results
- Number of annual bathers
- Proximity to stormwater, sewage, and commercial discharges

# MGL Citation - BOH Beach Authority

(e) The department shall require the posting of conspicuous warning signs to **notify the public** whenever there is a **threat to human health** or safety in bathing waters. **Signs shall be posted** at locations on the beach that are **visible** to the public in order to inform the public of the nature of the problem and the possibility of a threat to human health and safety. **Signs shall be posted immediately after significant rainstorms** at bathing beach locations where there has been a **chronic history of violations** of the department's minimum sanitation standards for bathing beaches after such **rainstorms**. When an officer or agent of a local board of health discovers a violation of such minimum sanitation standards, the officer or agent shall notify the department immediately, and in no event not later than 24 hours after such discovery. The local board of health shall also post signs immediately, and in no event not later than 24 hours after such a discovery.

# CMR Citation - BOH Regulatory Authority

## 105 CMR 445.000: MINIMUM STANDARDS FOR BATHING BEACHES

*No operator shall allow bathing or swimming in bathing water whenever in the opinion of the Board of Health or the Department the bathing water is or may be hazardous or unsafe for bathing or swimming.*



# Bathing Beach Test Standards

- Water Quality
  - Physical
  - Bacteriological
  - Contaminants - oil, hazardous materials, heavy metals
- Collection Location
  - Greatest bather load
  - Where contamination may occur, such as streams, sewer outfall pipes, or other location
- Frequency
  - At least weekly during the season, 5 days before opening, and before reopening after a closure

# Minimum Standards - Signs

Permanent sign at each parking lot and/or each beach entrance

- Dates of operation
- Name/telephone number for the beach operator
- Permit number
- Note that the beach is not monitored for bacteria outside of the specified date range

**When required** warning sign at parking lot and/or each beach entrance

- WARNING! NO SWIMMING. SWIMMING MAY CAUSE ILLNESS
- A graphic depiction of a swimmer in a red circle with a diagonal hatch mark
- Date of the posting
- Name and telephone number of the Board of Health

# Swampscott Beaches

- Preston Beach
- Phillips Beach
- Eisman's/Whales Beach
- Fisherman's Beach
- King's Beach

Each has its own history, features, access.

Different users based on the season, time of day, tides and weather.

# King's Beach

- Over 2000 feet along Humphrey Street from the Lynn line
- Three access points — one double ramp and two stairways
- Sand beach with two outfalls from Stacey's Brook at Lynn border
- Used year round eight to sixteen hours a day
- Bathers, waders, surfers, kayakers, wind surfers
- Pet owners, walkers, shell and other collectors

# King's Beach and Stacey Brook Unhealthy Connection

- Late 1800's Abutters to Stacey Brook unhappy with sewage, trash & flooding
- 1902-03 Swampscott builds clay pipe sewer system to Stacey Brook
- 1920s Swampscott & Lynn build first culvert to enclose Stacey Brook



# King's Beach and Stacey Brook Unhealthy Connection

- Contaminated flow from Swampscott and Lynn pollutes King's Beach
- Lynn: combined sewer system and illicit connections allow sewage to infiltrate Stacey Brook
- Swampscott: aging clay pipes and stormwater underdrain allow infiltration and inflow of sewage to Stacey Brook
- Stacey Brook collects storm water & sewage which flows to King's Beach
- Heavy rain events exacerbate the flow of contaminated stormwater

# State and Federal Oversight - Stacey Brook/King's Beach

- 1976 First EPA Consent Decree with Lynn
- 2007/2008 DEP Administrative Consent Order with Penalty for Swampscott
- 2015 Swampscott signs EPA Consent Decree with Fine

Violations of Groundwater Discharge Permit, known as MS4.

# 2015 EPA Swampscott Consent Decree

## Major Elements

- All stormwater drains to surface waters in Swampscott (beaches and ponds)
- All Swampscott beaches (not just King's Beach)
- End contaminated stormwater flow in violation of Clean Water Act
- Identify/eliminate unauthorized discharges of non-stormwater including sewage
- Correct infrastructure to prevent non-stormwater from entering the MS4 drains
- Through town regulations prohibit non-stormwater discharges into MS4 drains

# Federal Oversight - City of Lynn

Lynn Water & Sewer Commission violations of the U.S. Clean Water Act

- 1976 First EPA Consent Decree
- 1987 Modified Consent Decree
- 2001 Second Modified Consent Decree
- 2017 Third Modified Consent Decree - currently in force

# How is King's Beach-Lynn Tested for Safe Water Use?

- Lynn/DCR tests four locations every day:
  - Stacey Brook Outfall
  - Eastern Ave.
  - Peirce Rd.
  - Kimball Rd.
- The Stacey Brook Outfall tests high/unsafe virtually every day
- If one one of three locations tests high, the entire Lynn/DCR Section is closed
- **Unswimmable 90% of days since Memorial Day weekend**



# King's Beach - Swampscott/Lynn Comparison

## Swampscott

- Swampscott tests once a week
- Testing started June 14
- 1 testing location
- Outfall not tested
- Outfall not closed unless beach is
- Beach closed July 6
- Unswimmable 63% of days
- Temporary signs w/ date of posting
- Red banners
- No permanent CSO warning signs

## Lynn/DCR

- Lynn/DCR tests daily
- Testing started Memorial Day
- 4 testing locations (includes Stacey Brook)
- Entire section closed if 1 location fails
- Outfall always closed to swimming
- Beach closed June 25
- Unswimmable 90% of days
- Permanent signs
- Temporary signs dates inconsistent
- Red flags on posts
- CSO warning signs at 2 entrances
- CSO warning sign at Kimball St. seawall

# King's Beach - One Beach; Two Standards

- Confusing how one section can be swim-safe and other is not
- English-only signs ineffective; nearby Environmental Justice population
- Highly contaminated CSO/outfall area is never safe but not posted as unsafe
- Inconsistent sign types and locations
- Inconsistent dates on signs
- Variations in testing frequency and location standards
- Leads to mistrust of the entire system

# What about the Stacey's Brook Outfall?



# What about the Stacey's Brook Outfall?



# What about the Stacey's Brook Outfall?

- Outfall mouth shifts by hundreds of yard north and south
- Outfall volume increases and decreases with weather and seasons
- It is a very attractive area to young children and non-swimmers.
- The most polluted section of King's Beach per DPH test results.

# What about the Stacey's Brook Outfall?

- DPH requires testing of outfalls and other potentially contaminated locations
- But SB is not tested by Swampscott because Lynn/DCR collects samples
- And Swampscott does not use Lynn/DCR data to measure beach safety
- Should Swampscott expand how it evaluates King's Beach safety?
- Are there sufficient signs to warn of this bacteria danger at the outfall?



# Combined Sewer Overflows - 1

- Combined sewer systems collect rainwater and sewage in the same pipe
- Combined sewer systems are quite common in older cities such as Lynn
- Lynn has separated pipes in some areas, including Stacey Brook catchment
- They usually flow to a wastewater treatment plant
- Combined Sewer Overflows (CSOs) refer to the discharge & release location
- Swampscott does not have combined sewers

# Combined Sewer Overflows - 2

- Heavy precipitation causes the volume in the combined sewer to exceed capacity
- The sewer treatment plant cannot process the flow
- CSOs are designed to discharge excess wastewater and storm water
- CSOs discharge mainly to rivers and ocean harbors
- Without overflows, sewage would back up into homes, businesses, and streets

# Combined Sewer Overflows and King's Beach

- Stacey's Brook is a Lynn Water & Sewer Commission CSO
- It is designated as CSO-006/006a

# Combined Sewer Overflows Contain Contaminants

- Untreated and partially treated human and industrial waste
- Toxic materials
- Business and residential debris from storm runoff

# Combined Sewer Overflows (CSO)

## Lynn Water & Sewer Commission - Five CSO Permits

- **CSO-003** - Summer Street Overflow - Releases to Saugus River
- **CSO-004** - Market St. Overflow - Releases to Lynn Harbor at Heritage State Park
- **CSO-005** - Broad St. Overflow - Releases to Lynn Harbor at Heritage State Park
- **CSO-006/006a** - Sanderson Avenue & Groveland Street Overflows
- Both release to Stacey Brook to King's Beach at the Lynn/Swampscott border

# Lynn Water & Sewer CSO Map

- CSO-005 is hidden by CSO-004. They both release into Lynn Harbor.
- CSO-006 & 006a show as one location as they both drain into Stacey Brook.

Click Link Below

[ArcGIS Enterprise - Lynn, MA CSO](#)



# Stacey Brook CSOs

## CSO-006 Summer 2023

- July 21                      250,000 gallons                      45 minutes
- July 29                      1,100,000 gallons                      2 hrs 15 minutes
- August 8                      200,000 gallons                      45 minutes

# CSO Public Notice Requirements

## Act Promoting Public Awareness of Sewage in Public Waters Acts of 2020 Chapter 322

- Signed by Governor Baker in January 2021
- Applies to CSOs and certain Sanitary Sewer Overflows (SSOs)
  - CSO is release of a permitted Combined Sewer Overflow
  - SSO is release of sewage from a sanitary sewer

# CSO Notification Requirements

- [Massachusetts 314 CMR 16.00](#) sets notification requirements and procedures
- Applies to **CSO permittees** and **nearby Boards of Health**
- Swampscott is on Lynn Water & Sewer's notification list

# What CSOs require notice by [314 CMR 16.09](#)?

Upon receipt of a public advisory BOH shall issue a public health warning for:

- CSOs longer than two hours;
- CSOs if a public health warning is necessary to protect public health
- SSOs that requires notification

# CSO/SSO Notice Required by [314 CMR 16.09](#)

## Minimum Type and Duration of Notification

- Existing emergency notification systems, including if available, reverse 911.
- BOH shall determine if multiple public health warnings are required.

# CSO/SSO Notice Required by [314 CMR 16.09](#)

## Notification Content

- Location, date, and time
- Recommendation to avoid contact with affected water bodies for 48 hours
- Information about the status of shellfish growing areas and beaches
- Access to non-English translations



# CSO/SSO Notice Required by [314 CMR 16.09](#)

## Sign Requirements

- Conspicuous locations at public access points
- Temporary or permanent signs
- Required:
  - "WARNING! AVOID CONTACT WITH WATER - MAY CAUSE ILLNESS"
  - Infographic showing no fishing, boating, or swimming
  - Non-English translation
  - Board of health contact information

# Board of Health CSO Resources - MA DEP

- [Presentation on Board of Health Responsibilities](#)
- [Video of March 24, 2022 Meeting about BOH Responsibilities](#)
- [Video of April 7, 2022 Meeting about BOH Responsibilities](#)

# Swampscott Announced CSO Protocol

## Jeff Vaughan - 8/2/23 BOS Meeting

- Advisory by email, reverse phone call and on the Town Facebook page
- Compliant temporary signs will be placed at beach entrances
- Large red warning flags will be hung at access points (if not already up)
- Caution tape will be placed on stairs and ramp access
- Signs will be removed after 48 hours; Town website banner will note end of CSO

# Swampscott CSO Protocol - Recommendations

- Install required permanent CSO signs at beach entrances and outfall seawall
- Test outfall and beach water for 7 days after a CSO
- Test sand at CSO for possible bacteria or toxins
- Remove caution tape after 48 hours or after safe testing results

# Massachusetts DPH Beach Water Quality Resource

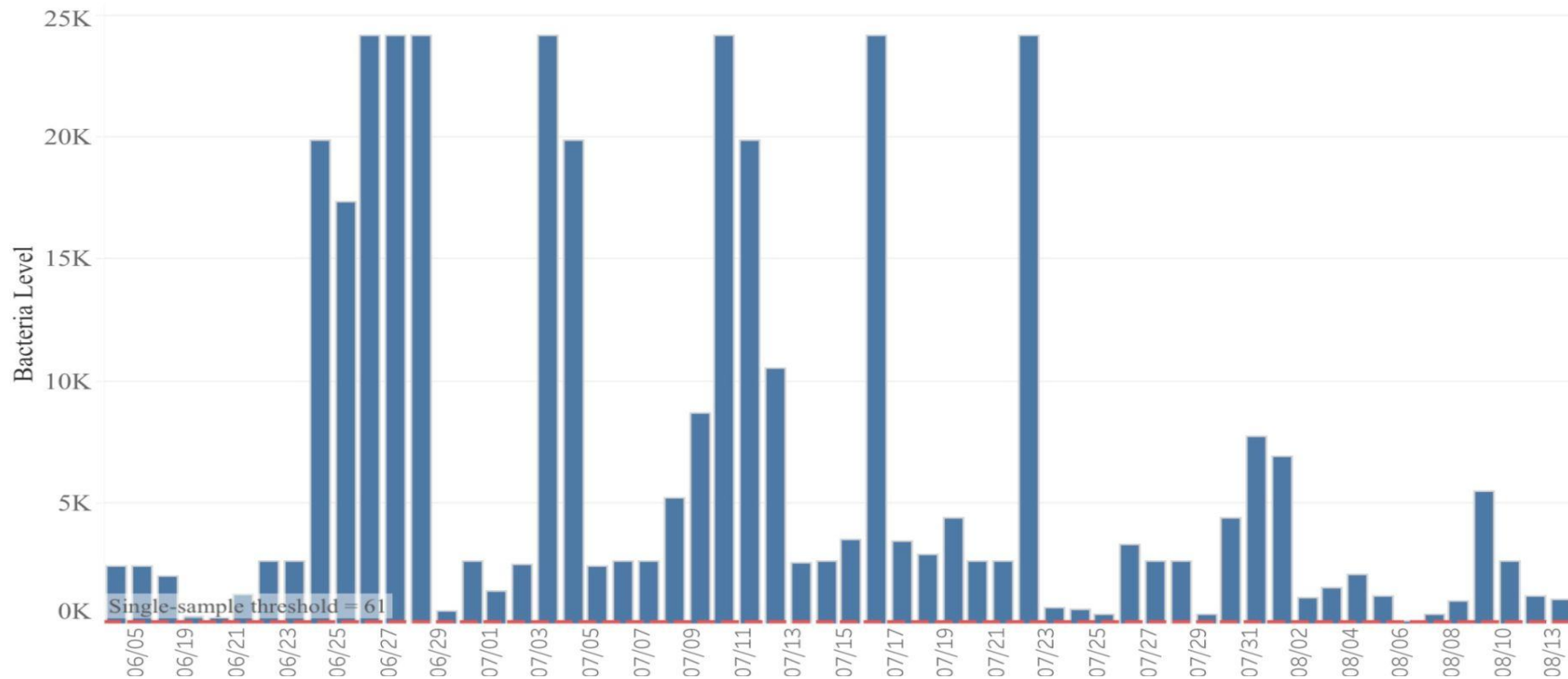
Interactive Beach Water Quality Dashboard

<https://www.mass.gov/info-details/interactive-beach-water-quality-dashboard>

# Stacey Brook Test Data - August 16, 2023

mass.gov

## 2023 Single-Sample Bacterial Results for (CFU/100 ml Enterococci)



# Bottom Line - BOH Authority

## 105 CMR 445.000: MINIMUM STANDARDS FOR BATHING BEACHES

*No operator shall allow bathing or swimming in bathing water whenever in the opinion of the Board of Health or the Department the bathing water is or may be hazardous or unsafe for bathing or swimming.*



## Recommendations - King's Beach

- Swampscott follows Lynn/DCR status unless Lynn/DCR is open and Swampscott has tested high for bacteria (Swampscott will be closed)
- Permanent signs warning of CSO at Stacey Brook outfall & KB entrances
- Outfall area is always closed to swimming due to high bacteria (with signs)
- Upon CSO notice Swampscott will follow previously-described protocol
- All signs contain QR code/website URL to beach test data and translation

# Recommendations - Other Swampscott Beaches

- Permanent beach testing signs at all entrances per DPH regulations
- Test all beaches for 2 days after heavy rain events to establish pattern
- Temporary signs after heavy rain warning of potential high bacteria
- Temporary signs also state not to swim at beach or play in storm drain outfall
- Signs should be in multiple languages
- Signs include QR code, website link to beach test data & language translation

# Public Beach Monitoring - Overview

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# DCR CSO and No Swimming Signs

