

**TOWN OF HAMPTON
NEW HAMPSHIRE**



MEMORANDUM

Date: July 21, 2023
To: Board of Selectmen
James Sullivan, Town Manager
From: Jennifer Hale, P.E. - Director DPW *JH*
RE: Green Street/Gentian Road High Bacteria Update

The Department of Public Works has been investigating the potential cause(s) that have produced high bacteria levels (Enterococci) to be detected in the flood waters that regularly occur on Gentian Road and Green Street. Because of the high number of potential sources, determining the exact source is difficult. In our attempt to identify the source(s) we have visually inspected the sewer manholes and video inspected the sewer lines to look for potential sources (breaks, leaks, etc.) of which none were found.

We have received multiple questions regarding the High Bacteria Notice, requests to provide a safe walking area such that those walking around the neighborhood or to and from their homes do not have to have contact with the water and an increased plea to fix the flooding problem for the neighborhood now. Below are our responses to many of these questions and information on where the Department stands with addressing these concerns.

Who asked for the water samples to be taken and why?

The water sampling was completed by the New Hampshire Department of Environmental Services (NHDES) at the request of one of the residents in this area due to concerns of the quality of the standing and more frequent flood waters. There were four (4) location sites and samples were taken on seven (7) different occasions between September 13, 2022, and July 6, 2023. The Town was made aware of the results July 14, 2023. Information related to the sampling locations and the results can be found on the "2022-2023 Hampton High Tide Flood Sampling- Green Street/Gentian Avenue" spreadsheet provided by NHDES and posted on the Town's Website at <https://www.hamptonnh.gov/DocumentCenter/View/6531/Green-and-Gentian-Testing-Results>

Why was a Notice posted?

According to the NHDES, the water quality standard set for Secondary Contact Recreation (per NHDES 2022 CALM) was exceeded. This made the flood waters not suitable for walking, wading, or any other minor contact. The Town made the decision, in the interest of Public Safety, to post the notice. It is important to note that all floodwater and standing water can be dangerous. Additional safety precautions can be found at www.cdc.gov or by clicking this link: [Flood Waters or Standing Waters | Water, Sanitation, & Hygiene-related Emergencies & and Outbreaks | Healthy Water | CDC](#)

What causes the high bacteria?

The bacteria in surface waters and flood waters could come from several sources including but not limited to domestic and wild animal waste (duck, geese, deer, dog, etc.), sewer leakage and stormwater runoff. According to studies conducted by the US Environmental Protection Agency, stormwater runoff from urban areas is a leading source of pollutants, including bacteria, that cause water quality impairment in coastal waterways. For more information related to Bacteria in Surface Water, NHDES has provided a fact sheet which can be found on their website at www.des.nh.gov or by clicking this link: [Bacteria in Surface Waters \(nh.gov\)](#).

In addition, there are often water quality concerns and risks after heavy rainfalls. NHDES and the Department of Health & Human Services issued a press release last Friday (07/14/23) with a warning that “The above average rainfall New Hampshire has experienced this month is causing our lakes and rivers to swell, which creates hazards for our residents and visitors. Naturally, once the rain stops and blue skies return, people will want to recreate in the water, but be aware that the rains bring certain risks that remain even on “blue sky days,” such as elevated levels of bacteria, including cyanobacteria, large amounts of debris, and swift currents.” The full press release can be found on the NHDES Website above or by clicking this link [Be Aware of Water Quality Challenges and Risks After Heavy Rainfall | NH Department of Environmental Services](#).

How long does the bacteria last?

It is unknown how long this type of bacteria will last. Different environments such as wet or dry and/or hot or cold can impact the time period. UV waves (sunlight) can kill the bacteria and therefore once the conditions dry, high levels tend to decrease.

What do you do if you do come in contact with the water?

Per the CDC guidelines, if you come into contact with the flood waters, wash any exposed skin, clothes, and shoes with soap and water or alcohol-based wipes/sanitizer. If you must walk through the water, wear rubber boots.

Who will monitor the water quality in the future?

NHDES will continue to collect samples and provide both the Resident and the Town with the results. Based on the potential for results to remain high due to the fact that urban areas are a leading source of pollutants, including bacteria, the Department intends to keep this area posted with the Public Notice. Please take the necessary precautions for protection when there is standing water.

Can a raised boardwalk be created at the edge of the street for pedestrians so that they do not need to walk through the waters?

In an effort to provide a pedestrian path in the areas of the flooded roadways, the DPW will be working on the shoulders in the next week to create shoulder swales to drain toward the existing catch basin system. Currently the water ponds within the middle of the road and reaches the entire width of the roadway. The center of the road is lower than the catch basins and even when the drainage system has capacity the water simply cannot get to it and out to the Pond. By creating the swales, the water that can drain to the system will reach the catch basin and provide some relief of the flooding with the intent to decrease the limits of flooded area and provide an area to walk that is not flooded.

Can the “flapper valve” on the existing outfall of the current drainage system be replaced?

Replacing the flapper valve on the existing outfall will not fix the flooding problems. The existing system has deteriorated and when the elevation of the water of Meadow Pond is higher than the outlet, the system has nowhere to outlet. It “stays” within the pipes, catch basins and the roadway.

Does the Town have a pumper truck – and can the water be pumped out?

The Town does own a vacuum truck. However, it is not feasible for us to routinely collect flooded waters. We will continue to monitor the situation and will determine if the shoulder work will help to alleviate some of the flooding that is occurring.

Were there recommendations in the Flood Studies for this area to provide flooding relief?

The recommendations within the flood studies for this area included: Installing a berm behind Gentian Road along back edge of lawns, improve drainage on Green Street, Gentian Road, Meadow Pond Road and Kings Highway, Ditch/Marsh remediation, elevate flood prone houses and Voluntary and assisted retreat/relocation, removal of development and fill, floodplain restoration. [SLR, Expanded List of Flood Mitigation Alternatives for the Meadow Pond Area, 3/23/2021 Page 153 of 191 https://www.hamptonnh.gov/DocumentCenter/View/4137/Final-Report-Meadow-Pond_SLR] While the Town has secured funding for the Kings Highway Improvement project which will improve drainage on Green Street, Gentian Road, Meadow Pond Road and portions of Kings Highway, it is important to note that Town funding is not able to be spent for work on private properties and we are working for all of Hampton to become more resilient.

What is the status of the Kings Highway Improvements Project?

The Town, Consultant and NHDES are in the final process of completing the Grant Documents, including review of the plans, scope of work moving forward and budget which is intended on being presented to the Governor and Council (G&C) for approval in September. Once approved, the Town’s consultant will complete the final design and bid documents that will go out for bid. We expect these documents to be out for bid between January and February with construction beginning in April 2024 with an anticipated completion in November 2024. We are unable to expedite this process as the time is needed for the final design. There will be a public meeting to discuss the final design details this fall and also the option of having a small meeting on site.

As part of this project the drainage will be replaced, a new pumping system will be developed and the roadways repaved to work with the new drainage. The current design plans are posted on the Town’s website within the DPW’s webpage for project information under Kings Highway - Meadow Pond Area Drainage Improvements or by clicking this link: [Kings Highway Meadow Pond Area Drainage Improvements Folder](#)

This correspondence along with related information can be found on the Town’s website at www.hamptonnh.gov. Information will be posted in the Alerts section which will provide links to the Public Works page – Project Information – Kings Highway Meadow Pond Area Drainage Improvements – Bacteria Advisory Folder where documents will be stored.

This link will also bring you to that folder: [Bacteria Advisory Folder](#)