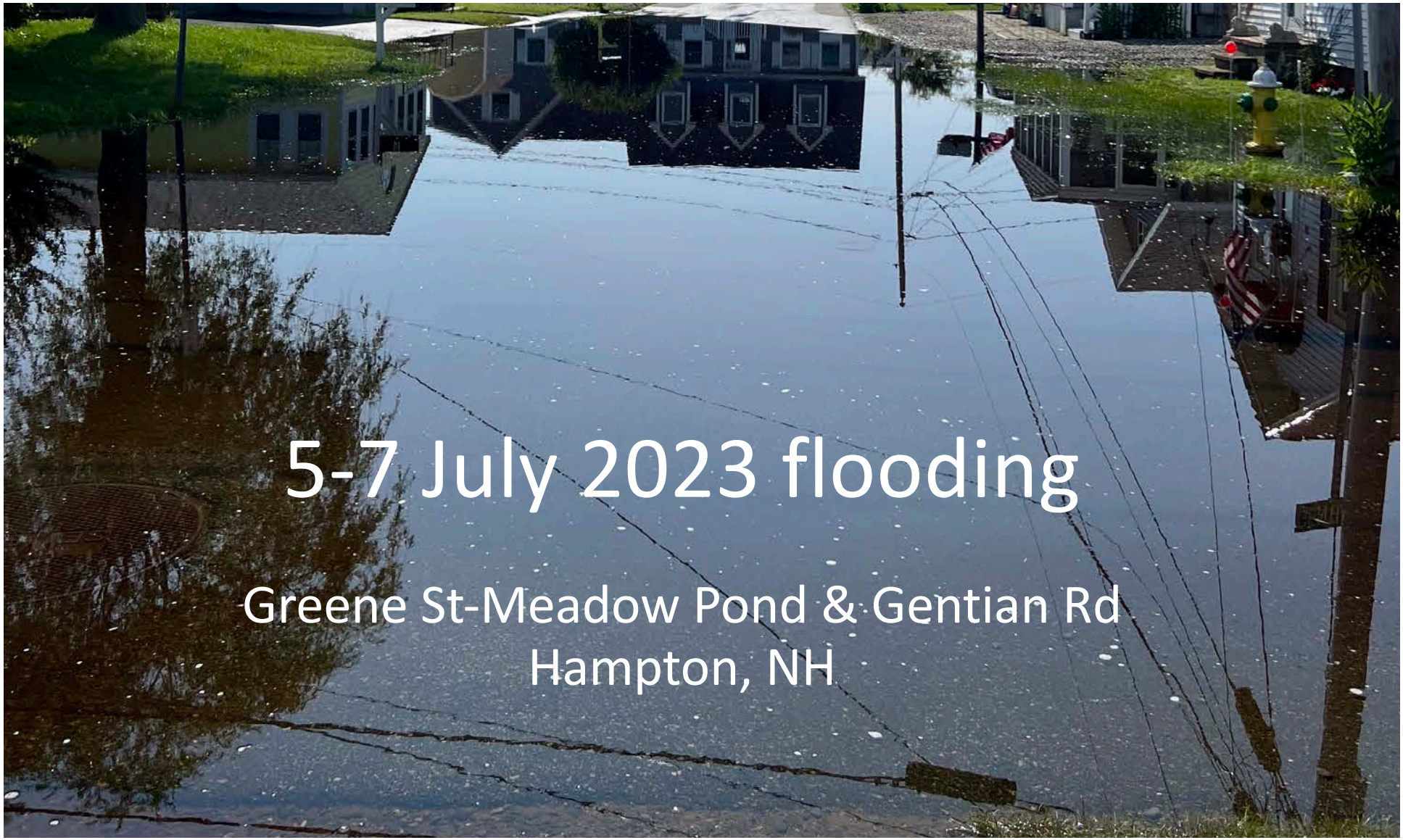
HAMPTON COASTAL HAZARDS ADAPTATION TEAM (CHAT)

July 2023 UPDATES & ANNOUCEMENTS

A summary of updates and announcements relevant to flooding, coastal hazards, and coastal planning intended to be shared with Hampton boards, commissions, committees, departments, and the public. Visit http://shea4nh.org/coastal-hazards-adaptation-team-chat/ for information about CHAT.

- Mr. Jason Bachand – Hampton Town Planner
    - The Master Plan Implementation committee held a kick-of meeting on June 28 and will meet again on July 26, 2023. The committee is working on prioritizing the "Vibrant" and "Connected" action items from the master plan. They anticipate beginning to evaluate "Resilient" action items in Sept/Oct 2023
    - The Flood Smart Seacoast Floodplain Ordinance Project team discussed various options for higher floodplain standards at the last meeting. Looking to have a public information session at the second Planning Board Meeting in September.
- Mr. Tom Bassett - Resident Representative
    - Lots of flooding in June around Father's Day and July (see attached pdf).
    - Recent, sunny-day flooding on July 5-7 with no significant rainfall. Hampton Tide Gauge measured high tides at 11' and above, which was 1' higher than the NOAA predicted high tide heights. The high tides filled Meadow Pond and flowed into storm drains and onto the roadways and there was some backyard flooding too.
    - There is growing concern about people walking and playing in flood waters. NHDES has been testing water quality at 4 sites (3 roadway intersections and 1 in Meadow Pond). Results show fecal levels in the roadway samples well above the safe level for human contact. High levels have been observed since May. The Flood Ready Neighborhood Team is crafting language and signage to alert neighbors.
    - Mr. Bassett sent a memo to DPW that summarized the water quality results, asked what the Town can do to help address the issue, and proposed several actions such as inspecting and repairing infrastructure and creating a boardwalk for pedestrians.
    - The Flood Ready Neighborhood is hosting a meeting at the corner of Gentian and Greene St in conjunction with the NHDES water sampling event to talk with experts about flooding and contamination concerns and share information on August 3rd, from 7 to 9 am.
- Ms. Jennifer Hale - Hampton DPW Director
    - Working on a response/action plan due to the high fecal level and flood levels in the Greene/Gentian neighborhoods. Still in the research phase and planning with NHDES. NHDES has issued a state-wide warning about bacteria level. CDC has precautions for floodwaters. Not all floodwaters are or can be tested – safer to assume they are a health hazard.
- Ms. Barbara Kravitz – Hampton Beach Area Commission (via email)
    - The HBAC Coastal Resilience and Environment Update to the master plan was accepted by the Commissioners on June 29th will be reviewed by the Planning Board for approval on August 16th. It will be accessible on the HBAC website soon.
    - The Resource Matrix in Appendix A identifies interest groups, finding and relevant resources, projects, and datasets. It was accepted as a stand-alone document that will be updated regularly.
- Mr. Jay Diener – Seabrook-Hampton Estuary Alliance update
    - Rockingham Planning Commission, with support from SHEA on behalf of Seabrook, received an NHDES Coastal Resilience Grant to evaluate the current condition of the 19 public walkways that go from the streets to the beach. Look for opportunities to address public safety concerns and to improve and support the dune structure.

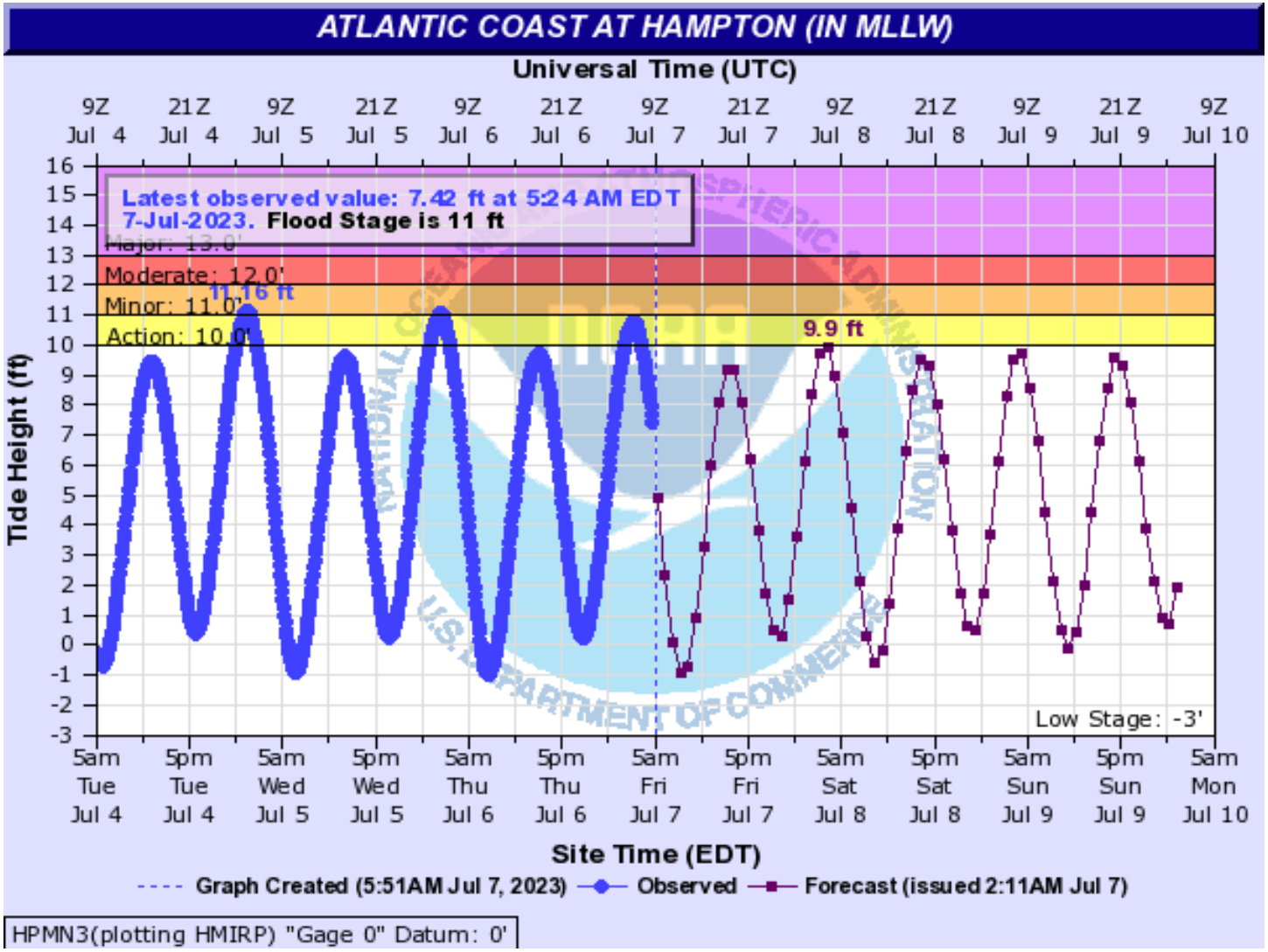


5-7 July 2023 flooding

Greene St-Meadow Pond & Gentian Rd
Hampton, NH

Hampton Tide Gauge

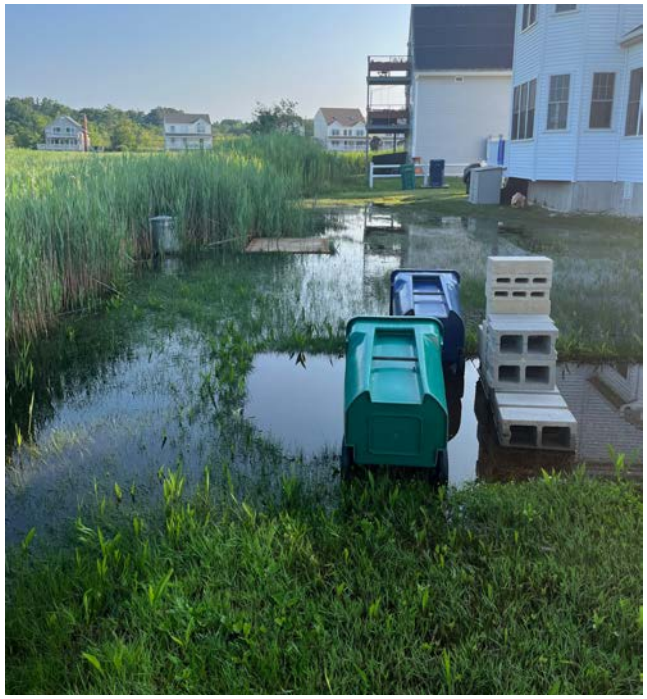
July 4-7, 2023



Predicted and recorded high tide levels & rainfall

Date	Predicted High Tide (MLLW)	Recorded High Tide (MLLW)	Rainfall (inches)
July 4	10.2 ft	11.1 ft	0.134”
July 5	10.4 ft	11+ ft	0.001”
July 6	10.3 ft	11 ft	--

July 5, 2023
sunny day flood



7 July 2023 sunny day flood

Walking & playing in flood water (5 July 2023)

Flood water quality sampling

Site	Date	MPN/100 ml
01-HHT	9/13/22	**884**
02-HHT	9/13/22	**1565**
03-HHT	9/13/22	**1396**
Meadow Pond	12/1/22	213
01-HHT	1/24/23	not read - lab error
02-HHT	1/24/23	not read - lab error
03-HHT	1/24/23	not read - lab error
01-HHT	3/23/23	**<10**
02-HHT	3/23/23	**41**
03-HHT	3/23/23	not sampled
01-HHT	5/9/23	**581**
02-HHT	5/9/23	**1172**
03-HHT	5/9/23	457
01-HHT	6/7/23	**1607**
02-HHT	6/7/23	**1597**
03-HHT	6/7/23	**17,329**
Meadow Pond	6/7/23	109
01-HHT	7/6/23	**2064**
02-HHT	7/6/23	**2755**
03-HHT	7/6/23	**2282**

Letter to neighborhood & notification to DPW with assistance from FRN project

ENVIRONMENTAL
Fact Sheet

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

WD-BB-14 2019

Bacteria in Surface Waters

What are Coliform Bacteria?

Coliform bacteria are a large assemblage of various species of bacteria that are linked together because of the ease of culturing as a single group. They include both fecal and non-fecal coliform bacterial sources. Fecal coliforms are bacteria that are found naturally in the intestines of warm-blooded animals. Fecal coliforms are sometimes pathogenic, as many are disease-causing species, though non-pathogenic species may be present too. The presence of fecal coliform bacteria may indicate contamination of the waterbody by human and/or animal fecal material.

What is *Escherichia coli*?

Escherichia coli, commonly called *E. coli*, is one of the most common species of fecal coliform bacteria. It is a normal component of the large intestines in humans and other warm-blooded animals, and it's found in human sewage in high numbers. *E. coli* is used as an indicator organism for fecal contamination because it is easily cultured. If sewage is present in water, pathogenic or disease-causing organisms may also be present.

What are Enterococci?

Enterococci are another type of fecal bacteria which are a subgroup of the fecal streptococcus group. Enterococci have the ability to survive in saltwater and therefore are the chosen indicator organism for coastal beaches and shellfish harvesting areas.

Why do we measure bacteria?

Typhoid and cholera epidemics in the mid-19th century led to the discovery that certain gastro-intestinal diseases of humans are transmitted via water. The disease-causing organisms leave the infected individual via the feces, which can become discharged into surface waters. These water-borne diseases include typhoid, cholera, enteric fevers, and bacterial dysentery. It is not feasible, however, to test waters for each possible type of disease-causing bacterium. Fecal indicator bacteria (e.g., *E. coli* and Enterococci) are used to indicate, on a statistical basis, the likelihood of contracting a disease by consuming or recreating in such waters.

Resident proposed action plan to DPW

(1) inspect the sewer infrastructure in the area for possible leaks

(2) create a raised boardwalk at the edge of the street for pedestrians

(3) replace the dysfunctional flapper valve at the outfall of the current storm drain system on Gentian Rd. to impede reverse flowing onto Gentian Rd

(4) accelerate the schedule for the force main storm drain system

Source of contamination?

Multiple hazards to coastal flooding