

# Coastal Flooding Citizen Science Project

BELFAST, MAINE



Photo courtesy of Belfast Police Department

The map on the back shows the six sites on the Belfast shoreline that have been chosen as long-term monitoring sites to track flooding impacts. Some sites have important infrastructure (a boat ramp, a building, a road), others are more natural (Stevenson Rangeway). Each is vulnerable to flooding from climate-driven sea level rise and coastal storms.

The City of Belfast is actively soliciting observations from these sites, both during normal days as baseline data, and during and after flooding events. Your observations will be combined with data from a weather station and tide gauge on the City Pier, and will be used for city planning, and by the National Weather Service to verify the watches and warnings they issue.

**We invite you to participate!**

## Contribute your observations

1. Visit the project website address on right.
2. Click on the tab for "Prep and Collect" and follow the instructions.
3. You will need to create an account in order to submit observations.

We hope you will contribute your pictures and your thoughts. After contributing and seeing how the project works, if you want to get "high water alerts," send a message to us at [belfast.cit.sci@gmail.com](mailto:belfast.cit.sci@gmail.com).

## Project background

Among the impacts of climate change are sea level rise and an increase in the frequency and intensity of storms. The gradual rise in sea levels that we have experienced in the Gulf of Maine over the past century is accelerating. Coastal communities like ours have been and can expect to experience higher high tides and more frequent and higher storm surges. Scientists have developed models to predict what global carbon emission projections mean for regional sea levels over the next century, but the unique characteristics of a coastline can influence astronomical high tides and storm surge.

Gathering local observations through time will reveal patterns associated with local flooding and the impact these floods have on our community's ecosystems and infrastructure. These observations – and citizens' reactions to them – will be used to inform city planning.

To visit the project website, you can:

Take a picture of this QR code with your cell phone for a quick link:



Or type in this address in your browser:  
[investigate.gmri.org/  
project/coastal\\_flooding/](https://investigate.gmri.org/project/coastal_flooding/)

This project is a collaboration between the City of Belfast Climate Crisis Committee and the Gulf of Maine Research Institute, with participation by the Belfast Free Library and local teachers, scientists and other citizens.

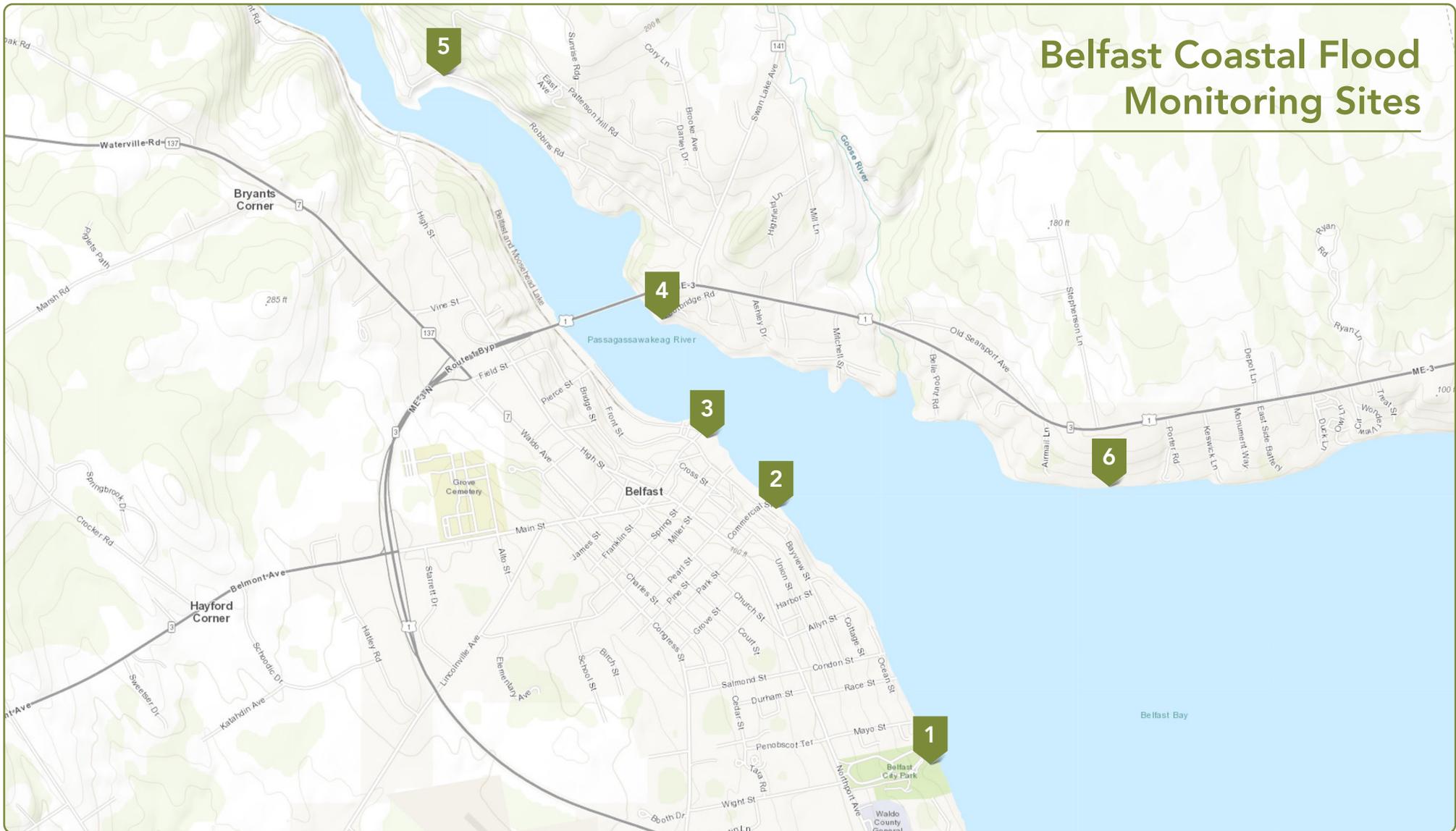


**Ecosystem  
Investigation  
Network**



For more information on sea level rise, please visit: [gmri.org/stories/gulf-maine-explained-sea-level-rise/](https://gmri.org/stories/gulf-maine-explained-sea-level-rise/)

# Belfast Coastal Flood Monitoring Sites



**1. Belfast City Park**

Stand at top of concrete stairs  
44.41546°N, -68.99131°W

**2. Belfast Boathouse**

Stand near sign on fence  
44.4255°N, 68.99991°W

**3. South side of Breakwater**

Stand between two trees near sidewalk  
44.42833°N, 69.00382°W

**4. East end of Armistice Bridge**

stand on walkway next to northern  
balustrade  
44.43299°N, -69.00675°W

**5. Robbins Road Culvert**

Stand by roadside, directly above culvert  
44.4427°N, -69.01919°W

**6. Stevenson Rangeway**

Park in west end of Wentworth Event  
Center parking lot and follow sign; stand  
at end of duckboards  
44.42609°N, -69.98138°W