



The interactive New York Sea Grant Lake Ontario Flood Risk Mapping Tool empowers local leaders' flood contingency planning

Lake Ontario Inundation Mapping Tool Empowers Waterfront Communities

After record-high water levels in 2017 and 2019, the late winter and early spring water levels in 2020 had Lake Ontario communities questioning whether another flood was on the horizon. Even with advances in weather forecasting, there are still uncertainties in water level forecasting, particularly because of spring precipitation. Visualization tools allow users to see various scenarios for contingency planning and making mitigation decisions.

In 2020, the Village of Sodus Point (Wayne County) used the Lake Ontario Inundation Mapping Tool developed by New York Sea Grant (NYSG) in partnership with Cornell University, to visualize parcel-level flood risk of individual properties in its community. That visualization of inundation scenarios derived from the NYSG mapping tool empowered the Village and its residents in preparedness planning. For example, they identified the location and triage of accessory structures and belongings during high water. Identifying areas prone to inundation informed community-level preparedness planning and marked areas that warranted in-depth analyses.



Lake Ontario waves along the breakwall to Sodus Point Lighthouse. Photo: Mary Austerman/NYSG

Flood mitigation decisions for properties in the Village were made in part based on the information the tool provided. The NYSG mapping tool was used sometimes at the homeowners' requests; other times, based on research done by the Village.

"This tool has been used by the village and many of the residents to determine what, if anything, needed to be done to secure their property from the ravages of high water. We have found the tool to be easy to use and it provides valuable information to inform resiliency projects."

— Dave McDowell, Mayor, Village of Sodus Point

Learn more at www.nyseagrant.org/waterlevel2017.

Project Partner:

- Village of Sodus Point

Note: The National Oceanic and Atmospheric Administration Community Climate Adaptation Initiative provided funding to develop the Lake Ontario Inundation Mapping Tool.

The Sea Grant Focus Area for this project is Resilient New York Communities and Economies.

New York Sea Grant is a joint program of Cornell University, the State University of New York, and NOAA.
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