New York’s Lake Ontario region saw unprecedented high water levels in 2017. New York Sea Grant (NYSG) responded to stakeholder requests for a standardized means of reporting the water level damages on waterfront properties by awarding special funding to Cornell University to develop and conduct an online survey with the goals of documenting the parcel-level impacts of the event on waterfront properties, providing municipalities with information to assist community-based planning to reduce flood risks; and verifying existing flood-risk modeling.

The survey was made available May 25 through August 31, 2017, via municipality email lists, newspaper, radio, television, and NYSG social media. Qualitative data was collected about parcel location, severity of inundation, flood insurance, severity of erosion, damage to shoreline protection, and overall impacts. Respondents also submitted photos of the waterline and property damage.

The survey results will be used to:
- document this unprecedented coastal flooding event
- report out for NY’s lake properties
- identify areas most vulnerable to future flooding
- assist in leveraging competitive funds to improve flood resiliency
- support a flood-risk model validation project (pending funding).

Cornell and NYSG provided survey materials to assist an online survey issued in November 2017 by Conservation Ontario on behalf of the Great Lakes-St. Lawrence River Adaptive Management Committee and open to Lake Ontario and St. Lawrence River shoreline property owners in Canada and New York.

**Partner:** Cornell University

**Highlights From 490 Validated Survey Responses**
- 97% report nearshore inundation, 68%: outbuilding inundation; over 60%: inundation of foundation and/or main structure 1st floor
- 82% report not having flood insurance
- 70% report some level of erosional damage to nearshore areas, 44%; to outbuildings, 25%: to main structure
- 49% report moderate to severe land loss to erosion
- 58%: moderate to severe damage to shoreline protection (i.e., vertical or sloping wall)
- 61%: overall impact of 7-10 (1: no impact, 10 severe)

**NYSG High Water Photos & Data Summary:**
http://www.nyseagrant.org/waterlevel2017

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**The Sea Grant Focus Area for this project is New York Resilient 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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