

## Resources

1. [Community Resilience Building](#) is a unique, “anywhere at any scale”, community-driven process, rich with information, experience, and dialogue, where participants identify top hazards, current strengths, challenges, and priority actions to improve community resilience for all hazards today, and in the future.
2. Engineering with Nature: <https://ewn.el.erdc.dren.mil/>
3. Erosion Management for New York’s Great Lakes Shorelines: <https://seagrant.sunysb.edu/glcoastal/pdfs/ErosionManagement.pdf>
4. [FEMA Flood Map Service Center](#) (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.
5. Great Lakes Ice Cover: <https://www.glerl.noaa.gov/data/ice/#currentConditions>
6. Great Lakes Portal: <https://www.weather.gov/greatlakes/>
7. Guidance for Consideration of Flood Risk in Smart Growth Public Infrastructure Assessment: [https://www.dec.ny.gov/docs/administration\\_pdf/crrasmartgrowth.pdf](https://www.dec.ny.gov/docs/administration_pdf/crrasmartgrowth.pdf)
8. [Lake Ontario Flood Forecast Mapper](#) is an online flood risk mapping tool based on monthly static water level forecasts. Inundation predictions are calculated using the NOAA (z-score) approach. This method propagates uncertainties inherent in the underlying data sources (e.g. elevation data, water level forecast, storm surge impacts, datum conversions) into the final inundation predictions.
9. [Lake Ontario Inundation WebMap](#) displays pre-determined lake levels (247.3’, 249’, 249.5’ and 250’) and helps users visualize the impacts of lake-level fluctuations on shorelines and coastal areas. The two highest water levels have not been experienced nor forecasted. They are provided as scenarios for community based planning discussions.
10. [Model Local Laws to Increase Resilience | Department of State \(ny.gov\)](#): Model local laws can help local governments be more resilient to sea-level rise, storm surge, and flooding. Cities, towns, and villages are invited to adapt model local laws to meet the resilience needs of the community with the assistance of their municipal attorneys.
11. Local Waterfront Revitalization Programs in the Coastal Area: Guidance Manual for Preparing Local Programs:  
<https://dos.ny.gov/system/files/documents/2020/02/lwrppreparationguidancemarch2019.pdf>
12. National Oceanic and Atmospheric Administration's (NOAA) Climate Normals:  
<https://www.climate.gov/news-features/understanding-climate/climate-change-and-1991-2020-us-climate-normals>
13. NOAA Coastal & Waterfront Smart Growth:  
<https://coastalsmartgrowth.noaa.gov/welcome.html>

14. [NOAA Digital Coast](#): Online repository of data, tools and training available for community leaders to address issues commonly associated with a changing climate and a growing population.
15. [NOAA Lake Level Viewer](#) displays variations in lake levels ranging from six feet above and below the long-term average, and helps users visualize the impacts of lake-level fluctuations on shorelines and coastal areas.
16. [New York Climate Change Science Clearinghouse \(NYCCSC\)](#) is a gateway for policymakers, local planners, and the public to identify and access documents, data, websites, tools, and maps relevant to climate change adaptation and mitigation across New York State. The goal of the NYCCSC is to support scientifically sound and cost-effective decision-making. The vision is a dynamic site where users can find information in multiple ways, including through interactive tools that use data from different sources.
17. [New York's Great Lakes Coastal Resilience Index \(CRI\)](#) is a self-assessment tool developed by New York Sea Grant. To complete the index, community leaders get together and use the tool to guide discussion about their community's resilience to coastal hazards. The Index provides a simple, inexpensive method for community leaders to perform a self-assessment of their community's resilience to coastal flooding and weather disasters, identifying weaknesses a community may want to address prior to the next hazard event and guiding community discussion. The Index is not intended for comparison between communities.

The Index uses information that is readily available and asks mainly "yes" or "no" questions. It consists of a 9-page exercise to investigate the vulnerabilities across six community sectors (critical facilities and infrastructure, transportation issues, community plans and agreements, mitigation measures, business plans, and social systems). The booklet also includes 24-pages of coastal flood mapping tutorials, and weather disaster narratives and charts to help frame the exercise. The Index can be completed in approximately three hours.

18. New York Sea Grant Virtual Site Visits:  
<https://www.seagrantsunysb.edu/glcoastalvirtuallsitevisit>
19. New York State Climate Smart Communities: Climate Smart Resiliency Planning (i.e., PE7 Action: Evaluate Policies for Climate Resilience):  
<https://climatesmart.ny.gov/actions-certification/actions/#open/action/87>
20. New York State Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act:  
[https://www.dec.ny.gov/docs/administration\\_pdf/crrafloodriskmgmtgdnc.pdf](https://www.dec.ny.gov/docs/administration_pdf/crrafloodriskmgmtgdnc.pdf)
21. New York State REDI: Building Resilience in Recovery:  
[https://www.dec.ny.gov/docs/water\\_pdf/redicoastalv11.pdf](https://www.dec.ny.gov/docs/water_pdf/redicoastalv11.pdf)
22. Using Natural Measures to Reduce the Risk of Flooding and Erosion:  
[https://www.dec.ny.gov/docs/administration\\_pdf/crranaturalmeasuresgndc.pdf](https://www.dec.ny.gov/docs/administration_pdf/crranaturalmeasuresgndc.pdf)
23. US Army Corps of Engineers - Ice Jam Database:  
<https://icejam.sec.usace.army.mil/ords/f?p=101:7>

24. USACE - Lake Ontario & Lake Erie Sediment Viewer:  
<https://www.arcgis.com/apps/MapSeries/index.html?appid=34476ea8c07a4111841d28a5d960cb02>
25. [US Climate Resilience Toolkit](#): An online repository of data, tools, resources, case studies, and tips for improving your community's resilience to climate change.
26. Working with Nature: A Guide to Native Plants for New York's Great Lakes Shorelines:  
<https://seagrant.sunysb.edu/Images/Uploads/PDFs/GreatLakes-ShorelinePlantsGuide.pdf>
27. Association of State Floodplain Managers: No Adverse Impact Floodplain Management  
<https://www.floods.org/resource-center/association-of-state-floodplain-managers-nai-no-adverse-impact-floodplain-management/>

#### Community Rating System

- [www.crsresources.org](http://www.crsresources.org)
- [www.nyfloods.org](http://www.nyfloods.org)
  - CRS Coordinators manual can be accessed here

#### Policies

1. Climate Leadership and Community Protection Act (Climate Act): <https://climate.ny.gov/>
2. Community Risk and Resiliency Act (CRRRA):  
<https://www.dec.ny.gov/energy/102559.html>

#### Programs

1. NYS Climate Smart Communities: <https://climatesmart.ny.gov/>
2. NYSERDA Clean Energy Communities: <https://www.nyserda.ny.gov/all-programs/programs/clean-energy-communities>

#### Plans

1. NYS 2100 Commission: Recommendations to Improve the Strength and Resilience of the Empire State's Infrastructure:  
<https://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/NYS2100.pdf>
2. Responding to Climate Change in New York State (ClimAID):  
<https://www.nyserda.ny.gov/About/Publications/Research%20and%20Development%20Technical%20Reports/Environmental%20Research%20and%20Development%20Technical%20Reports/Response%20to%20Climate%20Change%20in%20New%20York>

#### Funding

1. New York's Great Lakes Basin Small Grants Program: New York Sea Grant (NYSG) in partnership with the New York State Department of Environmental Conservation (NYS DEC) created the New York's Great Lakes Basin Small Grants Program to support stakeholder-driven efforts to restore and revitalize the state's Great Lakes region and demonstrate successful application of ecosystem-based management (EBM). The Small Grants Program supports local projects that lead to larger-scale activities described in the Great Lakes Action Agenda (GLAA), and is anticipated to be available on an annual

basis, depending on funding. <https://seagrant.sunysb.edu/articles/t/new-york-s-great-lakes-basin-small-grants-program-home>

2. NYS DEC Climate Smart Communities Grant Program: <https://www.dec.ny.gov/energy/109181.html#CSC>
3. NYS DEC Hudson River Estuary Program 2019 Financing Waterfront Resilience Fact Sheet (Most programs listed here are applicable statewide, not just in the Hudson River Watershed.): [https://www.dec.ny.gov/docs/remediation\\_hudson\\_pdf/financewr2019.pdf](https://www.dec.ny.gov/docs/remediation_hudson_pdf/financewr2019.pdf)
4. NYS Water Resources Institute Funding Climate Adaptation and Resilience: <https://wri.cals.cornell.edu/hudson-river-estuary/climate-change-hudson-river-estuary/helping-communities-become-climate-resilient/funding-climate/>