

The Community Risk and Resiliency Act: Enhancing Flood Laws

NEW YORK'S CLIMATE RISK AND RESILIENCY ACT (CRRA)

In 2014, New York State (NYS) passed and signed into law the Community Risk and Resiliency Act (CRRA), which includes five provisions, or requirements, that aim to increase New York's resiliency to climate change. CRRA aims to increase New York's resilience to climate change by ensuring that certain state funding, facility-siting regulations, and permits include consideration of the effects of climate risk and extreme weather events.

Implications for state agencies: CRRA amended three existing state laws: the Environmental Conservation Law, the Agriculture and Markets Law, and the Public Health Law. Various sections of these laws were changed by adding language that requires New York State's Department of Environmental Conservation (NYS DEC) and New York State public infrastructure agencies to consider future climate risk, but it's up to each agency to determine how it will integrate this requirement into its planning and processes. NYS DEC permitting programs are actively working to integrate CRRA into their permit application processes; however, permit issuance standards will evolve in the coming years. As a result of CRRA, NYS DEC, in consultation with NYS Department of State (NYS DOS) and other stakeholders, created guidance documents to help municipalities, state agencies, and other decision-makers implement the provisions.

Implications for local decision-makers. The CRRA guidance documents are a useful reference for local officials, floodplain administrators, planners, and others that are interested in considering climate change in planning and infrastructure projects. Implementing considerations of future climate risk can earn points in NY's Climate Smart Communities (CSC) and FEMA's Community Rating System (CRS).

In 2019, The Climate Leadership and Community Protection Act (CLCPA) amended CRRA to include all permits subject to the Uniform Procedures Act (bit.ly/NYSDECUPA) and expanded the scope to require consideration of all climate hazards, not only sea level rise, storm surge, and flooding.

CRRA's five major provisions, or requirements

1. Official Sea Level Rise Projections	2. Consideration of Future Physical Climate Risk	3. Smart Growth Public Infrastructure Policy Act Criteria	4. Guidance on Natural Resilience Measures	5. Model Local Laws Concerning Climate Risk
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1. OFFICIAL SEA LEVEL RISE PROJECTIONS

CRRA required NYS DEC to adopt science-based sea level rise projections and to update the projections every five years. In 2019, NYS DEC established the first sea level rise projections over various time intervals for NYS's tidal coast, including the marine coasts of Nassau, Suffolk, and Westchester Counties and the main stem of the Hudson River, north from New York City to the federal dam at Troy: 6 NYCRR Part 490, "Projected Sea Level Rise" ("Part 490"). At the time of this publication, they were in the process of being updated. The sea level rise projections are to be used by NYS DEC, other state agencies, and applicants for relevant permits, approvals, and funding programs specified in CRRA. The regulation only establishes projected sea level rise, it does not impose new standards or criteria for permit issuance or funding eligibility.

2. CONSIDERATION OF FUTURE PHYSICAL CLIMATE RISK

This provision requires a consideration of future climate risk for certain permit programs, funding programs, and facility siting regulations. It applies to the agencies who manage the programs and regulations and to the applicants. In 2020, DEC released the following four guidance documents. The documents were the result of an intensive interagency effort that involved at least 16 state agencies, and the documents were distributed to more than 160 municipalities for their comments before they were finalized.



Storm drain back-up due to an extreme high tide.
Credit: Jessica Kuonen

Guidance for state agencies in implementing CRRA

Note that this guidance may be useful for decision-makers as well

- NYS Flood Risk Management Guidance (bit.ly/NYSDECCRRAFloodRiskMgmtGdnc)
- Guidance for Consideration of Flood Risk in Smart Growth Public Infrastructure Assessment (bit.ly/NYSDECCRRAFloodRiskSmartGrwth)

Guidance for decision-makers (e.g. local officials, developers, etc.)

- Estimating Guideline Elevations (bit.ly/NYSDECCRRAEstGuidelineElevations)
- Using Natural Measures to Reduce the Risk of Flooding and Erosion (bit.ly/NYSDECCRRANaturalMeasuresGdnc)

The latest report with climate projections is "Observed and Projected Climate Change in New York State: An Overview (August 2021). This document provides a summary of observed and projected climatic conditions for NYS. https://extapps.dec.ny.gov/docs/administration_pdf/ccnys2021.pdf

3. SMART GROWTH PUBLIC INFRASTRUCTURE POLICY ACT CRITERIA

This provision pertains to public infrastructure projects and applies to agency and authority project sponsors. CRRA amended Smart Growth by adding a criterion to the original list to be considered by state public-infrastructure agencies: mitigation of future physical climate risk due to sea level rise, and/or storm surges, and/or flooding based on available data predicting the likelihood of future extreme weather events, including hazard risk analysis data, if applicable.

Smart Growth is an approach to community planning and development that integrates what are known as the 3 E's - Economy, Equity, and Environment, with an emerging fourth E - Energy. Smart Growth promotes several land use planning principles that create livable, sustainable, and equitable communities. Smart Growth principles align with resilience planning goals, the aim of which is to improve resilience to climate change impacts on the natural and built environment as well as social and economic systems.

NYS DEC has prepared Guidance for Smart Growth Public Infrastructure Assessment (bit.ly/NYSDECCRRAFloodRiskSmartGrwth) which is intended to guide state agencies as they assess mitigation of sea level rise, storm surge and flooding in siting and design of public-infrastructure projects and provides general principles of climate risk mitigation that state agencies should follow.

4. GUIDANCE ON NATURAL RESILIENCE MEASURES

CRRA required guidance on the use of resiliency measures that utilize natural resources and natural processes to reduce risk. *Using Natural Measures to Reduce the Risk of Flooding* (bit.ly/NYSDECCRRANaturalMeasuresGdnc) serves as a guide to selection and planning of natural resilience measures. This document describes natural resilience measures and how they can be used to mitigate the risks of flooding and erosion, provides definitions for different types of natural resilience measures and distinguishes among conserved, restored, nature-based, and hard structural approaches. It does not specify which natural resilience measures should be used in specific locations or provide detailed or site-specific engineering design and construction guidance for the restoration of natural features or the design and construction of nature-based features.

Natural resilience measures are actions to conserve, restore, or mimic natural landforms and processes that reduce risk from flooding and erosion. These measures also provide a variety of other public benefits. The use of natural resilience measures to reduce these risks is imperative to protecting NYS's communities and environment.

5. MODEL LOCAL LAWS TO INCREASE RESILIENCE

CRRA directed the NYS DOS to prepare Model Local Laws (MLL) relating to climate risk. The MLL help communities increase their resilience by incorporating measures related to physical climate risks due to sea level rise, storm surge, and flooding into their municipal codes. The guidance consists of five chapters:

- Basic Land Use Tools for Resiliency
- Wetland and Watercourse Protection Measures
- Coastal Shoreline Protection Measures
- Management of Floodplain Development
- Stormwater Control Measures

The MLL were developed from existing model laws, good examples of current laws, and combining various sections of laws using professional expertise. They can be adapted for local use by plugging in sections to update existing laws or using an entire MLL for topics that are not currently addressed.

The MLL are intended to be used as examples to help municipal officials address resilience issues in their codes. Adoption of the MLL is voluntary; the menu-based system presents a range of regulatory choices - from simple changes to enhance resilience aspects of typical local laws to comprehensive approaches for topics that involve more complex administrative elements.



Exposed sand bags due to beach erosion. Credit: Kathleen Fallon

Municipal officials who are considering the adoption of any MLL should seek the advice of their municipal attorney.

3.4.2: Shoreline “Reach” Analysis to Designate Overlay Zones (pg 107)

- Located in Chapter 3: Coastal Shoreline Protection Measures (bit.ly/NYSDOSCRRAMLLCoastal), Section 3.4: Shoreline Management Alternatives

How a local municipality would use the MLL:

- Create a coastal erosion overlay district on the municipal zoning map
- Amend the zoning law to include the new overlay district and its requirements
- Add definitions to the zoning law; MLL provides language on definitions and zoning regulations

This MLL was adapted from a Town of East Hampton law

- The Town requires different setbacks for different shoreline types: (<https://ecode360.com/10414808#10414808>)
- In the Town zoning law, they define four coastal erosion overlay zones: (<https://ehamptonny.gov/DocumentCenter/View/1427/LegendRevisions-Sheet-PDF>),
- These zones are designated on the following maps: (<https://ehamptonny.gov/DocumentCenter/View/1436/Sheet-9-PDF>)

RESOURCES

NY’s Climate Smart Communities (CSC): <https://climatesmart.ny.gov/>

FEMA’s Community Rating System (CRS): <https://www.fema.gov/floodplain-management/community-rating-system>

NYS Official Sea Level Rise Projections: <https://dec.ny.gov/regulatory/regulations/proposed-emergency-recently-adopted-regulations/climate-change>

NY’s Smarth Growth Program: <https://dos.ny.gov/nys-smart-growth-program>

Smart Growth Criteria: <https://dos.ny.gov/system/files/documents/2020/08/smart-growth-public-infrastructure-act.pdf>

Model Local Laws: <https://dos.ny.gov/model-local-laws-increase-resilience>

CRRA website (DEC): <https://www.dec.ny.gov/energy/102559.html>

CLCPA website (NYSERDA): <https://climate.ny.gov/>

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