



**Office of Planning
and Development**

Using Model Local Laws to Increase Resilience *For* Understanding and Managing Floodplains for Healthy Watersheds and Resilient Communities

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An Office of the New York Department of State

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Model Local Laws: Local Implementation of CRRA

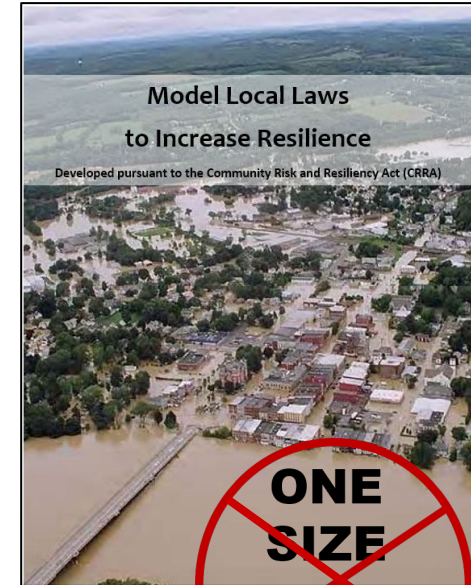
Importance of local government

Models created from:

- Existing model laws
- Good examples of current local laws
- Combining sections from various laws using professional expertise

Adapt for local use

- Plug in sections to update existing laws *OR*
- Use entire model law for topics not currently addressed



CHAPTERS



1 Basic Land Use Tools for Resiliency



2 Wetland and Watercourse Protection Measures



3 Coastal Shoreline Protection Measures



4 Management of Floodplain Development



5 Stormwater Control Measures

https://dos.ny.gov/system/files/documents/2020/09/model_local_laws_to_increase_resilience.pdf

Each Model Local Law: Content

Title, background and purpose

- Information about the subject, benefits
- References

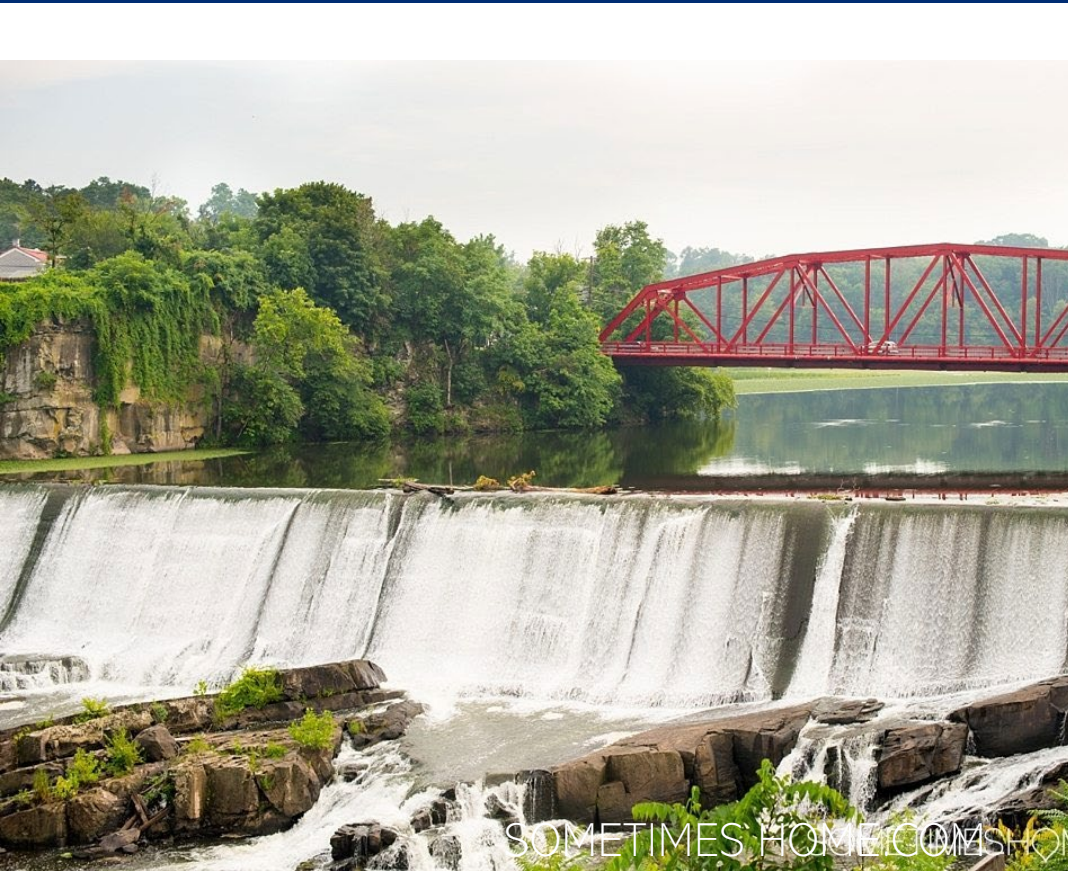
Usage

- Which existing local law(s) and section(s) in those laws to amend; or adopt a new law

Adapted from the following source

- Municipality name; sometimes other states or programs

Local law language



Town of Saugerties

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1. Basic Land Use Tools for Resiliency - Zoning

MLLs SECTION

Waterfront
Overlay District

1.1.2

Waterfront Bluff
Overlay District
(LWRP
integration)

1.1.3

Minimum Lot Size
Maximum Lot
Coverage

1.2.1
1.2.3



Thompson Pond Preserve, Pine Plains, NY

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2. Wetland Protection Measures	MLLs SECTION
Simple Wetland Setbacks	2.1.1
Wetlands Buffer	2.1.2
Wetland Conservation Overlay District	2.1.3
Local Freshwater Wetland Law	2.1.4



Wappinger Creek, Dutchess County

2. Watercourse Protection Measures	MLLs SECTION
Simple Watercourse Setbacks	2.2.1
Stream-related zoning standards	2.2.2
Watercourse Overlay District	2.2.3
Local Watercourse Law	2.2.4

3. Coastal Shoreline Protection Measures

MLLs SECTION

Shoreline Management Alternatives

- Non-structural and Natural features
- Nature-based measures
- Structural measures

3.4

Special Use Permit Alternatives Analysis

3.4.1

4. Management of Floodplain Development

MLLs SECTION

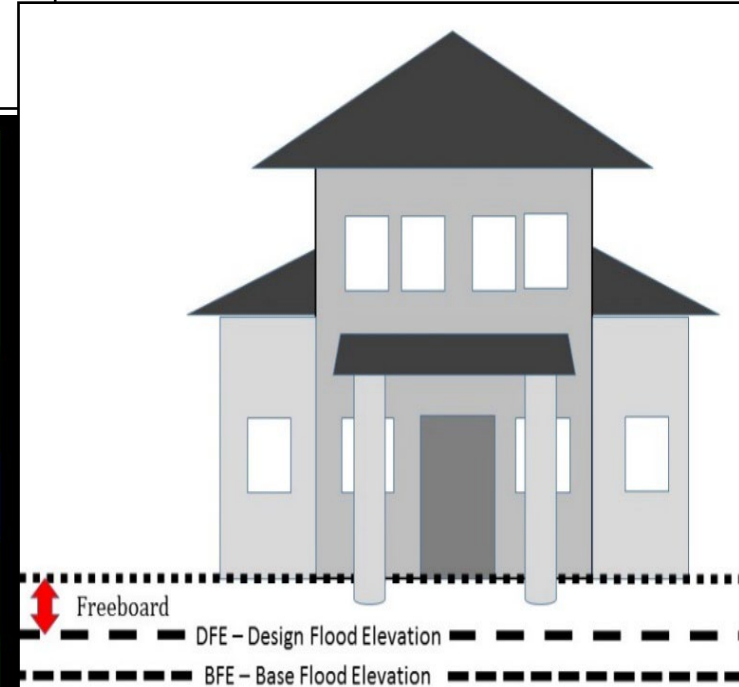
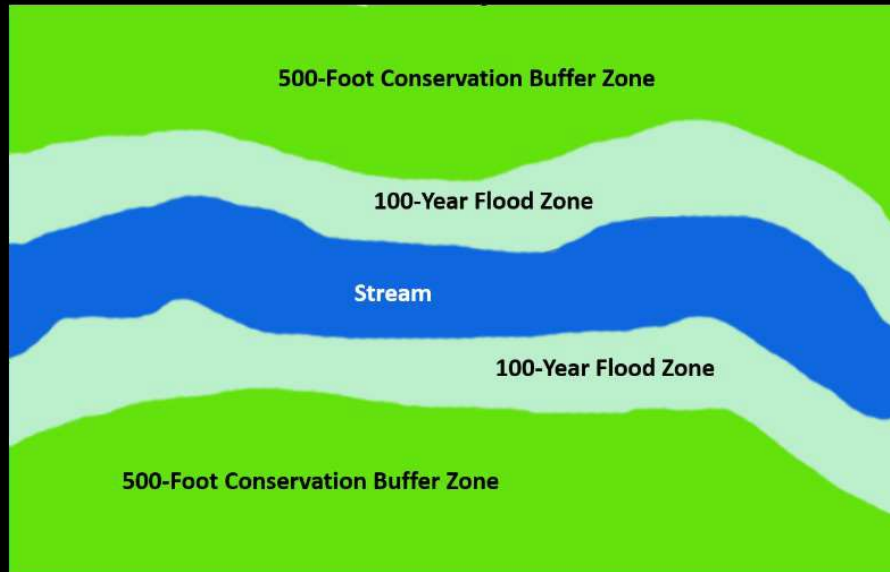
Floodplain and wetland resource conservation overlay district

4.2

Establish design flood elevation to reflect flood levels different than shown on FIRMS

4.3.2

Points given for the NFIP Community Rating System (CRS)





Canandaigua Lake

5. Green Infrastructure and Stormwater Management

MLLs SECTION

Steep slope and erosion control performance standards

5.1.2

Steep slope protection overlay district

5.1.3

Erosion and sediment control & stream corridor management provisions

5.4.3

Model Local Law Implementation Example

3. Coastal Shoreline Protection Measures	MLLs SECTION
Special Use Permit Shoreline Alternatives Analysis	3.4.1

Promote the use of natural or nature-based methods through the site plan or special use permits process

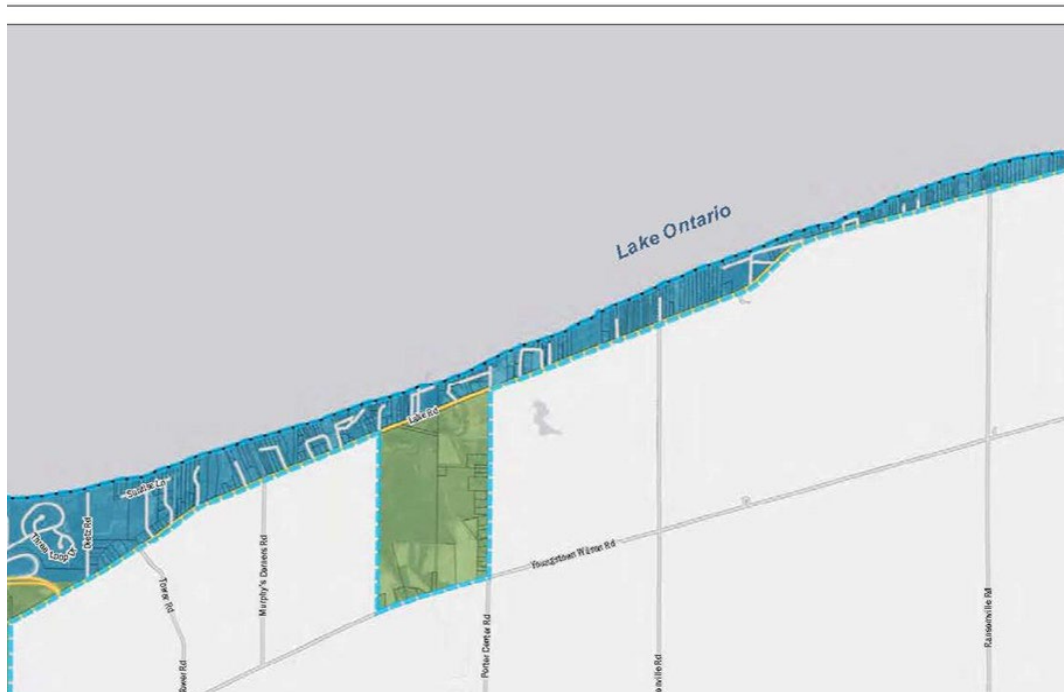
Purpose:

- Recognize the effects of structural shoreline measures on the environment
- Evaluate whether more beneficial options are feasible and effective.



Step 1 – Amend Zoning Law

- A. Identify zoning district(s) where shoreline management activities could be regulated using an alternatives analysis



For example:
– Waterfront
Residential
District

Step 1 – Amend Zoning Law

B. Amend the Usage table in specific districts by adding:

- Shoreline management measures installation or restoration
- Note it is a use permitted by Special Use Permit

Use	RA	LDR	WR	MDR
Private airfields and landing strips	SU2			
Public and semipublic uses	SP	SP	SP	SP
Public utilities	SP	SP	SP	SP
Recreational pond	SP	SP		
Research laboratory				
Restaurant				
Retail plazas				
Roadside farm stand	P	P	P	P
Sales and service of garden farm equipment				
Seasonal interior storage	SU1	SU1		
Single-family detached dwelling	P	P	P	P

Step 1 – Amend Zoning Law

C. Amend definitions section

NATURAL FEATURES: Natural features are landforms created by physical, geological, biological, and chemical processes of the environment, and existing in dynamic equilibrium with environmental forces (e.g., barrier islands, sand dunes, stream banks, wetlands). Absent human influence, natural features are self-sustaining and require little or no maintenance to continue providing ecosystem and protective services/functions.



Natural beach and dunes

Step 1 – Amend Zoning Law

C. Amend definitions section

NATURE-BASED FEATURES (NBF): Shoreline management techniques incorporating living material and natural substrate/structures, such as wood or rock, and designed to emulate the environmental services provided by natural features and processes. NBF provide services such as erosion and storm water management, and flood risk reduction, as well as secondary benefits such as water quality improvement, natural habitat, improved esthetics and carbon sequestration. NBF are created by human design to reduce natural hazard risks while replicating and/or accommodating natural processes.



Living shoreline, Shinnecock Reservation, Southampton
NYSDEC/Suffolk County CCE

Step 1 – Amend Zoning Law

C. Amend definitions section

NON-STRUCTURAL SHORELINE

MANAGEMENT MEASURES: Shoreline management measures that conserve or restore natural features and adapt development to dynamic natural processes to achieve risk-reduction as well as multiple co-benefits. Non-structural shoreline management measures include elevating, flood-proofing or relocating development.



Source: Larry Moss

Step 1 – Amend Zoning Law

C. Amend definitions section

STRUCTURAL SHORELINE MANAGEMENT

MEASURES: Shoreline management measures consisting of material designed and placed on or near the shoreline for the purpose of resisting erosion and/or flooding. These structures are typically placed vertical or perpendicular to a shoreline. Structural shoreline management often incorporates manmade material such as concrete, steel, aluminum, vinyl and pressure-treated wood, but may also employ stone or large tree trunks.

Groins, jetties, breakwaters, bulkheads, seawalls, revetments, riprap, artificial and solid core dunes, engineered beaches, levees and berms are structural shoreline management measures.



Step 1 – Amend Zoning Law

D. Amend Special Use Permit provisions: Application for a shoreline management permit shall include:

“(5) Documentation in the form of a narrative with visual and analytic support of all the alternatives required in subparagraph (c), below, including:

- (a) Project purpose
- (b) Project-specific objectives



NYSDEC photo

(5) (c) A clearly articulated range of alternative designs and sites and the ways in which they affect natural features, water quality, and erosion/flood control, including:

[i] **No action;**

[ii] **Natural feature(s)** conservation or other non-structural measure(s), and if appropriate, restoration of natural features, provided the applicant demonstrates the no action alternative insufficiently addresses flood or erosion risks;

[iii] **Nature-based feature measure(s)**, provided the applicant demonstrates the no action or natural feature alternatives insufficiently address flood or erosion risks; and

[iv] **Structural measure(s)**, provided the applicant demonstrates the no action, natural feature, and nature-based feature alternatives insufficiently address flood or erosion risks.”



Step 2 – Amend Zoning Law and Fee Schedule

- Add provision in the zoning law for an engineering review fee to be established by the City Council, Town Board, or Village Board of Trustees



Step 3 – Review Development Applications Using the Alternatives Analysis



Town of Dover, Tenmile River floodplain



Questions