



Department of State
Planning, Development
& Community Infrastructure

USING MODEL LOCAL LAWS TO INCREASE RESILIENCE: UPSTATE INLAND COMMUNITIES

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ONONDAGA COUNTY PLANNING FEDERATION'S
36TH ANNUAL PLANNING SYMPOSIUM

MARCH 25, 2025

Department of State

Office of Planning, Development & Community

Infrastructure

- Coastal Management Program
 - Local Waterfront Revitalization Program
 - State Coastal Management Program
 - Long Island Sound Coastal Management Program
 - Coastal Consistency Review
 - Long Island South Shore Estuary Reserve Program
 - Ocean and Great Lakes Program
- Downtown Revitalization Initiative
- New York Forward
- Brownfield Development (Brownfield Opportunity Area) Program
- NYS Smart Growth Program

*****Please note some program funding is through the NYS Consolidated Funding***

Department of State

Office of Planning, Development & Community

Infrastructure

- Resiliency Planning
- Water Resource Management
 - Watershed Management Planning, including NYC
- Coastal Lakeshore Economy and Resiliency (CLEAR) Initiative

*Foundational part
of resilience
technical assistance
through **resilience
principles.***

*Our office assists
communities in
planning and
implementation of
projects centered on*

Model Local Laws: Local Implementation of CRRA

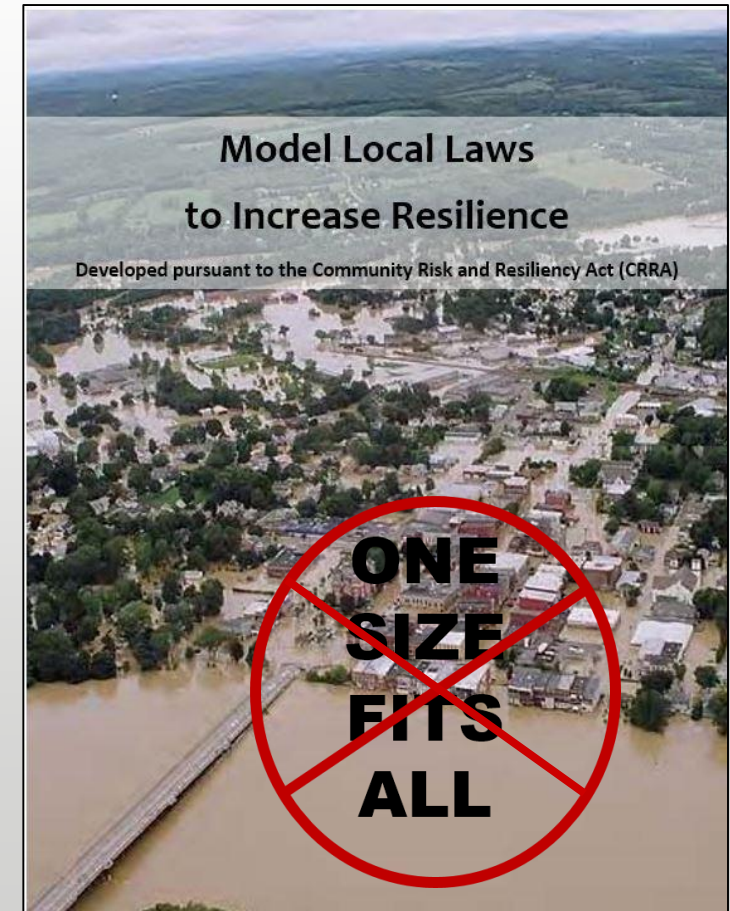
Importance of local government & resiliency

Models created from:


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

Adapt for local use - each municipality unique and different


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




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

Go to:

<http://dos.ny.gov/model-local-laws-increase-resilience-0>

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



Fair Haven Beach
State Park
Bluffs, NYS Parks



Erie Canal, PBS.org (archived) *Erie: The Canal that made America*

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

Example Cluster
Development
Randall Arendt



**1. Basic Land Use
Tools: Subdivision
and Open Space
Development**

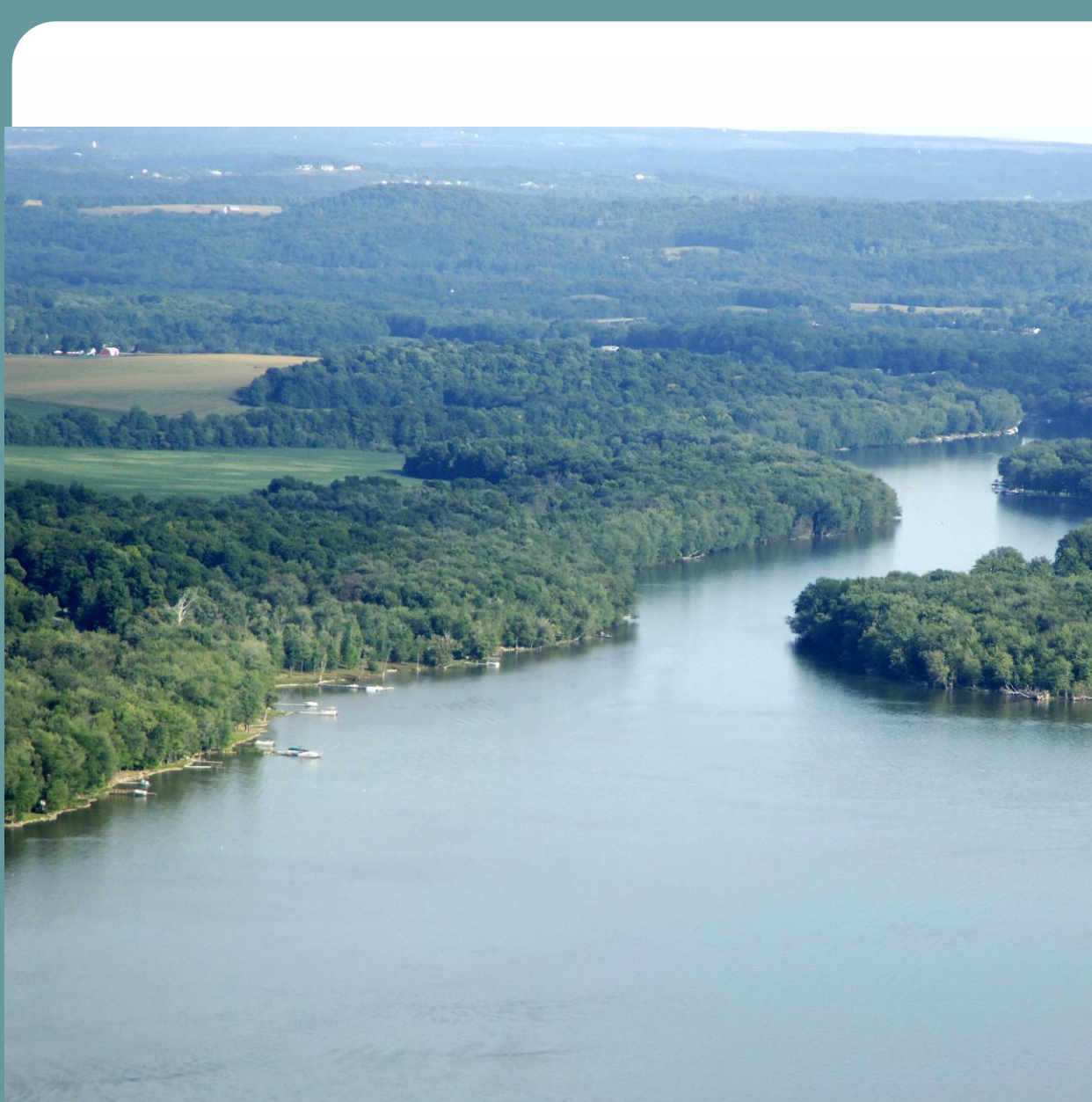
**MLLs
SECTION
N**

Design Standards to Protect Natural Features	1.5.4.1
Subdivision Woodlands	1.5.4.2
Cluster, open space & conservation development	1.5.6
Disclose environmental	1.5.7



Montezuma National Wildlife Refuge, DayTrippingRoc.com

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

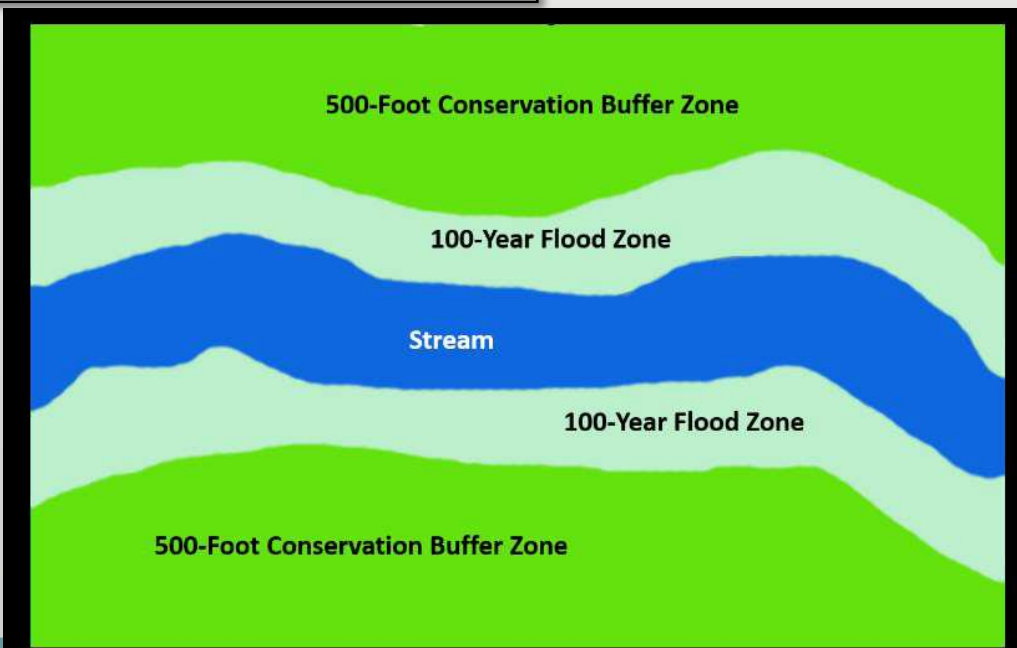
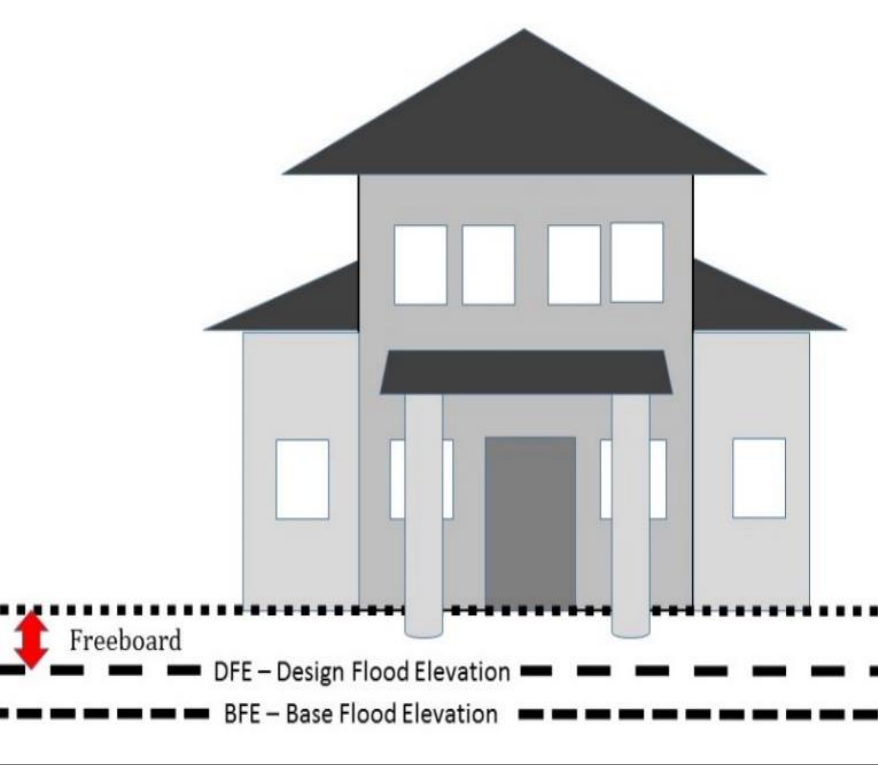


Seneca River, Marinas.com Seneca River Inlet

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 <ul style="list-style-type: none">• Non-structural and Natural features• Nature-based measures• Structural measures	3.4
Special Use Permit Alternatives	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



Canandaigua Lake neighborhood

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



Village of Greenwood Lake

5. Green Infrastructure Stormwater Management

MLLs SECTION

DEC Model Stormwater Management & Erosion & Sediment Control Laws:

5.4.1

1. Impaired waters & Enhanced phosphorus removal watersheds

5.4.2

2. Community

5. Green Infrastructure Stormwater Management *Continued*

Additional thoughts:

- Findings & Purpose: *climate change & resiliency*
- Definitions: "green infrastructure (GI)", "riparian buffer"
- SWPPP identify slopes >15%, 500-yr floodplains, mature forests
- Explicitly require the GI planning process
- Stormwater Management Design Manual (SWDM) riparian buffer alternates



City of Ithaca downtown pedestrian area

*Model Local Laws with
resilience principles
can guide development,
zoning, and updates to
comprehensive planning*



Western Onondaga County ,
8/192021 (syracuse.com)



Thunderstorm captured via
Skytop looking at Syracuse and
Onondaga Lake, NY 7-24-2024
(cnycentral.com;)



Eden, NY post-storm 7-10-2024
(syracuse.com)

Resilience

Principles

RESILIENCE PRINCIPLES FOR NEW YORK COMMUNITIES



RISK: KNOW IT, AVOID IT, REDUCE IT.	MAINTAIN CAPACITY TO ADAPT	MULTIPLE BENEFITS FROM ONE MEASURE	LET NATURE DO THE WORK	STACK RESILIENCY MEASURES	SHARE COSTS AND BENEFITS EQUITABLY	MAKE INCLUSIVE AND TRANSPARENT DECISIONS
<p>Know Your Risks: Use maps, risk viewers, and hazard mitigation plans to learn about risks to an area.</p> <p>Avoid Risk: Apply land use planning concepts that place development and community assets out of hazardous areas.</p> <p>Reduce Risk: Explore options to manage risks through the full range of measures, including non-structural and structural approaches.</p>	<p>Consider different scenarios of future conditions and be prepared to change course if necessary.</p> <p>Possible scenario variables include:</p> <ul style="list-style-type: none">• Climate stressors• Development patterns• Planning timeframes	<p>Seek solutions that provide multiple benefits and address multiple goals.</p> <p>Aim to identify resilience measures that are win-win solutions, such as green roofs.</p> <p>Green roofs:</p> <ul style="list-style-type: none">• Absorb rainwater• Reduce building energy usage• Reduce urban heat island effect	<p>Conserve, enhance, and restore naturally resilient features and systems.</p> <p>Left alone or supported through restoration actions, many natural features maintain or improve in their risk reduction benefits over time. Natural features can reduce risk by:</p> <ul style="list-style-type: none">• Absorbing water• Acting as a buffer• Slowing wave or water energy• Stabilizing or supplying sediment• Conveying or draining water	<p>Create a layered approach of multiple measures to provide greater reliability should one measure fail.</p> <p>Reliance on one measure can prove catastrophic, such as when the levees in New Orleans failed during Hurricane Katrina.</p> <p>Vary the types of measures, from land use policies to site specific measures, and have backups in place.</p>	<p>Identify the impact on existing inequities and the potential costs to future generations.</p> <p>Consider long-term impacts as well as impacts to neighbors to avoid transferring or deferring risks to others. Addressing risk and improving resilience of vulnerable or marginalized populations requires special consideration and extensive, meaningful public engagement, including identifying and addressing existing inequities.</p>	<p>Transparency, accountability, and inclusivity tend to lead to better decisions and reduce conflicts.</p> <p>Develop an inclusive and equitable public outreach and engagement plan and clearly outline the public's role in the planning and decision-making process.</p> <p>Build trust by soliciting input in multiple ways throughout the process and follow through and communicate outcomes.</p>

- **Seven** principles that guide planning and capital projects

- These principles provide:

- A more *consistent approach* to climate resilience.

- Communities can interpret and apply principles according to their *unique context*.


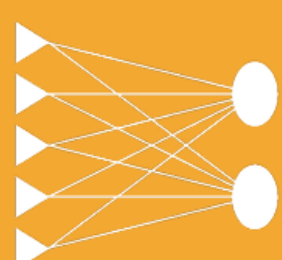





- A foundational concept: *resilience is a process, not an end point*

Go to: <https://dos.ny.gov/resilience-planning>

Seven Resilience Principles – Scaled in

RESILIENCE PRINCIPLES FOR NEW YORK COMMUNITIES



RISK: KNOW IT, AVOID IT, REDUCE IT.	MAINTAIN CAPACITY TO ADAPT	MULTIPLE BENEFITS FROM ONE MEASURE	LET NATURE DO THE WORK	STACK RESILIENCY MEASURES	SHARE COSTS AND BENEFITS EQUITABLY	MAKE INCLUSIVE AND TRANSPARENT DECISIONS
						
Know Your Risks: Use maps, risk viewers, and hazard mitigation plans to learn about risks to an area.	Consider different scenarios of future conditions and be prepared to change course if necessary.	Seek solutions that provide multiple benefits and address multiple goals.	Conserve, enhance, and restore naturally resilient features and systems.	Create a layered approach of multiple measures to provide greater reliability should one measure fail.	Identify the impact on existing inequities and the potential costs to future generations.	Transparency, accountability, and inclusivity tend to lead to better decisions and reduce conflicts.

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Model Local Law Implementation Example

2. Wetland and Watercourse Protection Measures

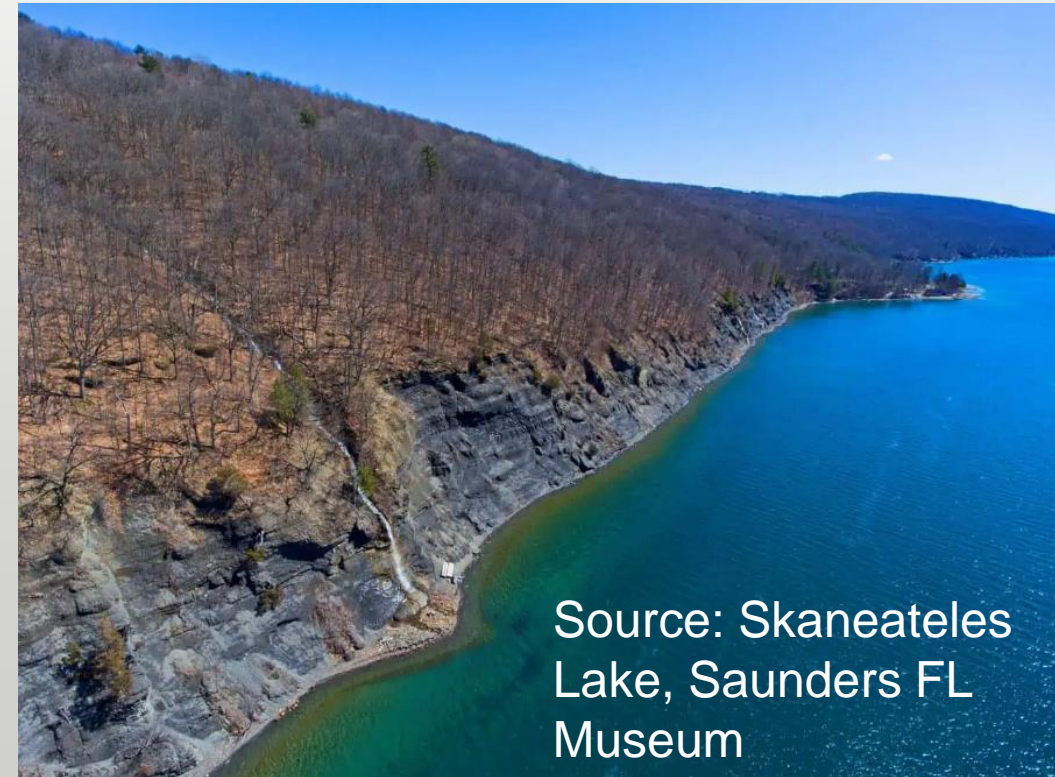
MLLs SECTION

Simple Watercourse Setbacks

2.2.1

A level of watercourse protection through setback requirement zoning.
Purpose:

- Deter development in certain districts to close to the waterbody and considers environmental sensitive areas.
- Allows amendments to zoning laws to include definitions

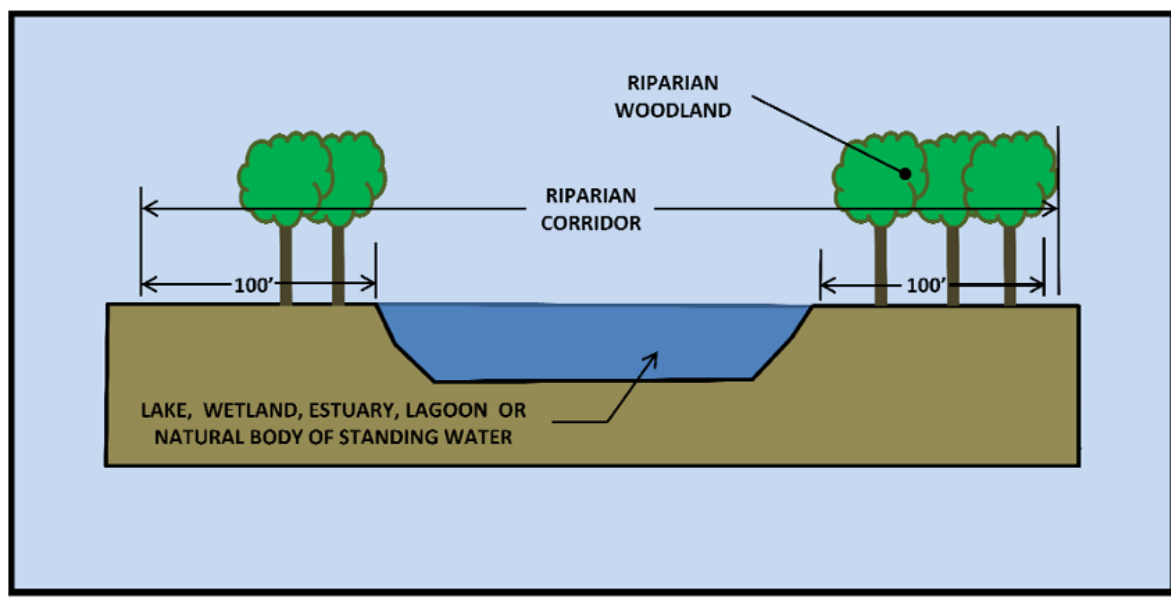


Source: Skaneateles Lake, Saunders FL Museum

Step 1 – Amend Zoning Law

A. Identify zoning district(s) where waterbody setback activities could be regulated using zoning requirements.

Definition: "The area of any lot located between the side lot lines, the lake line, and a line located 50, 100 feet onshore from the lake



For example:
Proposed
LAKESHORE
or
RIVER
SETBACK
ZONE

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

Text of Proposed Local Law.

I. Chapter 225 (“Zoning”), Article II (“Word Usage and Definitions”), Section 225-4 (“Definitions”), is hereby amended to read as follows: (changes highlighted):

“LAKESHORE SETBACK ZONE — The area of any lot located between the side lot lines, the lake line, and a line located 50-100 feet onshore from the lake line.”

II. Chapter 225 (“Zoning”), Article VI (“Overzone Regulations”), Section 225-20 (“Skaneateles Lakeshore Development Regulations”), is hereby amended to read as follows: (changes highlighted):

B. Boundaries. This section shall apply to all land within the Village of Skaneateles lying within 50 100 feet of the lake line.

C. Permit requirements.

(1) Any activity requiring a building permit pursuant to § 76-11 of the Municipal Code of the Village of Skaneateles proposed within 50 100 feet of the lake line, and any change of grade covering an area greater than 500 square feet proposed within 50 100 feet of the lake line, shall require a site plan approval from the Planning Board.

D. Lakeshore setback zone. No structure shall be built or expanded within 50-100 feet of the lake line, except the following, subject to the restrictions and conditions in Subsection E below:

Skaneateles Lake, Municipality’s proposed law ex

Step 1 – Amend Zoning Law

C. Other **Amend definitions section** to incorporate:

- Nature based features (NBF)
- Non-structural shoreline management measures
- Structural shoreline management measures



Skaneateles Lake, Town of Skaneateles



Oneida Lake, BassOnline Explore Oneida
Website

Continued:

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

Continued:

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.

Continued:

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,

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

(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:

(5) (c) :

[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

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



Residential home,
Hamilton
County,
[Hamiltoncountyswcd.org](https://www.hamiltoncountyswcd.org)
Streambank & Shoreline
Stabilization Project.

- Adoption or amending laws,
please see:

<https://locallaws.dos.ny.gov/>

For guidance on adopting laws, please

see: <https://dos.ny.gov/adopting-local-laws>

Step 3 – Review Development Applications Using the



August 2023 flooding on Onondaga Lake Parkway, Syracuse.com



Baldwinsville homeowner property 2023, Syracuse.com

New York Department of State

Office of Planning,
Development
& Community Infrastructure

<https://dos.ny.gov/local-waterfront-revitalization-program>

Resilience Planning
Program
Local Waterfront
Revitalization Program

Division of Local
Government Services

(518) 473-3355

(518) 474-6000

Email: OPD@dos.ny.gov

Email: localgov@dos.ny.gov

<https://dos.ny.gov/resilience-planning>

<https://dos.ny.gov/training-assistance>

Questions?



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