



Department of
Environmental
Conservation

The Fundamentals of Proactive & Protective Floodplain Management

November 2, 2022

What are floodplains?

"Floodplain" or "Flood-prone area" means any land area susceptible to being inundated by water from any source.

This includes overflow of inland or tidal waters, or unusual and rapid accumulation or runoff of surface waters from any source.



THE 100-YEAR FLOOD

Base Flood

The flood having a one percent chance of being equaled or exceeded in any given year.

KNOW YOUR RISK



Chance your home floods at least once over a **30-Year Mortgage**



Chance your home floods at least once over an **Average Lifetime**



Chance your home floods twice over an **Average Lifetime**

What are flood maps or FIRMs?



Flood Maps (Flood Insurance Rate Maps)

What they do...

- Identify areas within a community with a high risk of flooding
 - Show the extents of the 1% and 0.2% storm events
- Determine flood insurance requirements and policy costs
- Establish where floodplain management regulations apply

What they don't...

- Show the extents of higher frequency storm events
- Show flooding impacts due to ice or debris jams
- Show stormwater issues or impacts from development
- Get updated regularly due to budget limitations
- Account for impacts from climate change





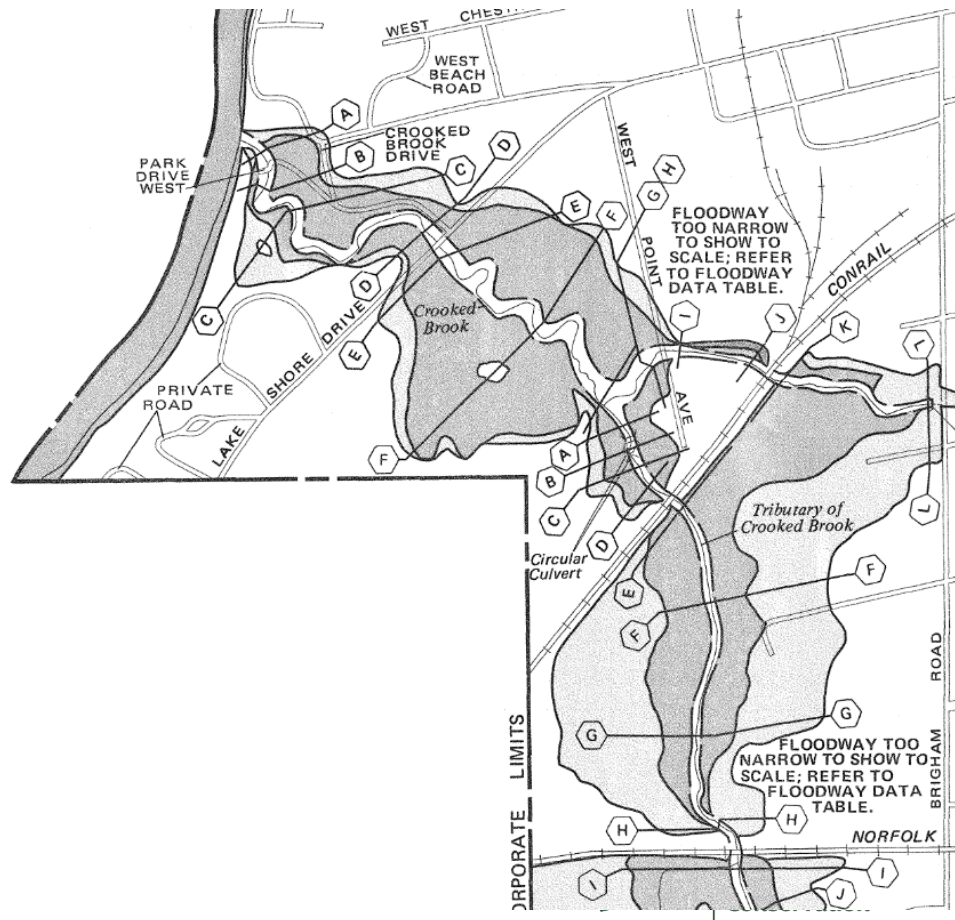
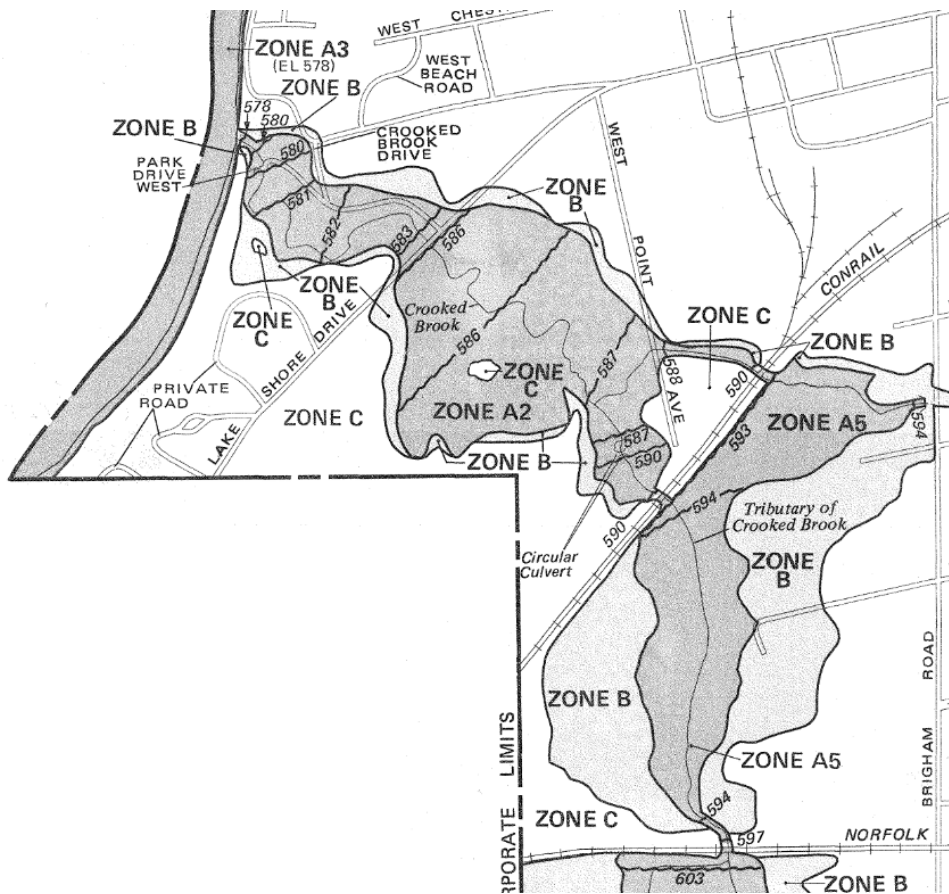
federal emergency management agency

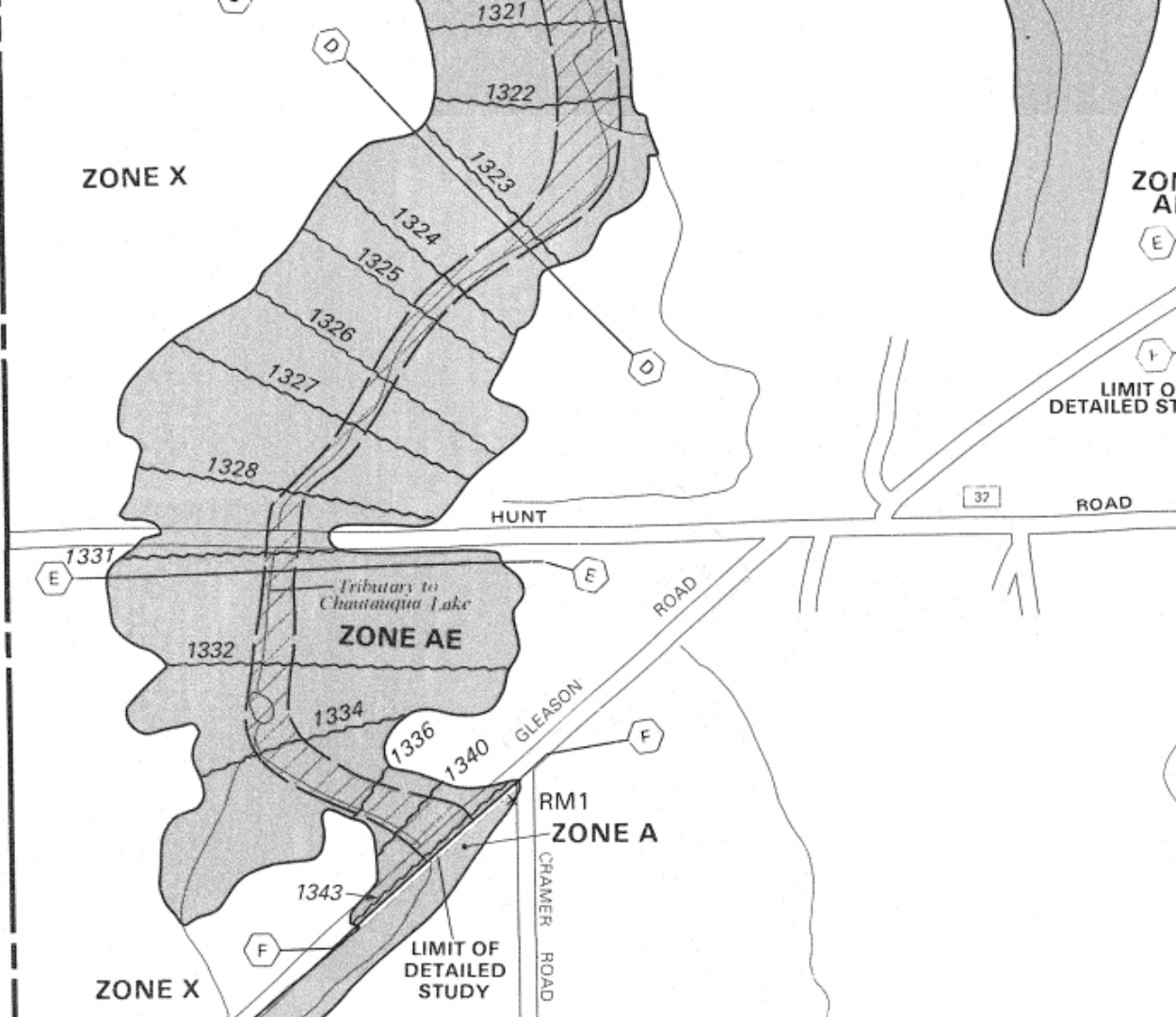
TOWN OF ASHFORD, NY
CATTARAUGUS COUNTY

FLOOD INSURANCE RATE MAP

COMMUNITY NUMBER 360062 B

EFFECTIVE DATE
MAY 25, 1984





NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
BUSTI,
NEW YORK
CHAUTAUQUA COUNTY

PANEL 4 OF 30
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
361106 0004 C

MAP REVISED:
JANUARY 20, 1993



Federal Emergency Management Agency



Zone VE
(EL 584)

Zone AE
(EL 583)

Zone AE

Zone AE

Zone AE
(EL 583)

TOWN OF
HAMBURG
360244
36029C03381
eff. 6/16/2021

Zone AE

Zone AE

Zone AE

Zone AE

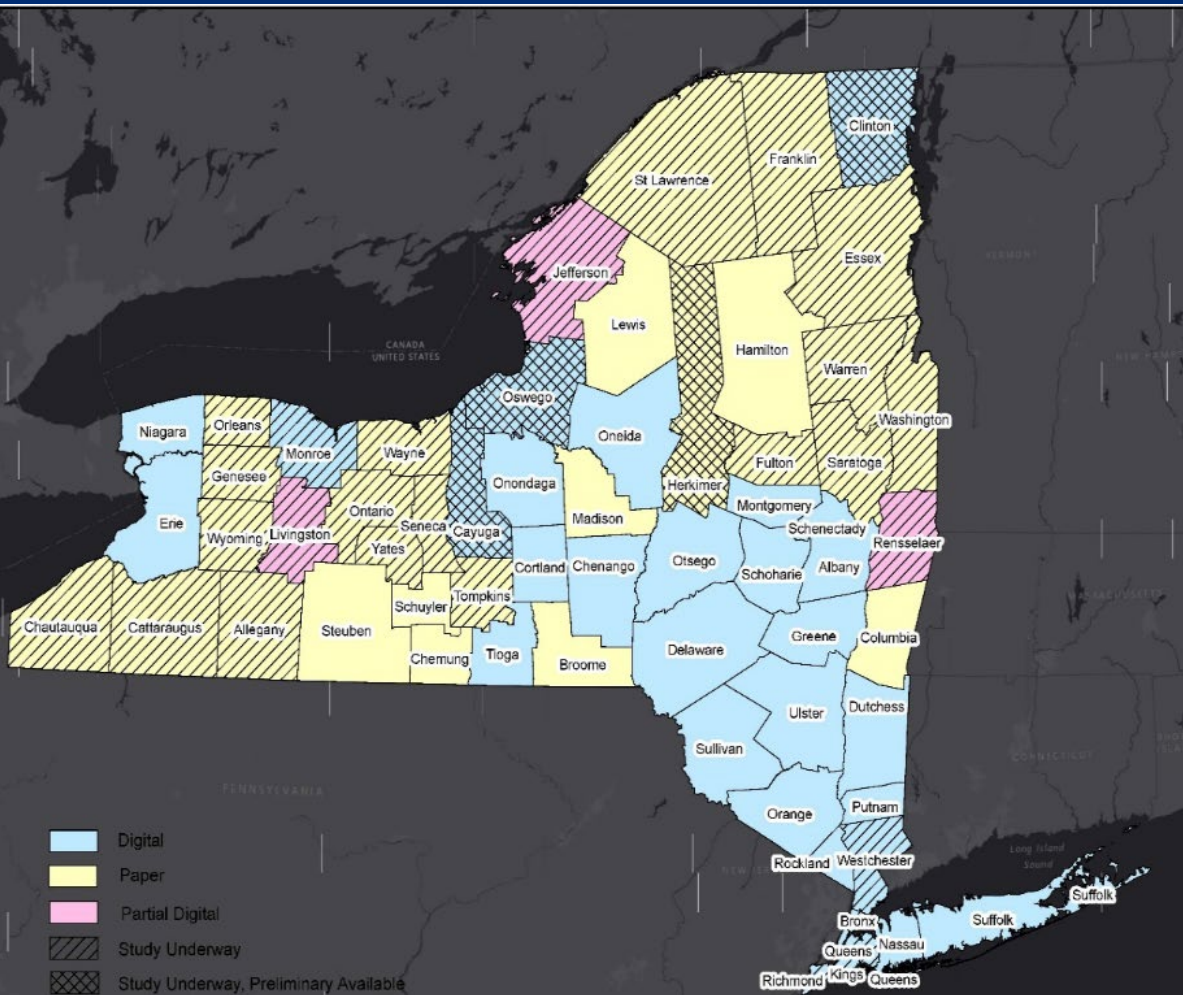
State Route
5 Southbound

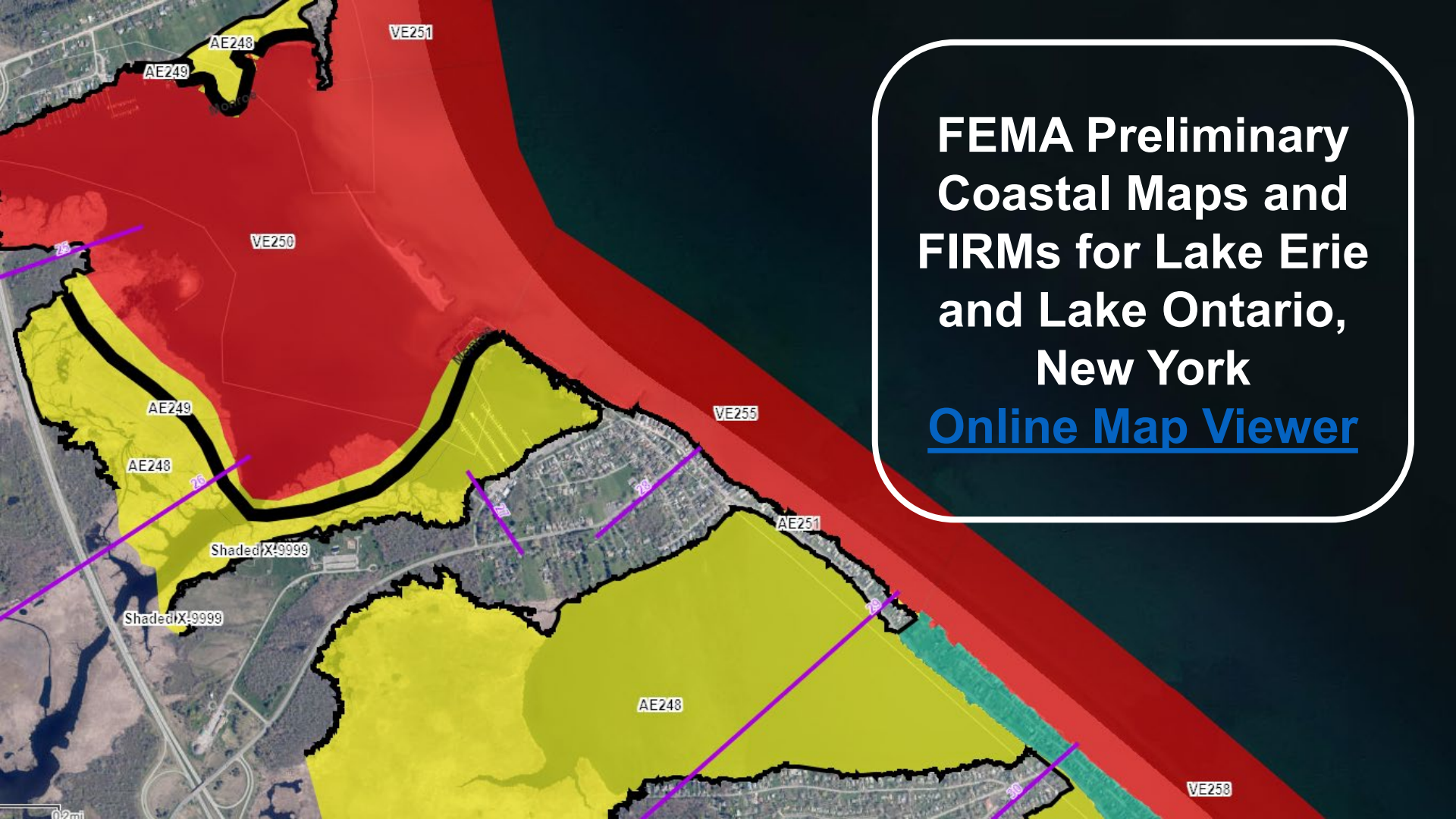
Hoover
Road

State Route
5 Northbound

State Route
75 Southbound

Current Mapping Status

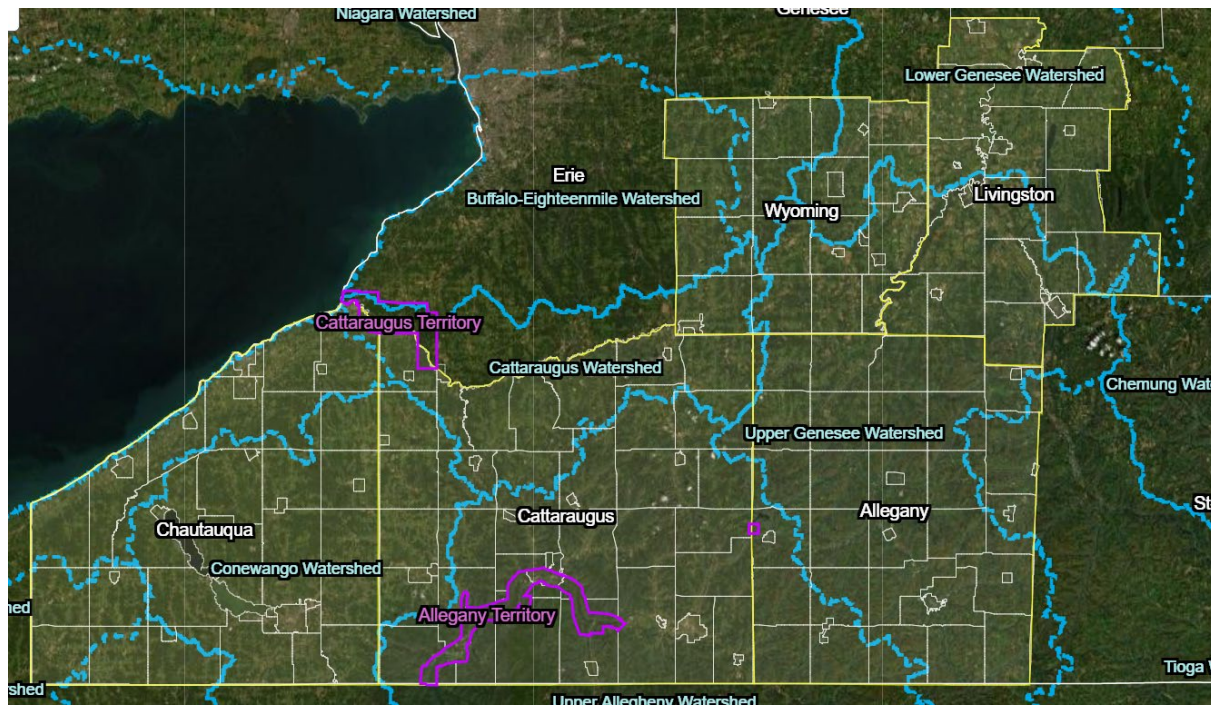




FEMA Preliminary Coastal Maps and FIRMs for Lake Erie and Lake Ontario, New York

[Online Map Viewer](#)

Base Level Engineering (BLE)



Base Level Engineering Studies in Western NY



Department of
Environmental
Conservation

Community Role

- Adopt a local flood damage prevention ordinance
- Regulate all development within FEMA identified Special Flood Hazard Areas (SFHA)
- Ensure the maps are up to date by requiring LOMC for any project that will change the floodplain boundaries or BFE
- Maintain all records
- Remedy violations



Consequences

- People and property at risk
- Emergency response costs and risk to personnel
- Costs to continually repair and rebuild
- Impacts to neighboring communities



N. Scott Trimble | strimble@syracuse.com



Photo | Observer-Dispatch



Photo | Luke Latini



Department of
Environmental
Conservation

The New York Times

Priest Dies in Northern New York in Storm That Lashed the Northeast

Tens of thousands of people remained without power on Saturday and states of emergency were declared in 12 New York counties.

[Give this article](#)

Photo | John Kucko



Department of
Environmental
Conservation



Benefits

- Safer, more resilient community
- Decreased flood damages
- Lower flood insurance rates
- Maintain property values
- Maintain NFIP status and access to Federal funds

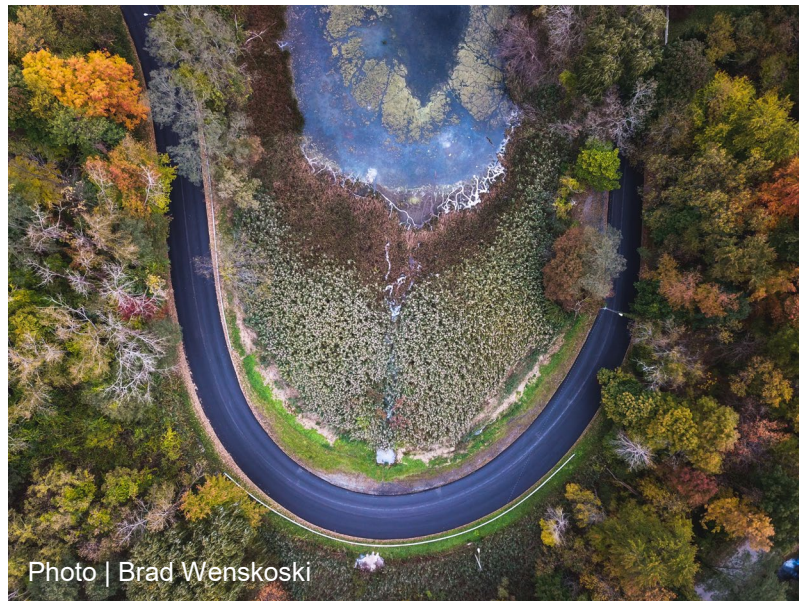


Photo | Brad Wenskoski



Alex Cooper | Observer-Dispatch



Tools/Resources

For Better Floodplain
Management



Department of
Environmental
Conservation

No Adverse Impact

Association of State Floodplain Managers (ASFPM) developed a [NAI Toolkit](#) for common sense floodplain management.

- Fill in data gaps for mapping
- Educate your residents about their flood risk
- Update your comprehensive plan to address flooding
- Adopt higher regulatory standards
- Protect at risk infrastructure



Nature Based Solutions

Watershed Scale:

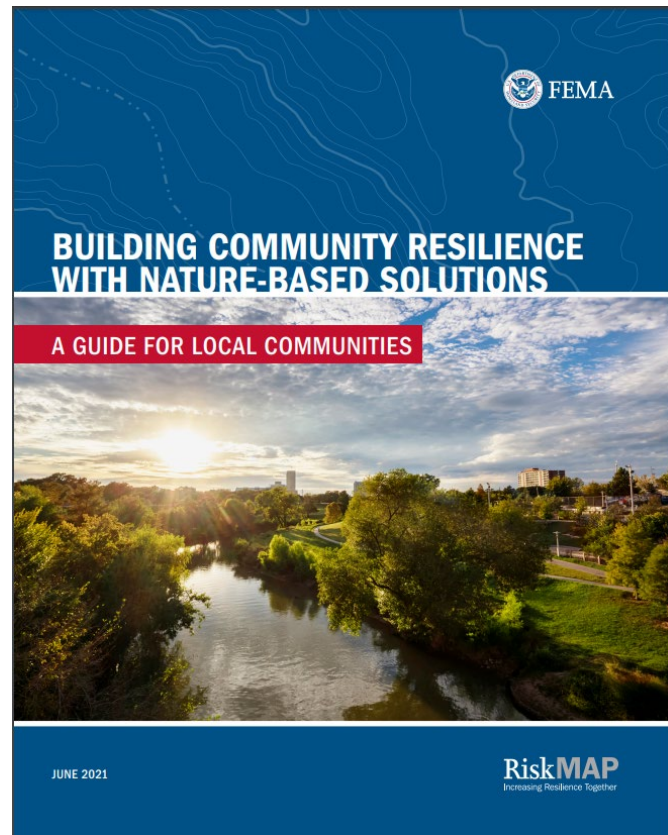
- Land Conservation
- Greenways
- Wetland Restoration
- Floodplain Restoration
- Stormwater Parks

Coastal Areas:

- Coastal Wetlands
- Dunes
- Living Shorelines
- Oyster Reefs
- Waterfront Parks

Site Scale:

- Rain gardens
- Green roofs
- Permeable pavement
- Tree trenches
- Vegetated swales
- Rain barrels
- Tree canopy
- Green streets



CRRA Model Local Laws

The Community Risk and Resiliency Act required DOS with DEC to develop model local laws that include consideration of future risk due to sea-level rise, storm surge and/or flooding.



Department of
Environmental
Conservation



Department
of State

[DOS Model Local Laws to Increase Resilience](#)



Department of
Environmental
Conservation

Community Rating System



FEMA

A voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum NFIP requirements.

Flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community's efforts that:

1. Reduce and avoid flood damage to insurable property
2. Strengthen and support the insurance aspects of the program
3. Foster comprehensive floodplain management



**Department of
Environmental
Conservation**

What should you take away?

- Review your community's FIRMs to better understand where your community is at risk
- Find out who your floodplain administrator is. Make sure they understand their floodplain management responsibilities and how you can support them
- Require development that changes the floodplain apply for the proper LOMC
- Enforce the minimum standards and consider adopting and enforcing higher standards



Thank You!

Brienna Wirley, CFM

Environmental Program Specialist

6274 East Avon-Lima Road

Avon, NY 14414

Brienna.Wirley@dec.ny.gov

P: (585)226-5465

Connect with us:

Facebook: www.facebook.com/NYSDEC

Twitter: twitter.com/NYSDEC

Flickr: www.flickr.com/photos/nysdec



Department of
Environmental
Conservation