



Department of
Environmental
Conservation

The Fundamentals of Proactive & Protective Floodplain Management

November 2022

Presenters: Mary Binder Gibbs , CFM
NYS Department of Environmental Conservation-
Division of Water

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**

Regulations

- Communities permit and enforce any floodplain development
- Residential: Elevate low floor and all utilities at least 2 feet above 1% flood level
- Non-Res: Elevate or build at grade, anchor, and install flood vents
- Anchor above and underground tanks and exterior utilities.
- Conduct floodway encroachment reviews where needed



What are flood maps or FIRMs?



Flood Maps (Flood Insurance Rate Maps)

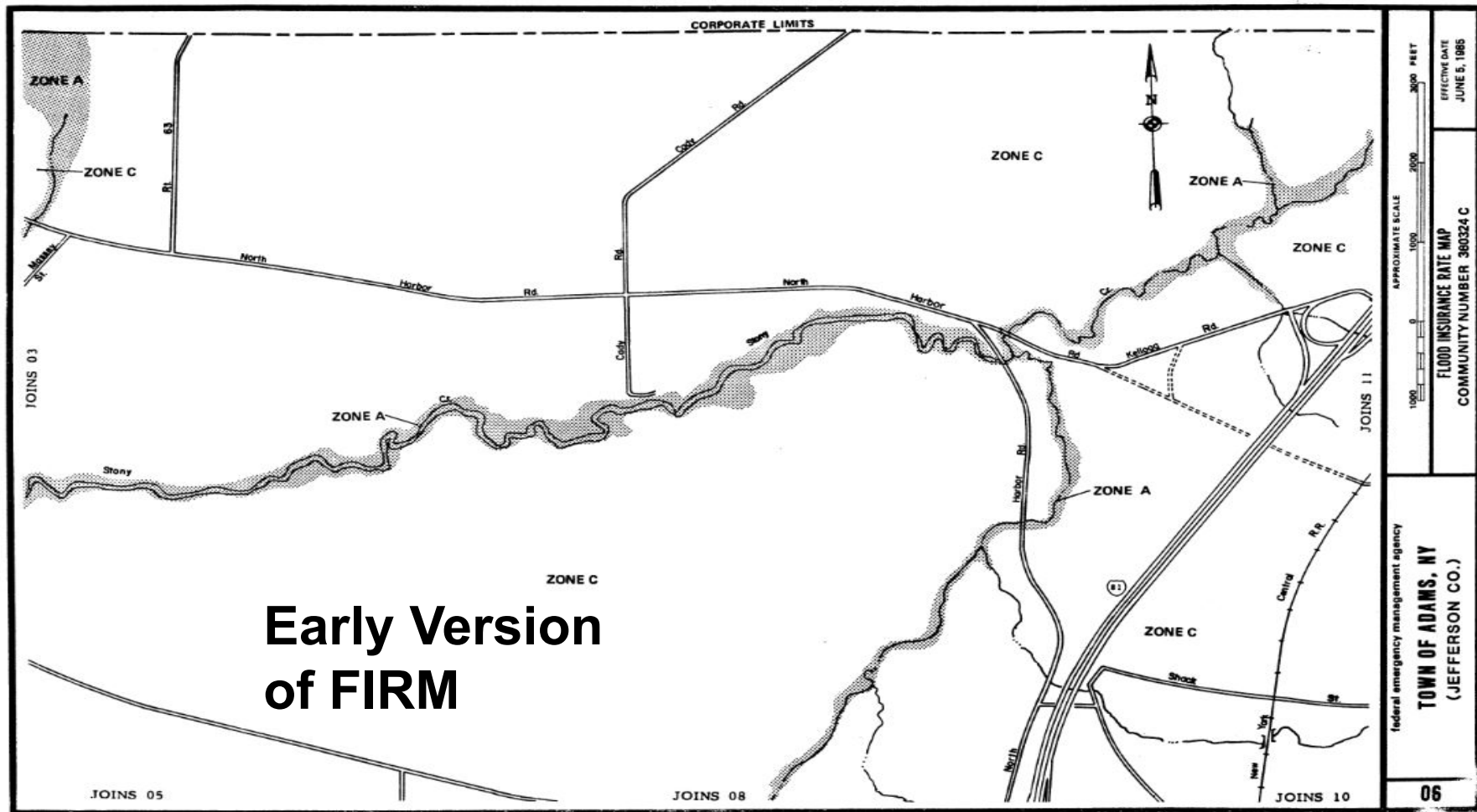
What they do...

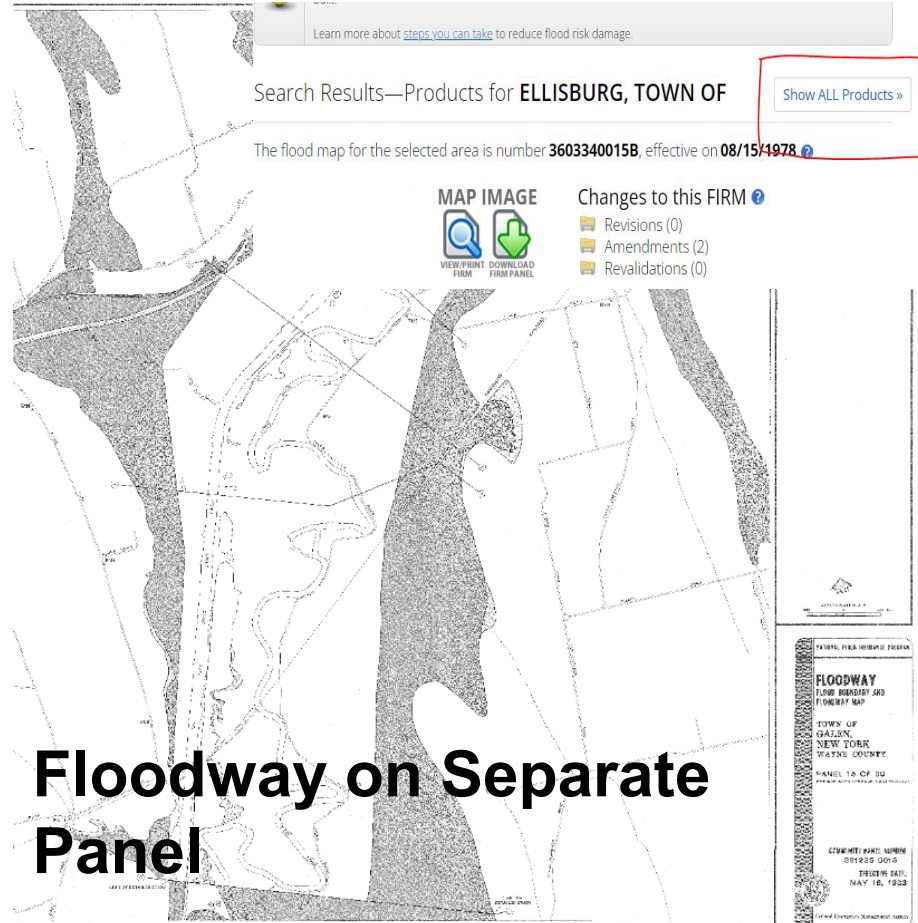
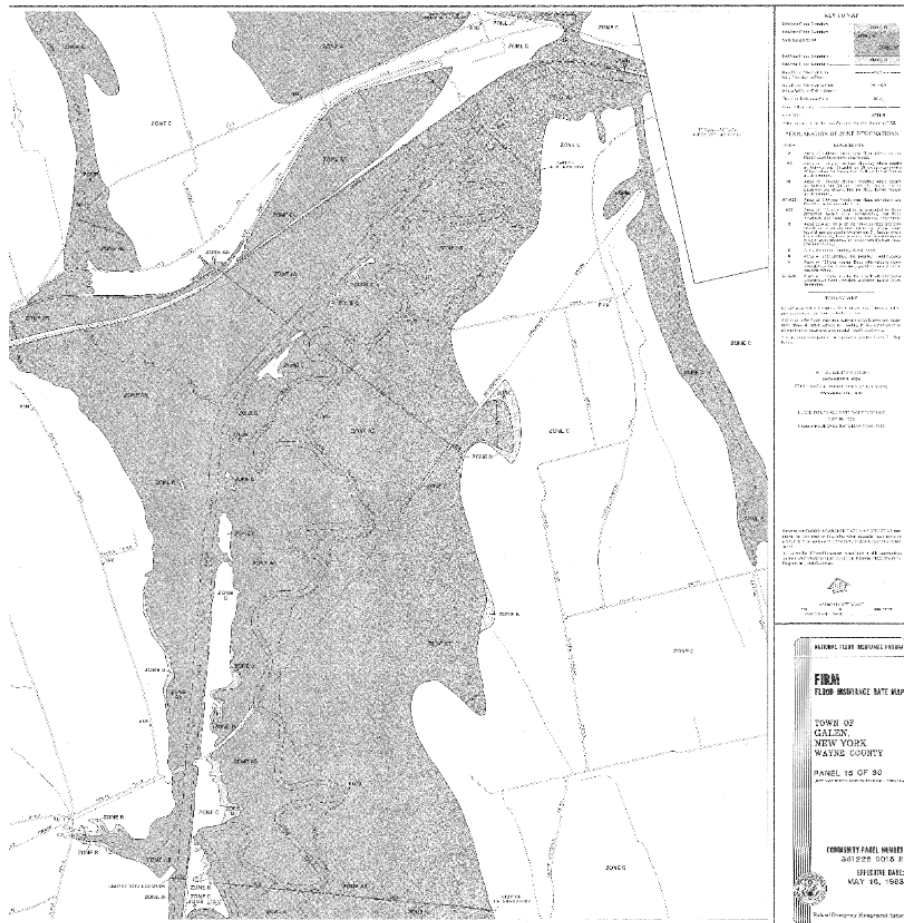
- Identify areas within a community with a high risk of flooding
 - Show the extents of the 1% and sometimes 0.2% storm events
- Determine flood insurance requirements and policy costs
- Establish where floodplain management regulations apply

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

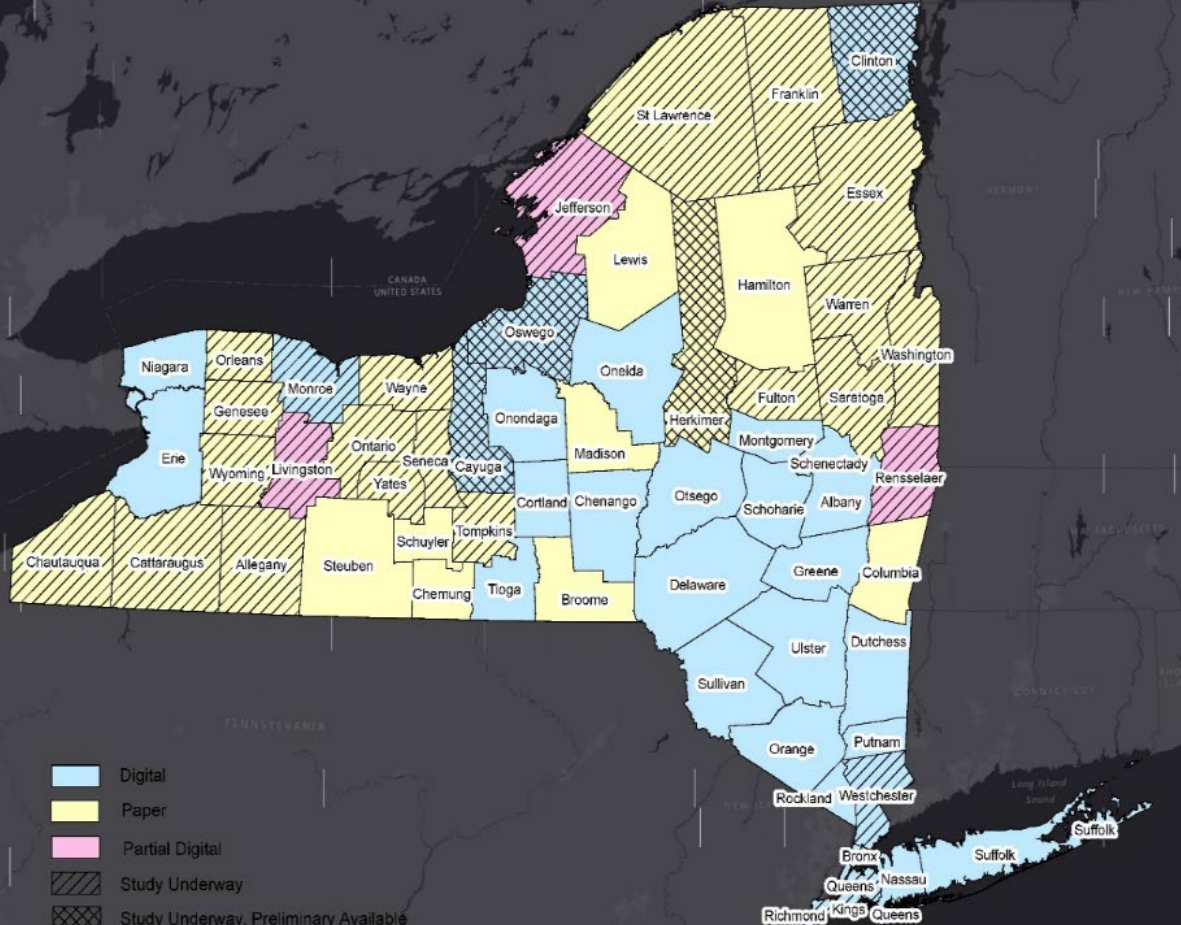




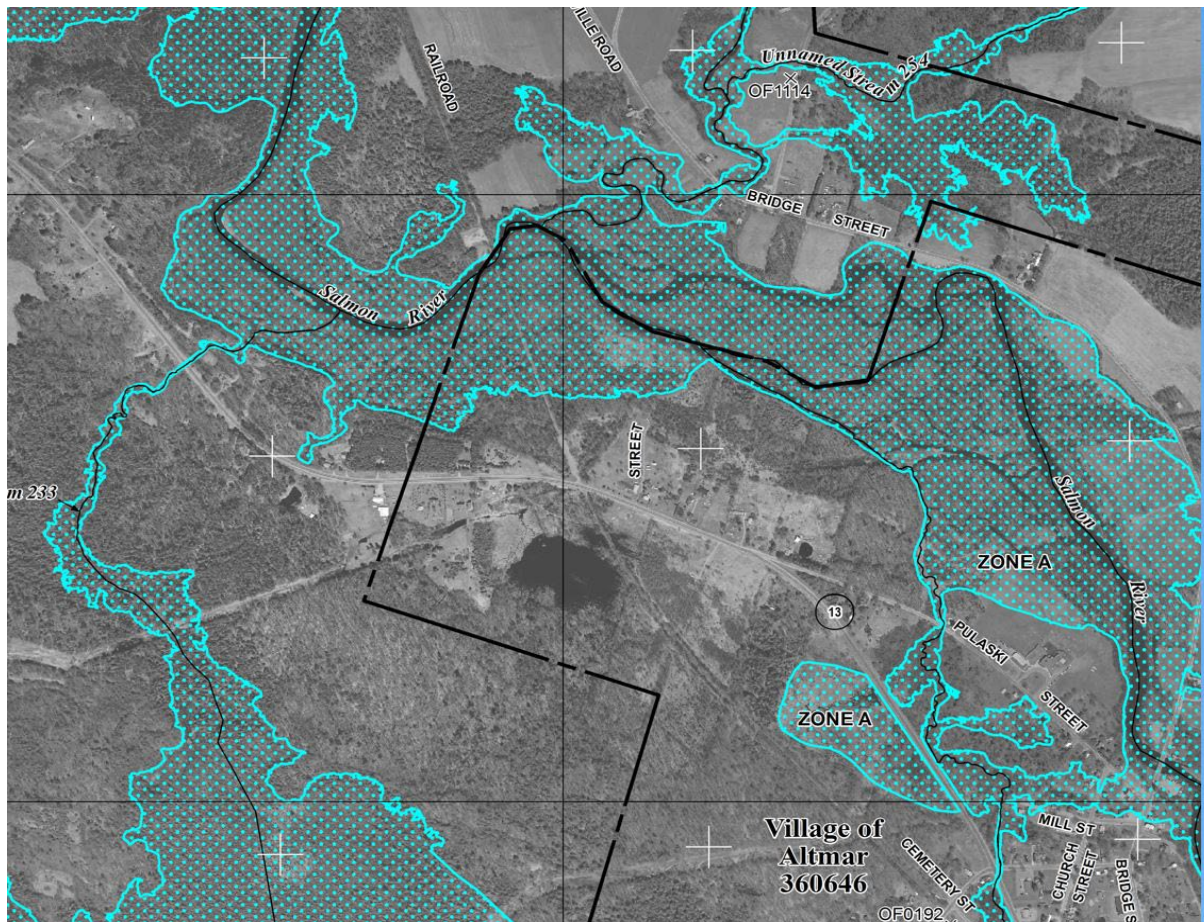


Floodway on Separate Panel

Digital Maps



Department of
Environmental
Conservation

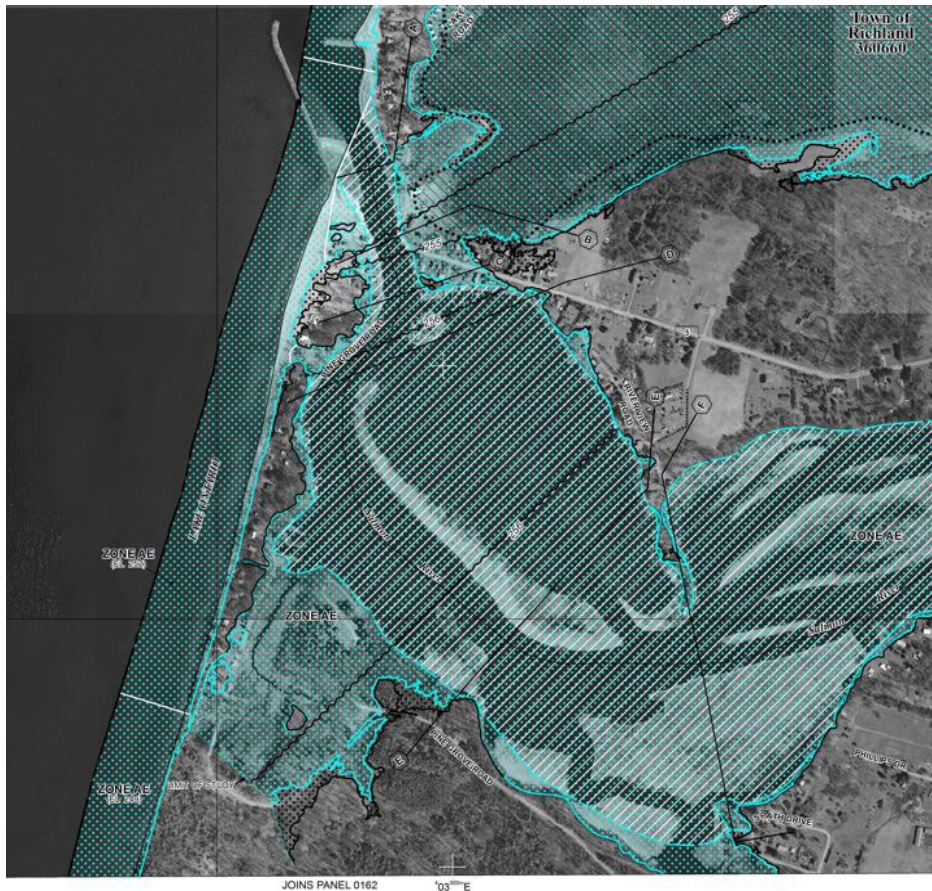


Altmar Current Effective
Digital FIRM:
Map 36075C0195G
Dated 06/18/2013

Zone A, no BFE.



Department of
Environmental
Conservation



Richland Current Effective Digital FIRM:

Map 36075C0154G

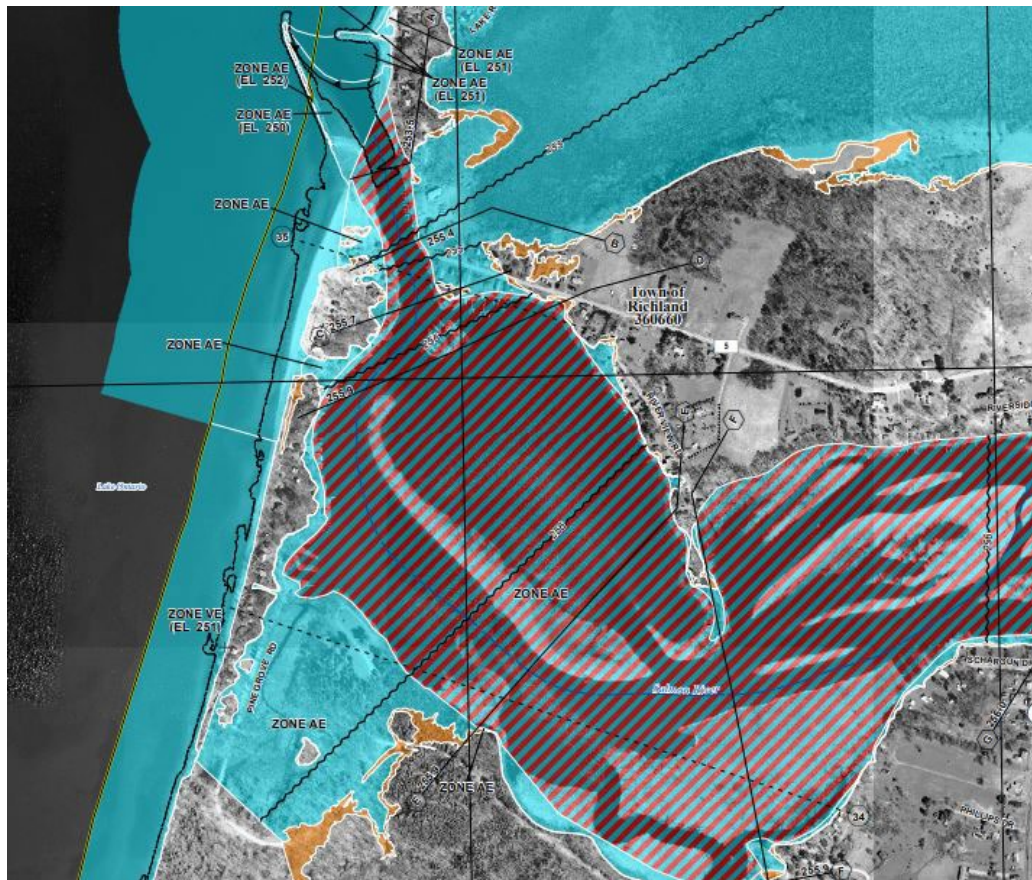
Dated 06/18/2013

Zone AE and Floodway
(striped area)

Does not include modeling
for wave action and wave
run up (only AE Zones),
hence BFE ranges from
249 to 251 feet.



Department of
Environmental
Conservation



Richland Preliminary
Digital FIRM:
Map 36075C0154H
Dated 04/05/2021

New map shows
wave action and
wave run up (VE
ZONES), hence BFE
ranges from 251 to
254 feet.

Shaded X-9999

VE251

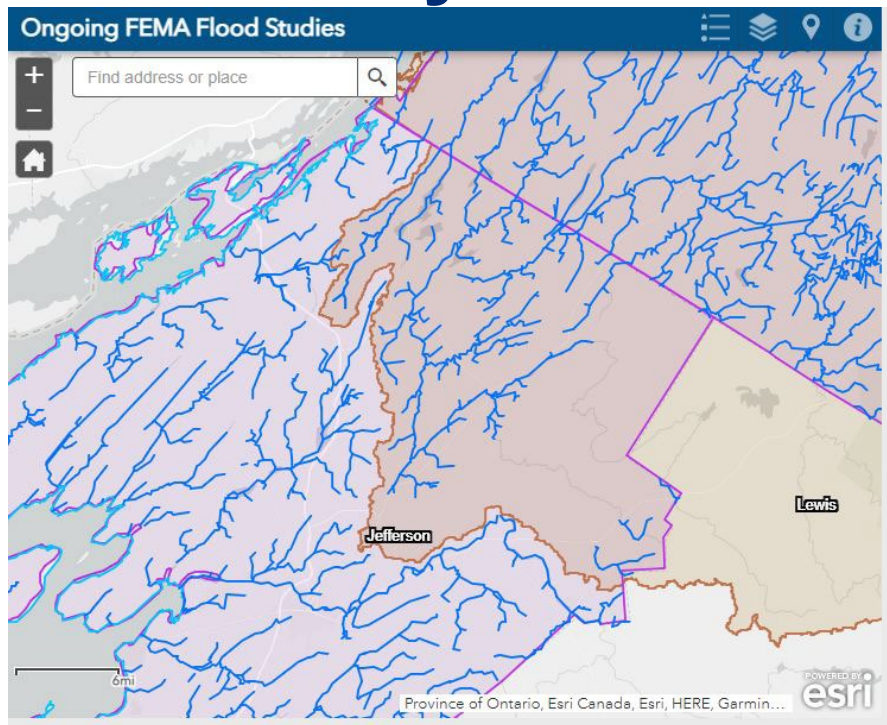
129

AE253

VE253

VE251

North Country BLE



[Region II Mitigation Portal \(arcgis.com\)](https://arcgis.com)



Department of
Environmental
Conservation

Community Role

- Adopt/enforce 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 Mary Binder Gibbs



Photo Luke Latini



Department of
Environmental
Conservation



The New York Times

SUBSCRIBE

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



Benefits

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

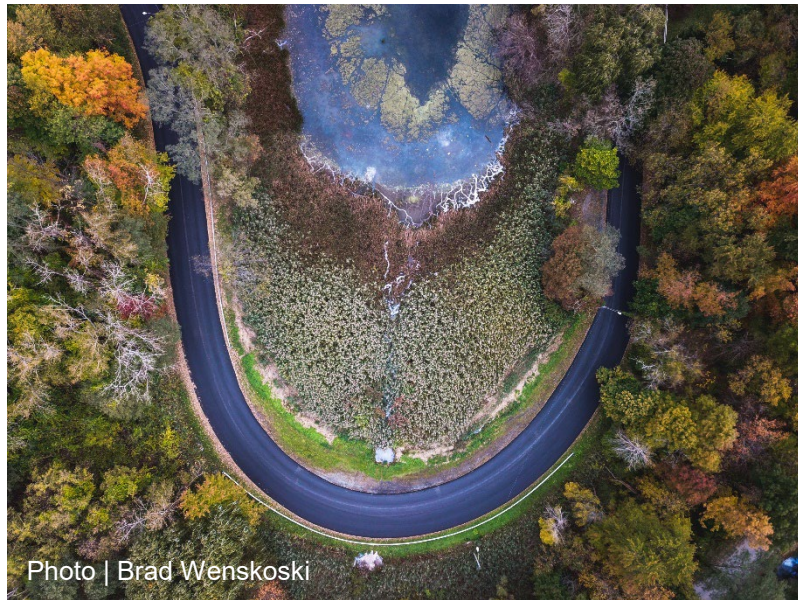


Photo | Brad Wenskoski

Stream Restoration- House Elevation



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:

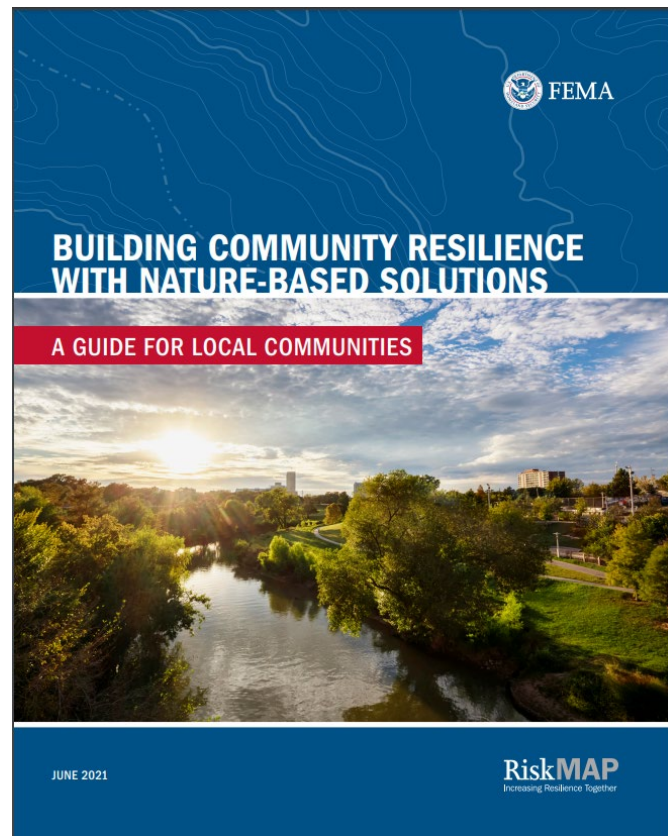
- Land Conservation
- Greenways
- Wetland Restoration
- Floodplain Restoration
- Stormwater Parks

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



Department of
Environmental
Conservation

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! Any questions?

Mary Binder Gibbs, CFM

Environmental Program Specialist

Region 6-Potsdam

(315) 705-3038

mary.binder@dec.ny.gov



Department of
Environmental
Conservation