



Department of  
Environmental  
Conservation

# Post Disaster Floodplain Administrator Response – 1 Hour

## Course Information

This course has been approved by the Department of State for In-Service Training credit as follows:

- 1 hour, Topic 1 – Enforcement & Administration

Course number: T02-07-3005

## To receive In-Service credit, you must:

1. Login using a computer or tablet,
2. Login no later than 15 minutes after the scheduled start time, and
3. Log out no earlier than:
  - The scheduled end time if the webinar ends late, or
  - The actual end time if the webinar ends early.

Please allow at least 3 weeks for training to show up in your SLMS training history.



# DEC Floodplain Coordinators

## Central Office Floodplain Management Coordinators

Main Number, 518-402-8185

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<b>Brad Wenskoski, CFM:</b>	Lead for Regions 5 – 6	518-402-8280	<a href="mailto:brad.wenskoski@dec.ny.gov">brad.wenskoski@dec.ny.gov</a>
<b>Geoff Golick, EIT:</b>	Lead for Engineering	518-402-7350	<a href="mailto:geoffrey.golick@dec.ny.gov">geoffrey.golick@dec.ny.gov</a>
<b>Bailey Sawyer:</b>	Lead for Regions 1 – 4	518-402-9148	<a href="mailto:bailey.sawyer@dec.ny.gov">bailey.sawyer@dec.ny.gov</a>

## Western NY Flood Hub Floodplain Management Coordinators

Assisting with Regions 7-9

<b>Karis Manning, PE:</b>	Chief, Western Flood Hub	585-226-5445	<a href="mailto:karis.manning@dec.ny.gov">karis.manning@dec.ny.gov</a>
<b>Brienna Wirley, CFM:</b>	Lead for Regions 7 – 9	585-226-5465	<a href="mailto:brienna.wirley@dec.ny.gov">brienna.wirley@dec.ny.gov</a>

Email us at [floodplain@dec.ny.gov](mailto:floodplain@dec.ny.gov)



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# Regional Floodplain Coordinators



*Region 8 North: Avon*  
Jonathan Tamargo  
585-226-5451

*Region 8 South: Elmira*  
Brad Chaffee  
607-732-2214



*Region 9: Buffalo*  
**Vacant**  
Contact: Brienna Wirley



# Accomplishing NFIP Goals



Require

Require new construction and substantial improvements/substantial damage to be flood resistant

Guide

Guide future development away from flood hazard areas

Transfer

Transfer flood loss costs from taxpayers to floodplain property owners

Prohibit

Prohibit new development in designated floodways that would increase flood heights



# Floodplain Management 101

- NO BASEMENTS
- Studied Floodplains: Lowest floor at least 2 ft above BFE ([NY] R322.1.4), ([NY] 1612.3.1)
- Coastal V Zones: Lowest structural member at least 2 ft above BFE ([NY] R322.3.2) ([NY] 1612.4)
- Unstudied Floodplains: Lowest floor at least 3 ft above highest adjacent grade (No longer allowed in R322), ([NY] 1612.4)
- All floodplain development requires a permit
- Floodway development requires H&H study

FEMA, 44 CFR 60.3b,

NYS DEC Model Local Law for 5 Acres/50 Lot Requirement



# Floodplain Management 101

- Storage of materials may require permit
- Anchoring requirements
- New structures require elevation certificates (**R322.1.10**), (**[NY] 1612.4**)
- Floodplain residents may need rescue!
- Keep the bulldozer out of the creek!
- Call DEC with questions



# Definition of Substantial Damage

Damage of **any origin** sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

[NY] AJ201 and 44 CFR 59.1



FEMA Substantial Damage Estimator:  
<http://www.fema.gov/media-library/assets/documents/1869>



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# What is the basis for determining a substantially damaged structure?

Percent Damaged =  
Cost of Repair / Market Value

**Even if the repairs are not made**

## Substantial Improvement

Any reconstruction, rehabilitation, addition, or other improvements of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the “start of construction” of the improvement.

# Substantial Improvement or Damage Does Not Include...

Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety codes **which have been identified by the local code enforcement official** and which are the minimum necessary to assure safe living conditions or...





# Substantial Improvement or Damage Does Not Include...



Any alteration of an “historic structure”, provided that the alteration will not preclude the structure’s continued designation as an “historic structure.”

# Requirements For Substantial Improvement

Substantially improved structures are considered **NEW CONSTRUCTION** and must meet all of the minimum building standards of the NFIP.

# FEMA Resources



## Homeowner's Guide to Retrofitting

Six Ways to Protect Your Home From Flooding

FEMA P-312, 3rd Edition / June 2014



[data/20150720-1757-200-15-2915/p\\_758\\_complete\\_r3.pdf](#)

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## Substantial Improvement/ Substantial Damage Desk Reference

FEMA P-758 / May 2010



## Answers to Questions About Substantially Improved/ Substantially Damaged Buildings

FEMA 213 / August 2018



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## Before the Flood

- Know the Regulations
  - 44 CFR 60.3
  - NYS Building Code
  - NYS Residential Code
  - Local Law
- Know your maps
- Identify properties in the community that are in a floodplain
- Ensure that you enforce the Regulations
  - Permits, elevation information





## Know Your Floodplain

Use Flood Insurance Rate Map to:

- Issue permits
- Determine number & type of flood prone structures
- Review with emergency officials and community planners
  - Don't locate critical facilities in floodplains
  - Emergency access/routes should not pass-through floodplains



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## Issue and Enforce Permits

- Review application, plans & specifications
- Check flood elevation on plans ([NY] R322.1.4)
- Check datum NGVD 29 vs. NAVD 88
- Require Elevation Certificate ([NY] R322.1.10)
- Prepared by design professional
- Inspections
- After foundation is prepared, but before walls go up





## **Flood Response and Post Flood Activities**

- Contact County Emergency Management
- Document flooding
- Document damage
- Notify public of need for building permits
- Consider moratorium on new building permits

# The Four-Step Approach

- 1) Initial Screening
  - Green, Yellow, Red Tag
  - Depth / Damage Curves
- 2) Detailed Evaluation
  - Substantial Damage Estimator
- 3) Owner and Contractor Affidavits
  - Must be estimates for a contractor to perform work.
- 4) Certified Appraisal on Appeal
  - Have owner get estimates for work.
  - Use appraisal pre-flood for SD/SI calculations



# Step 1: Initial Screening

- Conduct windshield survey from a moving vehicle to determine area affected by the event as soon as possible after the event
- Create a map of the area
  - Tax map
- Conduct damage assessments
  - Identify levels of damage

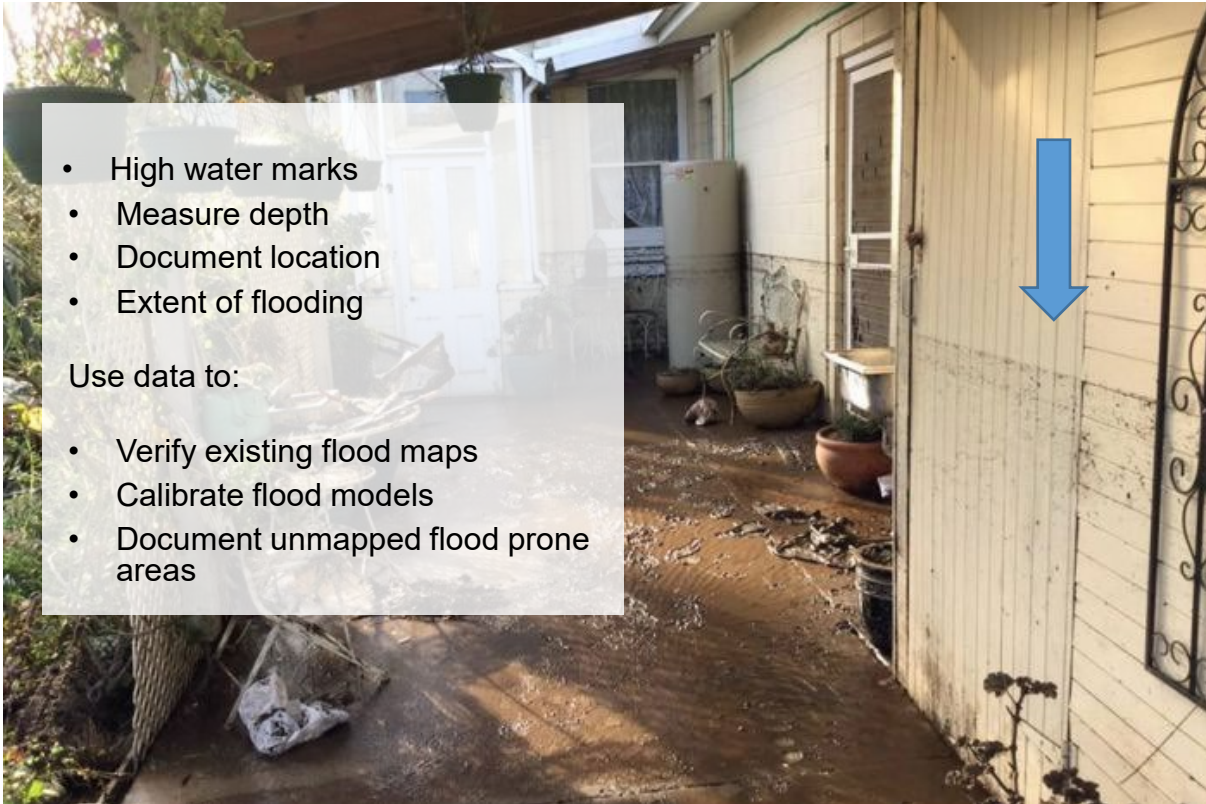


# Document Flooding

- High water marks
- Measure depth
- Document location
- Extent of flooding

Use data to:

- Verify existing flood maps
- Calibrate flood models
- Document unmapped flood prone areas



# Document Damage

Site address or location (GPS coordinates)

Water level in structure

Note building type

- One or two or more stories
- With or without basement
- Split level
- Mobile home

Preliminary damage assessment

- Affected habitable (**Green** Tag)
- Minor (**Yellow** Tag no substantial damage)
- Major (**Yellow** Tag substantial damage)
- Destroyed (**Red** Tag)



# Document Damage



# Notify Public of Need for Permit for Repair/Reconstruction

## Public Notification

- Television
- Community Website
- Emergency Shelters
- FEMA Disaster Centers
- Social Media (Facebook, Twitter, etc.)

## Direct Notification

- Tag individual damaged structures
- Notification letters to Property Owners



# Sample Permit Notification for Permit for Repair/Reconstruction

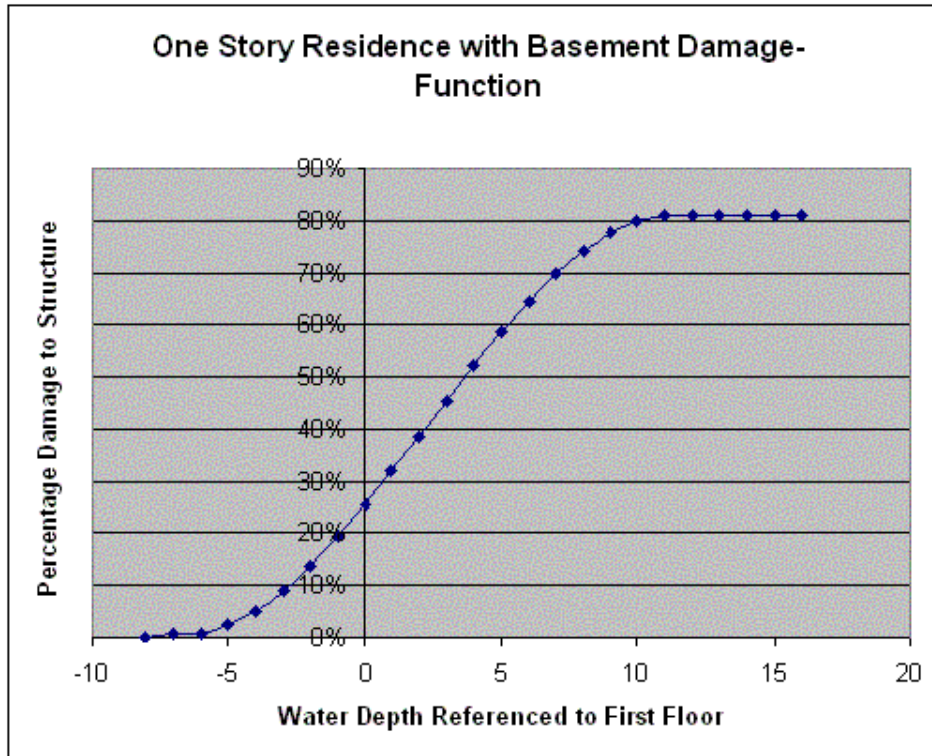
A building permit is required prior to any demolition, rebuilding, remodeling, or other improvements to your structure. Failure to obtain a building permit may result in higher insurance cost, loss of insurance, fines, and/or loss of Certificate of Occupancy. A building permit can be obtained from the \_\_\_\_\_ Office, located at \_\_\_\_\_.



# NFIP Damage Estimation Requirements

- Depth to Damage Curves
- ATC 45 Safety Evaluation of Buildings after Windstorms and Floods
- SDE Software & SDE Community Reports
- Data Collection and Field Inspections
- Documentation
- CEDAR Guidance from DOS Codes Division

# Flood Depth to Building Damage





<b>Building Damage % by Building Type (depreciated replacement value)</b>						
<b>Flood Depth</b>	<b>1 Story without Basement</b>	<b>2 Story without Basement</b>	<b>Split Level without Basement</b>	<b>1 Story with Basement</b>	<b>2 Story with Basement</b>	<b>Split Level with Basement</b>
-2	0	0	0	13.8	10.2	10.4
-1	2.5	3	6.4	19.4	13.9	14.2
0	13.4	9.3	7.2	25.5	17.9	18.5
1	23.3	15.2	9.4	32	22.3	23.2
2	32.1	20.9	12.9	38.7	27	28.2
3	40.1	26.3	17.4	45.5	31.9	33.4
4	47.1	31.4	22.8	52.2	36.9	38.6
5	53.2	36.2	28.9	58.6	41.9	43.8
6	58.6	40.7	35.5	64.5	46.9	48.8
7	63.2	44.9	42.3	69.8	51.8	53.5
8	67.2	48.8	49.2	74.2	56.4	57.8
9	70.5	52.4	56.1	77.7	60.8	61.6
10	73.2	55.7	62.6	80.1	64.8	64.8
11	75.4	58.7	68.6	81.1	68.4	67.2
12	77.2	61.4	73.9	81.1	71.4	68.8
13	78.5	63.8	78.4	81.1	73.7	69.3
14	79.5	65.9	81.7	81.1	75.4	69.3
15	80.2	67.7	83.8	81.1	76.4	69.3
16	80.7	69.2	84.4	81.1	76.4	69.3

From US Army Corps flood damage reduction studies

Data from 1996-2001 (Economic Guidance Memo 04-01 & 01-03)



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# Applied Technology Council 45

## ATC Applied Technology Council

A Nonprofit Corporation  
Advancing Engineering Applications for Hazard Mitigation  
California, Virginia



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## ATC-45 Field Manual: Safety Evaluation of Buildings after Windstorms and Floods

The Applied Technology Council (ATC) is pleased to announce the immediate availability of the ATC-45 *Field Manual: Safety Evaluation of Buildings after Windstorms and Floods*. Funded by the Applied Technology Council, the ATC Endowment Fund, and the Institute for Business and Home Safety, this 132-page report provides guidelines and procedures for conducting postwindstorm and postflood building safety evaluations. The purpose of these evaluations is to determine whether damaged or potentially damaged buildings are safe for use, or if entry should be restricted or prohibited.

The ATC-45 *Field Manual* is intended to be used by building officials, building inspectors, engineers, and others involved in postdisaster safety evaluation of building types commonly found in the United States. The *Field Manual* explains three different building safety evaluation procedures. Two of the procedures (Rapid Evaluation and Detailed Evaluation) are discussed in detail. For each of these procedures, the document provides guidance on where to look for damage.

The *Field Manual* gives advice on evaluating structural, geotechnical, and nonstructural risks, and advice on how to rate the safety significance of certain types of damage. In addition, the *Field Manual* covers related topics of interest to safety personnel, including (a) how to deal with owners and occupants of damaged buildings; and (b) field safety issues. Evaluation forms and posting placards, represented in the document in small-scale size, can be downloaded free of charge below.

The *Field Manual* is patterned after the concepts developed in two earlier ATC projects: (1) the ATC-20 project, whereby ATC developed the well-known and widely used ATC-20 report, *Procedures for Postearthquake Safety Evaluation of Buildings*; companion ATC-20-1 *Field Manual*, and ATC-20-2 *Addendum*, which contains updated evaluation forms and placards; and (2) the ATC-26 project, whereby ATC developed several sets of procedures for postdisaster safety evaluation of U. S. Postal Service (USPS) facilities, including procedures for safety evaluation of

Field manual: safety evaluation of buildings after windstorms and floods



### ATC-45 Rapid Evaluation Safety Assessment Form

#### Inspection

Inspector ID: \_\_\_\_\_ Inspection date: \_\_\_\_\_  
Affiliation: \_\_\_\_\_ Inspection time: \_\_\_\_\_ AM PM  
Areas inspected:  Exterior only  Exterior and interior

#### Building Description

Building name: \_\_\_\_\_ Type of Building  
Address: \_\_\_\_\_  Mid-rise or high-rise  Pre-fabricated  
 Low-rise multi-family  One- or two-family dwelling  
 Low-rise commercial  
Building contact/phone: \_\_\_\_\_ Primary Occupancy  
Number of stories: \_\_\_\_\_  Dwelling  Commercial  Government  
"Footprint area" (square feet): \_\_\_\_\_  Other residential  Offices  Historic  
Number of residential units: \_\_\_\_\_  Public assembly  Industrial  School  
 Emergency services  Other:

#### Evaluation

Investigate the building for the conditions below and check the appropriate column. **Estimated Building Damage (excluding contents)**

Observed Conditions:	Minor/None	Moderate	Severe	
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%
Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%
Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%
Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%

See back of form for further comments.

#### Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

INSPECTED (Green placard)  RESTRICTED USE (Yellow placard)  UNSAFE (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_

Number of residential units vacated: \_\_\_\_\_

#### Further Actions Check the boxes below only if further actions are needed.

Barricades needed in the following areas:

Detailed Evaluation recommended:  Structural  Geotechnical  Other: \_\_\_\_\_

Substantial Damage determination recommended

Other recommendations: \_\_\_\_\_

See back of form for further comments.

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Permission is granted for unlimited non-exclusive, non-commercial use and distribution of ATC evaluation forms provided that the Copyright Notice appears on all copies and the Applied Technology Council name shall not be used for any advertising or publicity. All licenses granted. Permission is further subject to the following conditions: (1) Licensee does not require, resell, or offer the forms for sale or licenses and (2) no material gain or financial profit is to be made from any sale or license of this form. Placards may be used without restrictions for their intended use on building postings. All rights not specifically granted to Licensee are herein reserved by ATC.



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### ATC-45 Rapid Evaluation Safety Assessment Form

#### Inspection

Inspector ID: \_\_\_\_\_ Inspection date: \_\_\_\_\_  
 Affiliation: \_\_\_\_\_ Inspection time: \_\_\_\_\_  AM  PM  
 Areas inspected:  Exterior only  Exterior and interior

#### Building Description

Building name: \_\_\_\_\_ Type of Building  
 Mid-rise or high-rise  Pre-fabricated  
 Address: \_\_\_\_\_  Low-rise multi-family  One- or two-family dwelling  
 Low-rise commercial  
 Building contact/phone: \_\_\_\_\_ Primary Occupancy  
 Number of stories: \_\_\_\_\_  Dwelling  Commercial  Government  
 Other residential  Offices  Historic  
 "Footprint area" (square feet): \_\_\_\_\_  Public assembly  Industrial  School  
 Number of residential units: \_\_\_\_\_  Emergency services  Other: \_\_\_\_\_

#### Evaluation

Investigate the building for the conditions below and check the appropriate column. Estimated Building Damage (excluding contents)

Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)
Cracks, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%
Damage to primary structural members, cracking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%
Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%
Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%
Other (specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%

See back of form for further comments.

#### Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

INSPECTED (Green placard)  RESTRICTED USE (Yellow placard)  UNSAFE (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Number of residential units vacated: \_\_\_\_\_

#### Further Actions Check the boxes below only if further actions are needed.

Barricades needed in the following areas: \_\_\_\_\_  
 Detailed Evaluation recommended:  Structural  Geotechnical  Other: \_\_\_\_\_  
 Substantial Damage determination recommended  
 Other recommendations: \_\_\_\_\_  
 See back of form for further comments.



See back of form for further comments.

**Posting**  
Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsound posting. Localized Severe and overall Moderate conditions may allow for a Restricted Use posting.

**INSPECTED** (Green placard)       **RESTRICTED USE** (Yellow placard)       **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of residential units vacated: \_\_\_\_\_

**Further Actions** Fill in the boxes below only if further actions are needed.

Members of the DOS CEDAR team are not authorized to 'post' buildings

# CEDAR Method for collecting Preliminary Information

See back of form for further comments.

## Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

**INSPECTED** (Green placard)       **RESTRICTED USE** (Yellow placard)       **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_



FEMA Designation: \_\_\_\_\_

Number of residential units vacated: \_\_\_\_\_

**Further Actions** Check the boxes below only if further actions are needed

# FEMA Damage Assessment Guidelines

## Changed in April 2016

### • Categories of damage modified

- “inaccessible” – homes not able to be assessed
- “**destroyed**” – complete failure of 2 or more major structural components; only foundation remains; immanent threat of collapse
- “**major damage**” – water line above 18” in an essential living area, above the outlets or a water line on the first floor when the basement is full
- “**minor damage**” – water line up to 18” in an essential living space; damage to mechanical systems
- “affected” – water in the crawl space or basement w/o water in an essential living space or damage to mechanicals

See back of form for further comments.

#### Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

**INSPECTED** (Green placard)       **RESTRICTED USE** (Yellow placard)       **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_

\_\_\_\_\_ FEMA Designation: Major damage      water 42" above first floor      basement full

Number of residential units vacated: \_\_\_\_\_ **Damage to electrical system** \_\_\_\_\_

**Further Actions** Check the boxes below only if further actions are needed

- Indicate if the water has gone over the electrical panel box and/or meter
  - It is not necessary to enter the building
    - Use water level on face of building
    - interview the occupant
    - Based on local conditions



# Substantial Damage Estimator


Substantial Damage Estimator 3.0

Main Menu File Tools Custom Fields Database Functions Import/Export Reports Help (Database Name: (Database Name Not Entered))

**SDE Substantial Damage Estimator 3.0**

**Residential Assessment** Be sure to SAVE assessment record before generating a report: [Print Summary Report](#) [Print Detailed Report](#) [Check Spelling](#) [Save](#)

Address Structure/Damage/NFIP Cost Element Percentages Output Summary Photos Assessment of 12/8/2017

No Photo Available 

**David Sherman**  
 00 Lincoln Street  
 Clifton Park  
 New York

Damage Date:  
 Assessment Date:  
 6/4/2018  
 Percent Damaged:  
 %

Subdivision / Community	Structure Address	Mailing Address	Custom Fields
Subdivision: <input type="text"/>	Structure Owner First Name: <input type="text" value="David"/>	<input type="checkbox"/> Check if same as Structure Address. Mailing Owner First Name: <input type="text" value="David"/>	Custom Field 1 <input type="text"/>
Parcel Number: <input type="text" value="0000"/>	Structure Owner Last Name: <input type="text" value="Sherman"/>	Mailing Owner Last Name: <input type="text" value="Sherman"/>	Custom Field 2 <input type="text"/>
Lot Number: <input type="text" value="11.22.5674"/>	Street Number: <input type="text" value="00"/>	Mailing Street Number: <input type="text" value="00"/>	Custom Field 3 <input type="text"/>
Elevation of Lowest Floor: <input type="text" value="100.00"/>	Street Name: <input type="text" value="Lincoln"/>	Mailing Street Name: <input type="text" value="Lincoln"/>	
Datum: <input type="text" value="NAVD88"/>	Street Suffix: <input type="text" value="Street"/>	Mailing Street Suffix: <input type="text" value="Street"/>	
NFIP Community ID: <input type="text" value="360713"/>	City: <input type="text" value="Clifton Park"/>	Mailing City: <input type="text" value="Clifton Park"/>	
NFIP Community Name: <input type="text" value="Clifton Park"/>	State: <input type="text" value="New York"/>	Mailing State: <input type="text" value="New York"/>	
Latitude: <input type="text" value="42.836789"/>	County/Parish: <input type="text" value="Saratoga"/>	Mailing County/Parish: <input type="text" value="Saratoga"/>	
Longitude: <input type="text" value="-73.772222"/>	Zip Code: <input type="text" value="12065-___"/>	Mailing Zip Code: <input type="text" value="12065-___"/>	
	Phone Number: <input type="text"/>	Mailing Phone Number: <input type="text"/>	
	Cell Phone Number: <input type="text"/>	Mailing Care of: <input type="text"/>	

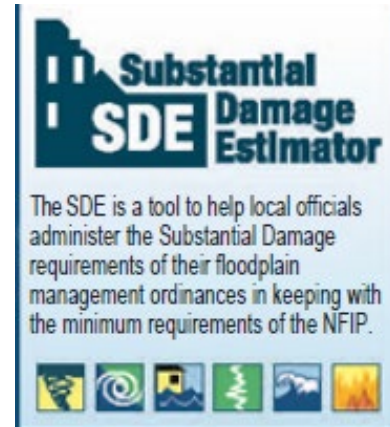
SDE is a tool provided by FEMA to help local officials administer the substantial damage requirements of their floodplain management ordinance in accordance with the minimum requirements of the NFIP.

Total Number of Properties: **1**  
 Total Number of Assessments: **2**



# Substantial Damage Estimator

- FEMA software
- Used to estimate damage
- Flexible
- Insures consistency
- Defendable in court

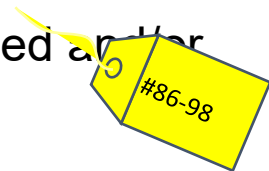
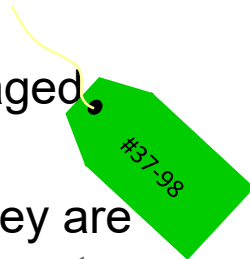


<https://www.fema.gov/media-library/assets/documents/18692>

# “Tagging” Structures

Each inspected structure gets a tag and identification number:

- Structures that are clearly not substantially damaged and are safe for occupancy get a **green tag**
- Structures where it is uncertain whether or not they are substantially damaged and/or safe for occupancy get a **yellow tag**
- Structures that are clearly substantially damaged and/or are unsafe for occupancy get a **red tag**
  - Remember: DOS CEDAR teams are not authorized to tag a structure!



# Exercise

Which of the following structures should be **green-tagged**, **yellow-tagged**, or **red-tagged**?





Yellow tag

07/02/2006



Red tag

Yellow tag

06/28/2006







Green tag (if electrical ok)



Yellow tag



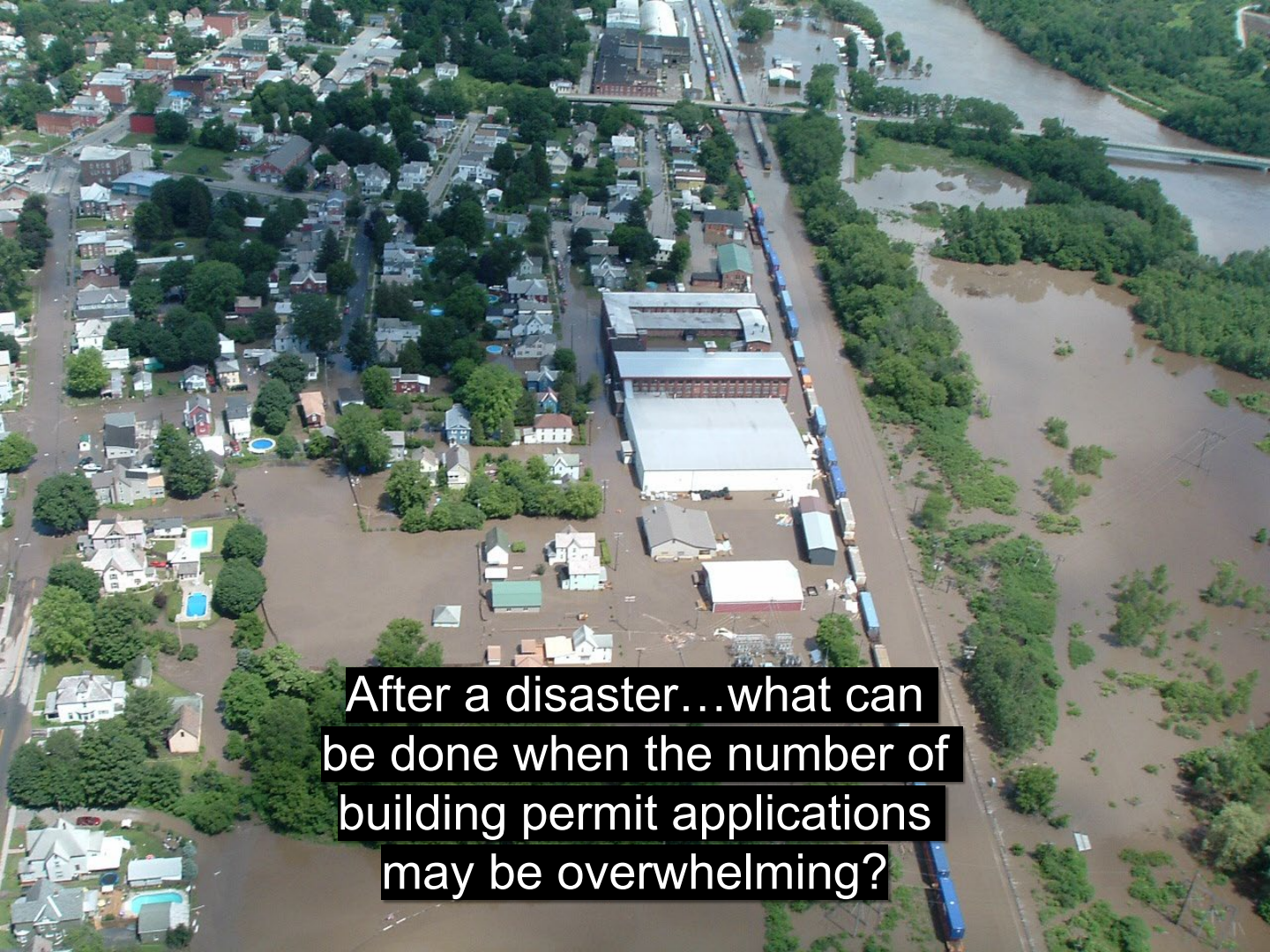




Red tag

# Post Disaster Considerations





After a disaster...what can be done when the number of building permit applications may be overwhelming?

# Post Disaster Guidelines

- Impose a temporary or short-term moratorium for issuing permits
- Issue a press release that informs property owners and contractors about the community's substantial damage and substantial improvement requirements
- Be proactive.
  - Do a windshield tour of the areas that were impacted for signs of repairs being made without permits.
  - Keep records of your activities, i.e., Did you mail out letters, did the community post notices, etc.
  - Take a lot of pictures.







- The Community can waive the permit fees
  - Not required by NYS Regulation
- The Community can not waive permit requirements
  - NYS Executive Law Article 18
  - NYCRR Title 19 Part 1203
  - 44 CFR 60.3



## Repair and Reconstruction Permit Process

- Flood Damage Prevention Law Requirements
- NYS Building Code Requirements
- Determine Floodplain Status
- Determine Extent of Damage
- Document Retention



# Flood Damage Prevention Law



Local Law - Applies to more than building code:

- Schools
- County owned structures
- Agricultural buildings
- Development other than structures
  - Fill
  - Storage of materials
  - RVs

# Floodplain Status

Located outside the floodplain

- B or shaded X zone (500-year floodplain)
- C or X zone (no floodplain)

Located inside the floodplain

- A zone (floodplain but no elevation data)
- A1-A30 or AE zone (has elevation data)
- AH or AO zone (areas of shallow flooding)
- VE zone (coastal zone with wave runup)

Located in or out of the floodway



# FEMA Damage Assessment Guidelines

Changed in April 2016

- Categories of damage modified

- “inaccessible” – homes not able to be assessed
- “**destroyed**” – complete failure of 2 or more major structural components; only foundation remains; imminent threat of collapse
- “**major damage**” – water line above 18” in an essential living area, above the outlets or a water line on the first floor when the basement is full
- “**minor damage**” – water line up to 18” in an essential living space; damage to mechanical systems
- “affected” – water in the crawl space or basement w/o water in an essential living space or damage to mechanicals

# Structures That Are Obviously Not Substantially Damaged

- Structures that would probably fall under this category are the ones that were deemed affected or minor damage category:
  - “**minor damage**” – water line up to 18” in an essential living space; damage to mechanical systems
  - “affected” – water in the crawl space or basement w/o water in an essential living space or damage to mechanical
- These permits can be processed quickly so that owners can repair and reoccupy their structures as soon as possible



# Structures That Are Obviously Substantially Damaged

- These structures are usually uninhabitable and can not be reoccupied until extensive repairs are made.
  - “**destroyed**” – complete failure of 2 or more major structural components; only foundation remains; imminent threat of collapse
- These structures generally have had floodwater impact the electric meter and / or electric panel

# Structures That Are Obviously Substantially Damaged...

- After a disaster, these permits should be less of a priority than the “borderline” cases:
  - Visible, extreme structural damage
  - Structure dislodged from foundation, roof ripped off, collapsed walls
  - The structure cannot be immediately reoccupied because repair and reconstruction will take a long time

# Borderline Structures

- Structural damage is visible
- Detailed estimates of repair cost and market value are required
  - “**major damage**” – water line above 18” in an essential living area, above the outlets or a water line on the first floor when the basement is full
- These structures will probably need an in-depth analysis to determine if they are substantially damaged



# Substantial Improvement / Substantial Damage Desk Reference

FEMA P-758 / May 2010



## Improvement / Repair Cost

- The cost must include all materials and labor, even if the labor is donated or the applicant is doing the work themselves.
- Substantial Improvement/Substantial Damage Desk Reference, FEMA P-758  
([https://www.fema.gov/media-library-data/20130726-1734-25045-2915/p\\_758\\_complete\\_r3.pdf](https://www.fema.gov/media-library-data/20130726-1734-25045-2915/p_758_complete_r3.pdf))



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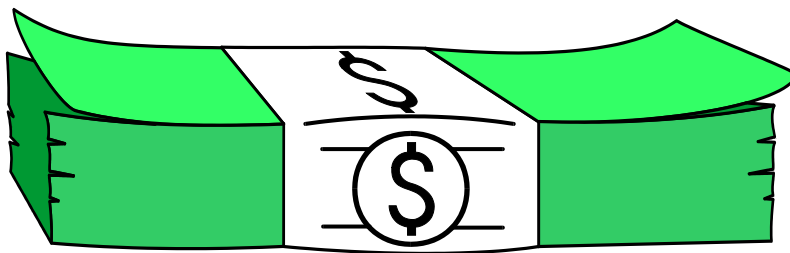
# Owner and Contractor Affidavits

- The purpose of these documents is to ensure that the owner and contractor understand that they are subject to enforcement action and/or fines if repairs or improvements are made that are not included in the substantial improvement evaluation
- This is particularly important when the project falls just short of the substantial improvement threshold
- A modified project that brings it over the threshold is a substantial improvement
- Remember to keep these records!



# Market Value

- Market Value is estimated using the structure's full value assessment.
  - *Land value and accessory structures must be subtracted from the market value for SI/SD Determination.*



# Detail Example

1234 Main Street, Clarkstown, NY

- Given: Land value = \$50,000
- Given: Total value = \$200,000
- Calculated: Structure value \$150,000

## Equalization Rates

- <https://www.tax.ny.gov/pit/property/learn/eqrates.htm>
- 2022 Clarkstown rate = 27.05%
- Market Value:  $\$150,000 / .2705 = \$554,528$



# Appeal

- If the applicant objects to the market value determination, then he or she may appeal by obtaining a certified appraisal based on the market comparison approach.



# Appraisals

- Remember, appraisals based on “economic” or other forms of “external” obsolescence are not acceptable
- The community must always review the appraisal for “reasonableness”
- If deemed reasonable, then the certified appraisal is the final market value determination (Don’t forget to adjust property taxes!)

# A Note About Appraisals

- Many individuals planning extensive improvements are required to obtain a certified appraisal for a construction loan
- Consider asking the applicant to obtain the appraisal “up-front” so you can make your substantial improvement evaluation before issuing the permit
- The appraisal must be based on the structure prior to the damage occurring.



# Document Retention

- Inventory of flood-damaged structures
- FEMA Letters of Map Change
- Damage assessments
- Floodplain development permit
- Elevation certificate
- As built plans or certifications
- Any other supporting documentation

**A structure is substantially damaged and is not brought into compliance, how will this impact flood insurance?**



# Increased Cost of Compliance (ICC)



# ICC Coverage

## Mitigation Measures under ICC:

- Elevation
- Floodproofing (**non-residential**)
- Relocation
- Demolition



National Flood Insurance Program

## Increased Cost of Compliance Coverage

Guidance for State and Local Officials

FEMA 301 / September 2003



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# ICC Coverage

- ICC is an endorsement to the Standard Flood Insurance Policy
- ICC coverage provides for the payment of a claim to help pay for the cost to comply with State or Community floodplain management laws or ordinances after a flood event in which a building has been declared substantially or repetitively damaged.
- Applies to only flood damaged buildings within a mapped Special Flood Hazard Area.
- Only provided on a building covered by a Standard Flood Insurance Policy.
- The policy holder must apply and be accepted.



National Flood Insurance Program

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# Eligibility for ICC Claim

A building is eligible for an ICC claim if it is in an A or V zone and the community makes the following determination:

Substantially Damaged by flood; or

A building is a Repetitive Loss structure in a community that has passed a Repetitive Loss definition in its local law.



# Further Guidance:



“Guidance for State and Local Officials on ICC Coverage”

National Flood Insurance Program

## Increased Cost of Compliance Coverage

Guidance for State and Local Officials

FEMA 301 / September 2003



<http://www.fema.gov/library/viewRecord.do?id=1532>



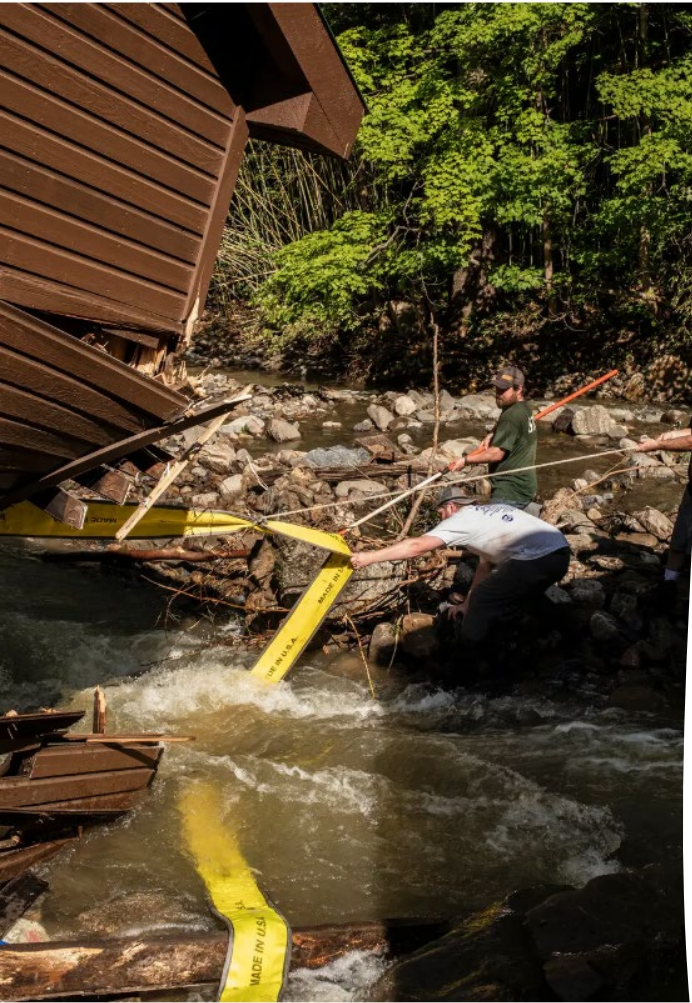
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# DRRA (Disaster Recovery Reform Act) 1206

- FEMA's Public Assistance (PA) Program
- **DRRA 1206:**
  - Assistance to local governments for building code and floodplain administration/enforcement, including inspections for SD determinations
  - Financial assistance for base and overtime wages for extra hires needed for implementing and enforcing building codes
  - Available up to 180 days after federal disaster declaration

1. [Section 1206 | Building Code and Floodplain Management Administration and Enforcement | FEMA.gov](#)
2. [Disaster Recovery Reform Act \(DRRA\) Section 1206 policy – YouTube](#) (6-minute video)





## Summary

- Ensure mitigation measures meet the NFIP requirements, as well as NYS Uniform Code.
- Require all necessary permits for all development.
- Inspect to ensure the mitigation measure is completed according to plans.
- Issue a Certificate of Occupancy/ Compliance.
- Maintain records.
- Contact NYSDEC & FEMA with any questions.

# Thank You

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