

**FLOODPLAIN 101**

The slide features four logos arranged horizontally. From left to right: Illinois Department of Natural Resources (with a green tree logo), FEMA (with its seal), IAFSM (International Association of Floodplain and Waterway Management, with a blue water drop logo), and Illinois State Water Survey (with a red 'X' logo).

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### Webinar Housekeeping

- Turn off camera
- Dial in option if you slow internet
- Mute Microphones/phones
- Put questions in the chat box
- Breaks & Lunch
- Attendance - CECs

A large orange-outlined computer monitor icon is centered on the slide. In the bottom right corner of the monitor's screen, there is a small version of the Illinois Department of Natural Resources logo.

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### Course Topics

- Part 1 Flooding and Floodplain Management
- Part 2 A Flood Maps and Studies
- Part 2 B Map Changes
- Part 3 Regulations
- Part 4 Ordinance Administration
- Part 5 Flood Insurance & CRS
- Part 6 Mitigation and Disaster Operations
- Part 7 Coastal V Zones
- Questions

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### Basic Terms

- Federal Emergency Management Agency (FEMA)
- National Flood Insurance Program (NFIP)
- Flood Insurance Rate Map (FIRM)
- Pre-FIRM Building\*
- Post-FIRM Building\*
- Floodplain, Regulatory Floodplain, Zone A/AE, AO, AH and Zone V/VE
- Floodway
- Lowest Adjacent Grade (LAG)
- Base Flood Elevation (BFE)

\* No longer a factor for flood insurance

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## Part 1 – Flooding and Floodplain Management Topics

- What is the NFIP?
- Basic Abbreviations & Terms
- Floodplain vs Floodway
- Minimum Standards of the NFIP



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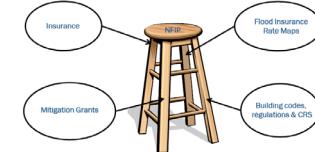
## What is the NFIP?

A voluntary federal program that provides:

- flood insurance to property owners and renters in participating communities
- maps and studies
- grants and disaster assistance

Communities must:

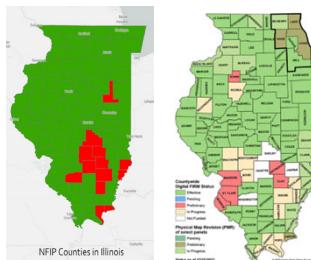
- adopt and enforce floodplain management regulations
- Adopt the flood hazard maps and study



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## NFIP in Illinois

- 89 of 102 Counties have joined the NFIP
- Total of 896 communities joined the NFIP
- 112 communities in IL with Mapped floodplain do not participate
- 11 suspended communities and 3 withdrew
- 1 community on probation due to building homes with basements in the floodplain

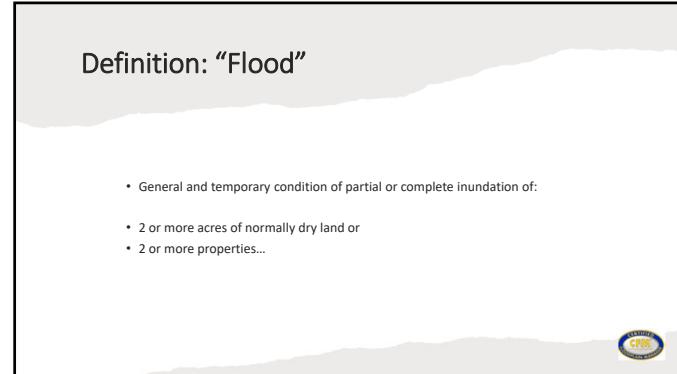


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## NFIP - Shared Responsibilities



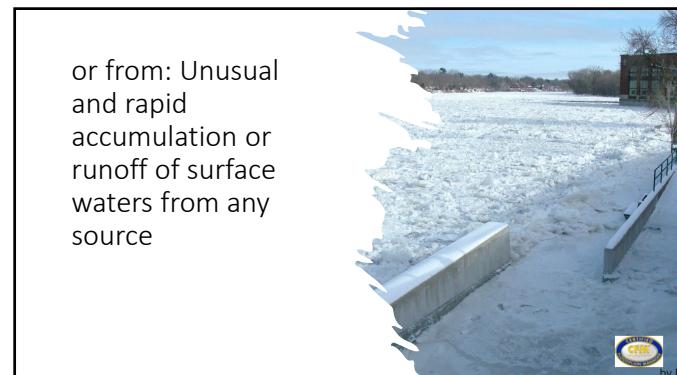
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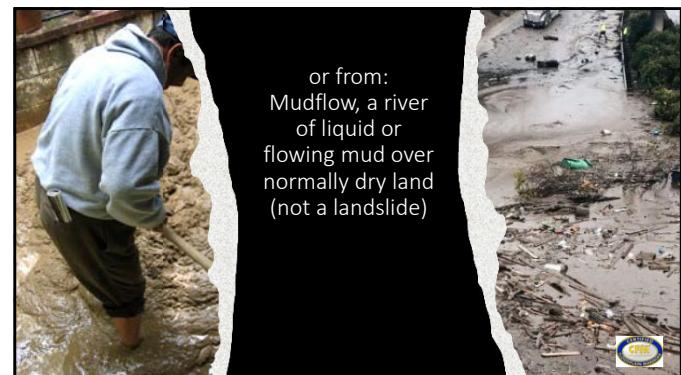
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Or from: Collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood.



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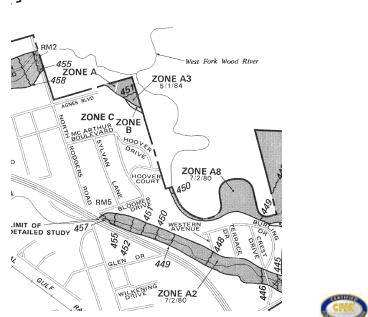
## Primary Types of Flooding Shown on a FIRM

- Riverine
  - Coastal
  - Shallow
    - Sheet flow (AO Zones)
    - Ponding (AH Zones)

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## Understanding the Floodplain

The regulatory floodplain is the land that is subject to a 1% or greater chance of flooding in any given year.



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## What is a Special Flood Hazard Area (SFHA)?

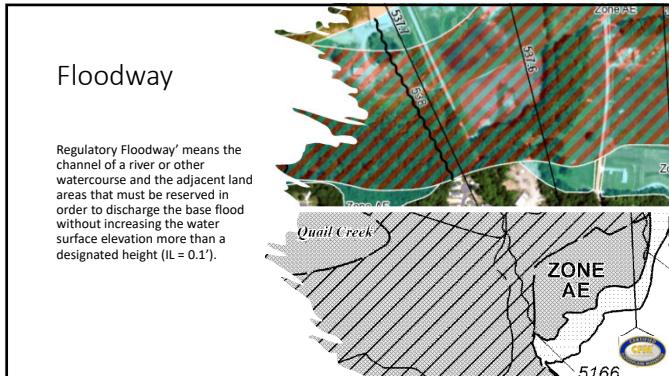
- Another name for the Base Flood or 1% annual chance flood floodplain.
  - Avoid calling the 100-Year Flood
  - These areas are indicated on Flood Insurance Rate Maps (FIRMS) as Zone A, AE, VE, AO, AH, AR, AAq

FLOOD HAZARD INFORMATION

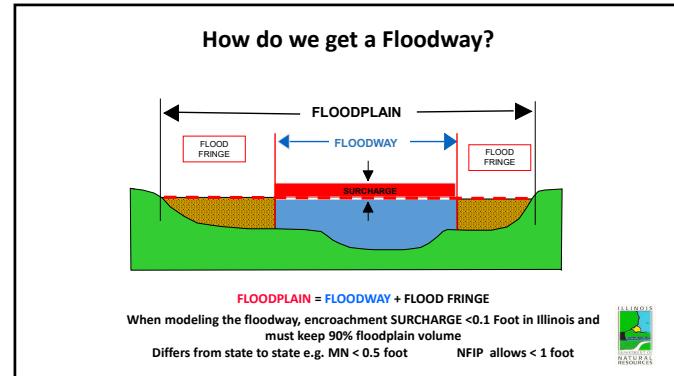
**FLOOD HAZARD INFORMATION**  
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT  
**THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT**

Special Flood Hazard Areas		Without Base Flood Elevation (BFE)	
		Zone A, AE, AR	
		With BFE or Depth Zone AE, AO, AH, VE, AR	
		Regulatory Floodway	
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile	Zone X	Zone X
	Areas of 1% Annual Chance Flood Hazard	Zone X	Zone X
OTHER AREAS	Area with Reduced Flood Risk due to Levee	See Notes Z, ZR	Zone D
	Area with Flood Risk due to Levee	Zone D	Zone D
US SCREEN		Area of Minimal Flood Hazard Zone X	
OTHER AREAS		Area of Undetermined Flood Hazard Zone D	

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### Community's Purpose in Floodplain Management

- Ensure new buildings and substantially improved buildings are protected from flood risk
- Ensure new development does not increase flood risk to themselves and others
- Comply with the rules and regulations of the National Flood Insurance Program codified as 44 CFR 59-79,

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### Local Community Role in the NFIP

**Floodplain Manager Duties**

- Permit all Development in the regulatory floodplain (1% - A or V Zones)
- Check all permits to see if the site is in the floodplain (interior work too)
- Issue permits that meet the code and inspect work for compliance
- If in the floodway refer to a PE for review – State permit, state issued “No Permit Required” letter, or state delegation letter required if site under state jurisdiction
- Inspect the floodplain – looking for violations

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## Local Community Role in the NFIP (cont.)

### More Floodplain Manager Duties

- Issue violation notices and ENFORCE your code
- Maintain any floodplain building permit records PERMANANTLY, including site grading plans, subdivision grading plans, and elevation certificates
- Enforce substantial improvement requirements
- Inspect and document post-flood (or other source) damages
- Make substantial damage estimates and enforce compliance



## NFIP Regulations

### Title 44 of the Code of Federal Regulations

#### Chapter 1, Subchapter B Insurance and Hazard Mitigation

##### Part 60 Criteria for Land Management and Use

###### 60.3 Flood plain management criteria for flood-prone areas

- a) No mapped floodplain
- b) A Zones (no studied floodplains)
- c) A, AE, AH, and AO zones (includes studied floodplains, no floodways)
- d) A, AE, AH, and AO zones (includes studied floodplains with delineated floodways)
- e) added V/VE to c level regulations

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## NFIP Regulations

### 60.3 a.

- No mapped floodplain
- Community regulates based on known flood-prone areas
- Ensure development is reasonably safe from flooding
- Buildings must meet protection standards
- Require water and waste water systems to be designed to minimize or eliminate infiltration of flood waters

## NFIP Regulations

### 60.3 b.

- Mapped but unstudied floodplains (Zone A)
- All requirements of 60.3 a.
- New subdivisions of 50 lots or 5 acres, whichever is less to include BFE calculations
- Obtain a reasonable estimate of the BFE from state, federal or other source
- Maintain elevation data and floodproofing records
- Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained

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## NFIP Regulations

60.3 c.

- Mapped and studied floodplains (Zone A, AE, AO and AH)
- All requirements of 60.3 a. and b.
- Building protection standards now include lowest floor elevated to or above the BFE and non-residential may be floodproofed (Part 3)
- Enclosed areas below BFE parking, access to building, or storage with openings
- Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) in Zones A and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot (IL < 0.1 ft) at any point within the community

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## NFIP Regulations

60.3 d.

- Mapped and studied floodplains (Zone A, AE, AO and AH) with AE Floodways
- All requirements of 60.3 a., b., and c.
- Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;
- May permit an encroachment with a CLOMR/LOMR

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## NFIP Regulations

60.3 e.

- Mapped and studied floodplains (Zone A, AE, AO and AH) with V/VE Zones
- All requirements of 60.3 a., b., and c.
- Added Zone V/VE requirements (Part 7)

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## Part 1 Summary Review

- Where did we confuse you?
- Basic terms and abbreviations
- NFIP
- Federal, state and local roles
- Floodplain, Flood Fringe vs Floodway
- NFIP Minimum Standards



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