



NFIP Basics

A TRUE BEGINNER'S GUIDE TO THE
NATIONAL FLOOD INSURANCE PROGRAM




Presenter

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Continuing Education Credits

- For full credit you must be attentive and participate in the polls
- Credit eligibility is based on attendance and participation
- STARR II reports to ASFPM once per month for the previous month
- If eligible, you will receive a Certificate of Attendance via email that you can forward to other agencies



Agenda

- Introduction and Housekeeping
- History of the NFIP
- Basic Terminology
- Community's Role in Floodplain Management
- NFIP Compliance
- Community Rating System
- Resources

NFIP Overview



FEMA

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National Flood Insurance Program (NFIP)



- Federal program that provides flood insurance to participating communities
- To participate, local communities agree to enforce minimum NFIP standards
- Private insurers write the policies based on an agreement with the Federal Government

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How was it established?



- US Congress established the NFIP in 1968, with the passage of the National Flood Insurance Act
- Reformed in 1973, 1994, 2004, 2012, 2014
- Administered by Federal Emergency Management Agency (FEMA)

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NFIP Participation



- Participating communities required to adopt and enforce a floodplain management ordinance that meets or exceeds 44 CFR 60.3
- Continued eligibility based on maintaining compliance, which is based on enforcement of the provisions of the Floodplain management ordinance
- Compliance monitored by FEMA via an audit process called a Community Assistance Visit (CAV)

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Team Effort




<u>PUBLIC</u>	<u>PRIVATE</u>
Building Officials	Property Owners
Planners	Lenders
Public Works	Insurance Agents
Public Information Officers	Builders
State Agencies	Surveyors
Federal Agencies	Engineers






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Purpose of the NFIP




- Reduce emphasis on flood control; increase emphasis on floodplain management
- Reduce Federal disaster costs; shift burden from general taxpayers to floodplain occupants
- Provide insurance coverage not generally available on the private market




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More Reasons for the NFIP




- New floodplain development built to construction standards that protect buildings against future flood damage
- Promotes sound floodplain management practices
- Provides a better form of assistance to flood victims



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Is NFIP Participation Mandatory?



No, however, there are ramifications of non-participation:

- Federal flood insurance not available
- Loans from federally-backed institutions may not be made on structures in SFHA
- Federal grants to repair insurable buildings in SFHA not available

Some states require flood-prone communities to participate in the NFIP




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NFIP National Statistics

(Aug/Oct 2018)

- 22,324 participating communities
- 5 million flood insurance policies
- \$1.3 trillion in flood coverage
- Average premium: \$699



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Floodplain Management

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What is Floodplain Management?

A comprehensive approach to reduce flood losses and protect natural functions

Floodplain management has two principle strategies:

- Structural – Dams, levees, floodwalls, channel alterations, on-site detention
- Non-Structural – Land use regulations, construction standards, insurance, education



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Non-Structural Strategies

- Reduce impact through preparedness, standards, flood insurance, education
- Preserve and restore floodplain functions as close to natural as possible
- Implement regulations at the local level
- Remove, relocate, elevate existing flood-prone structures




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Terminology


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Flood

A general and temporary condition of partial or complete inundation of normally dry land areas from

- Overflow of inland or tidal waters
- Unusual and rapid accumulation or runoff of surface waters from any source
- Insurance: Two lots or two acres



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Base Flood

- 1% Annual Chance Flood
- Has a 1% chance of occurring in any given year
- Often referred to as the “100-year” flood
- Base Flood Elevation (BFE) is the expected elevation of the crest of the base flood

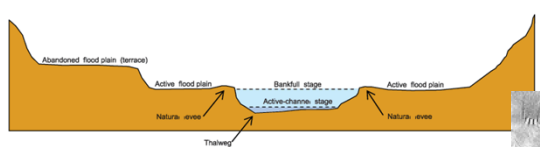
Flood Frequency Chart

Flood frequency (years)	Chance of flooding in any given year	Percent chance of flooding during 30-year mortgage
10	10 out of 100 (10%)	96%
50	2 out of 100 (2%)	46%
100	1 out of 100 (1%)	26%
500	0.2 out of 100 (0.2%)	6%

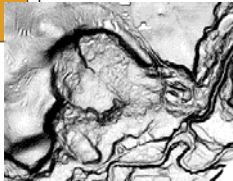
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Floodplain



Floodplains are natural landscape features, built by rivers.



Source: DOGAMI website, July 2009

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Special Flood Hazard Area

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Special Flood Hazard Area

- The area depicted on the FIRM as being inundated by floodwaters from the base flood
- The minimum area subject to floodplain management regulations
- Includes both the floodway and flood fringe

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Floodway

- Channel of the river and portion of the floodplain reserved to convey the 1% annual flood
- Velocities are the greatest
- Regulations strive to keep floodways open
- Regulations require development (if allowed) to cause no increase in flood heights (Floodway analysis)

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Flood Fringe

- The area on either side of the floodway
- Is subject to inundation by the base flood, but conveys little or no velocity flow
- Development requires a permit and must adhere to local floodplain development standards

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Fill



- Considered “development” and requires a permit when property is in the SFHA
- Prohibited in the floodway
- Includes roads, rail beds, culverts

The Effects of Fill on a Floodplain





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Development



Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.







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Substantial Improvement




Any reconstruction, addition, or improvement of a structure where the cost equals or exceeds 50% of the market value of the structure before the improvement.










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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 percent of the market value of the structure before the damage occurred.



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How the NFIP Works

- Mapping
- Insurance
- Regulations



Mapping

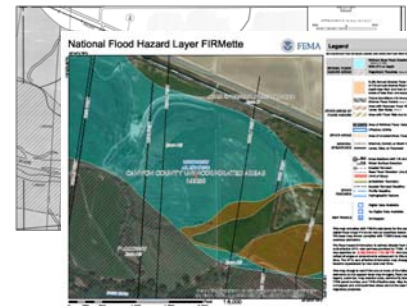


Flood Insurance Rate Map (FIRM)

- Basis for regulating development
- Depicts flood hazard zones based on the Flood Insurance Study (FIS)
- Used to determine flood insurance purchase requirement and rating
- Shows estimated BFE in flood hazard zones
- Digital FIRM suitable for use in GIS




Flood Insurance Rate Map (FIRM)

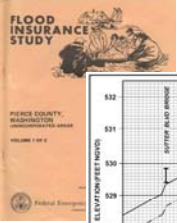


Use the digital or paper FIRM to interpret the floodplain for regulatory purposes

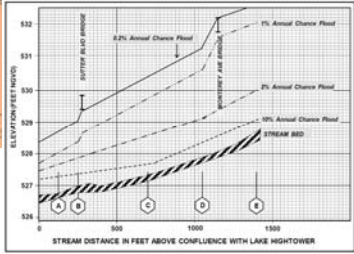
- From the FIRM:
- Identify the Flood Zone
 - Determine proximity to Floodway boundary
 - Estimate the BFE
 - Rounded to nearest 1 foot

Flood Insurance Study (FIS)






- A report prepared by FEMA that summarizes an analysis of the flood hazards in a community
- Used to prepare the FIRM
- The appropriate tool for determining a BFE at a site for regulatory purposes
 - 0.1 foot increments



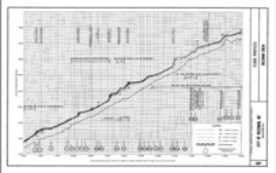
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FIS Contents




- Background information
- Engineering methods used for flood study
- How the FIRM was prepared
- Flood data and tables
 - Summary of Discharges
 - Floodway data
 - Flood Profiles

Floodway Name and Location	Elevation (feet NAVD 83)			
	1% Percent Annual Chance	2 Percent Annual Chance	5 Percent Annual Chance	10 Percent Annual Chance
Lake Michigan	**	**	561.7	**
City of Chicago Wilson Higgins Flood Control Reservoir	**	**	441.9	**
City of Des Plaines Lake Mary Ann Dodge Francis Pond	**	**	434.4	**
City of Hickory Hills Hickory Hills Reservoir	**	**	432.7	**




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Reading Flood Insurance Studies




FEMA offers a tutorial (June 2000) on how to properly read and interpret an FIS that can be found at www.fema.gov/media-library/assets/documents/7989

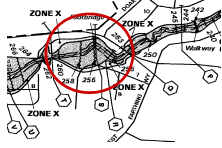


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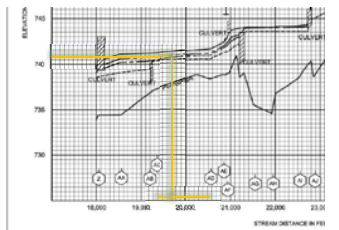
Determining BFE



Training is available from STARR II: <http://j.mp/starronlinetraining>



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Insurance


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NFIP Flood Insurance



- Available only in participating communities
- Required for federally-backed mortgages when any insurable structure is located in SFHA
- Mandatory purchase triggers: making, renewing, extending a loan

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What is an insurable building?

Any building that has two walls, a roof and an assessed value of greater than \$1000 that is principally above ground, and not entirely over water

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Notes on Insurance

- Can be purchased from almost any insurance agent
- Premium does not rise after a loss*
- 30 day waiting period unless purchased at loan closing or within 13 months of new/revised FIRM**

*Biggest Waters Act of 2012 changes the way Severe Repetitive Loss (SRL) properties are rated
 **May be waived or extended after a wildfire event

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Notes on Insurance



Two premium categories

- Pre-FIRM rates subsidized by the NFIP*
- Post-FIRM rates are based upon actuarial risk tables

Table 5: Factors Influencing NFIP Rates by Zone
Source: FEMA

A Zone	V Zone	Outside SFHA
<ul style="list-style-type: none"> • Type of Property • Number of Floors • Basement Presence • Elevation Relative to BFE 	<ul style="list-style-type: none"> • Type of Property • Year of Construction • Obstruction • Replacement Cost Ratio • Elevation Relative to BFE • Numbers of Floors • Basement Presence 	<ul style="list-style-type: none"> • Type of Property • Basement Type • Loss History (for PRP Qualification)

*Recent NFIP reforms phase out discounts for Pre-FIRM structures

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What happens when the FIRM changes?



FIRM changes building from Zone X to Zone A or V

- Lender may demand that building owner purchase flood insurance within 45 days at any time during life of loan; If insurance not purchased within 45 days, it will be force placed (very expensive)

FIRM changes from Zone A/V to Zone X

- Flood insurance no longer mandatory, but the bank may still require it; premiums likely to be lower

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Regulations



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Roles and Responsibilities



- Community
- State
- Federal



Clark Fork River, outside of Plains, Montana. Originally house was 30-40 feet from river bank and 1" above BFE

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Federal Role



- Administer the NFIP through Regional offices
- Provide assistance to State NFIP coordinating agencies
- Advise local officials responsible for administering floodplain development regulations
- Assess community compliance with NFIP criteria
- Enact sanctions for non-compliance
- Answer questions from design professionals and the public
- Help review and adopt new maps and data
- Provide information and training on the NFIP

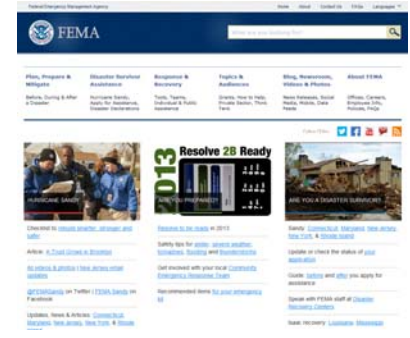


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www.fema.gov



- Tutorials
- Technical memorandums
- Model programs
- Planning guidance
- Grant notification/information
- Policy and procedure
- Valuable web links



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Other FEMA Websites



Map Service Center

- msc.fema.gov

Mapping Information Platform

- hazards.fema.gov

NFIP Consumer Information

- www.fema.gov/national-flood-insurance-program

Insurance

- www.nfipiservice.com

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State Roles



- Ensuring that communities have the legal authorities necessary to adopt and enforce floodplain management regulations
- Establish minimum state regulatory requirements consistent with the NFIP
- Provide technical and specialized assistance to local governments including: ordinance review, mapping and the adoption process
- Coordinate activities of various state agencies that affect the NFIP

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Community Roles



- Issuing or denying floodplain development permits
- Inspecting development to assure compliance with the local regulations
- Maintaining records of floodplain development
- Assisting FEMA in preparation and revision of flood maps
- Assisting residents in obtaining information on flood hazards, map data, flood insurance and proper construction measures

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Community Roles



- Review all floodplain development applications to determine whether it is Substantial Improvement
- Assess damaged buildings and make Substantial Damage determinations



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Duties of the Local FPA



Know your local ordinance!

See handout: Duties of a Local Floodplain Administrator

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NFIP Compliance



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Compliance



“Compliance” means holding up your end of the agreement by implementing your ordinance.

FEMA or State-led Community Assistance Visits (CAV) monitor local compliance.

FEMA has recourse for non-compliance:

- Reclassification under the Community Rating System (CRS)
- Probation
- Suspension

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What is a CAV?



Community Assistance Visit

- Performed by FEMA or State every 3-5 years
- Field work and cross-checking with communities regarding cases observed
- Ordinance deficiencies can result in quick suspension from the NFIP if not corrected
- Enforcement deficiencies can lead to probation or suspension

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Typical CAV Findings



- Inadequate flood vents
- Mechanicals not elevated above BFE
- Enclosures below BFE
- Encroachments/Fill in the floodway
- Wet floodproofing of buildings that exceed the low-damage potential threshold
- Manufactured homes not adequately anchored
- Inadequate record-keeping systems
- Not requiring permits for “other” development
- As-built lowest floor elevations often not recorded
- Inadequate documentation of altered watercourses

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Probation



- Represents formal notification that a community’s program is non-compliant
- All policy holders will pay a \$50 surcharge during the probationary period
- Probation remains in effect for at least one year, or until the community corrects its program deficiencies

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Suspension



- Invoked if a community does not address its deficiencies within the probation period
- Community no longer in the NFIP
- No NFIP Flood Insurance available
- FEMA will provide a community 30 days to show why it should not be suspended
- A suspended community can re-apply to the NFIP, if deficiencies have been remedied to the "maximum extent possible"

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Community Rating System (CRS)



- Part of National Flood Insurance Program
 - Voluntary program
- Provides reduced flood insurance premiums where there is better floodplain management (above and beyond the minimum requirements of the NFIP)
- Administered by the Insurance Services Office
 - ISO/CRS Specialists



Goals of CRS



- Reduce and avoid flood damage to insurable property
- Strengthen and support the insurance aspects of the NFIP
- Foster comprehensive floodplain management



CRS Series of Activities




- (300) Public Information
- (400) Mapping and Regulations
- (500) Flood Damage Reduction, Planning
- (600) Warning and Response

19 Activities
94 Elements



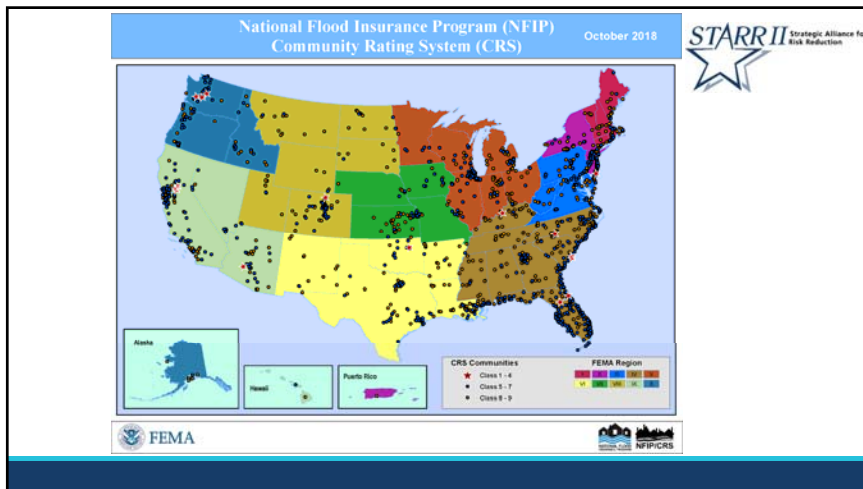
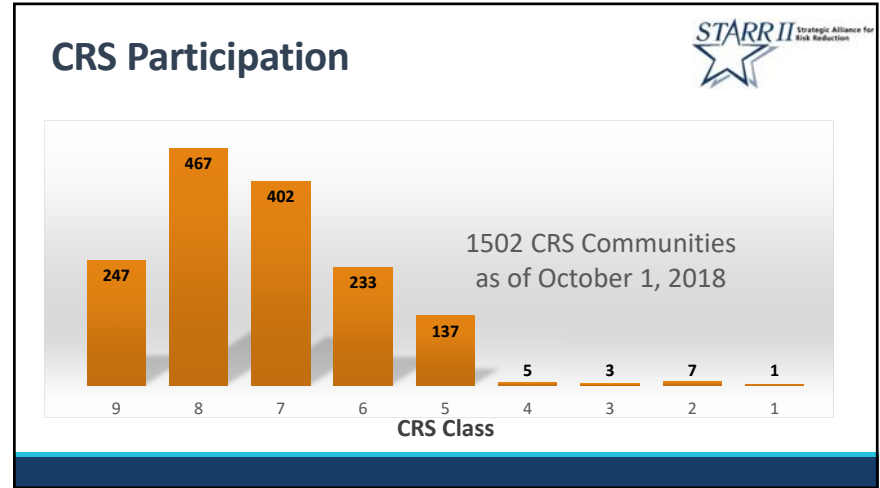
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CRS Classes



Class	Points	SFHA Discount	Non-SFHA
1	4,500	45%	10%
2	4,000	40%	10%
3	3,500	35%	10%
4	3,000	30%	10%
5	2,500	25%	10%
6	2,000	20%	10%
7	1,500	15%	5%
8	1,000	10%	5%
9	500	5%	5%
10	<500	0	0

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- ### This is a lot to learn...
- 
- FEMA Emergency Management Institute (EMI) – <https://training.fema.gov/emi>
 - Association of State Floodplain Managers (ASFPM) – www.floods.org
 - STARR II – www.starr-team.com
 - Sign up for the Region 10 newsletter! – <http://i.mp/starrxnews>
 - CRS Webinar Series – <http://crsresources.org/training>
 - Call your FEMA Region and your State NFIP Coordinator
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FEMA Resources



NFIP Guidebook (FEMA 480)

<https://www.fema.gov/media-library/assets/documents/902>

Technical Bulletins

<https://www.fema.gov/media-library/collections/4>

- > Openings in Foundation Walls and Enclosures
- > Flood Damage-Resistant Materials
- > Non-Residential Floodproofing
- > Wet Floodproofing
- > Structures Built on fill Reasonably Safe from Flooding

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Not today...



- Elevation Certificates
- Determining Base Flood Elevation
- Inspecting Floodplain Development
- Letters of Map Change
- How to Review a “No-Rise” Certification
- Higher Regulatory Standards
- FEMA Grants
- Community Rating System (CRS)

For upcoming webinars, visit
<http://j.mp/starronlinetraining>

...but some other time!

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Questions?



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Ask the Help Desk



RegionXHelpDesk@starr-team.com

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Thank you!

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