PART 5:

FLOOD INSURANCE

Floodplain Administrators should be aware of the close relationship between floodplain management and flood insurance.

Part 5 reviews:

- What a flood insurance policy covers,
- When a policy must be purchased,
- How flood insurance rates are determined, and
- How the Community Rating System can reduce flood insurance premiums in communities that do more than the minimum NFIP regulations.

SECTION 17: FLOOD INSURANCE

Contents

One of the main reasons for a floodplain management program is to make insurance available for people who want to protect themselves financially from flood hazards. This section reviews how the insurance aspect of the NFIP works and how rates and coverage are dependant on how well buildings comply with the ordinance.

17.1. FLOOD INSURANCE POLICIES

17.1.1. Introduction

This section is devoted to flood insurance policies: what's covered, what's not covered, when a policy must be bought, and other rules. This is important information for the local permit administrator to know because some construction decisions affect what is eligible for insurance coverage.

If there are additional questions, refer to:

- *Answers to Questions about the National Flood Insurance Program*, questions 21 – 66 covers the topics in this section.

- Local insurance agents should have additional references, including FEMA's *Flood Insurance Manual* (or view it on FEMA's NFIP website).

As noted in Section 3, 99% of the nation's communities in the NFIP are in the Regular Phase. Only a few communities with minor flood problems or which have just recently joined the NFIP are still in the Emergency Phase. This section only discusses the Regular Phase provisions. The only major difference is that Emergency Phase policies have limited amounts of coverage available.

17.1.2. Insurance companies

Flood insurance policies are obtained through local property insurance agents. The agents may sell a policy through one of the Write Your Own insurance companies or a "direct" policy through FEMA. Both approaches will result in the issuance of a "Standard Flood Insurance Policy" that meets all the requirements and rates set by FEMA.

If an insured property is flooded, the property owner contacts his or her insurance agent. The agent arranges for an adjuster to review the damage and work with the insured to settle a claim. Property owners always work through their insurance agents – they do not need to deal with FEMA.

17.1.3. Insurance data

Flood insurance data can be very helpful to a local floodplain management program. Here are three ways the floodplain administrator can use the data.

1. **Communicate flood risk:** The most common usage of flood insurance data is the rating tables. The rating tables in Figures 17-3 through 17-5 are for single family homes. Additional rates can be found in the flood insurance *Agent's Manual*. These insurance rates are based on the risk of damage: the floodplain administrator can show a builder or permit applicant how building above the base flood elevation (BFE) reduces the risk. It is not just a case of saving insurance premiums; it is a clear reduction in the likelihood of flood damage to the structure. Conversely, if an owner or builder wants to ignore the

community's regulations or request a variance, the cost of insurance can be very expensive.

2. **Planning:** A local official can request data on flood insurance policies and past claims in the community. FEMA can provide the printouts or digital files of current flood insurance policies in force, historical flood insurance claims (since 1978), and repetitive flood insurance claims. This information can be very helpful in preparing floodplain management or hazard mitigation plans.

> **The Privacy Act**
>
> ***Note:*** Use of flood insurance claim data is subject to the Privacy Act, which prohibits public release of the names of policyholders and the amount of the claim payment. Averages or totals and maps showing areas where claims have been paid can be made public.

   Claims records identify areas (including those outside the mapped Special Flood Hazard Areas [SHFAs]) where people have experienced flooding. The amount of the claim payments conveys how serious the flood problems have been. Repetitive claims show chronic problems that are a priority for FEMA's mitigation programs.

3. **Substantial damage:** After the flood, NFIP claims adjusters estimate total property damage. If the adjuster concludes that the property might be substantially damaged, he or she submits a special report to FEMA. The floodplain administrator should contact the State Coordinator's office, FEMA Region V, or the Disaster Field Office to determine what procedures are being used to make the adjuster's data available to communities.

17.2. COVERAGE

Flood insurance coverage is provided for insurable buildings and their contents to property owners in NFIP communities. Since the policy coverage details can change from year to year, a purchaser should carefully read the policy when it is issued or renewed.

17.2.1. Building coverage

Building coverage is for the structure. This includes all things that typically stay with the building when it changes ownership, including:

- ♦ Utility equipment, such as a furnace or water heater.
- ♦ Carpet permanently installed over unfinished flooring.
- ♦ Built-in appliances.
- ♦ Wallpaper and paneling.

Ten percent of a dwelling's building coverage may be applied to a detached garage. Residential detached garages used, or held in use, for residential business or farming are not covered under the dwelling policy. These detached garages and other appurtenant structures must be insured under a separate policy.

17.2.2. “Building” defined

A “building” is defined as a walled and roofed structure, including a manufactured home that is principally above ground and affixed to a permanent site. This definition has three parts:

1. “Walled and roofed” means it has in place two or more exterior rigid walls and the roof fully secured so that the building will resist flotation, collapse, and lateral movement.

2. “Manufactured (mobile) home” is a building transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities.

3. “Principally above ground” means at least 51% of the actual cash value of the structure, including machinery and equipment (but not land value), is above ground.

This definition is similar to, but not quite the same as, the definition for “building” or “structure” used for floodplain management and defined in Section 12. Buildings in the course of construction, alteration, or repair that have yet to be walled and roofed are eligible for coverage except when construction has been halted for more than 90 days and/or if the lowest floor used for rating purposes is below the base flood elevation. Materials or supplies intended for use in such construction, alteration, or repair are not insurable unless they are contained within the enclosed building on the premises or adjacent to the premises.

Examples of things that are not considered insurable buildings include:

- Gas or liquid storage tanks.
- A structure with more than 50 percent of its value underground, such as an underground pumping station, well or septic tank.
- Tents.
- Tennis and swimming pool bubbles.
- Swimming pools.
- Fences, docks, driveways.
- Open pavilions for picnic tables and bleachers.
- Detached carports with open sides.
- Recreational vehicles.
- Sheds on skids that are moved to different construction sites.
- Licensed vehicles, campers and travel trailers (unless permanently attached to the site).
- A building declared in violation of a State or local law (see Section 15 on Section 1316).
- Buildings over water which were built after October 1, 1982.
- Landscaping, crops, and other items outside of a building.

17.2.3. Contents coverage

Contents coverage is for the removable items inside an insurable building. A renter can take out a policy with contents coverage, even if there is no structural coverage.

Certain contents are not insurable. These include:

- Animals and livestock.
- Licensed vehicles.
- Jewelry, artwork, furs, and similar items valued at more than $2,500.
- Money or valuable papers.
- Personal property that is not secured to prevent floatation located in a building that is not fully enclosed (such as an open carport).

17.2.4. Basements

A basement is defined as any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides. There is limited coverage for basements as listed in Figure 17-1.

17.2.5. Enclosures

There is limited coverage in enclosures below the lowest floor of an elevated Post-FIRM building (including a manufactured home) located in SFHAs:

- There is no contents coverage in these enclosures.
- The only structural coverage is for the required utility connections and the foundation and anchoring system required to support the building.

It is therefore advantageous to the permit official to ensure that furnaces and other items that can be damaged by floodwater are not allowed in a crawlspace or other enclosure below an elevated lowest floor.

The National Flood Insurance Program has limited coverage for enclosures below the lowest floor of an elevated post-FIRM building and for basements. The NFIP defines "basement" as "Any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides." (Article II. of the Standard Flood Insurance Policy, October 1, 2002).

Coverage under building or structural coverage is limited to:

a. Any of the following items, if installed in their functioning locations and, if necessary for operation, connected to a power source:

(1) Central air conditioners;
(2) Cisterns and the water in them;
(3) Drywall for walls and ceilings in a basement and the cost of labor to nail it, unfinished and unfloated and not taped, to the framing;
(4) Electrical junction and circuit breaker boxes;
(5) Electrical outlets and switches;
(6) Elevators, dumbwaiters, and related equipment, except for related equipment installed below the base flood elevation after September 30, 1987;
(7) Fuel tanks and the fuel in them;
(8) Furnaces and hot water heaters;
(9) Heat pumps;
(10) Nonflammable insulation in a basement;
(11) Pumps and tanks used in solar energy systems;
(12) Stairways and staircases attached to the building, not separated from it by elevated walkways;
(13) Sump pumps;
(14) Water softeners and the chemicals in them, water filters, and faucets installed as an integral part of the plumbing system;
(15) Well water tanks and pumps;
(16) Required utility connections for any item in this list; and
(17) Footings, foundations, posts, pilings, piers, or other foundation walls and anchorage systems required to support a building.

b. Clean-up. (Article III. Section A.8).

Coverage under personal property coverage is limited to the following items, if installed in their functioning locations and, if necessary for operation, connected to a power source:

a. Air conditioning units, portable or window type;

b. Clothes washers and dryers; and

c. Food freezers, other than walk-in, and food in any freezer. (Article III. Section B.3.)

Figure 17-1: Flood insurance coverage limitations on enclosures below the elevated floor of a post-FIRM building located in a Special Flood Hazard Area

17.2.6. Amount of coverage

Insurance rates for all buildings are based on a two-tiered system: a first or basic layer of coverage and a second or additional layer. The maximum amounts available under each layer are shown in Figure 17-2.

BUILDING COVERAGE	**Basic Insurance Limits**	**Additional Insurance Limits**	**Total Insurance Limits**
Single-family dwelling	$50,000	$200,000	$250,000
2-4 family dwelling	$ 50,000	$200,000	$250,000
Other residential	$150,000	$100,000	$250,000
Nonresidential	$150,000	$350,000	$500,000
CONTENTS COVERAGE			
Residential	$ 20,000	$ 80,000	$100,000
Nonresidential	$130,000	$370,000	$500,000

Figure 17-2: Amount of Insurance Available

Note: This table is for communities in the Regular Phase of the NFIP. If a community has a Flood Insurance Rate Map and is participating in the NFIP, it is in the Regular Phase. Coverage amounts are as of May, 2005. The floodplain administrator should check the current flood insurance *Agent's Manual* for up to date rates.

17.2.7. Waiting period

In most cases, a 30-day waiting period follows the purchase of a flood insurance policy before it goes into effect. There are some exceptions when a policy goes into effect immediately: e.g., when a policy is purchased at the time of a new mortgage or title transfer and when a new FIRM puts a property into the SFHA.

The objective of the 30-day waiting period is to encourage people to keep a policy at all times. FEMA does not want people to wait for the river to rise before they buy their coverage. Also, to be on a sound financial basis, the NFIP needs everyone at risk to pay their share of the premiums.

Many people have found out about the waiting period the hard way. A community would be wise to publicize availability of flood insurance so residents can be protected when a flood comes.

17.3. THE MANDATORY PURCHASE REQUIREMENT

The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 made the purchase of flood insurance mandatory for federally backed mortgages on buildings located in Special Flood Hazard Areas (SFHAs). It also affects all forms of Federal or Federally related financial assistance for buildings located in SFHAs. This requirement affects loans and grants for the purchase, construction, repair, or improvement of any publicly or privately owned building in the SFHA, including machinery, equipment, fixtures, and furnishings contained in such buildings.

17.3.1. Where it applies

The requirement applies to secured mortgage loans from financial institutions such as commercial lenders, savings and loan associations, savings banks, and credit unions that are regulated, supervised, or insured by Federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchased by Fannie Mae or Freddie Mac in the secondary mortgage market.

Federal financial assistance programs affected by the laws include loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and the Department of Homeland Security's Federal Emergency Management Agency.

17.3.2. How it works

Lenders are required to complete a Standard Flood Hazard Determination (SFHD) form whenever they make, increase, extend or renew a mortgage, home equity, home improvement, commercial, or farm credit loan to determine if the building or manufactured (mobile) home is in an SFHA. It is the Federal agency's or the lender's responsibility to check the current Flood Insurance Rate Map (FIRM) to determine if the building is in a SFHA. Copies of the FIRM are available for review in most local government building or planning department. Lenders may also have copies or they use a flood zone determination company to provide the SFHD form. See Section 9.4.2. for more information on Flood Hazard Determination.

If the building is in a SFHA, the Federal agency or lender is required by law to require the recipient to purchase a flood insurance policy on the building. Federal regulations requires building coverage equal to the value of building (not the land), the amount of the loan (or other financial assistance), or the maximum amount of flood insurance available from the NFIP, whichever is less. The maximum amount available for a single-family residence is $250,000. Government sponsored enterprises, such as Freddie Mac and Fannie May, have stricter requirements.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles, business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in the SFHA, even though a portion of the lot may be. While not mandated by law, a lender may require a flood insurance policy, as a condition of a loan, for a property in any zone on a FIRM and may require more coverage that the minimum required by Federal law.

Note: Many people who were required to get building coverage do not realize that their contents are not covered unless they voluntarily purchase contents coverage. A local public information program would help residents by informing them of this and other basic facts, such as the 30-day waiting period and the availability of insurance for properties outside the floodplain.

17.3.3. Flood insurance for a community

As a recipient of Federal financial assistance, a community may have been subject to the mandatory purchase requirement. The floodplain administrator should determine if there are any insurable publicly owned or leased buildings in the floodplain. If so, see if they received federal aid in the past. Likely prospects include:

- ♦ A wastewater treatment plant (always located near a body of water) which received a grant from the Environmental Protection Agency.
- ♦ Public housing or neighborhood center funded with help from the Department of Housing and Urban Development or the Community Development Block Grant.
- ♦ Any facility that received disaster assistance after a flood or other disaster declaration.

Whether there was a requirement to buy insurance or not, the floodplain administrator should advise the risk manager or other appropriate office about the buildings exposed to flooding. Many agencies find out too late that their "all risk" insurance policies don't cover flooding.

Over the last several years, Congress has taken steps to encourage public agencies and private property owners to purchase flood insurance instead of relying on disaster assistance for help after a flood. Disaster assistance for a public building will be reduced by the amount of insurance coverage (structural and contents) a community should carry on the building (regardless whether the community is carrying a policy).

In effect, disaster assistance for public agencies now has a very large deductible equal to the insurance policy it should carry. The law expects public agencies to be fully insured as a condition of receiving Federal disaster assistance. The floodplain administrator should advise the appropriate people of the need to purchase flood insurance coverage on their community's buildings.

In effect, disaster assistance for a public agency now has a very large deductible equal to the flood insurance policy the agency should carry. The law expects public agencies to be appropriately insured as a condition of receiving federal disaster assistance.

There have also been recent cases in which communities were underinsured. Some communities have purchased only the required amount of coverage (e.g., coverage equal to the amount of a previous federal grant). The disaster assistance rule requires that the community fund all repairs up to the amount of flood insurance that it could have purchased.

Whether there was a requirement to purchase and maintain flood insurance as a condition of some previous federal grant or not, the community's risk manager or other appropriate official should ensure that all community-owned buildings exposed to flooding are insured for flood damage. Many agencies find out too late that their all-risk insurance policies do not cover flooding.

17.4. RATING BUILDINGS

The insurance agent calculates the premium for a flood insurance policy on a property. The premiums on new buildings are based on the risk of flooding and flood damage. If a building is built incorrectly, the owner may be faced with very high premiums or insufficient coverage. On the other hand, if a building is built properly, the owner will pay less than what it costs to insure a Pre-FIRM building under the "subsidized" rates.

The three aspects of the NFIP – mapping, insurance, and regulations – reinforce each other. How well local floodplain management regulations are enforced in the mapped floodplain affects the flood insurance rates paid by the citizens of that community. Consequently, it is important for the floodplain administrator to know how flood insurance rates are set for new and substantially improved buildings.

As noted earlier,this section only discusses the Regular Phase rates. Emergency Phase policies are rated similarly to Pre-FIRM policies.

17.4.1. Rating Pre-FIRM buildings

Pre-FIRM buildings are those built before the effective date of the community's first Flood Insurance Rate Map (FIRM) or December 31, 1974, whichever is later. This means they were built before detailed flood hazard data and flood elevations were provided to the community and usually before the community enacted comprehensive regulations on floodplain construction.

Pre-FIRM buildings are rated using "subsidized" rates that for most Pre-FIRM buildings are significantly less than actuarial rates that fully reflect their risk of flooding. They are designed to help people afford flood insurance even though their buildings were not built with flood protection in mind. Making insurance available for Pre-FIRM buildings was an incentive for communities to join the NFIP.

The "subsidy" in the subsidized rate is really premium income that is foregone by the NFIP and is not being funded by taxpayers. In the short term, it is funded through an insurance mechanism called cross-subsidization. Surpluses from premiums paid by Post-FIRM SFHA and B, C and X Zone policy holders are, in effect, being borrowed to help their Pre-FIRM counterparts obtain affordable flood insurance coverage.

The Pre-FIRM building rates for a single-family house are shown in Figure 17-3. They are based on the building type and FIRM zone and not on the buildings elevation in relation to the BFE. The elevation of the building is not counted because most people do not have elevation data on Pre-FIRM buildings. If there is an Elevation Certificate for the building or similar record, then the building can be rated using Post-FIRM rates, at the option of the policyholder. If the building has its lowest floor at or above the BFE, Post-FIRM rates on the building will generally be lower than Pre-FIRM rates.

Building type	A, AE, A1-A30, D Zones		B, C, X Zones	
	Building	**Contents**	**Building**	**Contents**
No basement or enclosure	.76/.34	.96/.60	.64/.14	.99/.25
With basement	.81/.50	.96/.50	.73/.20	1.12/.35
With enclosure	.81/.60	.96/.60	.73/.23	1.12/.40
Manufactured (mobile) home	.76/.34	.96/.60	.64/.31	.99/.25

Figure 17-3: Rates for Pre-FIRM single-family dwellings.

Note: Rates are per $100 coverage. The two numbers under each category (Building or Contents) reflect the rates for the basic and additional layers of coverage explained in Figure 17-2. Rates are from the May 2005, flood insurance Agent's Manual. The floodplain administrator should check the current manual for up to date rates.

If a Pre-FIRM building has been substantially damaged or substantially improved, it becomes Post-FIRM and is rated using Post-FIRM rates. Some Pre-FIRM buildings that have lateral additions that are substantial improvements may continue being rated as Pre-FIRM if certain conditions are satisfied (see Section 16 on determining substantial damage and substantial improvement).

17.4.2. Rating Post-FIRM buildings

The premium rates for Post-FIRM construction are actuarial, meaning they are based on the known risk the building is exposed to. Post-FIRM rates base the risk on the FIRM zone and the elevation of the lowest floor (including the basement) of the building in relation to the base flood elevation or BFE. These rates are shown for a single family residence in Figure 17-4.

Figure 17-4 shows how the rates are dependent on the elevation of the lowest floor in relation to the BFE. The higher the floor, the lower the rate. A building with the lowest floor at the BFE ("0" in Figure 17-4) benefits from a lower rate than a Pre-FIRM building's "subsidized" rate: $1.08 per $100 for the first layer compared to $0.76 per $100 for a building in the AE Zone.

Elevation of Lowest Floor Above or Below BFE	A, AE, A1-A30, D Zones	
	Building	**Contents**
+4	.24/.08	.38/.12
+3	.24/.08	.38/.12
+2	.32/.08	.38/.12
+1	.59/.08	.59/.12
0	1.08/.08	1.10/.12
-1	2.70/1.00	3.01/.75
-2	Submit for rating	

Figure 17-4: Rates for Post-FIRM single family dwellings in the SFHA

Note: Rates are for one floor, no basement or enclosure. The two numbers reflect the rates for the basic and additional layers coverage which are explained in Figure 17-2. Rates are from the May 2005, flood insurance Agent's Manual. The floodplain administrator should check the current manual for up to date rates.

Submit-for-rate: Certain properties at high flood risk, because of peculiarities in their exposure to flooding, do no lend themselves to preprogrammed rates. Rates for these properties are not included in the *Flood Insurance Manual*. These risks require an in-depth underwriting analysis and must be submitted to the NFIP or WYO Insurance Company for an individual (specific) rate. Examples include buildings with their lowest floors two feet or more below BFE, buildings with below grade crawlspaces, certain buildings with enclosures 2 feet or more below BFE, some buildings in unnumbered A zones, and similar risks.

Since a submit-for-rate policy often is an indicator of the property owner's noncompliance with a community's regulations, the community's failure to enforce its regulations, or the result of a variance action, these cases are forwarded to the FEMA Regional Office and IDNR for investigation.

Elevation certificates: Elevation Certificates are required to rate most Post-FIRM Buildings. The Elevation Certificate provides the data the insurance agent or company needs to determine the lowest floor of the building and calculate the flood insurance premium using the appropriate rates from the preceding pages. The Elevation Certificate is discussed in Section 15.

Floodproofing: A floodproofed nonresidential building is rated based on the elevation of its lowest floor, unless it is floodproofed to one foot above the BFE. Then, one foot is subtracted from the flood protection level. Thus, a building must be floodproofed to one foot above the BFE in order to get the same rates as a building elevated to the BFE.

If a building is only floodproofed to the BFE or lower, this floodproofing credit cannot be used and it will be rated based on the floor elevation. If the lowest floor is two or more feet below the BFE, it will be a submit to rate.

Buildings that are floodproofed need floodproofing certificates, as explained in Section 15.

17.4.3. Rating Unnumbered A zones

Unnumbered A Zones are floodplains that are mapped on the FIRM using approximate methodologies that do not have BFEs. Unnumbered A Zones are sometimes referred to as approximate A Zones. The approximate studies used to designate theses areas are discussed in Section 5.

Elevation Difference to nearest foot	Building	Contents	Type of Elevation Certificate
+5 or more	.36/.10	.62/.12	No estimated base flood elevation
+2 to +4	.80/.12	.82/.17	
+1	1.56/.56	1.40/.63	
0 or below	***	***	
+2 or more	.32/.08	.50/.12	With the estimated base flood elevation
0 to +1	.77/.10	.72/.15	
-1	2.50/.93	2.08/.67	
-2 or below	***	***	
No ElevationCertificate	2.93/1.20	2.61/1.00	No elevation Certificate

Figure 17-5: Rates for Post-FIRM single family dwellings in an Unnumbered A Zone

Note: Rates are for single family homes with no basement or enclosure. The two numbers reflect the rates for the basic and additional layers coverage. Rates are from the May 2005, flood insurance *Agent's Manual*. The floodplain administrator should check the current manual for up to date rates.

As illustrated, a Post-FIRM single-family home, without a basement or enclosure, in an unnumbered A Zone will be subject to rates that are much higher than the rates in Figures 17-3 and 17-4. This can be a real disincentive for people to buy flood insurance on Post-FIRM buildings in unnumbered A Zones.

Figure 17-5 shows that there are two ways to obtain lower rates in unnumbered A Zones. In either case, an elevation certificate is needed.

1. If the community provides a locally developed BFE and the building is elevated to or above that BFE, the rates are comparable to those for buildings in AE Zones. Communities are encouraged to do this, as explained in Section 9.

2. If there is no base flood elevation from any source, rates can be set based on the height of the building above its highest adjacent grade. Rates are reduced for buildings 1 foot, 2 feet, and 5 or more feet above grade (the higher the building, the lower the rate). Buildings built at or below grade can use the submit-for-rate approach.

17.4.4. Premiums

A policy holder's total payment is calculated by:

- ♦ Multiplying the amount of building coverage desired times the rate (done once for the basic coverage and again for the additional limits).
- ♦ Multiplying the amount of contents coverage times the rate desired (done once for the basic coverage and again for the additional limits).
- ♦ Factoring in the amount of deductible the policy holder wants.
- ♦ Adding the premium for Increased Cost of Construction coverage (which varies from $4 to $75, depending on the type of building and FIRM zone. See Section 16 on ICC coverage).
- ♦ Deducting the Community Rating System premium discount.
- ♦ Adding the Federal policy fee (currently $30 to help pay for administrative costs, such as floodplain mapping).

The rates can vary based on the community's floodplain management program. If the community has not properly enforced its floodplain management ordinance, it could be put on probation. Under probation, all policies have an additional $50 surcharge. If a community does not take remedial or corrective measures while on probation, it can be suspended.

Conversely, a community that has an exemplary program that includes floodplain management activities above and beyond the minimum NFIP criteria may apply for a Community Rating System (CRS) classification. Residents in CRS communities can receive up to 45% insurance discounts. The CRS is explained in more detail in the next section.