



Floodplain Management Ordinance
**STANDARD OPERATING
PROCEDURES AND GUIDANCE**

PREPARED BY: FEMA REGION III
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FEMA

INTRODUCTION

Community participation in the NFIP is voluntary. When a community joins the NFIP, a community must ensure that their adopted floodplain management ordinance and enforcement procedures meet NFIP requirements. NFIP minimum requirements include requiring permits for all development in the SFHA and ensuring that the construction materials and methods used will minimize future flood damage. Generally, the National Flood Insurance Program (NFIP) does not have specific requirements on how local ordinances should be administered. Administrative requirements vary from state to state due to differences in state enabling legislation. In addition Federal Emergency Management Agency (FEMA) wants to provide communities the flexibility to establish administrative procedures that are compatible with their other regulations and ordinances.

The NFIP does, however, require that the local community ordinance be legally enforceable and applied uniformly throughout the community (44 CFR 60.1(b)). There are also some record keeping requirements that assist in verifying community and building compliance with the regulations (44 CFR 59.22(b)(1)). In return for a community agreeing to adopt and enforce a floodplain ordinance that is compliant with the NFIP requirements, the Federal Government makes flood insurance available for almost every building and its contents within the community.

If FEMA finds that a community's ordinance and administrative process is not in full compliance with its NFIP obligation, then it may require certain administrative adjustments. Local regulations also must be updated when additional data are provided by FEMA or when Federal or State standards are revised.

FEMA works closely with State and local officials to identify flood hazard areas and flood risks. The local floodplain management regulations required by the NFIP apply only in SFHAs. However, communities may choose to regulate development in all areas of their communities.

PURPOSE

In developing their floodplain management ordinances, participating communities must meet at least the minimum regulatory standards issued by FEMA. The purpose of this document is to clearly articulate to community officials the minimum regulatory standards required in a fully compliant NFIP floodplain ordinance and to outline the minimum documentation needed for a complete ordinance review submission. NFIP standards and policies are reviewed periodically and revised whenever appropriate. When these administrative changes occur, or when Flood Insurance Rate Maps are updated, community flood plain management ordinances must also be revised and updated accordingly.

TYPES OF ORDINANCES

Floodplain regulations are usually found in one of, or a combination of, five types of regulations: "stand alone", zoning ordinances, building codes, subdivision regulations and sanitary regulations. Each is explained below.

"Stand alone" ordinance

Most communities in the NFIP have enacted a separate, "stand alone" ordinance that includes all the NFIP regulatory requirements, usually based on a state model ordinance.

The advantage of doing this is that one ordinance contains all floodplain development standards. Developers can easily see what is required of them, and FEMA and the state staff can easily see if your community has adopted the latest requirements. This is an acceptable method for a community to ensure full compliance with the NFIP requirements, especially for small and rural communities that do not have numerous other enacted codes already established.

The disadvantage to a separate ordinance is that it may not be coordinated with other building, zoning or subdivision regulations. Some communities have found that by adopting a stand alone ordinance, they adopt standards that are inconsistent or even contrary to the standards in the other regulations. For example, your building code may require crawlspace vents to be high, near the floor joists, while the floodplain ordinance requires them to be no more than one foot above grade. Both types of vents are required given this scenario.

If you have a stand alone ordinance, you should review its provisions with all other offices and ordinances that regulate land development and building construction. Make sure that others know the floodplain regulations and that there are no internal inconsistencies. For example, a floodplain ordinance administered by the city engineer may not have been coordinated with the permit process conducted by the building and/or planning departments.

Zoning ordinance

A zoning ordinance regulates development by dividing the community into zones or districts and setting development criteria for each district. Two approaches address development in floodprone areas: separate districts and overlay zoning.

In a separate district, the floodplain can be designated as one or more separate zoning districts that only allow development that is not susceptible to damage by flooding. Appropriate districts include public use, conservation, agriculture, and cluster or planned unit developments that keep buildings out of the floodplain, wetlands and other areas that are not appropriate for intensive development.

Overlay zoning adds special requirements in areas subject to flooding. The areas can be developed in accordance with the underlying zone, provided the flood protection requirements are met.

It is not uncommon for zoning districts or overlay zones to be defined in a zoning ordinance, but to have the actual requirements for development in other ordinance(s).

Building codes

A building code establishes construction standards for new and substantially-improved buildings. Building codes generally do not establish site or location requirements. These requirements are implemented through subdivision or zoning ordinances or other land development regulations.

Many communities have adopted one of these national model building codes:

- The International Codes (I-Codes) of the International Code Council include the International Building Code (IBC), the International Residential Code (IRC), and several codes covering building utility systems and existing buildings. The I-Codes are consistent

with all NFIP requirements related to the construction of flood resistant buildings. The National Building Code of the Building Officials and Code Administrators (BOCA) has its flood resistant design and construction standards in Chapter 31.

- The Uniform Building Code of the International Conference of Building Officials (ICBO) includes flood resistant design and construction standards in a separate appendix that must be adopted by reference.
- The National Fire Protection Association (NFPA) has issued the NFPA 5000 Building Construction and Safety Code. This code also is consistent with all NFIP requirements related to the construction of flood resistant buildings.

Many, but not all, NFIP regulatory requirements appear in parts of these codes.

FEMA worked closely with the International Code Council and the National Fire Protection Association in developing their codes to assure consistency with NFIP requirements. Those NFIP requirements that relate to the actual construction of buildings are reflected in the bodies of the International Building Code and International Residential Code. Requirements related to building utilities are contained in the International Plumbing Code, International Mechanical Code, International Fuel Gas Code, and the International Private Sewage Disposal Code. The other NFIP requirements, such as administrative provisions, and requirements that apply to floodways, subdivisions and manufactured homes are contained in Appendix G of the International Building Code. Communities that adopt the I-codes have the option of either adopting Appendix G or addressing these other NFIP requirements through other codes and regulations.

Similarly, NFIP requirements that relate to the actual construction of buildings are reflected in the body of the NFPA 5000 Code. The other NFIP requirements are included in Annex C of the NFPA 5000 Code. Communities that adopt the NFPA 5000 Code have the option of either adopting Annex C or addressing these other NFIP requirements through other codes and regulations.

FEMA supported incorporation of NFIP flood resistant construction requirements into the I-Codes and the NFPA code because it felt these requirements could be more effectively administered as part of a building code with full involvement of the community's building department. However, there will be challenges in adopting either the I-Codes or the NFPA 5000 Code that your community will need to address.

- Make sure that all applicable NFIP requirements are met in either the I-Codes or the NFPA 5000 Code or your other codes and ordinances.
- Make sure that your State or community has not amended the I-Codes or the NFPA 5000 Code in a way that makes them inconsistent with NFIP minimum requirements.
- Designate which community agencies are responsible for meeting various NFIP requirements and establish administrative procedures to assure that coordination occurs between these agencies on individual development proposals. Do not assume that the flood provisions of the I-Codes will automatically be carried out by the community building official.

- If a State agency directly enforces the I-Codes or NFPA 5000 Code for certain categories of buildings, make sure you work out similar procedures with that State agency.

FEMA and the International Code Council have jointly developed a publication that provides a comprehensive explanation of how the International Code Series can be used to meet the requirements of the NFIP. The publication is entitled *Reducing Flood Losses Through the International Code Series*, which is available through the FEMA library at www.fema.gov/library/. If your community will be adopting the I-Codes, you should obtain a copy of this publication. The most recent edition (3rd Edition dated 2008) is based on the 2006 editions of the I-Codes and the 2007 supplement to the International Codes.

Subdivision regulations

Subdivision regulations govern how land will be divided into single lots. They set construction and location standards for the infrastructure the developer will provide, including roads, sidewalks, utility lines, storm sewers and drainage ways.

Subdivision regulations offer an opportunity to keep buildings out of the floodplain entirely with cluster developments. They can also require that every lot have a buildable area above the BFE, include dry land access and meet other standards that provide more flood protection than a building code can.

Sanitary regulations

The NFIP's requirements for water and sewer system protection are sometimes best located in the regulations that set the construction standards for these systems.

CONTENTS

Whether your floodplain regulations are in one ordinance or several, the following provisions are required in all floodplain ordinances in order to be compliant with the NFIP regulatory requirements. NFIP regulations identify minimum requirements that communities must fulfill to join and stay in the program. The requirements that apply to a particular community depend on its flood hazard and the level of detail of the data FEMA provides to the community. The specific requirements are in 44 CFR Section 60.3, and apply to communities as follows:

- ◆ 60.3(a) FEMA has not provided any maps or data.
- ◆ 60.3(b) FEMA has provided a map with approximate A Zones
- ◆ 60.3(c) FEMA has provided a FIRM with base flood elevations
- ◆ 60.3(d) FEMA has provided a FIRM with both base flood elevations and designated floodway
- ◆ 60.3(e) FEMA has provided a FIRM that shows coastal high hazard areas (V Zones)

The NFIP requirements are minimums. As noted in 44 CFR 60.1(d), “Any floodplain management regulations adopted by a State or a community which are more restrictive than the criteria set forth in this part are encouraged and shall take precedence.”

These requirements are cumulative. A 60.3(c) community must comply with all appropriate requirements of sections 60.3(a) and (b). For example, 60.3(a) includes basic requirements for subdivisions and utilities that are not repeated in the later sections. *All* communities in the NFIP must comply with these subdivision and utility requirements.

For example, a 60.3(c) community must use the base flood elevations provided on the FIRM. If that community has an approximate A Zone without a BFE, it must comply with the requirements of 60.3(b) for that area. Likewise, the 60.3(b) provisions also refer back to and include the 60.3(a) provisions.

Required provisions for all ordinances

This section covers the minimum requirements for participation in the NFIP. As noted, communities are encouraged to enact regulatory standards that exceed these minimums and that are more appropriate for local conditions.

1. Citation of Statutory Authorization:

Cite the appropriate authorizing legislation for the National Flood Insurance Program, the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), and state laws that authorize the community to regulate development in the special flood hazard area.

2. Purpose:

This section of your ordinance identifies health, safety and welfare as the reasons for which the community adopts and enforces their floodplain ordinance.

3. Definitions:

The ordinance must clearly define the terms necessary for the ordinance to be understood. A list of the minimum definitions is provided on the FEMA Region III Ordinance Review Checklist under number three.

4. Adoption of Flood Insurance Rate Map (FIRM), Flood Insurance Study (FIS) and date:

Every NFIP community needs to adopt the specific flood maps, profiles and other regulatory flood data provided by the FIRM and the FIS with their date. A community may adopt and enforce regulations based on data more restrictive than that provided by FEMA. For example, a community may want to regulate to a historic flood which was higher than the BFEs shown on the FIRM. However, a community cannot regulate to data or information that is less restrictive than that shown on the effective FIRM. A community may also use other technical data to identify and regulate floodprone areas not shown on FEMA maps. For example, many cities and urban counties map and regulate areas on small tributary streams that are not shown on the FIRM. The provision which adopts your most recent FIRM and FIS may need to be amended when new studies are published or new areas are annexed. Delaware, Maryland, Pennsylvania and West Virginia have submitted documentation to FEMA confirming that automatic adoption is allowed in their state if a community chooses to include such a provision in an ordinance. **Note:** For communities in those states that allow automatic adoption, the community must include the automatic

adoption provision in their ordinance in order to be able to rely on this provision for the adoption of map and FIS updates. An ordinance will only be treated as an automatic adoption ordinance if a state allows the incorporation of such a provision and the community's ordinance contains this specific language.

5. Reference to all subsequent revisions and amendments:
Inclusion of the subsequent revisions and amendments text to flood maps and Flood Insurance Studies, regardless of whether you are an automatic adoption community, insures that the community will not have to update their ordinance every time a map revision (LOMR) is approved.
6. Enforcement provisions including violations/penalty section:
The ordinance must have enforcement procedures clarifying penalties for violations. These are usually fines and orders to correct the violation.
7. Abrogation and Greater Restriction section:
This is a legal provision that specifies that the ordinance take precedence over less restrictive requirements.
8. Disclaimer of Liability:
Ordinance administrators naturally fear they could be sued if a person gets flooded or if a building that they permit is damaged by a flood. Liability is based on negligence; a community is well defended by a properly administered program. Government agencies are generally not liable for flood damage unless the flood was caused by a government action.
9. Severability section:
This is a statement that the individual provisions are separable and if any one is ruled invalid, it does not affect the rest of the ordinance.
10. Framework for administering the ordinance:
This section should outline the process the community has chosen to administer its ordinance, including but not limited to outlining their permit system, identifying their office for administration, system of recordkeeping, etc.
11. Designation of Floodplain Administrator:
The community must officially designate one person responsible for administering the ordinance. This provision may list that person's duties, as detailed in the next section.
12. Submission of new technical data within 6 months to FEMA:
You must notify the FEMA Regional Office and the state within six months of physical changes that can affect flooding conditions, such as channel modifications or upstream detention or other changes that can increase or decrease base flood elevations.
13. Variance section with evaluation criteria and insurance notice:
The regulations need to provide a way for people to appeal or request a variance when they feel that the construction standards are overly harsh or inappropriate. This process should be handled by a separate body, such as a board of appeals or planning commission; it should not be left up to the decision of a single person, such as the administrator.
14. Community official signature and certification for adopted ordinance:
The ordinance submitted to the State and FEMA for review must be a complete copy of the signed official floodplain ordinance.
15. Requirement for a development permit:
Your ordinance must have a development permit process. Relying on your community's building code or zoning ordinance permit process may not be sufficient because those pro-

grams may not require permits for all development, including fill, mining, storage of materials, etc.

16. Building construction requirements:

The bulk of the ordinance will address the various building construction requirements relevant to your community and its' identified flood zones. It should cover all of the NFIP standards noted below and all additional regulatory standards required by the state or that the community deems appropriate. The standards should include provisions for:

- Building protection standards (elevation, floodproofing, anchoring, openings)
- Standards for manufactured (mobile) homes and manufactured home parks
- Construction standards applicable to the flood zones in your community (A, AE, AO, AH, V)
- Construction in the floodway and encroachment standards where floodways are not mapped
- Standards for subdivisions
- Standards for utilities, including electrical, mechanical, water and sewer service
- Rules on water course alterations
- Requirement for all other federal and state permits to be received

You should be able to identify where the required provisions discussed above appear in your ordinance. If you cannot find a specific reference or if you are not comfortable with your ordinance's regulatory language, contact your state NFIP coordinator or FEMA Regional Office for assistance. (See listing at the end of this document for contact information). FEMA and your state will expect you to enforce these minimum requirements as agreed to. If you don't think your ordinance language is clear or up to date, you should consider an amendment to remove any doubt.

FLOODPLAIN ORDINANCE ADOPTIONS & AMENDMENTS

There are various times when a community is required to adopt or amend a floodplain ordinance. A community is first required to adopt a floodplain ordinance as a condition of becoming a participating community in the NFIP. Once a community is a participating NFIP community, they are required to maintain a legally enforceable ordinance that meets or exceeds the NFIP floodplain management requirements. This means that each time the FIS and FIRM are updated or the minimum requirements in 44 Code of Federal Regulations (CFR) are changed, a community must update its ordinance to reflect the changes.

Each time a community is required to adopt or amend its floodplain ordinance the community must, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), adopt or show evidence of adoption of floodplain management regulations that meet the standards of the applicable Paragraph of 60.3 of the NFIP regulations (44 CFR) by the effective date of the FIRM. The standards stated in 44 CFR are the minimum requirements and do not supersede any State or local requirements of a more stringent nature.

It must be emphasized that all the standards specified in the applicable paragraph 60.3 of the NFIP regulations must be enacted in a legally enforceable document. This includes adoption of the current effective FIS report and FIRM to which the regulations apply and other modifications made by a map revision. Some of the standards should already have been enacted by your community in order to establish initial eligibility actions:

1. Amending existing regulations to incorporate any additional requirements of the applicable Paragraphs of 60.3;
2. Adopting all the standards of the applicable Paragraphs of 60.3 into one new, comprehensive set of regulations; or
3. Showing evidence that regulations have previously been adopted that meet or exceed the minimum requirements of the applicable Paragraphs of 60.3.

It is important to note that communities that fail to enact the necessary floodplain management regulations will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the Flood Disaster Protection Act of 1973 (Public Law 93-234) as amended.

REVIEW FOR COMPLETENESS

The State and FEMA Region III will only accept and approve ordinances that:

1. Include the complete floodplain ordinance language with pages in numerical order, including a copy of any other cited or referenced ordinance or code and a final, official, signed and dated copy of the ordinance in its entirety.
2. Definitions are complete and consistent with those provided in Section 59.1 of the 44 Code of Federal Regulations
3. Adopt both the Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) with an appropriate date (either the date of the most recently effective FIS/FIRM or, if appropriate, a previously effective FIS/FIRM with the auto-adopt clause).
4. Have been reviewed by the NFIP State coordinating office using the correct level of checklist (60.3(a), (b), (c), (d), (e) or (d)&(e)).

REVIEW FOR COMPLIANCE

As needed, the State may review draft versions of a floodplain ordinance before reviewing an official copy. However, if a community wishes to have the State review a draft of their ordinance, the draft version should be submitted to the State no later than two months prior to the effective date of the FIRM and FIS.

After a community determines through their own review and through working with the State that their ordinance is complete, adopted and ready for formal submission, the community should submit a copy of the official floodplain ordinance, along with any relevant sections of other codes or ordinances referenced by the floodplain ordinance, to the State NFIP Coordinator for a compliance review. The State NFIP Coordinator will use the FEMA Region III Ordinance Review Checklist to determine whether your floodplain ordinance is compliant with the NFIP regulatory requirements. **FEMA Region III cannot guarantee that ordinances will be reviewed by the FIRM and FIS effective date, unless the ordinance is submitted by the State to FEMA Region III at least three working days prior to the effective date.**

If the adopted floodplain ordinance is in compliance with regulations, the State NFIP Coordinator will pass their review and your floodplain ordinance on to FEMA for a compliance review.

If the adopted floodplain ordinance is NOT in compliance with regulations, the State NFIP Coordinator will contact you to let you know that your ordinance is not compliant and to identify the necessary changes required to bring your ordinance into compliance.

Note that each state has a model floodplain ordinance that has been reviewed and approved by FEMA as compliant with the NFIP regulatory requirements. All local communities are strongly encouraged to coordinate with their State NFIP Coordinators and to reference the appropriate state model floodplain ordinance any time they are considering making changes or updates to their floodplain ordinance. Engaging the State NFIP Coordinator early in your ordinance update process will help to ensure that the ordinance you propose before your governing body for adoption is

compliant with the NFIP regulatory requirements and will prevent repeated adoptions or suspension from the NFIP.

FLOODPLAIN ORDINANCE APPROVAL OR DENIAL

Once the State has reviewed your floodplain ordinance and requested that FEMA Region III review the ordinance, FEMA Region III also reviews your ordinance to ensure that it is compliant.

If the adopted floodplain ordinance is in compliance with regulations, FEMA Region III will send a letter to the CEO of your community and the floodplain manager notifying them that your ordinance is compliant. Additionally, if the update was required due to changes in the National Flood Insurance Program governing regulation, FEMA Region III will notify FEMA headquarters that your community is compliant and should not be suspended from participation in the NFIP.

If the adopted floodplain ordinance is NOT in compliance with regulations, FEMA Region III will contact the State NFIP Coordinator and your community to let them know that your ordinance is not compliant and to identify the necessary changes required to bring your ordinance into compliance. At this point, the State NFIP Coordinator will contact your local community and work with you to make the necessary changes. Once the changes are complete and the State has reviewed and determined the ordinance is compliant, the State will resubmit your ordinance to FEMA Region III for review and approval. If your ordinance update was a requirement due to a map update or change in the regulation and you have not successfully adopted an approved ordinance by the appropriate date, your community will be suspended from the NFIP. It is therefore critical to communicate with your State NFIP Coordinator to be clear when you need to have your ordinance adopted to remain in compliance and to be sure that you have all of the necessary provisions included.

RESOURCES

FEMA 480, “NFIP Floodplain Management Requirements: Study Guide and Desk Reference for Local Officials, Units 5 and 7” can be used as a study guide to enhance the knowledge and skills of local officials responsible for administering and enforcing local floodplain management regulations. It is also intended to broaden their understanding of floodplain management strategies that can be applied at the local level. Local officials and others can also use the study guide to help them study for the exam for the Association of State Floodplain Manager's (ASFPM) Certified Floodplain Manager designation. Guidance is included on how to handle many of the issues and information provided that will help floodplain managers explain the requirements to citizens of your community. FEMA 480 is available through the FEMA library at www.fema.gov/library.

A community can always reference the NFIP regulations at 44 CFR Parts 59 and 60 directly when revising or updating their ordinance. The NFIP regulations can be viewed online at http://www.access.gpo.gov/nara/cfr/waisidx_02/44cfrv1_02.html.

FEMA Region III has also created an Ordinance Review Checklist, which lists all of the minimum provisions for approval and the related Section of the Federal Code for reference. The Ordinance Review Checklist is attached as Appendix 1 for reference. This is the checklist against which your ordinance will be reviewed to determine whether it is compliant with the minimum NFIP regulatory requirements. Communities can use this checklist as a guide to check their own ordinance for compliance before submitting it to the State NFIP Coordinator and FEMA for review.

Additionally, the States and FEMA have put together a document entitled Top Ten Common Issues with Floodplain Ordinance Updates, which identifies the most common issues communities have faced when updating their ordinance and recommends sample provision language to overcome these common issues. Top Ten Common Issues with Floodplain Ordinance Updates is attached as Appendix 2.

If you are enacting or revising your floodplain regulations, contact your state NFIP coordinator to obtain a copy of the appropriate model floodplain ordinance for your state. State model ordinances incorporate the federal minimum requirements as well as state laws and serve as a compliant foundation for you as you develop and/or update your local floodplain ordinance. See the following page for a list of the contacts in each territory in Region III.

TERRITORY	NFIP COORDINATORS	ADDRESS	MODEL FLOODPLAIN ORDINANCE
<i>District of Columbia</i>	Tim Karikari (202) 535-2248 timothy.karikari@dc.gov Phetmano P. Phannavong (202) 439-5715 phetmano.phannavong@dc.gov	District Department of the Environment Watershed Protection Division 1200 First Street, NE 6 th Floor Washington, DC 20002	http://os.dc.gov/os/frames.asp?doc=/os/lib/os/info/odai/title_20_part_1/title20_chapter31.pdf
<i>Delaware</i>	Gregory Williams (302) 739-9138 gregory.williams@state.de.us Michael Powell (302) 739-9921 michael.powell@state.de.us	Dept. of Natural Resources & Environmental Control Division Soil & Water Conservation 89 Kings Highway Dover, DE 19901	http://www.swc.dnrec.delaware.gov/Shoreline/Documents/FLOOD%20DAMAGE%20REDUCTION%20ORDINANCE.pdf
<i>Maryland</i>	Dave Guignet (410) 537-3775 dguignet@mde.state.md.us Kevin Wagner (410) 537-3914 kwagner@mde.state.md.us	Maryland Department of the Environment 1800 Washington Blvd., Suite 540 (Dave) or Suite 430 (Kevin) Baltimore MD 21230	http://www.mde.state.md.us/assets/document/flood_Hazards/RevOrdinance2004.pdf
<i>Pennsylvania</i>	Daniel Fitzpatrick (717) 720-7445 dafitzpatr@state.pa.us Frederick Chapman (717) 720-7396 frchapman@state.pa.us	Dept of Community & Economic Development Governor's Center for Local Government 400 North Street, 4th Floor, Commonwealth Keystone Bldg. Harrisburg, PA 17120-0225	www.newpa.com
<i>Virginia</i>	Charley Banks (804) 371-6135 charley.banks@dcr.virginia.gov Alison Meehan (804) 371-6137 Alison.Meehan@dcr.virginia.gov	Dept. of Conservation & Recreation Division of Soil & Water Conservation 203 Governor St., Suite 206 Richmond, VA 23219-2019	http://www.dcr.virginia.gov/dam_safety_and_floodplains/documents/V_Azone_b95.pdf
<i>West Virginia</i>	(304) 957-2571 Kevin Sneed Kevin.L.Sneed@wv.gov Robyn Mumphard Robyn.C.Mumphard@wv.gov Richard Carte Richard.L.Carte@wv.gov	West Virginia Division of Homeland Security & Emergency Management, Building 1, Room EB-80 1900 Kanawha Blvd East Charleston, WV 25306-0360	