

**MODEL GUIDE**  
**TO**  
**WRITTEN ADMINISTRATIVE**  
**PROCEDURES FOR LOCAL**  
**FLOODPLAIN MANAGEMENT**  
**REGULATIONS**



Federal Emergency Management Agency (FEMA)  
Region VII  
2323 Grand Blvd., Suite 900  
Kansas City, Missouri 64108-2670  
(816) 283-7002

# ADMINISTRATIVE PROCEDURES FOR LOCAL FLOODPLAIN REGULATIONS

## INTRODUCTION

The following Administrative Procedures are provided as one model that can be used by a community participating in National Flood Insurance Program (NFIP). Because the NFIP is a locally administered program, the community is responsible for enforcing the requirements of the National Flood Insurance Act of 1968 and other subsequent legislation and executive orders. This model has been developed to assist communities in formulating their written Administrative Procedures as a free-standing document. The community's Administrative Procedures are based on the requirements of the local floodplain management ordinance. They set out the processes that accomplish the requirements of the ordinance. This model is organized in a straightforward manner to walk the participating community leadership through development of their own written Administrative Procedures.

It is noted that this guide is offered as a recommendation only and should not be considered all inclusive, universally applicable, or unadaptable to specific community needs. The Federal Emergency Management Agency (FEMA) manages the NFIP by geographic regional offices. For specific guidance, a community should contact its representative FEMA Region for assistance. A listing of the FEMA Regional staff and areas is included as an appendix.

## PURPOSE OF WRITTEN ADMINISTRATIVE PROCEDURES

The best way for a community to implement its floodplain management responsibilities is through consistent administration of the floodplain regulations. In order to do this, the community must adopt written Administrative Procedures that clearly outline the requirements and regulations that will be applied to any development within the floodplain. Each of the following steps are tied to fundamental implementation issues and should be considered in developing a community's written Administrative Procedures.

**This guide is not intended for use as a template.** Communities should not use this guide as the only source of guidance when writing their administrative procedures. Communities need to be sure to include all applicable sections of this guide, as well as any local floodplain management requirements found in their ordinances, zoning or subdivision regulations, or applicable state statutes.

The resulting administrative procedures should outline the **step-by-step process** used in each area of the community's floodplain management program. It should be written to guide the community staff members in performing the day-to-day tasks associated with the floodplain management processes.

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

### **KNOW WHICH COMMUNITY ORDINANCES AND REGULATIONS IMPLEMENT AND IMPACT THE FLOODPLAIN**

*The first step in administering the National Flood Insurance Program (NFIP) is understanding how your community has elected to implement its floodplain management authority. The actual floodplain management authority may have been established through:*

- o A portion of the general Zoning or Subdivision Ordinance or*
- o A Special Ordinance that specifically deals with floodplain management.*

*Either of these options may also include additional provisions above NFIP standards, such as requiring additional feet of freeboard for the elevation of structures.*

### **FLOODPLAIN ORDINANCE**

The legislative authority for the Administrative Procedures is the **FLOODPLAIN MANAGEMENT ORDINANCE** adopted by the community. A comprehensive floodplain ordinance will regulate:

- Development under provisions of the NFIP; [Development means 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.]
- The placement of structures, methods of construction, types of structures, alterations to structures (including manufactured homes);
- Additions, repairs or renovations to existing structures which are classified as substantial improvements;
- Subdivision (no structures in the floodway);
- Installation of water and sewer utilities;
- Filling, grading, channelizing, and excavating within the floodplain;
- Installation and replacement of roads and bridges, storage of materials and equipment; and
- Any related activities which may affect the level of the 100-year flood event.

As the agent for implementing the Floodplain Ordinance, the **FLOODPLAIN MANAGER** is responsible for:

- Understanding the regulations governing the floodplain
- Reviewing the flood development permit applications for development
- Conducting inspections
- Taking enforcement actions when necessary
- Interacting in variance and appeal processes
- Keeping records of all floodplain development
- Collecting fees
- Investigating complaints of violations
- Maintaining and updating administrative forms
- Coordinating map appeals and revisions
- Maintaining floodplain maps and flood data
- Disseminating floodplain management information

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

### **1) ESTABLISH AND MAINTAIN A FLOODPLAIN DEVELOPMENT PERMITTING SYSTEM**

*It is recommended that the community establish and maintain a floodplain development permitting system that includes regulating all floodplain development in the special flood hazard areas. It is important to note that the concept of "development" extends beyond the traditional "building" permit. Whereas the building permit is concerned solely with structures, the floodplain development permit includes buildings and alterations to landscape (such as excavation or use of fill) that would affect drainage patterns or the flood carrying capacity of the watercourse. This system should be structured to make retrieval and review easy.*

*In reviewing an application, the key to remember is that the proposed activity itself must be safe from flooding and it must not increase the flood hazard to other areas.*

### **FLOODPLAIN DEVELOPMENT PERMIT PROCESS**

#### **STEP 1) Review the Floodplain Development Permit Application Package for Completeness**

*The FLOODPLAIN MANAGER must be able to assess the accuracy and completeness of the floodplain development permit application package and evaluate site plans, topographic data and building design plans. Special flood-related considerations during permit review are:*

- *Maintenance of unobstructed floodways*
- *Watercourse alterations*
- *Residential structures*
- *Manufactured homes*
- *Substantial Damage*
- *Substantial Improvements*
- *Allowable floodway uses*
- *Nonresidential structures*
- *Subdivisions*
- *AO Zones (Shallow floodplain)*
- *"No-rise" requirements*

☞ The **FLOODPLAIN DEVELOPMENT PERMIT APPLICATION PACKAGE** must include all the required information, such as:

- Floodplain Development Permits
- Technical documentation
- Any additional reviews
- Elevation Certificates
- Floodproofing Certificates
- Plans and blueprints
- Any additional permits
- Cost analysis for substantial improvements/ substantial damages

#### ● **ADMINISTRATIVE FORMS**

- Make sure all administrative forms are completed satisfactorily and properly signed. These forms should record the specifics of the property and the proposed development. [See samples in appendix section]

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

### ● PLANS AND BLUEPRINTS

- Examine the site data: Briefly review site plans, grading and excavation plans, and building design plans for:
  - Completeness and clarity
  - Existing and proposed topographic information, including spot elevations
  - Boundaries of the floodway and the floodplain
  - Building elevations for all structures showing the level of the base flood elevation (BFE)
  - Proposed obstructions in the floodway
  - Professional registered architect, engineer or land surveyor seal, if prepared by same
  - Illustration of all proposed development
  - Other considerations:
    - Anchoring requirements
    - Construction materials and methods
    - Utilities
    - Subdivisions
    - Encroachments
    - Elevation of the lowest floor
    - Floodways

### ● TECHNICAL DOCUMENTATION

- Elevation/Floodproofing Certificates
  - **NFIP Elevation Certificate:** Provides a record of the as-built elevation of the lowest floor
  - **NFIP Floodproofing Certificate:** Provides a record of the height of floodproofing
- Ensure all necessary technical documents are included and properly certified
- Four conditions that necessitate the filing of certified documentation:

#### 1) **Floodway Encroachment/"No-Rise" Certificate**

If any of part of the proposed project is to be located in a designated floodway, the applicant must submit engineering documentation demonstrating that the proposed encroachment would not result in any increase in base flood heights. There is no form or special format for a "No-Rise" certificate. It may be a written statement, supported by hydraulic computations, signed by an registered professional engineer, who certifies that the development will result in no increase in flood heights.

#### 2) **Watertight Floodproofing**

In the event a nonresidential structure is to be floodproofed according to the NFIP standards, the applicant must submit a statement or floodproofing certificate from a registered professional engineer or architect certifying that the design and methods of construction meet these standards. Note: To receive a flood insurance rate based on 100-year flood protection, the nonresidential structure must be dry floodproofed

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

to an elevation at least one (1) foot above the base flood elevation to be rated at the base flood elevation rate (i.e. one foot of freeboard).

### **3) Enclosures Below the Base Flood Elevation (BFE)**

When an applicant designs an enclosure below the BFE using an alternative to the minimum standard for openings prescribed in the NFIP requirements, a registered professional architect or engineer must certify the design accounts for the effects of hydrodynamic loads and buoyancy.

### **4) Wet Floodproofing**

Wet floodproofing without a variance is limited to enclosed areas that are solely for parking, building access, or limited storage. These areas must: (1) be used **solely** for parking, building access, or limited storage; (2) be designed to allow for the automatic entry and exit of flood waters through the use of openings; and (3) be constructed of flood resistant materials.

## ● ADDITIONAL PERMITS

*The FLOODPLAIN MANAGER should be familiar with other Federal and State regulatory programs to ensure all necessary Federal and State permits are being obtained.*

- o The applicant should provide documentation to the FLOODPLAIN MANAGER stating that the Federal and State permits have been applied for, and that the project will not proceed until those permits are issued.
- o The FLOODPLAIN MANAGER may want to send copies of the application to other Federal and State agencies for their review.

## ● ADDITIONAL REVIEW

*Depending on the size and complexity of the community's organization, the FLOODPLAIN MANAGER may want to include additional review by other community departments that also have regulatory control over development. [See Step 3 below]*

- o Submit copies of complete application package to other community departments and possibly outside agencies for review
- o If the project involves an alteration or relocation of a watercourse, the FLOODPLAIN MANAGER must notify adjacent communities and the State NFIP coordinating agency and the FEMA Regional Office
- o A proposal to change a floodway delineation or a floodplain boundary must be reviewed and approved by FEMA as well as by the community.

## **STEP 2) Review the Floodplain Development Application Package for Compliance with the Technical Requirements of the Ordinance**

*It is not expected that the FLOODPLAIN MANAGER has ALL of the necessary expertise to independently review the permit application package. However, much of the technical information provided with an application can be verified through existing community records.*

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

- Examine **SITE INFORMATION** in detail
  - The **site plan** should show:
    - o Location of property lines and proposed development
    - o Streets
    - o Watercourses
    - o Existing and proposed structures
    - o Topographic information
    - o Floodway and floodplain boundaries
    - o References to any special regulations due to location of property
  
- Assess the **ELEVATION DATA** provided in the application
  - o Scrutinize the elevations using the elevation data contained in the Flood Insurance Study (FIS) and other available local data.
  - o The flood-related delineations must be consistent with the FIS data.
  - o No elevation data provided in unnumbered A zones: The developer, as a cost of doing business must provide elevations for development in unnumbered A zones. [See Appendices for additional guidance]
  - o All elevation information should be accurate as the application package will serve as the record substantiating the issuance of the permit.
  - o NFIP requirements also stipulate that lowest floor elevations be recorded.
  
- Review **BUILDING DESIGN PLANS**
  - **Building plans** provide the basis for determining which regulations apply to the placement and construction of the proposed building.
  - Building plans should reveal:
    - o Type of structure and proposed use
    - o The placement and elevation of the lowest floor
    - o The type of foundation system
    - o The existence of an enclosure below the BFE, if any
    - o The elevation of the lowest floor in relation to the base flood elevation
    - o The kind and potential use of the structure
    - o The height to which a nonresidential structure is to be floodproofed
    - o Anchoring systems to stabilize the structure during flooding.
  
- Have **ENGINEERING DOCUMENTS** reviewed by the Community Engineer
  - Four separate engineering documents linked to the NFIP requirements are:
    - 1) Hydrologic and hydraulic calculations concerning proposed floodway encroachments
    - 2) Loading calculations and methods of construction relative to floodproofing
    - 3) Alternative designs for meeting the minimum opening requirements for enclosures below the BFE
    - 4) Design and methods of construction for breakaway walls that exceed OP loading resistance of twenty pounds per square foot

## WRITTEN ADMINISTRATIVE PROCEDURES MODEL

### **STEP 3) Coordinate Floodplain Development Permit Reviews with Other Community Officials**

*The responsibility for actual permit review and issuance may reside in other administrative offices within the community, such as public works, planning, zoning, code enforcement or housing departments. The FLOODPLAIN MANAGER should work with these other departments and provide timely and accurate review data.*

### **STEP 4) Determine Compliance/Noncompliance**

#### **Acting on the Floodplain Development Permit Application: Approve/Deny the Application**

*When review of a floodplain development permit application is complete, there are three options for action:*

- 1) *Approve the permit application*
- 2) *Conditionally approve the permit application*
- 3) *Deny the permit*

#### **APPROVAL OF THE PROPOSAL/PERMIT**

- If the proposal is found to be compliant, then the FLOODPLAIN MANAGER must issue the permit.
  - ☞ The **floodplain development permit** becomes the official authorization from the community allowing the applicant to proceed based on the information submitted in the application package.

#### **CONDITIONALLY APPROVE THE PERMIT**

- The FLOODPLAIN MANAGER may elect to approve a floodplain development permit only when certain development conditions are met. These conditions should be clearly indicated on all records of the floodplain development permit approval.

#### **DENIAL OF THE PROPOSAL**

- If the proposal fails to comply with the regulations, then a floodplain development permit must be denied.
  - It is helpful to the applicant to have the major area(s) of noncompliance pointed out so the appropriate correction(s) can be made.
  - Clarification of deficiencies can help reduce the number of unnecessary appeals to administrative and regulatory decisions



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### 2) ESTABLISH AN ON-SITE INSPECTION PROCESS

*Either the FLOODPLAIN MANAGER or the designated community agent should perform periodic and timely on-site inspections to confirm that the line between design and actual construction/development is made in compliance with the approved plans. Site inspections serve to minimize and prevent violations. The community must take an active role in enforcement through site inspections.*

#### ☞ Inspection of the Site/Work

##### ● Inspection One:

- o With plans in hand:
  - Determine that the site identified on the proposed plans is consistent with actual ground conditions
  - Verify the location of floodplain and floodway boundaries, if applicable

##### ● Inspection Two:

- o Where an elevated/floodproofed structure is involved, this inspection should be scheduled just prior to the placement of the lowest floor of the building to:
  - Determine whether the lowest floor will be situated to the height stipulated in the permit application
  - Ensure that the type of foundation used is the type specified in the plans
  - Check floodway encroachments, if applicable

##### ● Inspection Three:

- o At or near the completion of the development, inspect to:
  - Determine whether the placement of fill, if used, meets the necessary slope and protection standards contained in local regulations
  - Inspect enclosures below the BFE to ensure adequately sized openings exist
  - Check breakaway walls
  - Check for floodway encroachments, if applicable,
  - Check anchoring system used in securing manufactured homes

##### ● Future/Additional Inspections

- o The property must remain in compliance with floodplain management regulations and the FLOODPLAIN MANAGER should periodically check to ensure that the property remains so.
- o Subsequent inspections are particularly important when a structure contains enclosures below the BFE as these areas can be easily modified and made into habitable spaces in violation of regulations.
- o Inspecting new construction serves to field verify "as built" conditions.
- o Routine inspections of special flood hazard areas can serve to check for unpermitted development.
- o Inspections are useful in identifying unpermitted substantial improvements.

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### 3) INSTITUTIONALIZE ENFORCEMENT ACTIONS

*The National Flood Insurance Program (NFIP) stipulates that participating communities must have legally enforceable regulations. To do this, the regulations must contain enforcement procedures and penalties that are derived from State enabling statutes.*

☞ Usually these enforcement tools are:

- Administrative Methods
- Fines
- Injunctions
- Imprisonment

#### ● ADMINISTRATIVE METHODS

- If the infraction is found during an inspection of ongoing construction, the FLOODPLAIN MANAGER can take initial steps to correct the problem by pointing out the deficiency to the developer and following up with another timely visit to ensure compliance.
- If the violation is serious or if the problem continues after the follow-up inspection, the community can issue a stop work order to begin procedures to revoke the permit. All of these actions should be conveyed through certified letters that follow an established warning process.
- If the violation continues, then usually formal legal action will have to be pursued.

#### ● FINES

- Fines are commonly cited penalties established through adopted community ordinance(s). Usually a maximum fine is established per offense, and each day of a violation is a separate offense.

#### ● INJUNCTIONS

- Most often in the form of a temporary restraining order, injunctive relief is the court directed order to the defendant to cease any further noncompliant conduct. The activity is usually shown to be of danger to the public and that immediate irreparable harm can occur. Once the illegal activity is stopped, the community can proceed to request a mandatory injunction to abate the violations as a public nuisance.

#### ● IMPRISONMENT

- Depending on State enabling legislation, the community's enforcement ordinance may invoke imprisonment as a result of the applicant's failure to pay the required fines.

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### 4) CREATE, SUPPORT, AND INTERACT IN VARIANCE AND APPEALS PROCESSES

*The FLOODPLAIN MANAGER should be well versed in the community's floodplain regulations including established variance and appeals procedures and requirements.*

#### ☞ Variances

A variance is a waiver of one or more of the specific standards required in ordinances. It represents a community's approval to set aside floodplain regulations that were adopted to reduce loss of life and property damages due to flood. While the impact of a single variance on a flood hazard may not be significant, the cumulative impact of several variances may be severe. Therefore, variances should be discouraged when possible.

*When a variance is granted by the community, the FLOODPLAIN MANAGER should properly document the justification for the variance. This will be required by FEMA when the community is audited.*

The **PRIMARY CRITERIA FOR GRANTING A VARIANCE** is predicated on the clear establishment of an unnecessary hardship created for the property owner. The following is a list of demonstrated unnecessary hardships.

#### ● UNNECESSARY HARDSHIPS

- o **Defined as:**
  - Loss of all beneficial or productive use
  - Deprivation of reasonable return on property
  - Deprivation of all or any reasonable use
  - Rendering property valueless
  - Inability to develop property in compliance with the regulations
  - Reasonable use cannot be made consistent with regulations
- o **Insufficient reasons:**
  - Less than a drastic depreciation of property
  - Convenience of property owner
  - Additional costs to build in conformance with codes
  - Circumstances of owner not the land
  - To obtain better financial return
  - Property similar to others in neighborhood
  - Hardship created by owner's own actions

**\*IF A VARIANCE IS APPROVED**, the community **must** send a letter to the applicant, in accordance with the floodplain management ordinance, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

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### ☞ Appeals

Once the request for a variance is heard, it must be either granted or denied. If the variance is denied, then the property owner has the legal right to appeal that administrative decision to the legislative body of the community. The legislative body can then grant or deny the variance or amend the regulations. If the action of the legislative body is still unacceptable to the property owner, the owner can seek relief through the judicial court system. Before the case can be presented to the court, all administrative and legislative remedies must be exhausted.

### **5) KEEP RECORDS OF ALL FLOODPLAIN DEVELOPMENT PERMITS**

*The community must establish a standard procedure for issuing and recording numbers of floodplain development permits for filling, construction and other development located in the floodplain.*

- ☞ The type of flood-related information that should be retained includes:
  - Floodplain Development Permits/Applications [*Includes all elevation and floodproofing certificates*]
  - Recorded "As-built" elevations
  - Findings of fact relative to variances and appeals
  - NFIP Biennial Report forms
  - Other NFIP correspondence
  - Floodplain management data
  - "No-Rise" Certifications in cases of floodway development
  - Copies of "Submit for Rate" on all structures built below 100-year flood levels

### **6) COLLECT FEES**

*While most communities have an established process and/or department for the collection of fees, the FLOODPLAIN MANAGER may be required to see that special fees connected to floodplain development are collected. If this is the case, the FLOODPLAIN MANAGER should have the administrative procedures for collecting and documenting all transactions institutionalized within the community's legislated structure.*

### **7) INVESTIGATE COMPLAINTS**

*Most communities rely on public complaints to augment their routine inspection and enforcement processes. The FLOODPLAIN MANAGER may be called on to investigate these ad hoc inquiries. The FLOODPLAIN MANAGER should use these opportunities to monitor any encroachments that may have occurred in the floodway (including fill, construction, placement of mobile homes, etc.). Additionally, by developing professional relationships with other community staff and instructing them periodically on what types of violations may occur, the FLOODPLAIN MANAGER can increase this floodplain monitoring capacity at no additional cost to the community.*

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### 8) MAINTAIN AND UPDATE ADMINISTRATIVE FORMS

*Once published, administrative forms should be periodically revised to reflect legislative changes within the community.*

☞ Form management should include these considerations:

- Forms should include a listing of the application information outlined in the administrative provisions of the ordinance.
- Forms should reflect the technical provisions of the ordinance by requiring information relative to those provisions.
- The forms should be revised periodically to remain current with the changes in the floodplain management ordinance and to include pertinent informational needs.
- Floodplain development permit applications, variance requests, and other administrative forms should be kept current and in sufficient supply.
- A good administrative form can serve as a checklist for identifying the other kinds of information that should accompany the application submission.

### 9) COORDINATE MAP APPEALS AND REVISIONS

*While the Federal Insurance Administration (FIA) is continually updating and revising the flood maps, the local FLOODPLAIN MANAGER is directly aware of development changes within the community. Usually the FLOODPLAIN MANAGER coordinates map appeals and revisions between the community and FEMA.*

- Any official revision of the flood maps accomplished through either a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR) should be appended to the official community floodplain map for permanent record.

### 10) MAINTAIN FLOODPLAIN MAPS AND FLOOD DATA

*The FLOODPLAIN MANAGER is the singular contact for the community to determine the extent of the floodplain. As such, the FLOODPLAIN MANAGER should:*

- Maintain an adequate supply of FEMA maps for administrative purposes
- Record all map corrections and notices of map revision and attach same to the official administrative map(s)
- Maintain other sources of known flood data for approximate floodplain areas
- Ensure that accurate floodplain maps are displayed in an appropriate public place

### 11) UNNUMBERED A ZONES

*When a community has entered the Regular Phase of the NFIP through a special conversion of their Flood Hazard Boundary Map (FHBM) over to a Flood Insurance Rate Map (FIRM), the flood areas designated as "Zone A" may be the only flood zone designation. These zones do not have base flood elevations provided. **THE LACK OF ELEVATIONS ON THE MAP DOES NOT REMOVE THE REQUIREMENT FOR ELEVATING STRUCTURES.** In this case, the community is required to obtain, review and reasonable use any base flood elevation data or floodway data available from a Federal, State or other source. [Additional guidance is provided in the Approximate Zone A Areas Guide - FEMA 265 and very general guidance is in the appendices.]*

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### 12) BIENNIAL REPORTS

Every two years, FEMA sends a pre-printed form to the community floodplain administrators that should be completed and returned within thirty days. It requests information concerning any changes to the community's flood hazard area, development activities that have taken place in the floodplain, and verification of the number of floodplain residents and structures.

- The report must be signed by the person completing the form and returned to FEMA at the address provided. A copy of the completed report should be retained in the community's files for future reference.
- The Biennial Report indicates to FEMA the degree of development pressure on the floodplain. Variances issued in the floodplain are of particular interest to FEMA.

#### **FEMA Biennial Report: Filling It Out - Some Items of Note**

- ☞ Correct any preprinted information on the form that is incorrect.
- ☞ **Section I:** Refers to any changes and activities in the floodplain. Changes in the community's territorial limits should be noted as "Yes" to Question A and a copy of the new boundaries should be included.
- ☞ **Question D:** Man-made changes refer to the replacement of culverts, bridges, physical changes which affect the characteristics of flooding, construction of dikes or drainage projects. Individual or localized projects such as resurfacing parking lots, building small retention basins, or minor drainage improvement need not be mentioned.
- ☞ **Section II:** Asks about the number of permits granted in the community's flood hazard areas only since the last report was made. Communities need to report the number of variances, if any, granted to the floodplain ordinance.
- ☞ **Community data:** Asks for the best estimate of the population and the number of 1-4 family structures and other structures (schools, churches, businesses, public buildings) located in the entire community. It then asks for estimates in the community's flood hazard areas only. Changes should be made to correct figures that are no longer accurate.