#### **Chapter Summary**

Communities participating in the National Flood Insurance Program must have a development permit system in place to ensure that new development meets the standards explained in Chapters IV and V. Permits must not be issued unless the proposed development complies with these standards.

After a permit is issued, the project must be periodically inspected to ensure that it is built according to the approved plans. It is very important that records of the plans and inspections be kept.

Occasionally, conditions may warrant use of a variance procedure to waive one or more of the regulatory standards of the NFIP. Variances, however, can only be granted if they are consistent with the purposes of the floodplain ordinance, state law and the NFIP regulations.

# A. The Development Permit System

The NFIP requires that a community have a development permit system [44 CFR 60.3(b)(1)]. Many Maine communities already have such a system to administer a land use, building code, zoning, or similar ordinance.

A model permit system is described as part of the Model Ordinance (Articles II, III, IV, and V.F.). It is designed solely for floodplain regulations. The model ordinance can be modified or the floodplain standards incorporated into other ordinances if the permit system will be used for other purposes such as ensuring that new buildings meet minimum fire safety or sanitary standards or zoning regulations.

A model application and permit package and permit decision tree are included in Appendix B of this manual to assist a community in meeting the ordinance and permit requirements of the Program. Electronic copies of the model permitting system may be found on the Maine Floodplain Management's website at <a href="http://www.maine.gov/spo/flood/ord/">http://www.maine.gov/spo/flood/ord/</a>.

# **The Enforcement Official**

In the Model Ordinance, the title of the person responsible for administering floodplain regulations is either left blank so the community can fill it in with the proper local title, or customized to fit the community by the staff of the Maine Floodplain Management Program.

For regulatory purposes, the "Code Enforcement Officer" (or "CEO") is the individual responsible for administering this ordinance. Fair, firm administration is essential to the success of any permit system. Proper administration is dependent upon the interest and capability of the CEO and the support received by the governing board.

The appointment procedure for the Code Enforcement Officer should be spelled out in the enabling ordinance. In many small towns, the position is part-time. Technical qualifications are important to the selection process and CEO certification is required. A basic knowledge of construction is a must. The CEO must work well with others. An official accomplishes more by tactfully explaining permit system intricacies than by quoting ordinances and regulations. The CEO should act as an advisor, ready to help permit applicants protect their property against flood damages.

The duties of the CEO are addressed in Article V of the Model Ordinance. Basically the official is responsible for ensuring that: floodplain development projects receive the necessary local and state permits; seeing that the proper records are maintained; and confirming that a project complies with ordinance requirements.



Topsham, ME, Code Enforcement Officer and assistant. Photo by Lou Sidell, Maine Floodplain Management Program

# **Permit Application**

Federal law requires that no construction or development within the SFHA may begin without a permit issued by the community participating in the NFIP. A person who wants to develop in the floodplain submits an application form (see Appendix B) and the development plans to the Code Enforcement Officer.

Using the decision tree shown in Appendix B, the CEO reviews the application to see if the project will meet ordinance requirements. If so, the permit is issued. If not, the permit is denied and documented with a written explanation. An applicant whose permit has been denied may pursue one or more of the following courses of action:

- 1. Redesign and resubmit a project so that is compliant.
- 2. If the applicant feels that the official made a mistake or has misinterpreted the ordinance, an appeal to the board of appeals may be made.
- 3. If the applicant believes the ordinance imposes a unique hardship on the proposed development, a variance may be requested (see discussion on variances later in this chapter).
- 4. Relocate the project out of the floodplain.

# **Process and Inspections**

Once a permit is issued, the Code Enforcement Officer is responsible for ensuring that the project is built according to the approved plans. This can be done by one of two methods. The easier method is to tell the applicant to have an engineer inspect the project. The engineer would certify to the community that it was done in accordance with the ordinance. This is a required method for technically complex projects, such as building a floodproofed factory.

However, in most, an expensive method is not warranted. Development projects that include elevated buildings, or buildings elevated on fill, can be inspected by the CEO, but may require an Elevation Certificate, Floodproofing Certificate or professional engineer's certification of relevant standards or other plans or documents completed by someone with a professional seal, including architects. When the development is a new building or a substantial improvement, at least three inspections should be made:



A FEMA Hazard Mitigation Specialist meets with Fayette, Maine town officials after the flood of March 2007.

- After the foundation is staked out, but before construction begins, setback out of the floodway, filling and other site
  requirements are checked. Work should not start on the foundation until this inspection has been successfully
  passed.
- When the foundation is completed, the lowest floor elevation is inspected (see following discussion on record keeping). Work should not proceed with the walls or floor until the structure has passed this inspection. If the floor elevation is not high enough, a stop work order may be issued or the permit may be revoked until the building is corrected. The model ordinance requires that communities adopt a two-part permit system. The first permit (or Part 1 permit) authorizes work only to the point of establishing the lowest floor, be it a elevated floor or a "slab on grade". The second part of the two-part permit system allows the remainder of the building to be constructed after the lowest floor elevation has been certified with a professionally executed Elevation Certificate. While not required by the NFIP regulations, the two-part permit system has become recognized nationwide as a valuable tool that helps the applicant and the community by recognizing a substandard elevation prior to the building being completed.

3. When construction is completed, the owner is not allowed to occupy the building unless this inspection shows that the building meets all the requirements of the ordinance and a completed "as built" Elevation Certificate has been submitted by the owner. (See Article VIII of the Model Ordinance).

Other minor development projects may be completed with fewer inspections.

#### **Use or Occupancy Permit**

Some communities require that a new building cannot be used or occupied without a use permit or a "certificate of use and occupancy." The CEO would not issue a use permit until the building could pass the final inspection.

The model ordinance, in Article VIII, provides for a "Certificate of Compliance". No structure may be occupied without the issuance of a *Certificate of Compliance*. Submission of an Elevation Certificate is required prior to the issuance of the *Certificate of Compliance*. A community may call the final approval something else such as a Certificate of Completion or Certificate of Occupancy. The intent is to allow the community leverage to ensure the building is safe and suitable for habitation and that the requirements of the permit were met.

#### **Fees**

It is reasonable for communities to require that the owners of projects in the flood hazard area bear the cost of administering the permit review for their project. However, a building permit system should not be viewed as a lucrative source of revenue for the community. Maine law limits permit application fees to be reasonably related to the costs of administration. Fees should be set to pay for the salary of the enforcement officer and expenses of administration.

In recognition of the varying degree of difficulty and amount of time required to review and process flood hazard development permit applications, some communities are inserting language for a split or sliding fee schedule.

Some communities already have fee structures in other ordinances that are set according to the value of the proposed project. In an effort to promote consistency between ordinances, they might choose to adopt a similar fee structure for the floodplain ordinance. Other communities want the flexibility of allowing their Board of Selectmen to reassess and establish fees annually, without specifying the exact amount within the ordinance. Many communities simply assess a larger fee for new construction or substantial improvement projects (which often require more time and effort to review) and a smaller fee for all other (minor) projects. The fee should form a reasonable standpoint to reflect the cost of reviewing the project.

Some options may include:

- 1. assessing a fee that is a percentage of the proposed project's value, (i.e. \$1/\$1000);
- 2. setting fees according to monetary thresholds based on the value of the proposed project, for example:

- 3. charging a fee of \$25 for minor development (as defined) and a \$50 fee for new construction and substantial improvements;
- 4. allowing the Board of Selectman to annually establish a fee; or
- 5. assessing fees based on the amount of time required to process the application. Some communities have adopted language similar to the following for the third and fourth points shown above:

"A nonrefundable application fee of \$25 for minor development or \$50 for new construction or substantial improvements shall be paid to the City/Town Clerk or the CEO and a copy of a receipt for the same shall accompany the application."

"A nonrefundable application fee, as established annually by the Board of Selectmen shall be paid to the City/Town Clerk and a copy of a receipt for the same shall accompany the application."

The Model Ordinance (Article IV) suggests that additional fees be collected if the CEO or Board of Appeals needs the assistance of an engineer or other expert.

#### B. Record Keeping Requirements

The CEO is responsible for keeping all appropriate records related to the floodplain ordinance. A complete record must be kept for every permit application. This is particularly important when a permit is denied or when a request is referred to the board of appeals. Normally a file folder is kept for each project. The file should contain the permit application, copies of all letters pertaining to the project, variance documents, completed checklists used during inspections, and the lowest floor elevation or floodproofing certificate.

The CEO should have sufficiently up-to-date copies of the ordinance, federal regulations, manuals, and flood maps. These may be loaned to one-time applicants; they may be given or sold to those who submit frequent permit applications, such as contractors. The amount charged would be just enough to cover the cost of reproduction. All records must be made available for public inspection.



(Gardiner, ME) Flood gauge picture taken in 2002 (above) and in April 2004 (below).

# **Biennial Report**

All communities participating in the NFIP have agreed to submit a report to FEMA. Every two years, FEMA sends out a report form that must be completed and returned within 30 days. It requests information about changes to the community's flood hazard areas and corporate boundaries. If there have been changes, copies of the new data or maps must be submitted with the report, so your flood insurance map can be revised. It also asks about permits and variances granted in the floodplain. Code Enforcement Officers with accurate and up-to-date permit files will find the report form easy to complete. A sample Biennial Report is shown in Appendix K.



## **Elevation Certificate**

The Model Ordinance requires that the lowest floor (including basement) of all new structures be one foot above the BFE. Article V, Section G of the Model Ordinance requires the building official to keep a record of these elevations. This is an important record keeping requirement of a community's participation in the NFIP. The elevation record is used both to set the flood insurance premium on the building and by the community official to check that new buildings are properly constructed.

# IT IS CRITICAL THAT THE ELEVATION OF THE LOWEST FLOOR BE PROPERLY TAKEN AND RECORDED FOR EACH NEW BUILDING IN THE FLOODPLAIN.

The NFIP has developed an Elevation Certificate that must be used to record the lowest floor elevations for any new or substantially improved building. The form (included in Appendix D and available for reproduction) includes a section to record the elevation of the adjacent grade, lowest adjacent grade and lowest floor elevations.

All such forms and data should be kept in the permit file. Property owners who request a "Letter of Map Amendment" (see Chapter II, Section H.) must at a minimum submit the **lowest** adjacent grade data with their request, however most requests require the Elevation Certificate to be filled in completely.

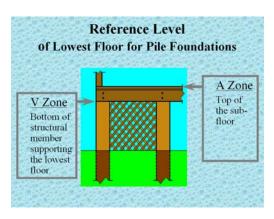
In recording elevations, it is necessary to use the same datum used in the flood insurance study, usually National Geodetic Vertical Datum (NGVD) or the Mean Sea Level 1929. Lowest floor elevations are measured at the top of the floor or slab, except in coastal high hazard areas. In coastal high hazard areas, the bottom of the lowest structural member must be one foot above the BFE. Where a FIRM shows a Zone AO with a number, the "datum" is the highest adjacent grade to the structure, rather than the base flood elevation. Buildings in Zone AO must have their lowest floor elevated above the **highest adjacent grade** to the depth number (in feet) specified on the FIRM.

The elevation record can be completed by the building official, an engineer or a surveyor. The Model Ordinance requires that the elevation certificate be completed by a Professional Land Surveyor, architect, or engineer. Only a registered professional engineer or architect can complete the floodproofing certification.

## C. Checking Elevations in the Field



(Kennebunk, ME) Field staff measures flood levels after 2007 nor-easter.



requirements of Title 30-A MRSA §4353.

The purposes of flood insurance rating and floodplain regulations do not require the degree of accuracy usually demanded in surveying. The records need only be accurate to within  $\frac{1}{2}$  foot. This level of accuracy can easily be attained by a code enforcement officer using a level.

It may be useful to field check elevations to ensure that construction is proceeding within permitting guidelines. However, if the community's local ordinance is based on the Model Ordinance provided by the Floodplain Management Program, there should be no need for the CEO to field check elevations. Article V, Section F of the model requires that a Professional Land Surveyor certify that the lowest floor meets the required elevation prior to the issuance of a permit for the construction of the remainder of the building.

Whereas the two-part permit system is not required by the FEMA regulations, and some communities may not have included it in their local ordinance, a complete discussion on how to check elevations in the field has been included in Appendix C.

#### Variances

A variance is a relaxation of one or more specific flood damage prevention standards of the Model Ordinance, Article VI. It may be granted only for a specific project on a specific site. Strict requirements of the ordinance may be relaxed, but a variance must remain consistent with the purpose of the ordinance. Whereas a floodplain management ordinance is a zoning ordinance, dividing the town into districts, a variance is granted in accordance with the

Variances may not be used to waive the standards for every permit application. This would be the equivalent of amending the ordinance, an action that would likely not meet minimum NFIP standards.

Communities with existing zoning ordinances or building codes should follow the variance procedures of those ordinances. They should also consider adding some of the procedures and requirements of variance from the model into their existing code. Communities without an existing procedure should use the method presented in Article X (Article IX in the b, c, and d non-coastal models) of the model.

# **Variance Standards**

Under the Zoning Adjustment statute, applicants for variances must prove they are necessary because the ordinance causes "undue hardship". The statute spells out four criteria the applicant must show have been met in order to prove undue hardship. These four criteria are:

- 1. The land in question cannot yield a reasonable return unless a variance is granted:
- The need for a variance is due to unique circumstances of the property and not to the general conditions in the neighborhood.
- 3. The granting of a variance will not alter the essential character of the locality; and
- 4. The hardship is not the result of action taken by the applicant or a prior owner.

To be considered for a variance the applicant must present evidence to show that the four criteria in Title 30-A MRSA §4353 have been met. In addition, Article X, Section B (Article IX in the b, c, and d non-coastal models) of the model ordinance contains three additional requirements. This section is designed to ensure that the applicant has no feasible alternatives and that there will not be an additional burden placed on the public. One thing to note, a standard should be adjusted only enough to grant the relief needed.

Hardship is a difficult standard for an applicant to demonstrate. Increased costs associated with elevating the building are not considered to be a hardship. The Maine Supreme Judicial Court clearly ruled that a "reasonable return" does not require "maximum return" on construction (*Barnard v. Town of Yarmouth*, 313 A.2d 741 [1974], *Grand Beach Assoc., Inc. v. Town of Old Orchard Beach*, 516 A.2d 551 [1986]). The applicant must prove to the satisfaction of the Board of Appeals that a substantial hardship will be suffered, and that the property has no reasonable economic use under the terms of the ordinance. It is also important to warn the applicant that if flooded, they will endure a different kind of hardship.

The following document contains valuable information for local officials who are faced with a situation in which a variance may be required. While this document was produced by FEMA Region V (Chicago) in April 1998, the guidelines apply to current NFIP participants.

# FEMA Variance Guidelines April 1998

#### INTRODUCTION

The Federal Emergency Management Agency (FEMA) does not set forth absolute criteria for granting variances from the floodplain management provisions of Title 44 CFR, §60.3, §60.4, and §60.5. However, general variance criteria have been established in the NFIP regulations under §60.6 (a). These criteria provide the basis for each community participating in the NFIP to determine if a structure qualifies for a variance from the local floodplain management regulations. The variance criteria are a compilation of standards most frequently found in State variance law, coupled with specific floodplain management standards.

In all cases, the responsibility to approve or disapprove a variance rests on the community, not FEMA. However, FEMA evaluates variances granted by a community to determine if they are consistent with the objective of sound floodplain management. The variance criteria are intended to inform participating communities of the guidelines that FEMA will use in such an evaluation.

To ensure consistency with sound floodplain management, communities should issue variances only on a finding of good and sufficient cause, exceptional hardship, and a determination that variance will not result in additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances. In addition, a variance should be the minimum necessary, considering the flood hazard, to afford relief.

If the criteria at §60.6 (a) are closely adhered to, variances that completely waive the substantive NFIP requirements which provide protection to the 100-year standard should be quite rare. In most cases, some lower level of protection or alternative methods to provide comparable protection.

#### **DESCRIPTION AND INTENT OF THE REGULATIONS COVERING VARIANCES**

The NFIP variance criteria assume the principal of zoning laws: that variances pertain to a piece of property and are not personal in nature. Though standards vary among States, in general a properly issued variance is granted for a parcel of property with physical characteristics so unusual that complying with the ordinance would create an exceptional

hardship to the applicant or the surrounding property owners. Those characteristics must be unique to that property and not be shared by adjacent parcels. The unique characteristics must pertain to the land itself, not to the structure, its inhabitants or the property owners. Therefore, financial hardship or the health condition of the property owner alone is never sufficient causes for granting a variance.

It is common practice for some administrative bodies to grant variances for zoning, property setback, and non-health and safety regulations based on personal criteria and the character of the owner rather than the nature of the property. However, granting a variance from NFIP floodplain management standards on these grounds would rarely be an appropriate action. Such action would not be consistent with the community's need to ensure public safety.



(Damariscotta, ME) Schooner Landing – when this property was sold the insurance and insurance rate was transferred to new owner (grandfathered). The structure would be uninsurable under current NFIP standards. Photo by Bonnie Cowle, Maine Floodplain Management Program.

Once the character of the owner changes

(i.e., the property is sold, leased, etc.) the justification for a variance based on personal considerations no longer exists. Because the structure remains, future owner/occupants are exposed to the nonconforming nature of the property and whatever hazards and public safety problems are associated with it. This exposure to flood risk is unnecessary because the sole reason for granting the variance was the personal condition of the previous owner.

The variance criteria in §60.6(a) must be read as a whole and not piecemeal. Variances can be granted for new construction and substantial improvements only if all criteria in §60.6(a) and the local ordinance are met. If any one of the criteria is not met, the variance should not be granted.

#### Floodways - §60.6 (a) (1)

The floodway is defined (§59.1) as:

"the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height."

It is important to reserve the floodway as a water conveyance area because any encroachments or obstructions placed in the floodway will increase flood heights and consequently flood damages. Thus, at §60.6 (a) (1):

"Variances shall not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result."

The intent of this variance criterion is to prohibit non-conforming development that may increase flood levels; these, in turn, could potentially increase the flood damage experienced by owners of nearby properties.

In most cases, there will be alternative locations for the proposed development outside the floodway, or other actions can be taken to compensate for increased flood stages or the floodway can be modified through flood



West Front Street parking lot in Farmington, ME. MEMA Photo.

control measures. If there is no feasible or practical alternative site to locate the development, then it must meet all criteria under §60.6 (a) and, in accord with §60.6 (d) (3), demonstrate that no increase in flood stages will result. Section 60.3 (d) (3) states that:

"The community shall prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway that would result in any increase in flood levels within the community during the occurrence of the base flood discharge."

The only exceptions to this provision, located in §§60.3 (c) (13) and (d) (4) of the NFIP regulations, allow for the increases in flood levels under certain conditions and upon approval by the administrator.

In cases where all variance criteria in §60.6 (a) are met and a "no-rise" analysis and certification has been approved, the community may find it appropriate to issue a variance. However, because of the potential hazards involved, many states and communities exceed minimum NFIP requirements by prohibiting the issuance of variances for floodway development altogether, regardless of whether all variance criteria are met and a "no-rise" certification was made. Therefore, a community may wish to prohibit all variance requests based on three potential flood hazards in the floodway:

- 1. the hazard to the development itself;
- 2. increased hazard which the development may cause to other properties; and
- 3. risk to individuals stranded in isolated structures surrounded by what is in many cases rapidly flowing, debris-laden floodwaters, and the risk to the rescue workers.

For example, the granting of a variance, which allows the placement of a manufactured home below the BFE in a floodway, will place the lives of its inhabitants at risk because during a flood it is likely that the manufactured home will be destroyed. Aside from this danger, experience has shown that a manufactured home can float into other manufactured or conventional homes and result in severe structural damage; or, become wedged in a bridge opening or culvert, which could in turn dramatically increase flood heights upstream and endanger other citizens. Local emergency personnel may be endangered attempting to rescue the occupants before the manufactured home is carried downstream.

Because of the hazards of granting variances for development in the regulatory floodway, community officials should carefully consider all of the possible dangers created by the variance issuance. In most cases, a review will indicate that the benefits of allowing the development are outweighed by the costs of increased future flood damage and increased hazards to life.

## Lots of One-Half Acre or Less - §§60.6 (a) and (a) (2)

"While the granting of variances generally is limited to a lot size less than one-half acre (as set forth in paragraph (a) (2) of this section), deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases."

"Variances may be issued by a community for new construction and substantial improvement to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the procedures of paragraphs (a) (3), (4), (5) and (6) of this section."

A common, but unjustifiable argument for variance requests on lots of less than ½ acre is one based on personal convenience or aesthetics; i.e., the height inconsistency that would result between adjacent

structures if the middle one was elevated to or above the BFE. Aesthetics or other personal considerations should never be a consideration when making variance determinations on ½-acre lots. Section 60.6 (a) (2) only addresses the physical, not the aesthetic characteristics of a lot in relation to the adjacent lots. In balancing considerations for personal issues versus issues related to public health and safety such as minimum NFIP criteria, a community should always choose public safety and the protection of lives and property.

The intent of the above variance criteria has been misinterpreted to mean that variances can be systematically granted for all intermediate or "in-fill" subdivision lots of less than ½ acre. Such variances are not to be assumed. The intent of §60.6 (a) (2) is not to place a lesser (or no) burden on ½-acre lots, but to place a greater burden on lots larger than ½ acre. Section §60.6 (a) specifically states, "as the lot size increases beyond ½ acre, the technical justification required for issuing a variance increases."

The ½-acre lot size threshold is meant to be a general cutoff point. As §60.6 (a) states, "deviations from that limitation may occur." However, experience shows that for intermediate lots greater than ½ acre, a structure can, in nearly all instances, be elevated on fill to or above the BFE without causing measurable drainage impacts to the adjacent structures whose lowest floor elevations are at or below grade.

Because of the additional storage and infiltration capacity provided by larger lots, and because of the flexibility in being able to choose a location on such a lot hat would lessen environmental impact, the technical justification required for issuing a variance based on potential drainage problems increases with the lot size beyond ½ acre. Conditions will vary based on the size of the structure relative to the lot size, and the location of the structures relative to each other.

Many design and construction alternatives exist that will ease a hardship caused by potential drainage problems, while still allowing a structure in this situation to be built in full compliance with NFIP regulations. Several acceptable elevation techniques cause no more (and sometimes less) disruption of drainage patterns that provide an alternative to building a structure at ground level with a variance. Examples include: 1.) elevating a structure on pilings, columns, or extended foundation walls; 2) grading or landscaping the elevated fill pad to drain away form the adjoining properties; and 3) creation of natural or artificial infiltration fields or systems located at the intersection of the fill slope and the natural ground. Such alternatives can be cost effective, visually appealing, and provide drainage solutions problems that do not harm adjacent structures.

In summary, the granting of variances for small lots where elevation on fill will pose an exceptional hardship due to drainage problems should be rare. Variances for "in-fill" lots of ½ acre or less should be granted on the basis of potential drainage problems only 1) if, as §60.6 (a) (2) explicitly states, all other criteria [§§60.6 (a) (3), (4), (5), and (6)] are met, and 2) if a professional engineer or architect has prepared and certified data demonstrating that there are no technically feasible methods available to alleviate or mitigate the drainage problems.

#### Good and Sufficient Cause - §60.6 (a)(3)(i)

"Variances shall only be issued by a community upon a showing of good and sufficient cause."

A variance request by an applicant that is based on good and sufficient cause is one that deals solely with the physical characteristics of the property, subdivision lot, or land parcel under question. A rendering of a good and sufficient cause should never be based on the character of the planned construction or substantial improvement, the personal characteristics of the owner or inhabitants, or local provisions that regulate non-health and public safety standards (e.g., aesthetic restrictions of subdivision homeowner associations).

"Good and sufficient" cause means that by granting a variance there is substantial and legitimate benefit to be achieved by numerous other citizens, or the community as a whole. It is not based on the convenience or financial relief that the variance would afford the applicant. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, the disapproval of one's neighbors, or homeowners' association restrictions, likewise do not, as a rule, qualify as "good and sufficient" causes.

"Good and sufficient" cause for a variance occurs when a property has such unusual physical characteristics that complying with NFIP regulation in a local ordinance would create an exceptional hardship to the applicant, the

surrounding property owners, or the community in general. In addition, the unusual physical characteristics must be unique to that property and not be shared by adjacent parcels or be typical of other lots in the community.

Physical conditions are inherent to the land or property and usually will not change or be significantly altered over time. Therefore, the justification for granting a variance based on physical characteristics will usually not be undermined over time. In contrast, personal characteristics and intended uses of buildings can change dramatically with changes in ownership. Likewise, local aesthetic and other non-health and safety restrictions are frequently altered over short periods. Thus, the justification for granting variances based on characteristics other than the physical conditions of the property can easily become compromised.

Once the character of the owner changes (i.e., the property is sold, leased, etc. or the owner no longer suffers from financial hardship) the justification for the variance no longer exists, but the structure remains. Future owner/occupants are exposed to the nonconforming nature of the property and whatever hazards and public safety problems are associated with it. This exposure to property and personal risk from flood damage is unnecessary except for the personal condition of the previous owner.

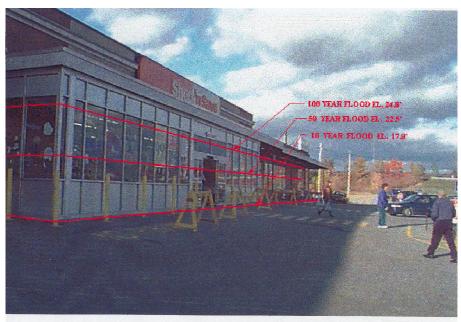
A common misinterpretation of what constitutes "good and sufficient cause" for granting a variance is based on the financial status or other monetary circumstances of the owner. Financial hardship of the property owner is never a good and sufficient cause for granting a variance. Granting a variance for construction in a flood hazard area based on financial hardship only increases the probability that owners least able to afford it will suffer even greater monetary adversity (not to mention health and safety risks) when the structure is damaged during a flood.

[The next section is a break in the FEMA Variance Guidelines for an overview of a high profile variance that was granted here in Maine]

# Anchor Store Receives Floodplain Management Ordinance Variance:

Cottle's was a mom and pop grocery store that sat on a parcel of land in Gardiner, Maine near the confluence of the Cobbosseecontee Stream and the Kennebec River. The parcel had, at one time, been a back-water pond where logs were floated in for a mill to pull and cut up. The pond was filled with logs and debris that would "environmentally" not be considered appropriate by standards today. Sometime in the 1960s, Cottles became a part of the Shop 'n Save grocery chain and sometime later, Hannaford's.

One of Maine's worst floods arrived on April 1, 1987. The April Fools Day Flood, was a



Flood Levels at Gardiner Shop 'n Save, from the 1994 FEMA flood insurance study. 10 year flood level is at the existing ground floor of Shop 'n Save, 50 and 100 year flood levels cause 5.5 feet and 8.8 feet, respectively, of water above the floor. The 1987 flood was a 100 year flood.

100-year event and the Shop & Save flooded to the 100 year flood elevation of 24.8', as shown in the picture above.

There are conflicting accounts about the height of the flooding in the store. It was either 8 feet or 12 feet

above the floor at this oft flooded location. Flood waters enter the store's basement long before the flood waters reach the outside adjacent grade. During previous flooding events the store had parked trucks on the manhole covers in the parking lot thinking that they could prevent the flood water from reaching the store too soon. Various accounts tell of the trucks being lifted by the force of the water as though they were on hydraulic jacks.



understanding the floodplain management mission.

Hannaford Brothers asked the city code officer for a permit to do a \$2.9 million dollar improvement. The permit was denied because the CEO determined that the development was a substantial Improvement and required the structure either to be elevated or floodproofed. The proposal did not encompass those standards as required by the community's Floodplain Management Ordinance.

On a Tuesday evening in November 1999, a Floodplain Management Workshop was conducted for the Gardiner Board of Appeals to assist them in

(Gardiner, ME) The overflow from the Kennebec River and Cobbosseecontte Stream floods the parking area of a local supermarket in April 2005.

On the following Thursday evening, a public hearing was held on the store's request. Several of the city councilors as well as the local chamber of commerce and local residents testified in favor of the store. The store argued that it is impossible to elevate and impossible to floodproof to depths of 8 to 12 feet and that their only

course of action would be to leave the city if not granted relief. The Board of Appeals voted 6-0 to grant the variance. The community stated that it needed a large "anchor" store for the downtown and they were pleased that the store was reinvesting in the community and not promoting sprawl by moving to a location outside of town. There was no local opposition.

The community was made aware that they might face suspension from the National Floodplain Insurance Program. As discussions unfolded following the community's granting of the variance, FEMA noted that the criteria for suspension say there must be a pattern of variances or clear failure to properly administer the regulations. Over the following many months there were several meetings with city leaders, FEMA and the Maine Floodplain Management staff as well as attorneys. The attorneys agreed that one variance did not constitute a pattern.

The grocery store representatives agreed to abandon the use of the basement (in fact they had already accomplished that), use flood resistant material, as prescribed in FEMA Technical Bulletin FIA 2-93, (http://www.fema.gov/plan/prevent/floodplain/techbul.shtm) elevate all mechanicals to the roof and they also adopted and filed an emergency action plan. One component of the plan is for the store to have a number of trucks at the ready in order to move the goods to a safer place. The plan establishes a threshold for initiating the implementation and identifies who is responsible for making that determination. There have been several occasions when the parking lot is full of large trucks as the waters rise.

To date, the store has not flooded since the variance was granted. The store's flood insurance policy is being re-rated as a post FIRM structure and consequently they will see much higher flood insurance premiums. While a variance may "relax" some of the development standards, it does result in higher rates because of the increased exposure to flooding.

This variance issue has become a bench mark in the Maine floodplain management arena. Due to the high profile media coverage nearly all of the current code officers have raised questions regarding "How come they got to do that?" While it has been touted by many in the field as a bad example, it has become a valuable example of how the system works, what are the ramifications, and what should and can be done to mitigate. It

has also helped us better define variance criteria. At this point in time we are now laboring under the assumption, based on discussions with FEMA that while one variance does not constitute a pattern, perhaps two variances may constitute a pattern. This is not to say variances can never be granted. The NFIP recognizes historic structures and water dependent uses as potentially legitimate reasons for a variance. Any variance considered by a community must meet the standards outlined in the Maine statutes, the minimum NFIP standards, and the community's FMO criteria for review. A variance is the means of the last resort and must always be the minimum necessary. Every time a community grants a variance a red flag goes up somewhere in the Program.

# [Continuation of the FEMA Variance Guidelines]

#### Exceptional Hardship - §60.0 (a) (3) (ii)

"Variances shall only be issued by a community upon a determination that failure to grant the variance would result on exceptional hardship to the applicant."

In determining whether an applicant has established an exceptional hardship sufficient to justify a variance, the variance or appeal board or other local governing body must weigh the applicant's hardship against community goals and the purpose of their floodplain management ordinance. When deciding whether to approve a variance to flood elevation or floodproofing requirements, the question to ask is this: Does the hardship that this individual applicant would face outweigh the community's need for strictly enforced regulations that protect its citizens form the dangers and damages of flooding? Only an exceptional, unique hardship relative to the physical character of a piece of property should persuade local officials to set aside provisions of an ordinance designed with the whole community's safety in mind.

The hardship might not have to be so severe if the applicant were seeking a variance to a setback ordinance, for instance, which was intended merely to simplify street repair and modifications. In the course



(Shapleigh, ME) Houses located near rivers and lakes in York County were surrounded by high water for many days after heavy rains inundated the region in May, 2006. Photo by Jocelyn Augustin.

of considering variances to flood protection ordinances, however, variance boards continually must face the more difficult task of frequently having to deny requests form applicants whose personal circumstances evoke compassion, but whose hardships are simply not sufficient to justify deviation form community-wide flood damage prevention requirements.

The hardship that would result from failure to grant a requested variance must be exceptional, unusual, and peculiar to the property involved. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, the disapproval of one's neighbors, or homeowners association restrictions likewise cannot, as a rule, qualify as exceptional hardships. All of these problems can be resolved through other means, without granting a variance. This is so even if the alternative means are more expensive or complicated than building with a variance, or if they require the property owner to put the parcel to a different use than originally intended, or to build his or her home elsewhere.

For example, a situation in which it would cost a property owner several thousand dollars more to elevate a house to comply with the ordinance and an additional several thousand to build a wheelchair ramp or an elevator to provide access to that house for a handicapped member of the family might at first glance seem like the sort of problem that could be relieved by a variance. However, while financial considerations are always important to property owners and the needs of the handicapped person certainly must be accommodated, these difficulties do not put this situation in the category of "exceptional hardships" as they relate to variances. This is because the characteristics that result in the hardship are personal (the physical condition and financial situation of the people who propose to live on the property) rather than pertaining to the property itself. In addition, the problem of the day-to-day access to the building can be alleviated in any one of a number of ways (going to the additional expenses of building a ramp or elevator), without granting a variance. In fact, one method that facilitates the use of a structure for handicapped persons (especially those in wheel chairs) is to elevate the structure by means of earthen fill.

Third, the situation of handicapped persons occupying flood-prone housing raises a critical public safety concern. If a variance is granted and the building is constructed at grade, it will be critical that the handicapped or infirm person evacuate when floodwaters begin to rise, yet he or she may be helpless to do so alone. Not only does this pose an unnecessary danger to handicapped persons but also it places an extra demand on the community's emergency service personnel who may be called upon. If the building is properly elevated, the handicapped person can still be evacuated if there is sufficient warning and assistance available. If there is not, that person can, in all likelihood survive the flood simply by remaining at home safely above the level of the floodwaters.

More simply, the property owner's difficulties would not really be relieved by the variance, but likely only postponed and perhaps ultimately increased. It would be more prudent over the long run for the property owner and the community, if the variance were denied and the home built at the proper elevation with handicapped access. This will ensure the safety of all family members when floodwaters rise and protect individual and community investment in the property, as discussed in the paragraphs on public safety and nuisances.

Another common argument for variances from the elevation requirement is the unaesthetic height differential with adjacent structures that would result. To promote architectural and aesthetic consistency, homeowners associations or subdivision boards frequently place restrictions on landscaping and construction practices, such as the total height to which structures can be built. The owner, and usually the prospective neighbors and local homeowners association, protest that the structure, if elevated, will be architecturally uncoordinated with the rest of the structures on the block and that property values will be decreased as a result.

Variance requests that claim exceptional hardships due to architectural considerations or conflicts with local subdivision regulations governing aesthetics should never be granted to waive regulations designed to protect the health and safety of residences. For the following reasons a community would be remiss in its responsibilities to its citizens if it placed appearance before public protection:

- 1. The hardship would be based on personal preference, not the property per se;
- Most structures can be elevated such that they are aesthetically pleasing and architecturally consistent, despite the height difference;
- 3. Elevated structures are much less prone to flood damage, and, therefore, actually increase in value relative to adjacent unprotected structures, especially after they are damaged in a flood;
- 4. The health and safety risks placed on occupants of the unprotected structure are unnecessary and avoidable.

#### Increased Flood Heights - §60.6 (a) (3) (iii)

"Variances shall only be issued by a community upon a determination that the granting of a variance will not result in increased flood heights."

A development for which a variance is to be granted must not in any way cause an increase in water surface elevations during floods of <u>any</u> magnitude, not just the base flood. Therefore, for a community to grant a variance, all other variance criteria in Section 60.6 (a) must be met, <u>and</u> the applicant must demonstrate through technical justification that the proposed development will not increase flood heights.

The underlying principal is that an increase in flood heights has the potential to cause flood damage to structures in the community that otherwise would not be flood-prone. In addition, it has the potential to increase the depth of flooding, and thus the damage potential, of structures that are already flood-prone.

To allow increases in flood heights to occur unnecessarily is inconsistent with the objectives of sound floodplain management, and undermines the community's previous efforts to protect structures by requiring elevation or floodproofing to or above the BFE. Increases in flood heights subtract from the level of protection provided by these requirements.

# Public Safety and Nuisances - §60.6 (a) (3) (iii)

"A variance will not cause additional threats to public safety or create nuisances."

Variances must not result in additional threats to public safety or create nuisances. Local flood damage prevention ordinances (including elevation and floodproofing requirements) are intended to help protect the health, safety, well being, and property of the local citizens. This is a long-range community effort usually made up of a combination of approaches such as adequate drainage systems, warning and evacuation plans, keeping new property (especially homes) above the flood levels, and participating in an insurance program. These long-term goals can be met if exceptions to the laws are kept to a bare minimum.

Variances to allow the construction of habitable structures below the BFE, especially in the higher hazard areas such as floodways, places residents of those structures at much greater personal risk. The potential for loss of life is much greater in structures whose first floor is below the BFE, and where flood depths are greater than three feet or velocity is present. A community that waives elevation requirements in these situations is doing a disservice to its citizens. In addition, a community may be held liable for personal injuries or loss of life that occurs to occupants of structures for which a non-compliant variance has been granted.



(Kennebunk, ME) Critical facilities located in the floodplain are at risk. Photo by Lance Carpenter, FEMA.

It is often argued that variances to waive the elevation requirement should be granted for structures where handicapped or elderly persons will be occupants. The basis for this argument is that elevation of the structure will make wheelchair access difficult (i.e., long and expensive ramps) or that elderly people are not physically capable of climbing stairs.

For the same reasons, handicapped and elderly people are less able to quickly evacuate flood-prone structures. They are more likely to become trapped inside structures if they are not told about an imminent and worsening flood hazard, or when floodwaters rapidly rise. As such, it is difficult to imagine a case where a variance would be appropriate for structures when there is to be handicapped and/or elderly occupancy.

Not only does a community's public safety commitment apply to residents of structures located in flood hazard areas, but also to local emergency services personnel. Variances from the elevation requirement increase the risk exposure for personnel required to rescue residents of structures flooded because of the variance. Simply, if structures are elevated to or above the BFE, residents can in all likelihood, survive the flood by remaining at home safely above the level of the waters. The necessity to rescue residents of elevated structures is not as great and local emergency services personnel can concentrate their efforts to areas of greater need.

#### Public Expense – §60.6 (a)(3)(iii)

"Variances shall only be issued by a community upon a determination that the granting of a variance will not result in extraordinary public expense."

The public expense is usually monetary (government funds), but can also be non-monetary. An example of extraordinary public expense is the repair or replacement of public facilities and infrastructure damaged by a flood because of a variance issuance. Another example is the construction of flood control projects or other public works to protect structures prone to flooding because of the issuance of variances. There are also public costs associated with emergency floodproofing measures such as sandbags and temporary floodwalls built (with public funds) to protect structures flooded because they were issued a variance from elevation requirement.

The time and equipment expended by emergency services personnel during the rescue of residents of flooded structures is significant public expense. This time and expense is unnecessary, and therefore "extraordinary," if it is spent rescuing residents of structures for which variances were granted. There is also a significant "missed opportunity" (non-monetary) public expense if an otherwise avoidable injury or death occurs while rescue personnel are busy evacuating structures for which variances were issued.





(Wilton, ME) (Left) Floods in 1999 caused gabion wall outside of the Wilton Free Library to collapse. (Right) This concrete wall was erected to protect the Wilton Free Public Library in 1999 and has held up through many floods. Photos courtesy of the Town of Wilton.

National expenditures in the form of various Federal disaster assistance programs (e.g., FEMA, SBA, etc.), non-government assistance (e.g., Red Cross), and other charity donations are public expenses. Residents of structures flooded because of the issuance of variances may be entitled to one or more of these many forms of assistance; an increased public expense that, without a variance issuance, could be avoided. Specifically, residents of flooded structures (for which variances have been granted) may qualify for personal grants and monies to provide temporary housing under the terms of FEMA's Disaster Assistance Program.

Another form of public expense occurs when owners of heavily damaged structures (for which variances were granted) cannot afford repairs, and abandon them. When local government is held responsible for repair or demolition (which is usually the case)' the additional expense incurred by the public should be considered "extraordinary" because it would not have occurred had a variance not been issued.

#### Fraud and Victimization - §60.6(a)(3)(iii)

"Variances shall only be issued by a community upon a determination that the granting of a variance will not cause victimization of the public."

When considering a variance request, local variance boards should consider the fact that every newly constructed building adds to the responsibility of local government and remains a part of the community for fifty or more years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring.

One of the biggest potential problems involving variances is the change of ownership of a structure for which a variance has been granted. Future owners that purchase the property may be unaware that it is subject to potential flood damages and can be insured only at very high flood insurance rates. Frequently, resale happens after the structure has been flooded. The original owner repairs the structure and removes all evidence of previous flooding. The structure is then put up for sale in an attempt to "unload" it on prospective buyers that are new to the area or who are otherwise unfamiliar with extent and nature of the local flood hazard.

An example of public victimization is the case of a variance request to waive elevation requirements for mini-warehouse. The units or "bays" of the warehouse are rented to the public for various personal uses such as the storage of excess furniture. Granting a variance in this case would create the potential for victimization of citizens who, unknowing of the flood hazard and the risk to their property, rent units to store their possessions. When the warehouse is flooded and its contents (which are not covered by flood damage by a homeowner's policy) are damaged, the owners may have no recourse for financial compensation. In addition, many stored possessions that are damaged may be family heirlooms, have sentimental or historic value, or otherwise be irreplaceable. Variances that have the potential to cause this type of victimization or fraud on the public should never be granted.

#### Existing Local Laws or Ordinances - §60.6(a)(3)(iii)

"Variances shall only be issued by a community upon a determination that the granting of a variance will not result in conflict with existing local laws or ordinances."

A community is authorized to grant variances from their local floodplain ordinances if the variance is not in conflict with other existing Federal or State laws and regulations that, by statute, the community is required to obey and enforce. Examples of local laws protecting environmental and other natural resources. In addition, variances granted by a community must comply with the provisions of State zoning and enabling legislation and case law.

#### Minimum Necessary to Afford Relief - §60.6 (a)(4)

A granted variance should be for the minimum deviation from the local requirements that will still alleviate the hardship. In the case of variances to an elevation requirement, this means the community need not grant permission for the applicant to build at grade or even to whatever elevation the applicant proposes, but only to that level that will both provide relief and preserve the integrity of the local ordinance.

For example, if the BFE is ten feet above natural grade, and only a three-foot waiver is necessary to avoid a legitimate hardship, then the community should require that the structure be elevated seven feet. Alternatively, using this example, if the structure had to be built on grade to afford relief, the variance should still stipulate that all utilities and finished interior workings (and other damageable property) be elevated to or above the BFE (or to the maximum extent possible or practically feasible) in order to reduce the potential of flood damage.

Augusta, ME. An addition to a commercial structure in the floodplain was considered substantial improvement. Flood proofing the older section of the building included retrofitting with a rubber lining. Photo Lou Sidell, Maine Floodplain Management Program

The variance must be the absolute minimum necessary to relieve the hardship, which means the absolute maximum to

prevent or reduce future flood damages. When a variance waiving the elevation/dry floodproofing requirements is granted, the "minimum necessary" includes the implementation of 1) "wet floodproofing" techniques and/or 2) provisions in §60.3(a)(3) which require the structure to:

"(i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, (ii) be constructed with material resistant to flood damage, (iii) be constructed by methods and practices that minimize flood damages, and (iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding."

In summary, very rarely will there be justification to grant a "blanket variance" which waives all NFIP requirements. There will usually be a feasible change that can be done to the structure to reduce the potential for flood damage.

#### Disclosure - §60.6(a)(5), §60.22 (c)(3)(ii)

Community officials must notify the applicant that the issuance of a variance to construct a structure below BFE will result in increased premium rates for flood insurance and that such construction below BFE increases risks to life and property. Specifically, it is stated in §60.0(a)(5) that:

"a community shall notify the applicant in writing over the signature of the community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions as required in paragraph (a)(6) of this section."

In addition, under §60.22 (c) (3)(ii), "Planning Considerations in Flood Prone Areas," it is recommended that a community consider implementing:

"full disclosure to all prospective and interested parties (including but not limited to purchasers and renters) that variances have been granted for certain structures located within flood-prone areas."

Such a disclosure is important and necessary to inform subsequent buyers of structures for which a variance was granted to build below BFE. From a public safety standpoint, the prospective buyer has a right to know that the structure will be susceptible to flooding and its occupants subject to risk. From a financial standpoint, the prospective buyer has the right to know that the structure and its contents will be susceptible to damage. All prospective owners of these structures who desire flood insurance should be made aware, before closing, that the premium rates applied to these structures can be extreme, and possibly prohibitively high.

Often the variance applicant does not wish, or is not forced under the mandatory purchase requirement, to purchase flood insurance at the time the variance is granted and high rates are not a problem. Later, especially after a structure has experienced flooding, the owner may decide to purchase flood insurance. In addition, prospective buyers of a structure for which a variance has been granted may desire or be required to purchase flood insurance and may be discouraged from acquiring the structure because of the high rates. This situation can be compounded when an unsuspecting buyer purchases such a structure and later discovers that insurance is required, but at a prohibitive cost. This can result in an economic hardship to an innocent party.

#### Functionally Dependent Uses - §60.6 (a) (7)

"Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that (i) the criteria of paragraphs (a)(1) through (a)(4) of this [60.6] section are met, and (ii) the structure or other development is protected by methods that minimize flood damages during the base flood and create no

additional threats to public safety."

As defined §59.1, a "functionally dependent use" means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes docking facilities necessary for the loading and unloading of cargo and passengers, and shipbuilding and repair facilities. It does not include the long-term storage or related manufactured facilities.

Long-term storage or related manufactured facilities may be located outside of the floodplain or fully comply with all NFIP requirements. These uses are therefore excluded from the definition of "functionally dependent use." The intent of this is to limit variances only to the practical problems of building and repairing ships, of loading cargo and passengers from vessels, and moving the cargo onto other forms of transportation or to long-term storage facilities that fully comply with NFIP criteria.



In accordance with §60.6(a)(7), communities may grant variances for new or substantially improved construction, and for other development necessary for the conduct of functionally dependent uses. However, all variance criteria must be met. Structures and other development must be protected in ways that minimize flood damages during the base flood.

When applied to some functionally dependent uses such as port facilities, the seafood industry or shipbuilding, NFIP floodplain management criteria can usually be met, with the industry still being able to operate as intended. A 1983 FEMA study entitled "Effect of Floodplain Regulations on Inland Port Facilities" identified few instances where ports could not be built in compliance



State Pier 2 - docks and piers are examples of functionally dependent uses. Photos by Bonnie Cowle, Maine Floodplain Management Program.

with the regulations while several examples were given of ports that have met all standards.

However, because functionally dependent uses must be located on or adjacent to water to operate, there can be serious practical and operational difficulties resulting in exceptional hardship due to the physical characteristics of the property if a variance is not granted. Typically of concern to the port industry are the elevation and watertight floodproofing requirements in §60.3(d)(3).

In addition, problems occasionally arise in dealing with various V-zone requirements in §60.3(e), especially those covering pile and column construction, breakaway walls, prohibition of fill for structural support, and location of new construction landward of mean high tide. Except for the floodway requirements, there feasible alternative methods for creating no additional threats to public safety and achieving a comparable degree of protection from flood

damages for the types of structures that normally accompany functionally dependent uses.

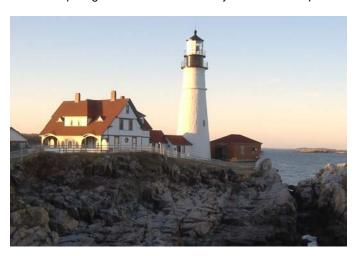
Therefore, in accordance with §60.6(a)(4), a variance can be used to address the unique problems of functionally dependent uses if it is for "the minimum necessary to afford relief considering the flood hazard" (§60.6(a)(4)). When evaluating variances for functionally dependent uses, the primary concerns should be that flood damages will be minimized during the base flood and that no additional threats to public safety will be created. A community that varies individual standards for functionally dependent uses, but still uses methods to reduce flood damages to the maximum extent possible or feasible does not jeopardize its NFIP eligibility.

As with existing variance criteria under §60.3(a)(1), no variances for functionally dependent uses may be issued within any designated regulatory floodway if any increases in flood levels would increase potential flood damages to other property owners. In many situations, there will be feasible locations outside of the floodway for a functionally dependent use. In a functionally dependent use has no option but to locate in a floodway, the applicant must either demonstrate that no increase in flood stages will result or must provide additional floodway carrying capacity such as through channel improvements to ensure that no increase in flood stage will result. Communities should be instructed to contact FEMA regional offices for technical assistance if they encounter situations where functionally dependent uses must locate in a floodway, but cannot meet the no-increase-in-flood-stage requirement.

#### Historic Structures - §60.6(a)

"Variances may be issued for the repair or rehabilitation of historic structures upon a determination that (i) the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and (ii) the variance is the minimum necessary to preserve the historic character and design of the structure."

The original intent of providing special treatment to historic structures was to comply with the intent of the Historic Preservation Act of 1966 by 1) allowing historic structures to always maintain Pre-FIRM, subsidized insurance rates and, 2) minimizing the adverse impacts of NFIP requirements on the historic integrity of historic structures. However, it is stipulated under §60.6(a) that the variance be the minimum deviation necessary to preserve both the historic character of the structure and its designation as a historic building. It should be noted that communities that do not require historic structures to meet variance criteria may exempt historic structures through the substantial improvement requirement without requiring the minimum necessary to afford relief provision.



(Cape Elizabeth, ME) The Portland Headlight is an example of a historic structure located in a floodplain. The light, housed in one of New England's handsome cast-iron lighthouses, still acts as a navigational aid. The U.S. Coast Guard maintains its equipment.

Granting a variance should be based on a structure-bystructure review to determine whether elevation (or floodproofing if a non-residential structure is involved) to or above the BFE would destroy the historic character or design of the structure. If so, a variance for that structure may be granted. Variances should never be granted for portions of, or entire historic districts, but only for individual historic structures.

For example, if elevation of a historic structure would destroy its character and cause a loss of its Department of Interior (DOI) designation, an elevation requirement variance may be considered. However, the owner of the structure should still be required, in accordance with §60.6(a)(40), to do the following as feasible: elevate all utilities and finished interior and exterior improvements wherever possible; and/or raise the interior floors to or above the BFE, or to the maximum extent possible (this is often technically feasible in older structures with high ceilings).

would otherwise constitute a substantial improvement must not result in the delisting of the structure from its DOI certified, state, or local inventory status. If such alterations cause the structure to lose its official listing or historic status, the structure would no longer be a "historic structure" for the purposes of the NFIP. It would be considered a substantial improvement and, as such, need to comply with the NFIP new construction requirements.

For further background on the pertinent regulations, procedures and adopted nomenclature of the DOI as the as they pertain to historic structures see **36 CFR 61.4**, **61.5**, **67.2**, **67.4**, **67.5**, and **67.10**.

---- End of FEMA Variance Guidelines ----

#### Records

The Code Enforcement Officer and Board of Appeals must keep a detailed record of the variance procedure. Whenever the Board of Appeals grants a variance, the decision should include findings of fact and reasons for denying *or* granting the variance. This is important should someone take the community to court.

A variance may also be viewed as a precedent for similar situations. The uniqueness of the situation in question should be well documented so that the future applicants cannot claim that they are treated unfairly (see also *Driscoll v. Gheewalla*, 441 A.2d 1023 [1982]).

The Maine Municipal Association has published a Handbook for Boards of Appeals, which outlines suggested procedures and record keeping. The handbook also contains model forms for Boards of Appeals to use.

It is very important to notify the applicant for a variance (to build below the FPE) about the three things specified in Article X, Section F (Article IX, Section F. in the b, c, and d non-coastal models). Even though a variance to build lower may be granted by the community, the flood insurance rating system does not change. An elevation record must be kept by the community and the insurance agent will report the correct elevation in the application for flood insurance.

Applicants for a variance should be advised to get a flood insurance premium quote before they apply. For example, \$50,000 in flood insurance coverage for a building built five feet below the base flood elevation would cost over \$1,400 a year.

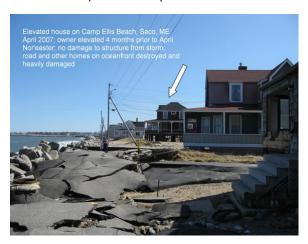


A code inspector measures height of flood vents which allow floodwater to flow underneath a building.

#### D. Enforcement

The CEO may occasionally become aware of violations either through inspections, during periodic tours of the community, or through the receipt of complaints of alleged violations from citizens or other government officials. An ordinance is worthless if it is not properly enforced. Adequate, uniform and fair enforcement means two things:

- 1. All new development in the floodplain must have a permit.
- All development with a permit must be built according to the approved plans.



(Saco, ME) Property owners who elevated home four months prior to April 2007 nor'easter did not sustain damages as a result of that storm. Photo courtesy of Town of Saco Emergency Management.

The best way to ensure the first requirement is to have a large, brightly colored permit form. The sample form in Appendix B can be photocopied on colored cardboard. The form should be displayed at the construction site in full view of a public road. Construction going on without a permit form posted would be seen by police or sheriff's patrols, the animal control officer, or some other local official. These officials should report the violations to the CEO. In many communities, concerned neighbors make such reports.

The best way to ensure the second requirement is for the CEO to inspect the development site. This technique is preferred over waiting until the project is complete, and then expecting an engineer to certify that it is built properly. If the project is not built correctly, it is much easier to correct it before it is finished. It is for this reason that the Model Ordinance suggests a two-part permit process.

The first permit authorizes construction of the foundation and first horizontal floor only. Once the applicant certifies the first floor is at the proper height, a second permit is issued for the construction of the remainder of the building. It will be far less

expensive to correct an error by the excavation contractor or foundation contractor when only the first floor has been constructed, than when the entire building is finished. The Maine Floodplain Management Program strongly urges all Maine communities to adopt the two-part permit procedure contained in the model.

#### **Violations**

When the CEO confirms that floodplain development is underway without a permit or that a project is being built contrary to the permitted plans, the property owner should be notified immediately, in writing, of the nature of the violations, and the CEO should order corrective measures to be taken. In addition to a written notification, the CEO should attempt to contact the property owner or building contractor in person or by telephone to explain his/her concerns.

Some communities include in their ordinances a provision that gives the CEO the power to revoke a development permit or to not issue a use permit. Developing a site or using a building without a permit would therefore be a clear violation of the ordinance.

When the CEO cannot persuade the developer to comply with the ordinance, the municipality must take legal action. Failure to take action makes the ordinance meaningless and violates the community's agreement with the National Flood Insurance Program. The municipality should seek a court order to stop the development. The municipality may also seek a fine and an order for the developer to bring the project into compliance. These recourses are spelled out in Title 30-A MRSA §4452, regarding enforcement of land use laws and ordinances. The Model Ordinance's penalty clause, Article XII (Article XI in the b, c, and d non-coastal models), merely references that statute.

In Maine, CEOs who are certified in Court Rule 80K and have clear written authority from the municipality, are permitted to prosecute land use ordinance violations in District Court without the assistance of the municipal attorney. For more information about 80K training and certification, contact the Code Enforcement Officer Training and Certification Program in the State Planning Office. The Program also has a basic legal issues manual available that offers guidance on enforcement procedures.

#### **Help With Enforcement**

The community is not alone in wanting its ordinance enforced. Help in dealing with the violator is available from other sources. Your first point of contact can be the staff of the State Floodplain Management Program. The Coordinator and staff will work with you to determine the best way to deal with the violation problem. In some regions of the state, the Regional Council may be of assistance.

If the project is a building that has been or will be constructed or altered so that it violates the ordinance, the CEO may request that NFIP flood insurance be denied. Section 1316 of the National Flood Insurance Act provides for denial of flood insurance coverage on a building in violation of a local floodplain management ordinance. This technique is especially useful for new construction that will be sold to someone else. Without flood insurance, the buyer will be unable to obtain a mortgage from most lending institutions. For guidance on a Section 1316 declaration, contact the State Floodplain Management Program.

A community that does not adequately enforce the provisions of its adopted floodplain ordinance may be suspended from the flood insurance program by FEMA. The effects are severe. These are outlined below:

- 1. No new insurance policies can be sold within the community and existing policies will expire as they come up for renewal.
- 2. A building and its contents located in a special flood hazard area must be protected by the maximum amount available under the NFIP standard flood insurance policy in order to qualify for full disaster assistance.
- 3. All forms of direct federal financial assistance for acquisition or construction in the special flood hazard area will cease to be available. This includes:
  - Federal disaster relief for flooded buildings and their contents, per above.
  - All federal grants from such agencies as: Environmental Protection Agency, Department of Commerce, Department of Housing and Urban Development, and the Small Business Administration, among others.
  - All federally insured or guaranteed loans, such as: SBA, FHA, VA, and Farmer's Home Administration. In
    addition, banks must notify new or renewal mortgages in flood hazard areas that federal disaster assistance
    would be restricted for their properties in the event of a flood.
  - While lending institutions are not prohibited from making conventional mortgages for acquisition or construction purposes within the special flood hazard area of a suspended community; they may be reluctant to issue mortgages on properties without flood insurance protection and to take on the responsibility of a mortgage that cannot be resold on the secondary market to any federal or quasi-federal instrumentality.
- 4. In communities without a sound floodplain management program, substantially improved or new structures that are allowed to be built with the lowest floor (including basement) below the 100-year flood elevation will have at least a

one in four chance of being flooded during the next 30 years. Those built significantly below the 100-year level will have an even higher chance of being flooded. In addition to the increased risk of flood damage, the insurance premium for structures built this way is based on the actuarial rate rather than the subsidized rate. Actuarial rates can be as high as 25 dollars per 100 dollars of insurance coverage. This could mean that in the next flood, many people who were allowed to build unsafely in the special flood hazard area may suffer an uninsured loss. Local governments may be held liable, because their actions deny the ability of its citizens to purchase flood insurance and does not take positive steps to reduce the exposure of life and property in the face of authoritative scientific and technical data.





Effective floodplain management ensures the protection and long-term survival of wildlife habitats, floodways, and structures located in communities that would be otherwise negatively affected by nearby lake, riverine, and coastal water bodies. Photos Lou Sidell, Maine State Planning Office.