Chapter Summary

All development activity in the SFHA that may increase flood damages, or that may be prone to flooding itself is subject to the regulations of the NFIP. Any activity that could affect the flow of flood water must be reviewed. Local governments can regulate floodplain development activity within their statutory limits. Some of these activities require permits from other local, state and federal agencies before the floodplain development permit can be issued.

A. Development

In order to accomplish the objective of keeping new construction from making flood problems worse, all development activity in the floodplain must be reviewed. The regulatory definition of "development" in the Model Ordinance and the NFIP regulations is all inclusive. Congress established no minimum thresholds for permitting.

Development can be summarized to mean any man-made change to the surface of the earth. It includes but is not limited to buildings, bridges, placement of mobile homes, and fill - obvious potential obstructions to the flow of water. It also includes construction of fences and storage of materials because such activities could catch debris or otherwise dam or divert flood flows.



(Kennebunk, ME) Houses on Intervale Road were flooded during heavy storms in March 2007. In many neighborhoods, it took several days for floodwaters to recede. The homes flooded were not just the pure result of a lot of rain, "development" of the floodplain throughout the Mousam River basin contributed to the increased flooding footprint, Photo by Lance Carpenter, FEMA.

The Flood Insurance Rate Maps developed for communities in the lower reaches of the Mousam River Basin in York County were given to the towns back in the early 1980's. Since that time, more than two decades ago, a lot of development has occurred in communities in the upper part of the basin in towns like Sanford, Acton, Alfred, parts of Lebanon and Lyman, Shapleigh, and Waterboro that has contributed greatly to the increased run off and changes in the way the basin could react to large amounts of rain.

Development, as defined in the Model Ordinance, means any man made change to improved or unimproved real estate, including but not limited to:

- 1. the construction of buildings or other structures;
- 2. the construction of additions or substantial improvements to buildings or other structures;
- mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials; and
- 4. the storage, deposition, or extraction of materials, public or private sewage disposal systems, or water supply facilities.



Rodney Bonney Memorial Park, named in honor of Auburn Officer Rodney Bonney, who lost his life while trying to save a drowning child, was created near the waterfalls of the Androscoggin River near Lewiston. The park is "development," and while its creation did not drastically alter either the topography or the "feel" of the natural landscape it is subject to a permit review. Photo by Lance Carpenter, FEMA.

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It is important to note that the concept of development goes beyond the traditional building permit system most communities have in place. Whereas the building permit is concerned with buildings, the notion of regulating development involves both buildings <u>and</u> alterations to landscape (such as excavation or the use of fill) that might affect flow patterns or the flood carrying capacity of a watercourse. A community's floodplain management program must include the regulation of all improvements or "developments" within the floodplain, not only the construction of buildings and other structures. For permitting purposes, the newly revised Model Floodplain Management Ordinance contained in this handbook now contains a definition for Minor Development.

Theoretically, if a pebble were dropped in a floodplain, it would affect the flow and storage of water. It may border on the ridiculous to require a permit for each solitary pebble placed in a floodplain, but the definition of development in the Model Ordinance does not make exclusions based on size, volume, or dollar value of improvements. On the other hand, we all have better things to do than to monitor pebbles in the river, but it is still important to be mindful that even small things like front porch steps or stacks of firewood can exacerbate flooding problems. By having a permit review for small development a community can mitigate the potential for these problems by requiring that buoyant material be anchored.

B. Statutory Authority to Regulate

The authority for, and restrictions upon a municipality's power to regulate land use in Maine are found in Chapter 187 of Title 30-A. A floodplain management ordinance such as the one adapted from the Model Ordinance is a zoning ordinance and therefore must be consistent with a municipality's comprehensive plan.

In addition, municipal governments are subject to municipal zoning ordinances, and the State is as well where municipal zoning ordinances are consistent with a comprehensive plan that meets statutory requirements. The State may grant itself a waiver where it can be proved that overriding State concerns require that some zoning restrictions be waived. The federal government is not subject to municipal zoning ordinances (Title 30-A MRSA § 4352).

C. Other Activities

Over the years, the Federal Insurance Administration has issued policy statements to clarify what must be regulated and what need not be covered in order to meet the minimum requirements of the National Flood Insurance Program. Here are some summaries:

- 1. To the limits of its statutory authority, a community must regulate all development. This includes development activities undertaken by the local government itself. For example, because the sanitary district, road commissioner, or public works department usually does not get a building permit, those agencies frequently do not realize that the floodplain ordinance still applies to their projects and requires a development permit.
- 2. Only development in the Special Flood Hazard Area is regulated; projects outside this area are not covered by the ordinance. Frequently, due to the scale of the map and the lack of a base flood elevation (in an unnumbered A Zone) a Code Enforcement Officer may need to interpret the location of the SFHA boundary. Because a map only shows generally where the SFHA is, the flood elevation must be relied upon to tell if a project is in or out of the SFHA.



Route 109 in Acton, ME after April 2007 flooding. Photo courtesy of Maine DOT.

Issues such as these are addressed in Article V, Section B of the Model Ordinance. Any development that takes place within the shaded area on the map must have a permit. If the natural elevation of the building site is higher than the base flood elevation (BFE), the project has met the elevation requirements of the ordinance. If the site is above BFE, the applicant should be advised to seek a Letter of Map Amendment (LOMA) from FEMA. (See page 2-14 for further information on revising or amending flood maps.). Until the map is officially amended, the site will still be subject to the federal law that mandates lenders to require the purchase of a flood insurance policy on all structures within the SFHA and the lowest floor must remain above the BFE. Often a property owner thinks that because the natural grade is

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greater than the BFE and is therefore not floodprone, he/she can sink a basement. This is a problem as it relates to the town's administration of the ordinance. If the property is shaded it is still under the auspices of the ordinance and therefore, the lowest floor must be one foot above the BFE. If not, a building with the lowest floor below BFE is considered a violation of the ordinance and a LOMA is very difficult to obtain after the fact.

3. NFIP regulations (and the Maine Subdivision Law) require developers to supply base flood elevation data for large projects such as subdivisions, shown in the Model Ordinance at Article IX, Section D (Article VIII, Section D in the b, c, and d non-coastal models). The Model exceeds NFIP standards in requiring base flood data for <u>all</u> in subdivisions, while the NFIP requires it only for projects exceeding five acres or 50 lots.

The intent of this requirement is to obtain data that can be used by the community to set an accurate base flood elevation for protecting new buildings within the proposed development. If detailed data is not available in the Flood Insurance Study or from the State Floodplain Management Coordinator, the developer must conduct an engineering study to obtain the data.

4. The NFIP mandates minimum property damage protection standards, but not environmental protection or public health regulations. For example, a development project would be permitted if it meets the flood damage protection standards of Articles VI and IX (Article VIII in the b, c, and d non-coastal models), even if the project would destroy a bird nesting area or wetland. (Note: other government regulations such as the Army Corps of Engineers' 404 permits or the state's Natural Resources Protection Act may protect such environments.) Be mindful of the requirement that all permits from other state and federal and even other local permits must be in hand before the Flood Hazard Development Permit is issued – see discussion below in subsection D.

Also, flooded septic tanks do not function well, but they are permitted because they do not cause a flood flow obstruction. Flooding usually does not damage a septic tank, but the tank can create a sewage disposal problem for building occupants during a flood. In coastal environments with strong wave action or even in riverine areas with high velocity, flow can upend a septic tank. That is why they must be anchored. This presents a public health hazard, leading some areas to ban septic tanks in SFHAs. *Maine Subsurface Wastewater Disposal Rules* prohibit disposal areas and septic tanks in the 10-year floodplain.

D. Other Regulations

The NFIP requires local governments to be sure that a developer has all other necessary permits before a floodplain development permit is issued (NFIP Regulation 44 CFR 60.3(a)(2) and Model Ordinance, Article V, Section D). The specific permits required will vary according to the type of project.

As noted above, other state and federal agencies that may have some jurisdiction over some of the floodplain development activities may include:

- 1. The Maine Department of Environmental Protection (DEP) may have jurisdiction over floodplain developments under any of the following laws or programs:
 - a. DEP provides water quality certification as required by Section 401 of the Clean Water Act and requires permits for any waste treatment systems that discharge to a water body.
 - b. The Natural Resources Protection Act (Title 38 MRSA § 480-A to 480-V) regulates activities over and adjacent to rivers, streams, great ponds, coastal wetlands, sand dunes, and inland wetlands. Activities that require a permit include dredging; bulldozing; removing or displacing soil, sand, vegetation, or other materials; draining or otherwise dewatering; filling, including adding sand or other material to a sand dune; or the construction, repair or alteration of any permanent structure. Generally, a permit is required from the DEP for any activity within 100 feet of a protected resource although some activities are covered by a "permit by rule" procedure. A state or federal agency permit by rule does not exempt the development from a local Flood Hazard Development Permit.
 - c. Site Location of Development Act (Title 38 MRSA § 481 to 490) regulates large development as it relates to ground water and the environment. Activities requiring a permit include: development that occupies a land or water area in excess of 20 acres; drilling for or excavating natural resources on land or under water where the area affected is in excess of 60,000 square feet; mining or advanced exploration activity as defined in the law; structures affecting three or more acres; and subdivisions of five or more lots affecting 20 acres.

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- 2. Maine Department of Environmental Protection/Department of Conservation/Maine Land Use Regulation Commission have jurisdiction over Metallic Mineral Exploration and Advanced Exploration and Mining (Title 38 MRSA § 349-A).
- 3. The U.S. Army Corps of Engineers has authority under the
 - a. Rivers and Harbors Act of 1899 (33 U.S.C. §403), sections 9 and 10. Activities under section 9 that need permits include dams or dikes across any navigable (all) waters of the U.S. Section 10 permits are required for the following activities in navigable waters of the U.S.: wharf, dolphin, weir, boom, breakwater, jetty, or groin; bank protection or stabilization activity (e.g. riprap, revetment, or bulkhead); permanent mooring structures such as pilings; aerial or subaqueous power transmission lines; intake or outfall pipes; permanently moored floating vessels; tunnels, artificial canal; boat ramps; aids to navigation; a permanent or semi-permanent obstacle or obstruction; dredging or disposal of dredged material, excavation, and filling, or other modification affecting the course, location, condition, or capacity of navigable waters of the United States.
 - b. Clean Water Act (33 U.S.C. §1344), section 404. This section regulates the discharge of dredged or fill material into all waters of the United States. Activities needing permits include placement of fill that is necessary to the construction of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills, dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs.
- 4. U.S. Coast Guard. Activities that need permits include bridges and causeways.

The Code Enforcement Officer should be familiar with the permitting requirements of other agencies and advise permit applicants accordingly.

In administration of the floodplain management ordinance, the CEO must keep in mind that shoreland zoning and any other town-wide zoning still applies. Most water bodies for which a special flood hazard area has been designated will be large enough to be included within a community's Shoreland Zoning Ordinance.



Scene after April 2004 flooding. Photos by the Maine Floodplain Management Program.

