



The Antediluvian

Ohio's Floodplain Management Newsletter

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MISSION STATEMENT: The Mission of Floodplain Management Program is to provide leadership to local governments, state agencies, and interested parties toward cooperative management of Ohio's floodplains to support the reduction of flood damage and the recognition of the floodplain's natural benefit. This mission will be accomplished through technical assistance, public awareness, education, and development/protection standards.

Land Use Planning & Natural Hazard Mitigation

Reprinted from the Natural Hazard Mitigation Insights (No. 8 10/98), Institute for business & Home Safety

Why are we surprised when rampaging waters sweep away homes and businesses that are built in a floodplain? And why is it such a shock each time an earthquake cracks buildings that sit along a fault line? If we don't want to lose entire communities to a hurricane, if we don't want homes turned to ashes in wildfire, let's stop putting them in harm's way, or at least manage development with natural hazards in mind.

A community develops most sensibly by following a strict land use plan. Sometimes the process means no development in some areas, denser development in others. We must overcome the perception that land use planning is nothing more than a means to restrict where people reside and work. In reality, land use planning can be a powerful tool in striking a balance between a community's need to protect its citizens from natural catastrophes and the right of those same citizens to live and work where they please.

Effective planning will reduce the consequences – injuries, deaths, property damage and economic losses-of natural disasters. Traditionally, mitigation efforts in the United States have focused on better building codes, stronger code enforcement, and new building techniques and materials. Useful as these approaches may be, the fact is they're insufficient alone to contain losses. If we are to curb the rising human and financial toll of natural disasters, communities need a larger, more comprehensive mitigation framework that includes thoughtful land use decisions as a key component.

This report explains the practical and important loss-reduction impacts that planning has for the most destructive hazards: earthquakes, hurricanes, wildfires, and floods, as well as others.

WHY ACT NOW?

Because we can't afford to wait. With natural disaster costs already at staggering levels and continuing to soar, communities will pay a heavy price for unwise development should a natural catastrophe occur. They'll pay it through expensive repairs to public buildings and infrastructure. They'll pay it through lost tax revenues. And they'll pay it through the emotional suffering, physical injuries, and deaths of the families, friends, and neighbors.

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The most important factor contributing to spiraling costs is changing demographics. More people are moving to and building in the areas of the country most prone to natural disasters, such as the Southeast and Gulf Coasts, where hurricanes are most likely to strike, and California and western Washington, where the threat of earthquakes is great. Between 1970 and 1995, the U.S. population grew 29 percent, while Florida's almost doubled and the population of California increased by 63 percent.

This trend shows that the nation's population will continue to concentrate directly in nature's path. Population demographics, coupled with increasing storm cycles, have fueled a steady climb in catastrophic losses. In the six years from 1991 through 1996, dollar losses were more than twice those of the previous decade and more than four times the losses in the 1970s. Between 1990 and 1997, the Federal Emergency Management Agency (FEMA) spent more than \$22 billion on disasters, an increase of 550 percent over the previous decade. Finally, estimates from Property Claim Services (PCS), a division of the American Insurance Services Group, put catastrophic losses paid by the insurance industry since 1989 well above \$42 billion.

LAND USE PLANNING AND MITIGATION – THE BASICS

As planners know, land use planning is the process of deciding whether and how to develop and redevelop land. More than just the simple choice of location, it must take into account transportation, water supply, power, access to schools and parks, and population growth and densities - in short, everything that makes a community what it is. Its comprehensive nature makes land use planning a potentially powerful tool in promoting hazard mitigation as it guides a community's decisions about development and redevelopment.

Unfortunately, though, there is no single blueprint to follow. As a result, communities take many different approaches to planning, ranging from a detailed description of appropriate and inappropriate uses and locations to no plan whatsoever. Some states give communities no choice at all, but require them to prepare a plan

which either advises property owners to follow a set of principles or binds them to prescribed action.

California, Rhode Island, and coastal regions in states such as Florida and North Carolina not only require comprehensive plans on the city or county level but also require that the plans include a section on natural hazards. In states that have no statewide legal requirements, communities are free to plan or not plan as they see fit. Regardless, communities should plan, and the plan should account for natural hazards and their mitigation.

Through its **Growing SmartSM** project, the American Planning Association (APA) offers policy-makers a set of model statutes to help produce up-to-date and workable planning legislation. Designed to be adaptable and flexible, the APA models list the baseline requirements that every local plan should have and suggest additional factors for consideration. These requirements include such items as utilities, public facilities and housing-and natural hazard mitigation.

MITIGATION PLANNING OFFERS BROAD BENEFITS

Incorporating natural hazard mitigation into land use plans has a number of broad benefits for communities in hazard-prone areas. For example, planning for hazard mitigation can:

- Put basic information in the public's hands on the types of hazards it faces and the potential consequences. A public aware of its risks and vulnerabilities is more apt to prepare for them.
- Manage and control the development of land that is subject to natural hazards in a way that's compatible with the frequency and damage potential of these hazards. Putting buildings directly over known fault lines or over washover channels on barrier islands are obvious examples of poor planning. Better choices include pushing development back from a vulnerable shore, preserving sand dunes that cushion a storm's impact and building roads that allow firefighting equipment into a wildfire-hazard area.

- Balance property owner rights with the social, economic, aesthetic, and ecological costs of development to the entire community. Landowners must accept greater responsibility for the risks they assume when they put structures in harm's way.
- Limit the consequences of the hazard or, in some instances, avoid it altogether.

Fewer injuries, less demand for public relief funds, greater insurance affordability and availability, and a faster recovery for homeowners, private businesses, and public services also follow from mitigation.

Land use planning is more than a means for communities to limit building in hazardous areas. Planners can still account for development while using a variety of techniques to control losses and keep them within manageable and sustainable limits. In other words, a strong mitigation element in a land use plan doesn't erect a barrier to growth but actually helps a community keep thriving.

INCORPORATING MITIGATION INTO LAND USE PLANS

Land use planning and hazard mitigation must go hand-in-hand. Preparing separate mitigation and land use plans does work well for some communities, as long as the two plans coordinate with each other. As a general rule, however, it is more effective to incorporate mitigation and land use planning into a comprehensive plan that has a broader reach and is more ingrained in a community and its ongoing programs. In Rhode Island, this is being accomplished at the community level.

A community might consider a stand-alone mitigation plan if it lacks a comprehensive plan, or if the existing plan is weak or outdated. And a recent disaster may create a window of opportunity for forging consensus on a mitigation commitment and strategy even without a comprehensive plan. Under these circumstances, a community could integrate mitigation into its land use plan later.

Finally, **don't confuse an emergency management plan with a hazard mitigation plan.** Emergency managers deal with a crisis as it is happening and with the after effects when it passes. More operational in nature, emergency management plans

typically stand alone and do not encompass the prevent loss reduction features of a mitigation plan. ·

KEY COMPONENTS OF MITIGATION

An effective hazard mitigation plan seeks to ensure that development, both existing and future, is compatible with the hazards facing a community. Whether it is a part of the community's land use plan or stands by itself, a hazard mitigation plan should have certain key components:

- A statement of guiding principles and goals: minimizing deaths and injuries, for example; protecting lifelines and critical facilities such as hospitals, utilities, bridges, and evacuation routes; reducing property damage and economic loss; and restoring people to their homes and businesses after a natural hazard event;
- A review of the conditions particular to the community, including a history of local hazard events;
- A description of the natural hazards that threaten the area, including detailed mapping and an analysis of vulnerability and risk;
- A discussion of specific hazard-mitigation measures the community is committing to;
- An outline of how at-risk areas will be used and managed over the next 10 to 20 years;
- A road map of the management and enforcement process, including identification of responsible individuals and agencies, projection of costs and funding, and descriptions of any necessary legislative changes; and
- A discussion of how to monitor the plan's success and how to update it when appropriate so that it is a living document, not an obscure blueprint that is quickly forgotten. The plan should include a list of specific, measurable projects that can be undertaken in the short term (say, one year). This is one way the community can tell if it is meeting plan goals.

PLANNING TOOLS

Specifically, then, how can a land use plan help a community manage the use and development of property to minimize the consequences of natural catastrophes? The planner can choose from a number of tools, including these very important ones:

Development Regulations

- Zoning and subdivision ordinances can regulate the type of development that occurs in hazard areas. They can also limit development densities where evacuation routes are tight, lifelines are fragile or soils are likely to shift (in the case of an earthquake). In wildfire zones, these ordinances can require that streets be wide enough to accommodate fire trucks. In addition, they can require that access to an adequate water supply exists and that landscaping be designed to avoid fueling a fire. One type of zoning, called cluster development, concentrates a site's density on its less hazardous portions. Another zoning tool limits development according to hazard specific needs. Sanibel Island in Florida limits development to the number of people who can be evacuated in five hours, for instance.
- Setback regulations are becoming a significant land use tool. In high-wind coastal areas, they prohibit development of sensitive waterfronts, which take the brunt of storms coming inland. South Carolina, for example, requires that development be set back from the shore a distance of 40 times the average annual beach erosion rate. In seismic areas, setback regulations steer development away from fault lines, unstable slopes and unconsolidated soils. In floodplains, they preserve wetlands and holding areas that absorb floodwaters, thereby minimizing flooding in developed areas.
- Dune-protection laws enacted by state legislatures allow coastal counties to protect dunes, which serve as a first line of defense against storm-surge and flooding from coastal storms. New York, North Carolina,

Texas, and Virginia all authorize their coastal jurisdictions to deny permits for activities that disrupt sand dunes.

Critical and Public Facilities Policies

- Capital improvement programs limit the availability of necessary urban services in high-hazard areas and thereby discourage improper development. When landowners know that such an area will never have the convenience of nearby public roads, sewer lines, and other utilities and public services, they are often less inclined to develop the area inappropriately (*e.g.*, for residential use).

Siting public facilities in areas less prone to damage in a disaster is also justified because it will reduce the costs of reconstructing public property after an event.

Land and Property Acquisition

- Acquisition of open space and undeveloped lands for use as parks and flood holding areas can have enormous benefits. Many communities see open space as a missed opportunity to expand the tax base, so there are usually strong pressures to develop. Open space can actually enhance surrounding property values, however. It can attract revenue to local businesses, decrease the burden on government services and improve the quality of life in the community. In addition, a community can remove the risk to residents by acquiring existing hazard-area development and relocating it to new, more appropriate sites. After the Great Midwest Flood of 1993, more than 10,000 homeowners and business owners voluntarily relocated to drier ground with federal assistance.
- Development rights can be transferred from hazard areas to safer locations. New Jersey state law, for example, (N.J. Stat. Ann. Sec. 40:55D-114 *et seq.*) authorizes the transfer of development rights within Burlington County by letting owners of sensitive lands separate their development rights from their

other rights to the land. Under this law, landowners can sell their rights to develop their property for cash in exchange for a permanent restriction on development. Participating communities set up a *bank* to fund the purchases of development rights and to sell them to landowners in areas where growth is more appropriate. The landowners in hazard areas *cash out* by selling their development rights to the bank, which recovers its investment by selling the rights to landowners in less sensitive areas. Owners of sensitive lands don't lose their investment. And the community benefits by putting development in more suitable areas, while avoiding a constitutional challenge for deprivation of property rights.

Recovery / Reconstruction Policies

- A *recovery* or *construction plan* can ensure that any redevelopment of an area devastated by a natural catastrophe incorporates mitigation features that the community did not require initially

Taxation and Fiscal Policies

- *Lower taxes* for open space or reduced density development in hazard areas encourage these more appropriate uses of the land.
- *Impact taxes* or special assessments can fund the added expense, including future disaster recovery costs, of hazard area development. By making property owners who insist on building in dangerous locations directly responsible for the risks and costs that go along with their decisions, these assessments discourage poor development choices or encourage mitigation. After the Oakland Hills fire of 1991, the city designated the entire hillside area a special assessment district, using the funds for vegetation management and improved fire protection.

Information Dissemination

- A *full-scale public information campaign* leads to a better informed citizenry and helps create a political constituency for hazard mitigation.

Hazard disclosure requirements in real estate transactions provide information that buyers otherwise overlook. For all residential sales, the state of California requires the seller to include a standard disclosure about the home's seismic - resistance features. Buyers who know that a house should be seismically retrofitted can either make the retrofit a condition of the purchase or negotiate a lower price (demonstrating, again, the importance of a public information program). Houses that are retrofitted should then command a relatively higher market value, which also encourages retrofitting as a general practice.

CONCLUSION

Development pressures will only increase as the nation's population expands and hazard-sensitive areas like California and Florida will face even more strain. This situation makes land use planning, which is too often overlooked as part of the answer to surviving natural disasters, more important than ever. Without it, decision-makers will continue to allow people to position their homes and businesses unwisely. Rather than incorporating mitigation efforts as an after-thought to development, communities must establish a sound land use strategy that starts the natural hazard mitigation. And every person should take advantage now of the opportunity to make a difference in their communities. After all, it's our responsibility too, to make where we live, work, and play as safe as possible.

Mitigation



Reprinted from the Federal Emergency Management Agency, MITIGATION Reducing Risk Through Mitigation

Report on Costs and Benefits of Natural Hazard Mitigation

Land Use and Building Requirement in Floodplains: The National Flood Insurance Program

Perhaps the most cost-effective way to reduce damages due to natural hazards is to incorporate mitigation measures into site planning and the design and construction of buildings; this can often

be accomplished at little or no incremental cost. For most hazards, the mitigation measures can be included in local land use plans, land development and zoning ordinances or the national building codes adopted at the state or local levels. The National Flood Insurance Program (NFIP) is illustrative of the savings that can be achieved through these mitigation measures.

The National Flood Insurance Program was established by the National Flood Insurance Act of 1968, and was strengthened by the Flood Disaster Protection Act of 1973. The key component of the program is the requirement that the NFIP offer flood insurance only in those communities that adopt and enforce floodplain management ordinances that meet minimum criteria established by FEMA. Also critical to the success of the NFIP has been the \$1 billion undertaking to identify and map the nation's floodplains. This mapping effort has helped increase public awareness of the flood hazard and has provided the data necessary to actuarially rate flood insurance and develop community floodplain management programs.

Since inception of the program, over 18,700 communities have chosen to adopt floodplain management ordinances and participate in the program. Nearly all communities in the nation with significant flood hazards are participating in the program. The floodplain management ordinances require that residential buildings be elevated to or above the base flood elevation (BFE), which is defined as the elevation of the flood that has a 1% chance of occurring in any given year (also called the 100-year flood). This elevation is determined through hydrologic and hydraulic modeling. Nonresidential buildings must either be elevated or floodproofed to the BFE.

Additional requirements prevent the obstruction of the floodway portion of the floodplain and provide guidance to buildings exposed to hazards, such as wave impact in coastal areas.¹

Buildings that are built or substantially improved

¹ The floodway is the channel of a river or other watercourse 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.

after the date of a community's first *Flood Insurance Rate Map* (FIRM) are referred to as post-FIRM and are charged actuarially sound insurance rates that fully reflect the building's risk of flooding. Buildings constructed prior to the issuance of a FIRM for a community are classified as pre-FIRM and pay an insurance premium based on chargeable rates that are subsidized by tax dollars. This subsidy was provided both to offer an incentive for communities to join the NFIP and to make affordable insurance available for buildings constructed prior to the availability of flood hazard mapping for a community without full knowledge of the risk.

The effectiveness of NFIP-compliant community floodplain management regulations and ordinances in reducing flood damages can be directly measured by comparing the flood insurance claims of buildings constructed according to those standards with the claims of buildings constructed prior to the adoption of the requirements by the community. The NFIP is nearly 30 years old and therefore adequate claims data for the comparison are accessible by computer. To date, the data represents over 804,189 losses closed and 620,920 losses paid since 1978. Overall, although there is considerable variation in how well communities implement their floodplain management regulations, the data cumulatively demonstrates that mitigation works, significantly reduces damages, and is cost-effective. Historical claims since 1978 demonstrate that pre-FIRM buildings constructed to NFIP minimum standards sustain 77.1% less losses than pre-FIRM buildings that were not built to such standards. Post-FIRM buildings experience fewer claims in total and when claims are filed-the losses are less severe than in pre-FIRM construction.²

The effectiveness of NFIP floodplain management regulations in reducing flood damages can also be demonstrated by comparing the cumulative loss experience of new buildings with buildings that predate those regulations. Between 1978 and the end of 1995, the actuarially-rated flood insurance

² Program standards result in a 25.4% reduction in the severity of losses among those buildings that are damaged by floods and a 69.2% reduction in the frequency of those damages. These numbers combine to produce the reduction in expected annual loss relative to building value of 77.1%.

policies in special flood hazard areas generated a surplus of \$169 million for the National Flood Insurance Fund after claims and other expenses of the program we're paid. By contrast, subsidized policies on buildings in the special flood hazard area yielded a \$1.5 billion deficit. This occurred even though the premiums on policies for the actuarially-rated buildings are, on the average, less expensive than policies on the subsidized buildings.

Since the beginning of 1975, over 2 million buildings have been built in the special flood hazard areas of communities that participate in the NFIP. These structures are protected against the 100-year flood because these communities adopted and were enforcing floodplain management ordinances which meet program requirements. As of 1995, FEMA has estimated that each year the community floodplain management ordinances prevent over \$770 million of flood damages to buildings and their contents. This figure was calculated using the difference in historical loss experience between pre-FIRM and post-FIRM buildings under the NFIP in order to project losses that would have occurred if the 2 million buildings had not been built to NFIP minimum standards.

Another indicator of the NFIP's success in reducing flood damages is the change in the distribution of flood insurance policies that are post-FIRM as compared to those that are pre-FIRM. One of the expectations of the NFIP was that over time the existing stock of floodprone buildings would be upgraded or replaced by new buildings that were protected from flood damages. As this occurred, the subsidy on insurance for existing buildings would shrink and eventually disappear, and the program would become fully risk-based. The change in distribution of NFIP policies over time indicates that substantial progress has been made in reaching the objective of reducing the stock of floodprone buildings. At the beginning of 1978, nearly 78% of the policies were for pre-FIRM buildings located in special flood hazard areas. By the end of 1995, subsidized policies on these pre-FIRM buildings constituted only 34:10 of the policy base. This change in the distribution of policies reflects both the new construction that has taken place since 1978, and the elimination or upgrading of pre-FIRM structures that pre-date the NFIP.

What is most impressive about the success of the NFIP is the program's cost-effectiveness. The cost of meeting community floodplain management requirements is generally less than 5% of total construction costs. Additionally, in some instances there has been no increase in construction cost, since NFIP requirements can be met through sound land-use planning; by choosing a comparable location outside of the floodplain; through no cost modifications to the property's grading plan; or by selecting a foundation type or architectural style that lends itself to elevation (*e.g.*, constructing the building on piles or columns or on a crawl space instead of on a slab). When there are costs associated with meeting NFIP performance standards, often the increased costs are offset by other benefits such as improvements in view, provision of low cost covered parking beneath an elevated building, and other amenities.

As this case study indicates, the cost of meeting NFIP requirements represents an up-front investment that reduces long-term flood damages. Through the program, any added costs associated with the decision to build in the floodplain are borne by the property owner. Because the owner assumes responsibility for residual damages through the increased construction costs and an annual flood insurance premium, no cost is borne through disaster assistance and uninsured private losses. 💧



Mitigation Success Stories

By Christopher M. Thoms, CFM
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Management Program

This past decade has been hectic for floodprone communities and the flood damage prevention / response agencies that serve them. Each flood brings old frustrations and new opportunities as (hopefully) we all learn what to do and what to avoid doing for flood damage prevention. Around the country I communities have tried

various flood recovery / prevention tactics. Some work, some don't. A few communities have had their mitigation programs featured in publications seeking to provide inspiration and instruction to the rest.

As in Ohio, many communities retrofit floodprone structures to reduce flood risk. Many have purchased floodprone structures that have been repaired and damaged repeatedly without a reasonable prospect of increased flood safety. Communities have publicized their flood hazards and their responses, both to prevent and to recover from flood losses. Communities have created floodplain development plans to maximize the benefit and reduce the risks of having floodplains in their communities (See our page 1 article, *Land Use Planning & Natural Hazard Mitigation*). We were struck with the notion that many Ohio communities have done as much, if not more, than those we saw featured.

As the drought of 1999 gave us all an opportunity to dry out a little, the Ohio Departments of Development, Natural Resources, and Public Safety have begun to collect our own stories of how various communities throughout Ohio have succeeded in reducing their exposure to natural hazards including floods.

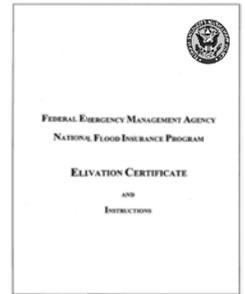
The concept is to showcase Ohio communities with successful mitigation tactics. This will not only recognize these communities for their efforts but also provide examples and detailed recipes for successful duplication around Ohio.

Through photography and text, we hope to show the nature of each hazard, the alternatives considered for responding to each hazard, the resources called upon, the effectiveness of the response chosen, and the specific costs and benefits of each tactic.

Eventually we will compile examples from across the state to reflect a range of successful responses to the natural hazards present in Ohio. If you think you have a success story that would benefit other Ohio communities, contact me at the Floodplain Management Program Office (614) 265-6750. We will keep you all informed of these success stories through our newsletters,

websites, and a unique publication to highlight your **Mitigation Success Stories**. 

Rating Made Easier with Redesign of Elevation Certificate



Reprinted from NFIP's WATERMARK (Spring/Summer 1999)

An accurate Elevation Certificate (EC) documents a building's susceptibility to flooding as well as its compliance with floodplain management requirements. To the insurance agent or underwriter who rates the structure, the EC is an essential tool for determining the annual premium charged for flood insurance coverage.

But if flood waters strike and the EC for a building has been filled out incorrectly or incompletely, the policyholder stands to receive a costly surprise when seeking an NFIP claims payment for flood damages to the structure or its contents. The misrating of buildings due to incorrect information supplied on the EC can delay not only the issuance of flood policies, but also the settlement of insurance claims.

New EC is More Comprehensive and Less Complicated

Filling out the NFIP Elevation Certificate has not always been easy, judging from comments FIA has received about the EC's format and the relevance of the data collected on it. However, the process of identifying and rating flood risks just got a little easier, thanks to a work group convened by FIA at the beginning of 1998 to analyze, redesign, test, and revise the NFIP's EC.

For the last few years/ we've been collecting comments from EC users such as surveyors, engineers, floodplain managers, and insurance agents, explains Jhun de la Cruz, an insurance examiner in FIA's Underwriting Branch. We've improved the form to make it more defined For example; the new form collects more elevation

information on a building. Surveyors or engineers must provide all of the elevation measurements that underwriters need to rate a building's susceptibility to flooding, but with the new form they no longer have to understand the NFIP's guidelines. Surveyors and engineers are now required to perform what they were trained to do, and that is to certify the building's elevation and location.

New Sections Are Detail Oriented

For years, the EC included the certificate form, followed by two pages of instructions and two pages of building diagrams. Information was collected about a property's address, its location on the current FIRM, its elevation, its compliance with community ordinances, and details regarding the certifying surveyor, engineer, architect, or community official. Eight diagrams served as references for determining the type of building and the required elevation. Much of the information requested on the old certificate had to be entered by the surveyor, engineer, or architect in a general comments section.

The new certificate still provides ample space for comments, but detailed questions about property location, FIRM data, and survey results have been added, the instructions have been clarified, and the building diagrams have been revised. Another significant change is that the surveyor or engineer is no longer required to provide the reference level (the lowest floor) used for rating.

The new EC also provides space to describe the building's use and to record its latitude and longitude, when this information is available. In addition to the NFIP community name and number, as well as any relevant flood zones, the new EC asks for information about the building's location in relation to a Coastal Barrier Resources System area or Otherwise Protected Area.

Several new questions have been added to the EC: highest grade adjacent to the building; existence of an attached garage; lowest elevation of machinery or equipment eligible for NFIP coverage in an attached garage or enclosure; and number and size of permanent openings or flood vents. One of several new sections on the form records community resource information-completed at the

option of the local official who administers the community's floodplain management ordinances.

Testing and Implementation

In addition to a host of floodplain managers, approximately 25 surveyors in different parts of the United States were involved in testing the new form and making recommendations for its improvement. After integrating their comments, as well as those provided by technical engineering and surveying advisors and experts in the insurance industry, the work group revisited the EC and its instructions. Final revisions were made and the redesigned EC became effective on August 1, 1999. Use of the new certificate will become mandatory on January 1, 2000, if the certification date is on or after that date. [Editor's Note: As we go to press, the deadline for mandatory use has been extended to October 1, 2000. See our article, *Flood Insurance Highlights*, page 16.]

The new EC form and instruction packet are available from the FEMA distribution Center at 800-480-2520 (ask for FEMA Form 81-31). It also will be reproduced in this October's revision of the NFIP *Flood Insurance Manual*. According to de la Cruz, training in how to use the new EC will be offered at NFIP agent and lender workshops across the country and in Puerto Rico and through the NFIP regional offices. Call the NFIP's **Telephone Response Center** at 800-427-4661 for information about upcoming EC training sessions in your area.💧



The Effects of Floodplain Management on Flood Insurance Rates



REQUIRING SUBSTANTIALLY IMPROVED AND/OR DAMAGED STRUCTURES TO BE BROUGHT INTO COMPLIANCE

By Rich Roths, Mitigation Specialist, FEMA Region V

Officials of NFIP-participating communities are required to ensure that all structures located in a Special Flood Hazard Area (SFHA) which are substantially improved or are damaged to the extent that they are considered substantially damaged are brought into conformance with the National Flood Insurance Program (NFIP) regulations.

44 Code of Federal Regulations (CFR) Section 59.1 defines a *substantial improvement* as:

Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures that incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing code violations of state or local health, sanitary, or safety code specification that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or

(2) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

If the local official, in determining the cost of the repair or remodeling work reduces the cost of the improvement based on code violations, he/she must keep two very important things in mind. First the code violation must be pre-identified. That is, the owner must have been cited for a code violation prior to the owner's first contact with the community to obtain a permit for the repair/improvement. Second, if the work proposed exceeds the minimum necessary, the value of the improvement must be included.

44 CFR Section 59.1 defines substantial damage as:

Damage from any origin sustained by a structure whereby the cost of restoring the structure to its before-damage condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

If a structure is substantially improved or is substantially damaged and not brought into compliance with the NFIP regulations, it must be rerated using the Flood Insurance Rate Map (FIRM) in effect at the time the improvement or repair occurred, regardless of whether it is Pre-FIRM or Post-FIRM construction. The only exceptions to this rule are Pre-FIRM buildings where:

1. The substantial improvement is an addition to the building (this includes substantial improvements made as interior remodeling or repair projects);
2. The addition is an extension next to and in contact with the existing building (this condition does not apply to substantial improvements consisting of construction of additional floors.

Failure by the local official to require substantially improved or substantially damaged residential structures to be elevated in accordance with the community's regulations and the NFIP standards; or a non-residential structure to be elevated or



Floodplain Management in Ohio Statewide Conference 2000

August 30th and 31st, 2000
Ramada Plaza Hotel and Conference Center
Columbus, Ohio

Sponsored by:

Ohio Department of Natural Resources (ODNR)
Ohio Floodplain Management Association (OFMA)
(A Division of the Water Management Association of Ohio)
Federal Emergency Management Agency (FEMA)

Don't Miss Out on Your Chance to Attend the 1st Floodplain Management in Ohio Conference!!

Just See What's Being Offered at: Floodplain Management in Ohio - Statewide Conference 2000

General Floodplain Management

- ODNR's Flood Loss Reduction Workshop
- Selling Floodplain Management to Elected Officials and the Public
- Development in Approximate A Zones - Generating Flood Elevations & Development Standards
- Community Rating System
- Flood Map Modernization
- Retrofitting Structures
- Elevation Certificates
- Letters of Map Change
- Post-disaster Floodplain Management - *Including* How to Use FEMA's Substantial Damage Estimator

Mitigation

- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program
- Project Impact
- Mitigation Planning

Enforcement

- Strategies for Effective Code Enforcement
- Takings and Appeals

Certified Floodplain Manager Exam

Why not take this opportunity to be professionally certified for your Floodplain Management Expertise? The ASFPM Certified Floodplain Manager (CFM) Exam will be offered at the Floodplain Management in Ohio - Statewide Conference 2000 on Wednesday, August 31st, 2000. Additional information will be posted at <http://www.floods.org/certmenu.htm>



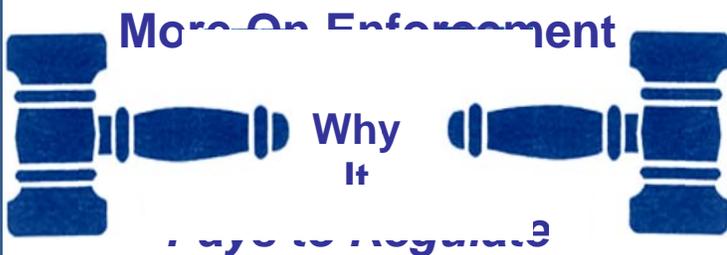
☺ Continuing Education Credits (CEUs) are being pursued to support CFM, AICP, and Building Code Officials accreditation.

For further information regarding this conference, please contact:

Ohio Department of Natural Resources
Division of Water
Floodplain Management Program
1939 Fountain Square Drive, Building E-3
Columbus, OH 43224-1336
Or call Alicia Silverio at 614-265-1006
Email: alicia.silverio@dnr.state.oh.us

structurally dry-floodproofed in accordance with the community's regulations and NFIP standards, will result in the structure being rated at the current actuarial flood insurance rates. Previously the owner would have been paying the subsidized Pre-FIRM rate. This could cause the insurance rates to go up by several hundred dollars, or more.

For more information on how to determine whether an improvement is a substantial improvement, whether a structure is substantially damaged, or the effect of noncompliance on insurance rates you may contact Ohio's State NFIP Coordinator's office at (614) 265-6750 or the Mitigation Division at the Federal Emergency Management Agency's Region V, at (312) 408-5548.



By Peter G. Finke, Deputy Chief
Division of Water

In a November 2, 1999-article the Raleigh, North Carolina, *News & Observer* reported that residents of the town of Zebulon, North Carolina, which had been flooded by Hurricane Floyd a month earlier, had hired a lawyer and were considering a lawsuit against the town's officials for failing to enforce local floodplain regulations.

Owners of flooded homes said the town had not accepted its responsibility to enforce zoning regulations. They stated that builders and lenders had told them they were not in a flood zone. Many residents blamed the town for allowing the deception and for not enforcing zoning ordinances. Local officials admitted that a number of the flooded houses did not meet the town's zoning standards. Officials stated that builders either failed to elevate the house or neglected to get elevation certificates. And the town failed to enforce its regulations.

With hindsight in mind, town officials approved a 90-day moratorium on construction of new

subdivisions that contain lots in floodplains. Officials will use the time to consider what additional policy changes need to be undertaken to prevent such problems in the future. Among the changes being considered are requiring builders to provide as-built drawings to prove homes have been properly elevated, erecting permanent signs at flood-prone subdivisions, and lobbying state legislature for laws requiring sellers to disclose to buyers if a home is in a floodplain.

The flooded residents agree that the changes town officials are proposing will help future home buyers. However, they are still proceeding with their lawsuit against the town. As one resident stated, *Someone didn't do their job, so how can they relieve themselves of responsibility.*

Community Concurrence with LOMRs



By Chad M. Berginnis, Supervisor, Division of
Water - Floodplain Management Program

Did you know that it is a requirement for a community to sign-off on the application for a *Letter of Map Revision* (LOMR)? A LOMR is a request to the Federal Emergency Management Agency (FEMA) to revise a community's floodplain map, usually due to manmade conditions (*i.e.*, filling, grading, channelization, levees). LOMRs are generally:

- 1) revisions to floodplain boundaries with no change to the 100-year flood elevation;
- 2) revisions to the 100-year flood elevation(s); and
- 3) floodway revisions.

It is the formal process used to ask FEMA to revise either *Flood Insurance Rate Maps* or *Flood Boundary and Floodway Maps*. If an application is reviewed and approved by FEMA, a letter and any supporting map data will be issued by FEMA to officially change a community's flood map(s).

The first type of LOMR - one that revises the floodplain boundaries with no change to the 100-year elevation - is a revision based on filling in the

floodplain to create ground that is above the 100-year flood elevation. It also is based on the condition that no alteration or encroachment within the floodway has occurred. The application packet for this type of revision is referred to as *MT-1* and it requires community concurrence with the project.

The specific form, entitled *Community Acknowledgment of Requests Involving Fill* states: *We hereby acknowledge receipt and review of this Letter of Map Revision (Based on Fill) request and have found that the completed or proposed project meets or is designed to meet all of the community's applicable floodplain regulations, including the requirement that no fill be placed in the regulatory floodway...* The form asks for community comments on the proposed project and requires the community official's signature.

The local floodplain administrator should be the community official responsible for signing the community acknowledgment form. When the form is utilized properly, the floodplain administrator should have already reviewed the development proposal, determined whether it is compliant with local floodplain regulations, and issued a floodplain development permit conditioned on FEMA approving the LOMR request. The requirement for community acknowledgement is a useful tool to help local floodplain administrators discover development proposals that might not have been submitted to the community for a floodplain development permit.

The second type of LOMR - one that revises base flood elevations and/or alters the floodway – also requires community concurrence. The application packet for this type of revision is referred to as *MT-2*. Federal regulations require that additional documentation and analysis be submitted for this type of LOMR.

One form in the *MT-2* packet entitled *Revision Requestor and Community Official Form* should be reviewed carefully by local officials. Section 4 *Encroachment Information*, Questions 2 and 3, request whether base flood elevations are being increased. If the answer to either of those questions is *yes*, then documentation must be included with the application regarding:

- 1) the evaluation of alternatives to the proposed measure that would result in zero increase in

the 100-year flood elevation and why those alternatives are not feasible:

- 2) documentation of individual legal notice to all affected property owners within and outside the community explaining the effect of the proposed action on their property;
- 3) concurrence from the Chief Executive Officer of all communities affected by the proposed actions; and
- 4) certification that no insurable structures are affected by the increased flood elevations.

It is the responsibility of the revision requestor to complete the four activities stated above; however, local officials should carefully review the revision request to ensure that the requestor has satisfactorily completed these items.

Section 5 of the *Revision Requestor and Community Official Form* states that the community is willing to assume responsibility for performing or overseeing compliance with the maintenance and operation plans of a proposed flood control structure such as a levee or for other projects where the channel of a watercourse is altered for flood protection. Again, a community should review this section of the form and be sure that it is completed appropriately.

A community official should not sign the *Revision Requestor and Community Official Form* if he or she is not satisfied that all of the submittal requirements have been met. Additionally, the proposal should be compliant with local floodplain regulations. It is just good planning practice to ensure that applications for LOMRs, especially those that increase the 100-year flood elevation, are carefully evaluated by community officials as their actions could affect other property owners.

If changes to the floodway dimensions, increases and/or decreases to 100-year flood elevations, or watercourse relocations are proposed, local officials might consider requiring the applicant proposing the change to obtain a Conditional LOMR (CLOMR) prior to issuing a floodplain development permit for the activity. The CLOMR is a letter from FEMA commenting on whether the

proposed project, if built as proposed, would justify a map revision (LOIR).

With a CLOMR, a community official can be assured that the proposed changes to the floodplain have been reviewed by FEMA, that questions about the effect of the project on the floodplain are answered early in the development review process, and that the engineering analysis for the proposed project-supplied by the developer-have been reviewed by a qualified engineer, especially if the community does not have engineering expertise. In fact, federal regulations (44 CFR 65.12) require prior approval by FEMA of all projects resulting in increases to the 100-year flood elevation where a floodway has been adopted. This requirement can be met when a CLOMR has been approved by FEMA. 💧



Ohio Floodplain Management Association

By Ray Sebastian, OFMA President,
Chief Building Inspector & Floodplain
Administrator for Clermont County

*Reprinted from the OHIO WATER TABLE a publication of
the Water Management Association of Ohio*

First, I would like to thank the WMAO Conference Committee and especially Kari Ann Mackenbach for a GREAT 28th Annual Conference!! Informative and timely training and informational sessions, good food, and entertainment (Where did all the scarves come from?).

OFMA met Wednesday [November 16, 1999] in the breakout session. An update was given on the Association of State Floodplain Managers, Inc., **Certified Floodplain Managers Program**. Four people from Ohio have successfully completed testing and now are CFMs. Congratulations.

There was considerable interest and discussion about this certification program and the organization itself. We will investigate the benefits, costs, qualifications, *etc.* of possible membership to this organization.



There were two changes approved by the membership to the bylaws. The first change will now allow an officer to serve more than two terms. The second change defines a quorum as 2/3 of the members.

Cindy Crecelius from ODNR presented preliminary plans for our first statewide Floodplain Managers Conference this fall. Notification will be made throughout the state as plans progress and are finalized. We are looking forward to a great (hopefully annual) conference.

The fourth regional seminar will be presented in Southeastern Ohio this year. These seminars have been a huge success and we are looking forward to large turnout and good participation in this event.

There was extensive discussion from the membership about the future direction of OFMA and fulfilling the goals of the organization. Recommendations resulting from the discussion included:

- Having periodic meetings which include guest speakers on topics of interest to floodplain managers,
- Enhancing communication with the membership and others. Suggestions included expanding written communication through the use of newsletters and other mailings and possible the use of e-mail,
- Strategizing,
- Continuing education offerings that will be certified by ASFPM and the potential to charge for such training.

Election of officers was held and the new officers are:

- Chair – **Ray Sebastian**, Chief Building Official for Clermont County
- Vice Chair – **Gary Ziegler**, Services Director for the City of Findlay
- Secretary Treasurer – **Kari Ann Machenbach**, Environmental Planner for FMSM Engineering
- Past Chair - **Doug Johnson**, Chief Engineer for Miami Conservancy District
- ODNR Representative – **Cindy Crecelius**, Program Manager for ODNR, Division of Water
- Members at Large - **Chad Berginnis**, Supervisor for ODNR Division of Water, **Mary Sampsel**, Union County Engineer's Department
- Delegates – **Peter Finke**, ODNR Division of Water, **Alicia Silverio**, ODNR Division of Water, **Doug Cade**, Lawrence County Community Action

Welcome to all the members above in their newly elected positions. We are looking forward to working for a progressive year 2000. 

Setting Up Your Local Floodplain Permit Program



By Chad M. Berginnis, Supervisor, Division of Water - Floodplain Management Program

Occasionally, a local official will call our office and say, *I am replacing Mr. X who is no longer with the community. I was told that I am supposed to be issuing floodplain permits, but I can't seem to find anything.* When faced with this challenge, what is a person to do? How do you set up a floodplain permitting program, especially if your community does not issue any other types of permits? Over the years, our office has responded to this type of request, and I have compiled a short list of the **essentials**.

1. Attempt to find the original copy of your flood

damage prevention regulations. Make sure that it has been signed and adopted properly. If you can locate the documentation, it also is a good idea to find proofs of publication related to the adoption of the regulations, and references to hearing dates (council minutes, *etc.*). Keep all of this information in a single file. This information will be important if you have to go to court over an enforcement issue. If you believe that your regulations have been adopted improperly, please contact our office immediately. Communities have lost many land use cases in court because regulations were adopted improperly.

2 Make copies of your flood damage prevention regulations. Whether you give them away or offer them for sale, it is important to have an ample supply.

3. Have adequate supplies of blank forms. Forms that you should have are a floodplain development permit application, elevation certificate, floodproofing certificate (for nonresidential structures), floodplain development permit (if separate from the application form), and residential substantial damage determination form. Other forms that you may consider creating are a complaint form for recording contacts from citizens about potential violations to your floodplain regulations, and a variance request form (application) for variances to your floodplain regulations.

4. Have adequate copies of flood maps, flood studies, and Letters of Map Correction (LOMAs, or LOMRs). Flood maps can be ordered-free of charge-by community officials by calling the federal map distribution center at 800-358-9616. The Division of Water attempts to maintain an up-to date list of changes, and can provide community officials with copies if needed.

5. Obtain an engineering scale, measuring wheel, and camera (preferably with an automatic date stamp). These tools will assist you with evaluating permit applications, inspections, and violations.

6. Set up individual files for each floodplain development permit issued. Each permit file should have: floodplain development permit application, plans and other site information, copy of the floodplain development permit, any variance applications with variance documentation if one was granted, inspection reports, elevation certificate, and

other correspondence related to the development.

7. Track important dates for all floodplain development. An effective tracking sheet should include dates of permit application, dates of permit issuance, date of permit expiration, whether an elevation certificate has been received and date of receipt of an elevation certificate. Also, a tracking sheet can assist with violations and enforcement issues. 



Non-Residential Floodproofing

Technical Bulletin # 3-93

By Christopher M. Thoms, CFM
Senior Environmental Specialist, Division of Water
Floodplain Management Program

When building in a Special Flood Hazard Area (SFHA), the minimum NFIP-standards require that the lowest floor of the structure, including basement, be built at or above the known Base Flood Elevation (BFE), that the structure be anchored, that utilities be flood-protected, and that the construction materials and methods used be flood resistant. These are the four basic structural flood hazard reduction standards for any NFIP participating community.

Technical Bulletin #3-93 *Non-Residential Floodproofing – Requirements and Certification*, addresses an exception to the first of the four (for non-residential structures ONLY). The minimum NFIP-standards for floodproofing are found at Title 44, Code of Federal Regulations (CFR), Chapter 60.3(c). FEMA Bulletin #3-93 gives the applicable CFR excerpts, provides design guidance for the minimum appropriate application, construction, and documentation of a flood proofed structure, and reviews additional planning considerations. Though the term, *Floodproofing* has been applied to any

effort employed to reduce flood hazard exposure, your local flood damage prevention regulations and the minimum NFIP-standards require a **watertight** or **dry** floodproofing and allow this technique only for non-residential structures.

By definition, all SFHAs are dangerous, but the danger varies with each. Likewise, all structures placed in the SFHA are placed at risk whether they are elevated or not. Your local flood damage prevention regulations can help reduce but do not eliminate those risks. For increased flood protection (and the additional benefit of reduced insurance premiums) many communities require floodproofing to one foot above BFE.

There are many flood hazard conditions that would make floodproofing inappropriate (*e.g.*, frequent floods, high velocity floods, flash floods or similar reduced set-up/evacuation times or when safe access is not available to and from the flooded structure). According to the CFR, to furnish a complete SFHA-development permit application to the local floodplain administrator, those interested in exploring the feasibility of floodproofing must:

Provide that where a non-residential structure is intended to be made watertight below the base flood level, (1) a registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of paragraph (c)(3)(ii) or (c)(8)(ii) of this section [e.g., flood protection standards for: anchoring, materials & methods, utilities etc.], and...

[44 CFR 60.3(c)(4)]

Even when considered appropriate, floodproofing may present increased risks. While not a federal requirement—due to these additional safety concerns—plans for maintenance and flood emergency operation should be part of floodproofing a building. These factors are reviewed in the Planning Considerations section of this bulletin.

Besides the supporting documentation required for every SFHA-development, for floodproofed structures local floodplain administrators must keep:

(ii) a record of such certificates which includes the specific elevation (in relation to mean sea level) to which such structures are flood-proofed shall be maintained with the official designated by the community...

[44 CFR 60.3(c)(4)]

Guidance for completing the floodproofing certificate is contained in Bulletin #3-93. The **Further Information** section lists additional publications detailing floodproofing design and construction material.

Floodproofing--in compliance with your local flood damage prevention regulations--can help ensure reduced flood risk for those non-residential structures that cannot be elevated to or above the base flood elevation. Technical Bulletin #3-93 provides importance guidance for the proper use of floodproofing.

To obtain a copy of this or any of the Technical Bulletin series write to FEMA Publications, P.O. Box 70274, Washington, D.C. 20024 or our office.

Flood Insurance Highlights for 1999



By Peter G. Finke, Deputy Chief,
Division of Water

During 1999, the Federal Emergency Management Agency (FEMA) undertook a number of initiatives designed to both strengthen and increase awareness of the National Flood Insurance Program (NFIP). Thanks to FEMA's expanded marketing efforts, which include television spots, radio announcements, and magazine ads, awareness about flood insurance has greatly increased. Significantly, more people know about flood insurance today and this

has meant more policies being sold both in Ohio and in other states. As of the end of December 1999, more than 35,000 policies were listed for Ohio, with 4.2 million policies nationwide. The following are some flood insurance-related highlights of 1999.

NFIP Call for Issues About one and a half years ago, FEMA initiated an assessment of the National Flood Insurance Program (NFIP). FEMA sent letters and notices, asking for ways to make the NFIP Q more effective program. In response to the Call for Issues, FEMA received almost 800 comments and suggestions for improvements. 437 responses dealt with insurance (Once issues and 363 responses dealt with risk identification, mapping, and floodplain management. Submissions on flood insurance issues have been reviewed and will be summarized in a report being released in early 2000. The report will itemize responses into categories for implementation and will seek additional information on others. FEMA plans to make the report available on FEMA's web site: fema.gov

NFIP Repetitive Loss Strategy FEMA has been criticized in recent years by the media, taxpayers, and Congress for failing to address the drain on the flood insurance fund by a very small number of policyholders whose buildings are flooded over and over again. Nationwide about 2 percent of NFIP flood policies account for almost 40 percent of all claim payments. Unlike most other types of insurance, flood insurance rates do not factor in claims, and a property's insurance rate does not automatically increase after a flood claim is filed. Critics have pointed out that this provides no incentive for property owners to undertake mitigation measures. However, change is on its way. On August 4, 1999, FEMA published a proposed rule in the federal Register to target the highest repeat claim buildings for special flood mitigation efforts. FEMA has identified 10,000 *target repetitive loss* buildings - those with four or more flood losses, or two or more flood losses cumulatively greater than the building's value. FEMA proposes to contact owners of such repetitive loss buildings and offer them federal mitigation funds to help elevate or otherwise flood protect such properties. Owners that decline such mitigation funds will be charged full-risk premiums. Fortunately, Ohio is: not among the states having a

large number of repetitive loss structures. FEMA estimates show 100 target repetitive loss structures for Ohio. ODNR's Floodplain Management Program staff has been assisting FEMA in verifying the information on the list.

Elevation Certificate In August 1999, FEMA started distributing a new and completely redesigned Elevation Certificate (EC) form. For a more detailed description, please refer to the article, Rating Made Easier with Redesign of Elevation Certificate in this issue of *The Antediluvian* [page 8]. Use of the new Elevation Certificate was to be phased in with the new form becoming mandatory starting January 1, 2000. However, concerns were raised by a number of insurance trade organizations, Write-Your-Own companies, and surveyors that additional time was needed to allow agents and others to be trained in the use of the new form. In December 1999, FEMA announced that it would delay mandatory use of the new EC until October 1, 2000. During the extended phase-in period both the current and the new elevation certificates can be used. The new elevation certificate form is available on FEMA's web site: (fema.gov/library/elvcert.pdf>).

Increased Cost of Compliance (ICC) It has been almost three years since FEMA added ICC coverage to the standard flood insurance policy. ICC coverage provides additional funds under a flood policy to pay for the increased cost of rebuilding a flood-damaged structure in compliance with local floodplain management regulations. Congress stipulated that such coverage could add no more than \$75 per policy. FEMA actuaries estimated that, based on an average of 3,400-3,700 ICC claims expected each year, the ICC premiums would generate enough revenues to provide a maximum benefit of \$15,000. However, actual numbers of ICC claims have been lagging far behind FEMA's expectations. As of January 2000, FEMA has paid out 172 claims, with 50 claims still open. FEMA is looking into reasons for the low response and is undertaking a field study in Texas. FEMA also announced in November 1999, that it is raising the maximum ICC limit from \$15,000 to \$20,000 effective for all losses occurring after May 1, 2000; Further possible improvements to ICC will be examined by FEMA in the coming months. 💧

Severe Weather Safety Awareness Week



By Christopher M. Thoms, Senior Environmental Specialist, Division of Water - Floodplain Management Program

Everybody talks about the weather but nobody does anything about it.

- Robert Johnson

Once again, the Ohio Severe Weather Committee (OSWC) is defying that old saw and for more than twenty years it has been encouraging all Ohioans to do the same.

Governor Robert Taft has proclaimed March 5th through 11th as **Severe Weather Safety Awareness Week**, the last of the century. Each year, the OSWC sponsors two awareness weeks to draw attention to the need to prepare for severe weather.

OSWC sends severe weather information packets tailored for teachers and media statewide. These packets contain statistics and safety tips about flooding, tornados, winter storms, and thunderstorms. Each year a **Severe Weather Poster Contest** is conducted for elementary students.

Like all activities during the Severe Weather Awareness Week, the winner's poster is used to promote severe weather awareness year-round because the threat of severe weather is with us throughout the year. Though a year-round threat across the state, in Ohio, the risk of flooding intensifies in winter and early spring. For a variety of reasons, people continue to work and reside in floodplains with nearly 300,000 structures in Ohio's identified flood hazard areas. Can we afford the increasing costs of flood recovery when by each of us doing something about it we can save lives and property?

National and state flood recovery costs exceed all other natural disaster costs combined. By incorporating flood damage reduction tactics, starting with the consistent enforcement of your community's flood damage prevention regulations-we can work to reduce the tragic loss of life and property. The OCSWA consists of representatives from National Weather Service, Ohio Departments of Education – Health - Natural Resources - Public Safety, County Emergency Management Director's Association, Red Cross, Ohio Insurance Institute, and the Ohio News: Network. These organizations are committed to doing something to promote severe weather safety.

If you would like to receive more information concerning severe weather safety, please contact your county emergency management agency or the local chapter of the Red Cross. For a copy of the educational materials developed in support of this awareness effort, contact the Ohio Emergency Management Agency at (614) 799-3695 or download the information from the Ohio EMA Website at <state.oh.us/odps/division/ema/tfsc99.pdf> The OCSWA encourages you, as a local floodplain administrator, to take the occasion to promote floodplain and flood hazard awareness so that we don't just *talk* about the weather; we can all *do something about it*. 



Roll Call

You can't seem to tell the players without a scorecard

The ranks of our Floodplain Management Program Office continue to change with the addition of two new faces, the preparation to hire two more, and the return of Chad Berginnis after a year's sabbatical as a county planning director. The latest newcomers would like to introduce themselves to you.
[Editor]



Chad Berginnis, Alicia Silverio, Ray Klingbeil

Alicia A. Silverio, Environmental Specialist, Division of Water - Floodplain Management Program

Greetings! As one of the most recent additions to the Ohio Department of Natural Resources, Floodplain Management Program Staff, I wanted to take this opportunity to introduce myself.

In August 1999, I joined the ODNR team as an Environmental Specialist where a portion of my responsibilities will include the implementation and maintenance of the National Flood Insurance Program through community assistance across the State of Ohio. I will also be assisting with preparations for the Statewide Floodplain Management Conference scheduled for Fall 2000.

I am a 1999 graduate of The Ohio State University where I majored in Environmental Science with emphasis in Water Quality. Before coming to ODNR, I served as College Intern for two years at the Environmental Protection Agency, Division of Surface Water, where I provided assistance. To local watershed organizations, performed compliance inspections of various wastewater treatment facilities, and conducted extensive water quality sampling.

I also worked briefly as an Intern for the United States Department of Agriculture, Natural Resources Conservation Service to develop conservation plans for area landowners and agricultural producers. Now that I've joined the ODNR staff, I truly look forward to providing State support to community and county floodplain management programs. I am pleased to have this

opportunity to work with local floodplain administrators, individual citizens, representatives of the private sector, as well as government officials to promote flood damage reduction through responsible and safe management of Ohio's floodplain resources.



Ray Klingbeil, Environmental Specialist,
Division of Water - Floodplain Management
Program

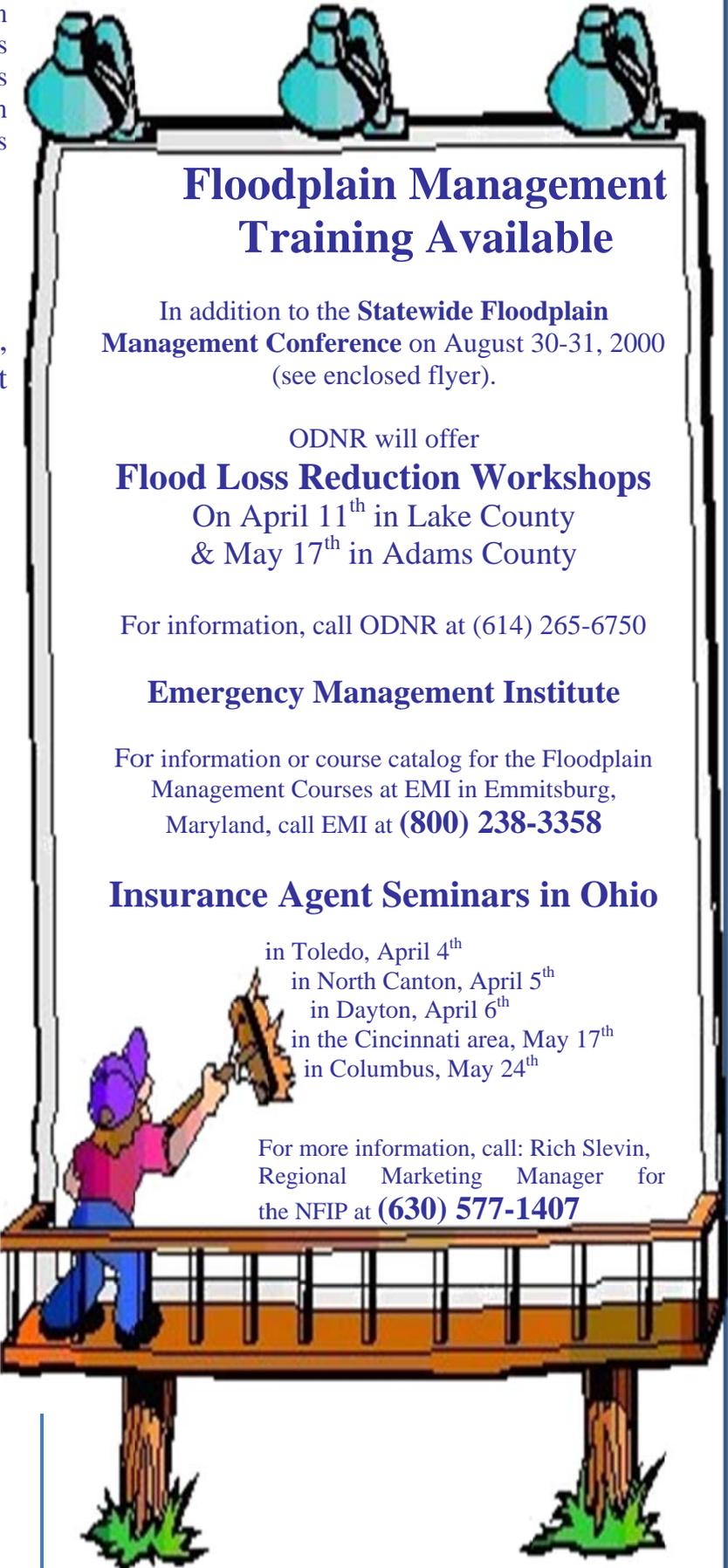
Hello. My name is Ray Klingbeil, one of the newest members of the floodplain management team in the Division of Water.

Joining the team on September 13, 1999, I bring a long history with the Ohio Department of Natural Resources, having served with the Office of Chief Engineer (Civil Site Design), Division of Reclamation (Civil / AML Reclamation Terrain Modeling), and Division of Geological Survey (Computerized Geologic Mapping).

Other accomplishments include establishing ODNR's first C"DD System, five suggestion awards, and two governors' citations for cost saving solutions and programs.

I've been very busy reading and reviewing State, FEMA, and NFIP publications and familiarizing myself with all the resource data in our office as well as assisting those with NFIP mapping needs.

I look forward to this career opportunity and working with all the other agencies and community officials in our common goal of preventing loss of life and minimizing flood damage in the floodplains of Ohio. 



Floodplain Management Training Available

In addition to the **Statewide Floodplain Management Conference** on August 30-31, 2000 (see enclosed flyer).

ODNR will offer
Flood Loss Reduction Workshops
On April 11th in Lake County
& May 17th in Adams County

For information, call ODNR at (614) 265-6750

Emergency Management Institute

For information or course catalog for the Floodplain Management Courses at EMI in Emmitsburg, Maryland, call EMI at **(800) 238-3358**

Insurance Agent Seminars in Ohio

- in Toledo, April 4th
- in North Canton, April 5th
- in Dayton, April 6th
- in the Cincinnati area, May 17th
- in Columbus, May 24th

For more information, call: Rich Slevin, Regional Marketing Manager for the NFIP at **(630) 577-1407**



DIVISION OF WATER
1939 FOUNTAIN SQUARE
COLUMBUS, OHIO 43224

Bob Taft
Governor,

Samuel W. Speck,
Director,

James R. Morris,
Chief

STATE FLOODPLAIN MANAGEMENT CONFERENCE
AUGUST 30th – 31st
(See flyer inside for details)

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Christopher M. Thoms, Editor.

