



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.

The Effects of Floodplain Management on Flood Insurance Rates

COLLECTING AS-BUILT LOWEST FLOOR ELEVATIONS

By Richard J. Roths, Natural Hazards Program Specialist Federal Emergency Management Agency- Region V

Officials of NFIP-participating communities are required to ensure that all new or substantially improved structures constructed within a Special Flood Hazard Area (SFHA) are constructed in conformance with the requirements of National Flood Insurance Program (NFIP) regulations. This language is mirrored in the community's floodplain management ordinance or resolution.

The regulations found in 44 Code of Federal Regulations (CFR), Section 60.3(b), require that where base flood elevation (BFE) data are available, communities must obtain the elevation of the lowest floor (including basement) of all new or substantially improved structures, or the elevation to which a new or substantially improved non-residential structure has been floodproofed. This requirement would also be extended to those sites where best available data have been obtained from a federal, state or local agency, and where a developer was required to prepare flood elevation data for a subdivision which exceeds 50 lots or 5 acres. The community official is also required to maintain a record of the lowest floor information.

An easy way for a community to ensure that they have obtained this information is to require that an *Elevation Certificate* be completed for each structure. The best time to complete the certificate is after the foundation has been poured and before any more than the first floor cap is placed over the foundation. FEMA Elevation Certificates are mandatory for communities which participate in the

Community Rating System (CRS) of the NFIP. Some communities also have ordinances which require the use of elevation certificates.

The as-built elevations are important to property owners. Flood insurance premiums for structures built after the date of the community's first Flood Insurance Rate Map (FIRM) are based on the comparison of the elevation of the lowest floor (including basement) of the structure to the base flood elevation. Property owners of structures built after the initial FIRM who are not able to obtain this information from their community must hire a surveyor to generate this information as support for their insurance application.

Blank copies of the elevation certificates and floodproofing certificates may be obtained from the NFIP Forms Order Unit at (800) 638-6620. 

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Tornado/Flood Safety Awareness Week



March 17-23, 1996

By Peter G. Finke, Administrator,
Division of Water

To help increase awareness about the threat of flooding and tornadoes in Ohio, Governor Voinovich has designated March 17-23, 1996 Tornado/Flood Safety Awareness Week. In his proclamation, the Governor urges the news media and local governments to assist the Ohio Committee for Severe Weather Awareness in its efforts to educate Ohioans about the dangers of floods and tornadoes and the necessary measures that can be taken to increase safety.

Ohio has a long history of damaging floods. No area in the state is free from the threat of flood-producing storms. Floods account for almost 80 percent of Ohio's major disaster declarations. During the last six months Ohio experienced locally severe flooding on two occasions.

A few weeks ago, in January 1996, heavy rains and rapid snow melt caused locally serious flooding in all of Ohio's counties where they border the Ohio River. Damage to private and public (government) property was estimated to be at least \$16 million. Thousands of residents temporarily lost their drinking water supply, roads were closed, and hundreds of families were forced from their homes. At the request of Governor Voinovich, thirteen counties - Adams, Belmont, Brown, Clermont, Columbiana, Gallia, Hamilton, Jefferson, Lawrence, Meigs, Monroe, Scioto, and Washington were declared to be major disaster areas by President Clinton. Ohio was spared the worst of the flood's impact which was centered further to the east. However, the Ohio River flowing from Pennsylvania brought the flood waters with it. In Columbiana, Jefferson, and Belmont counties the Ohio River crested at about a 20 to 50-year frequency flood stage. Further downstream, in Washington, Scioto, and Hamilton counties, the Ohio River peaked at a 10-year frequency flood stage.

Several months earlier, in August 1995, a series of slow moving thunderstorms dumped from 4 to over 10 inches of rain over various portions of Ohio. The flash flooding, which affected primarily small streams, caused an estimated \$15 million in damage and resulted in five deaths. Damage was locally severe, and the President declared a major disaster for eleven Ohio counties.

The two recent flood events were relatively minor floods in terms of the damage they left behind. These were just *small* floods. In our travels through the state, local residents will frequently stop and relate accounts of the Great Flood of 1913, the floods of 1936/37, 1959, and 1969, all of which affected large areas of Ohio.

The Ohio Emergency Management Agency and the Ohio Department of Natural Resources- with active support from many other agencies - work closely to stop the trend of rising flood damage in Ohio. Many of the new programs and initiatives being implemented focus on greater cooperation and participation among all levels of government. Public awareness campaigns such as the Tornado/Flood Safety Awareness Week are examples of Ohio's new flood damage reduction effort. 

Floodplain Mapping Needs Survey

By Michael K. Gease, Senior Planner
Division of Water

Under the National Flood Insurance Program (NFIP) Reform Act of 1994, the Federal Emergency Management Agency (FEMA) is mandated to undertake a review of the nation's floodplain mapping. The Act states...*the Director shall assess the need to revise and update all floodplain areas and flood risk zones identified, delineated, or established under this section, based on an analysis of all natural hazards affecting flood risks.* The Act further stipulates that the review be conducted at least once every 5 years. A task force will be established to determine map update needs and a mechanism for the revisions.

In order to assist FEMA in assessing flood map revision needs nationwide, the Association of State Floodplain Managers (ASFP M) conducted a survey in the fall of 1995. State NFIP Coordinators were asked to supply summary information on the issues of map maintenance and engineering needs. Maintenance needs include changes in corporation limits and street/highway names,

publishing Letters of Map Revision, and addition of existing data from non-FEMA sources. Engineering needs include revision of FEMA Flood Insurance Studies and Special Flood Hazard Areas, and providing new studies and maps. Each state was asked to identify the top 10 communities in each category, number of stream miles affected, and number of map panels needing revision. Other survey questions solicited state experiences with the new FEMA Digital Flood Insurance Rate Map process using Geographic Information System technology.

Ohio's survey responses were provided to Bob Watson (Wisconsin Department of Natural Resources) of the ASFPM's Mapping and Engineering Committee at the October 1995 FEMA Regional-State Coordinators Conference hosted by Ohio. In future issues of *The Antediluvian* we will discuss the national survey and solicit your input to further identify local community and watershed floodplain mapping and study problems. This information will be utilized to provide recommendations to FEMA for future map revisions and restudies. 💧

FEMA Is Looking for a Few Good DAEs



The Federal Emergency Management Agency (FEMA) is looking for people to fill temporary full-time positions on an intermittent basis as Disaster Assistance Employees (DAEs) for the duration of a disaster and its follow up activities.

DAEs fill a variety of positions immediately after a major disaster declaration by the President.

They work full-time or nearly full-time for several weeks or months, and are released and may be called-up again in the future, so the ability to leave an existing job, family, and home for an extended period of time is essential.

These positions include administrative, clerical, flood insurance and floodplain management, hazard mitigation, outreach and community services, and public affairs. Currently, the FEMA Region V Chicago office is seeking hazard mitigation, flood insurance, and floodplain management recruits. Backgrounds in building inspection, zoning administration, planning, civil or structural engineering, public administration, natural resources, or physical sciences will help

prequalify applicants. Previous experience with the National Flood Insurance Program and related building and zoning codes will help. DAEs are paid according to their experience and must be available to report to a disaster field office or disaster application center (often in a remote area and not under the most advantageous conditions) on very short notice and stay in the field for up to two months or more, and then work in either Chicago or a state disaster recovery office. Accommodations, travel, and per diem are provided.

Interested persons who can devote their energies and talent full-time for several weeks or months should contact Bertha Curtis, FEMA Mitigation Division, 175 West Jackson Boulevard, 4th Floor North, Chicago, IL 60604-2698 or call 312-408-5367. (Note: These are training positions and recruits may not be deployed until the next disaster. A roster of qualified DAEs is maintained by the agency.) 💧

New Roles for Surveyors in Flood Insurance



By Scott Jones, Hagensee Surveying Group

As losses from floods and related disasters once again appear in news headlines, surveyors may find themselves becoming involved in certifying flood plain areas and advising private and government insurers about potential losses. To do so, however, may require surveyors to become familiar with procedures and regulations that have been established by federal and local government offices.

The National Flood Insurance Program (NFIP) was established in 1968 because the federal government limits the need to provide supplemental aid to homeowners, farmers and businesses following floods, and because flood insurance was not commercially available through normal insurance marketing channels.

According to David Whiteman, analyst for Congressional Research Service, the NFIP was enacted with the intent of *limiting the burdensome cost of flood control and disaster relief expenditures, and to control unwise development in the flood plain and to provide affordable, pre-funded, insurance protection for existing residential*

property and new or improved property constructed to flood-resistant standards.

Several enhancements to the program have since taken place. The most recent was enactment of the *National Flood Insurance Reform Act of 1994*. Now, the Federal Emergency Management Agency (FEMA) is initiating discussions with the American Congress on Surveying and Mapping (ACSM) that may enable surveyors to self certify determinations similar to the **Letter of Map Amendment (LOMA)**. Surveyors should thus become familiar with NFIP regulations, as well as FEMA policies, because there is the possibility that they will have an increased role in processing flood plain certification documents.

According to Ken Hinterlong, FEMA engineer in Chicago, *a certification process is necessary due to the level of unmonitored activity already in practice by lenders and anticipated increases in the LOMA review workload after implementation of the Reform Act*. One avenue of thought, he said, is to use continuing education programs sponsored by state associations as a vehicle to support an enhanced determination process.

Among its wide-ranging actions, the 1994 NFIP Reform Act requires FEMA to respond to requests by homeowners who ask for reviews of horizontal determinations that have been made on behalf of lenders. FEMA suspects that its response in many of these reviews will involve a recommendation to obtain vertical data, so that an appeal can be made through the LOMA process. It is Hinterlong's opinion that managing two review procedures *would be confusing and wasteful*. He notes that the demand for LOMAs, currently at 5,000 per year nationwide, has been doubling every two to three years since 1990.

To compound matters, FEMA is introducing new county-wide maps in several urban corridors that may require reevaluation of old LOMA determinations. Surveyors could be called upon to relieve FEMA of what, to them, is a burdensome duty - to make such determinations based upon vertical data. Michael Buckley, chief of the Hazard Identification Branch, who oversees mapping in the Washington, D.C. FEMA office, adds, *we think the idea has merit. At present, FEMA is the only body authorized to change maps, but there might be a process where surveyors could make a*

determination and a recommendation to lenders. Such a change in the present policy may require Congressional approval and a willingness on the part of the surveying industry to get involved. Surveyors, Buckley added, will also be represented on an advisory council that will suggest ways to produce better maps.

On another level, the traditional role of surveyors in determining flood hazard limits is being challenged by a fairly new type of business. Known as flood hazard certification companies, these firms will determine, for a fee of about \$20, whether a structure is within a special flood hazard area and issue a certificate for the mortgage closing. They typically operate in the single-family market, but are not bound to do so. Although some of these companies are independent, many are subsidiaries of insurance agencies that sell flood insurance. Recently, **Professional Surveyor** sent several of these companies questionnaires that asked specific questions about their qualifications. Only the companies listed with FEMA were mailed questionnaires. About 20 percent replied, enough to obtain a fair sampling.

Some indicated that they only operated within a certain region, usually isolated to a few states, but others were active across the country. Most indicated that they had been in business a few years, but one claimed to have been issuing flood hazard certificates since 1974. Only two indicated that a licensed surveyor or engineer made the flood plain determination; the remaining replies were equally split between technicians and executive/managerial personnel. The companies were asked how many flood hazard certificates they processed in a year; one company claimed one million and a runner-up came in at 750,000.

One technical question was asked: How do you determine flood limits? All responses referenced the *Flood Insurance Rate Maps (FIRMs)*, but one answer was, *Comparing address/ legal description to flood maps*. The companies were asked how long it took to prepare flood hazard certificates. Most replied that the process took from 10 minutes to an hour, but one company replied, *Minimum 10 seconds*. The questionnaire also asked: If a certificate issued by your company indicates that a property is in the flood limits, does it mean flood insurance must be purchased? All but two replied with a simple *yes* or similar answer, which raises

some questions about their compliance with proper procedures. Two answers made reference to the actual structure, since flood insurance is not required on vacant property, but none made reference to the type of loan being made or to the community's participation in the NFIP.

In fairness to these companies, it is not likely that every surveyor would have answered this question absolutely correctly either.

Flood hazard certification companies are examples of an area where licensed surveyors should take leadership. Surveyors should be the experts in determining flood hazard areas, yet the banking industry has found an outside resource. FEMA, on the other hand, appears to have recognized that surveyors could be an important part of the process.

For surveyors to achieve the expertise sought by FEMA, they not only must become familiar with certain regulations of the NFIP, but also must become familiar with the material they are using to determine flood limits. Surveyors should be aware, for example, that the two primary FEMA maps, *Flood Insurance Rate Maps (FIRMs)* and *Flood Boundary and Floodway Maps (FBFMs)*, serve separate purposes. As explained by David Schein, senior program specialist in FEMA's Chicago office, *for insurance purposes, the FIRM must be used unless a flood hazard boundary map is in effect [older maps]. Floodway maps are not referenced in federal regulations, and are not interchangeable with FIRMs. FIRMs indicate the 100-year flood limits and elevations rounded to the nearest foot; they are intended to be used by insurance agents, bankers and the public. Floodway maps also show the 100-year flood plain, but indicate cross-section stationing in which the published profiles can be used to interpolate the flood elevation to the nearest tenth. Additionally, they indicate the limits of the floodway, and other information. Floodway maps are intended to be used by engineers, government officials, developers and surveyors.*

FIRMs and flood hazard boundary maps are the instruments to be used when determining flood insurance liability. The FEMA-suggested lender's notice, which is to be given to borrowers by the lender, says, *This area is delineated on [community name] Flood Insurance Rate Map (FIRM) or, if the FIRM is unavailable, on the Flood Hazard*

Boundary Map (FHBM). This area has a one percent chance of being flooded within any given year. The risk of exceeding the one percent chance increases with time periods longer than one year. For example, during the life of a 30-year mortgage, a structure located in a special flood hazard area has a 26 percent chance of being flooded. The shaded areas on the maps are to be scaled (preferably from the centerline of the road) and the horizontal location on the map is to be used to determine flood insurance requirements. The shaded areas on both floodway maps and FIRMs are the same, but often what happens is that an elevation is interpolated from the map and a flood hazard line based on topography is shown on the survey, rather than the horizontal limits indicated on the map.

If a topographic flood hazard line is interpolated from a FIRM, it will be incorrect because the elevations shown across the flood plain on the FIRM are rounded to the nearest foot. For purposes of flood insurance, the limit of the shaded area is the determining factor; many older maps do not even indicate elevations. The surveyor is not following the correct procedure in showing a topographic flood hazard line for flood insurance purposes. Schein explained that, *the lender is not supposed to waive flood insurance based on topography, but many do so in order to avoid flood insurance.*

It is not uncommon for the horizontal location on the FIRM and the topographically generated flood hazard line to appear unrelated. Mary Anne Lyle, FEMA engineer in the Atlanta office, explained that, in this event, *the best procedure for the surveyor to follow is to show both lines on the survey (FIRM location and topographic location). This approach reflects all the information available to the surveyor and limits his or her liability. The determination as to whether or not flood insurance is needed will be determined by others.*

If the structure is found to be above the topographic flood line, but within the shaded region on the FIRM, the purchaser will be eligible for flood insurance at a reduced rate until the map is amended via a LOMA. Surveyors should be able to differentiate between a LOMA and a **Letter of Map Revision (LOMR)**. A LOMA resolves limitations in the topographic map used to delineate a flood plain on the FIRM or FBFM. According to a FEMA publication titled *Answers to Questions About the*

National Flood Insurance Program, A LOMA is the result of an administrative procedure in which the Federal Insurance Administrator reviews scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a property is not located in an SFHA. Buckley adds, A LOMA is an official effective revision to the map resulting from an incorrect flood hazard area designation.

A LOMR, Buckley continues, *is for situations where the flood plain or flood elevation has been physically altered through some physical change.* A category called LOMR based on fill, or LOMR-F, is a similar statement to LOMA for property elevated on fill. Another type of LOMR consists of documents issued by FEMA that resolve requests for revision to the 100-year flood elevation or regulatory floodway data. This category generally reflects compilation or revision to hydraulic modeling files. Annotated portions of the FIRM and profiles are often attached. In the event that a structure is found to be wrongly identified in an SFHA, the lender may still insist that flood insurance be purchased until the amendment or revision is processed; most likely the insurance may be purchased at a reduced rate or may be canceled when the process has been completed. If an insurance policy is written as a condition of a loan, the FEMA publication explains, *when a LOMA or LOMR is issued and cancellation requested, the policy holder may be eligible for a refund of the premium paid for the current year only if no claim is pending and no claim has been paid during the current policy year.* Surveyors should familiarize themselves with these policies and abandon some common misconceptions that Schein describes as, *serious technical errors.*

One common misconception is that if a property is not transferred with a federally assisted loan, flood insurance is not required. Flood insurance is required if the lender is a federally regulated lender. Schein comments, *if the lender is not federally regulated, they will likely place the loan on the mortgage market where it must have a determination made to go on the market.* Surveyors should also be aware that slightly different rules govern new and existing construction. For FEMA to waive flood insurance for new construction placed

on fill through the LOMR-F process, both the lowest adjacent grade and lowest floor elevation must be at or above the 100-year flood elevation (as determined from profiles). A basement floor is, in fact, considered the lowest floor for those structures. It should also be demonstrated that the footprint of the structure is out of the regulatory flood way. In addition to the lowest adjacent grade, a LOMR-F also requires the lowest floor, including the basement, be at or above the 100-year flood elevation. If a crawl space exists, FEMA will not waive flood insurance if the floor of the crawl space (lowest floor) is below the flood elevation. *This is what we're asking surveyors to show,* Schein says, *many lenders want to waive flood insurance because the building is elevated above the flood elevation, but the crawl space is not. This is not acceptable.* For structures built on natural grades or for existing construction that was grandfathered into the program, Schein adds, *it must only be demonstrated that lowest adjacent grades be above the 100-year floodway.*

FEMA not require an additional height above the flood elevation, known as free-board. Free-board is a requirement of local governments. The only requirement to waive flood insurance is that the lowest adjacent grade and lowest floor elevation for structures placed on fill are above the flood elevation. Vacant property is not required by FEMA to have flood insurance, and vacant property within a flood plain is buildable. FEMA's only requirement is that the structure's lowest floor be built above the flood elevation. To remove the flood insurance purchase requirements, the elevation of the lowest adjacent grade is also used. Compensatory cutfill requirements are requirements of local governments and, according to Schein, *are often in excess to accommodate past errors and abuses.*

Every should be familiar with these straightforward guidelines and policies. FEMA seems willing to rely on the expertise of the surveying profession. It is refreshing to see the industry being called upon. Surveyors are the consultants to all parties in the mortgage closing process, and if certification of LOMAs by surveyors is approved, they will be able to perform an additional and very valuable service for their clients. 💧

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at the University of Illinois at Chicago. The author wishes to thank Ken Hinterlong, engineer at the office of FEMA Region V in Chicago, Illinois, for editorial assistance.

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The article represents the opinion of the author not the Division of Water, Floodplain Management Program.

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Partnerships for Building Safer Communities...

We've Come a Long Way since Noah

By Richard T. Moore, former Associate Director for Mitigation, FEMA

Two years ago, after touring the areas devastated by the Midwest floods, President Clinton promised the American people that when a disaster hits their community, his administration will help them respond to and recover from that disaster. The President committed to deliver disaster assistance more efficiently and effectively, and to rebuild safer communities by mitigating the impacts of future disasters.

Despite significant advances in our efforts to protect people from natural hazards, the tension between hazards and the built environment continues to escalate, causing untold suffering, billions of dollars in property losses, and environmental degradation.

While mitigation of natural hazards has been an important focus of programs within numerous federal and state agencies for some time, and, while progress has been made in mitigating the impacts of some hazards, there is an obvious need for intergovernmental coordination, cooperation with the private sector, improvement of technical standards, evaluation of progress in mitigation, and the setting of long-term national goals.

Consequently, the President directed the Federal Emergency Management Agency (FEMA) - under the leadership of Director James Lee Witt - to develop a strategy to reduce the loss of life and property through mitigation.

Those who have built a new home, or know someone who has, can appreciate the effort that has gone into developing the National Mitigation Strategy. What do constructing a building and formulating public policy have in common? The concept of National Mitigation Strategy as a shelter from natural hazards is not farfetched.

For instance, a lot of things happen before we acquire land on which to build - surveys, title searches, legal steps, etc. Similarly, a lot happened to help reduce the impacts of natural hazards before FEMA was asked to develop a National Mitigation Strategy, for example:

- Developing fire and building life safety codes for much of the nation to reduce major urban fires and building failures;
- Establishing a national program of floodplain management with strong mitigation provisions to significantly reduce flood losses;
- Developing a national system of emergency management with a coordinated federal response plan;
- Establishing a National Earthquake Hazards Reduction Program to increase the availability of applied seismic research and an enhanced National Hurricane Program to minimize loss of life from hurricanes through better tracking, warning, and evacuation procedures;

Developing a national assessment of hazards and of the efforts to prepare for, respond to, and mitigate their impacts; and Developing a National Inventory of Dams that has identified high hazard dams and

encourage warning systems and emergency plans for these facilities under federal regulation.

After we've acquired our land on which to build, the next step is to clear the site. Similarly, the public policy *landscape* had to be cleared before anyone could start building a National Mitigation Strategy.

The Clinton Administration and the Congress have, in the past two years, helped *clear the site* for mitigation by *reinventing* FEMA with mitigation as its cornerstone, increasing by as much as six times the funding previously available for postdisaster mitigation through the Volkmer Amendment to the Stafford Act, and reforming the National Flood Insurance Program to provide mitigation grants and mitigation insurance .

Mitigation has also been integrated with emergency response and recovery following disasters. For example:

- Following the Midwest and subsequent flood disasters, we are working with communities to move people out of repeatedly flooded areas. In Missouri alone, we are removing approximately 4,300 structures from the floodplain, saving the state an estimated \$200 million in future disaster costs over the next 15 years.
- In Northridge, California, for the first time and at the direction of FEMA, residential building inspectors recommended and estimated costs for mitigation options so that they could be applied to damaged homes as soon as repairs began .

However, just as we need a site plan and blueprints before we start building, the actions above and other steps will not guarantee safer communities without a comprehensive plan. We need to institutionalize safety measures - mitigation - at all levels of government, with the private sector, and as a basic responsibility of every American.

Therefore, we needed to develop the architectural plans. Of course, we went to the professionals for the actual design -the emergency managers, building and land-use experts, and others. However, like many homeowners, we sought advice from friends , neighbors, literature, and other sources as we held our series of Mitigation Strategy Forums and other information-gathering activities.

We are now ready for the foundation. Past efforts to promote hazard mitigation have led to the emergence of a new partnership for building safer communities involving all levels of government, public and private sectors, communities, and individuals and families. Therefore, the foundation of our mitigation strategy is to strengthen existing partnerships and create new ones .

However, we cannot build a foundation without first selecting a solid concept for the cornerstone, and we chose *civic responsibility*.

Natural disasters are neither *Acts of God*, - as they have been called - nor are they necessarily caused by nature. They are the direct result of our ill-considered decisions to live too near the coast, in floodplains, along seismic faults , or among wooded wildlands. We must build in ways that protect us and our families and those who will use those structures after us. We must limit the possibility that natural hazards will cause those structures to fail and thus adversely impact the rest of the community. We must exercise civic responsibility.

We can visualize five strategic elements that hold the structure together - four *pillars* of our strategy and a *roof* overhead:

- The first pillar is public awareness and education. We must create a broad-based public understanding of natural hazards that leads to public support for mitigating those risks. This public information program must answer two questions: Does the message reach the widest possible audience? Is it presented in unique or thought-provoking ways that help the public to accept and advocate mitigation?
- The second pillar is hazard identification and risk assessment. We must conduct studies to identify hazards and assess the associated risks for communities. Does the mitigation effort identify all relevant hazards, determine the degree of risk, and address the vulnerability of people and the built and natural environments? Does it use the latest technology to assist in setting mitigation priorities?
- The third pillar is applied research and technology transfer. Does the mitigation

effort effectively transfer ideas or technology to messages or products that can be readily understood and applied to identify, assess, and mitigate natural hazards risks?

- The fourth pillar is incentives and resources. We must use these to encourage mitigation and redirect resources from both the public and private sectors to achieve national mitigation goals. Does the mitigation effort demonstrate cost-effective use of limited resources, provide new or reprogrammed resources, or use scarce or limited resources to promote or serve the goal of mitigation?

Our *roof* atop these four columns is the umbrella of leadership and coordination. We must provide national leadership and coordination among federal agencies to promote hazard mitigation throughout all federal programs and policies, and coordination with other levels of government and the private sector as well. Does the mitigation effort demonstrate the benefits of mitigation, encourage mitigation on the part of others, or challenge old assumptions about natural hazards? Does it build coalitions or partnerships to maximize benefits or enhance resources? Does it encourage individual, family, or private-sector participation and cooperation in support of hazard identification and mitigation?

To hold this shelter together, the mortar consists of the implementation of various objectives that support each of the five strategic elements.

The management company for the shelter will be the proposed National Multi-Hazard Mitigation Council, which will monitor the shelter's management, evaluate how it is functioning, and make repairs or additions as necessary. The member federal agencies, states, communities, academic institutions, professional associations, *etc.*, will provide various services to help maintain the shelter.

Naturally, the shelter isn't free - we have to pay the increased cost of building safer- out of floodplains, or away from the coasts and other hazardous areas - because the American people are all investors who own shares in the *National Mitigation Strategy*.

Building a shelter from natural hazards is nothing new. After all, isn't that what Noah did? However, the National Mitigation Strategy, unlike the biblical ark, which sheltered only two of each species, is designed to protect all Americans - if we all get on board!

Note: A recent report describing the Mitigation Directorate's activities during its first year, *Placing the Cornerstone - A Year in Review* (1995, 16pp., free), can be obtained from FEMA. Publications Distribution Facility, 8231 Stayton Drive, Jessup, MD 20794; (800) 480-2520; (202) 646-3484; fax: (301) 497-6378.

Reprinted from an invited comment for *Natural Hazards Observer*, July 1995 



Update on NFIP Reform Act

By Peter G. Finke, Administrator,
Division of Water

The *National Flood Insurance Program Reform Act of 1994* contains a number of provisions designed to improve the efficiency of the NFIP and to reduce federal disaster expenditures. The following is an update on some of the Act's key provisions that FEMA has implemented:

- A new *Standard Flood Hazard Determination Form* has been developed that lenders, or their agents, must use to determine if a building or mobile home is located in an identified Special Flood Hazard Area. FEMA's new form became effective January 2, 1996 (see related article on page 11).
- Standard review procedures have been established to resolve disputes between borrowers and lenders whether or not a property has been accurately located on an NFIP flood

map. FEMA will begin accepting requests for determination reviews beginning January 2, 1996. The requests must be submitted jointly by the borrower and lender within 45 days after the lender notifies the borrower that flood insurance is required. (Note: The above process should not be confused with FEMA's Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR) process which involve appeals to the accuracy of NFIP maps).

The following provisions are to be implemented in the near future:

- Provide additional insurance coverage to cover the cost to repair and reconstruct substantially flood damaged structures to comply with local floodplain management regulations. Currently, a flood policy will provide coverage only from direct physical loss from a flood. However, if a structure incurs substantial damage, it must be rebuilt in full compliance with local floodplain management codes. The Act provides that the additional cost to comply with local codes be treated as an eligible expense under the flood policy. FEMA is in the process of working out the details on this coverage and plans to issue proposed rules in Spring 1996. The *mitigation insurance* as the coverage is called, is scheduled to become effective in early 1997.
- Establish uniform flood insurance purchase requirements. Proposed rules were published on October 18, 1995 by the major federal regulatory agencies (Treasury, Federal Reserve System, FDIC, Farm Credit Administration, National Credit Union Administration) setting uniform requirements to ensure that loans in Special Flood Hazard Areas are covered by flood insurance. Expected effective date is Spring 1996.
- Create a new Flood Mitigation Assistance Program to provide grants to states and communities for mitigation plans and projects. The Program provides 75 percent federal and 25 percent nonfederal cost sharing on various projects including acquisition and relocation, demolition, floodproofing and technical assistance. FEMA plans to publish Interim Final Regulations in Spring 1996. 

1995 A Record Year for Flood Claims

By Peter G. Finke, Administrator,
Division of Water

In Fiscal Year 1995, the Federal Emergency Management Agency (FEMA) paid out a record \$700 million in claims on flooded properties insured under the National Flood Insurance Program (NFIP). A major reason for the record payout was the May 1995 floods in Louisiana which have turned out to be the most expensive floods ever for the NFIP.

FEMA estimates that the 35,000 claims from the Louisiana floods will cost the NFIP some \$600 million. However, since the NFIP's Flood Insurance Fund is self-supporting, no taxpayer money will be used to cover these claims. In catastrophic years - such as the 1993 Midwest floods and now the 1995 Louisiana floods - the premiums FEMA receives are not sufficient to cover claims payments. When this occurs, FEMA must borrow money from the U.S. Treasury. FEMA announced in August 1995 that it will draw down almost \$200 million from the U.S. Treasury to help cover Louisiana claims payments, which it plans to pay back within three years with interest.

The good news is that these record payouts in flood insurance will save taxpayers about \$250 million. This is because fewer flood victims will look to the federal government for disaster grants or low-interest loans. According to FEMA, 88 percent of the dollars for flood victims in Louisiana came from the NFIP. Only 12 percent of aid to Louisiana victims came from taxpayer-financed disaster relief. In contrast, taxpayer-funded programs paid for 59 percent of the total aid for the 1993 Midwest floods. The difference is that nearly 40 percent of Louisiana flood victims were covered by flood insurance, compared to only 10-20 percent of the Midwest flood victims.

The year 1995 was an unprecedented year for flood disasters. In addition to the Louisiana flood(s) there were flood disasters in Alabama, California, Florida, Missouri, Ohio, Oregon, and Washington. In August 1995, Ohio experienced serious localized

flooding causing about \$15 million in damages which resulted in eleven counties being included in a major disaster declaration.

Fewer than 2 percent of Ohio's 1,866 applicants for federal disaster relief stated that they carried a flood insurance policy. The low policy count may be due, in part, to the fact that many of the flooded areas were along small tributary streams whose floodplains had not been mapped by FEMA. These victims could have purchased flood insurance at much lower rates than those FEMA charges for property located in mapped floodplains. 

We Need You!!!!

By Cynthia J. Crecelius, Supervisor,
Division of Water

The Ohio floodplain management newsletter, *The Antediluvian*, was initiated in response to your requests for an information exchange and is entering its third year. It has been used to convey general and specific floodplain management issues and concepts. However, we have not featured local success stories in floodplain management. We hold the belief that several of you are more expert in this area than we can be as state program staff. This is your opportunity to become a *featured contributor* to our newsletter. Your input is needed. We invite your submissions concerning floodplain administration and management, effective flood prevention, public education and outreach programs, and related topics such as wetlands or stormwater management. Materials for publication should be submitted in draft form to:

Christopher M. Thoms, Editor
ODNR, Division of Water
1939 Fountain Square Drive
Columbus, Ohio 43224

If possible, include a diskette in *WordPerfect*®. Text and photos will not be returned unless specifically requested. Please remember to include your name, agency and phone number so that we may contact you if there are questions or editing concerns. We look forward to your contributions. Also, do not let our suggestions limit your creativity. If you have innovative partnerships or identify topics which we did not mention, please let us know. 

A Standard Flood Hazard Determination Form

By Chad Berginnis, Planner,
Division of Water

1996 has already been a busy year for floodplain managers in Ohio. Flooding has occurred on the Ohio River, Scioto River, Maumee River and Killbuck Creek.

So, you ask, what else will happen this year? For the National Flood Insurance Program, the New Year has brought the *Standard Flood Hazard Determination Form*. What is the *Standard Flood Hazard Determination Form* (SFHDF)? As of January 2, 1996, lending institutions are required to complete an SFHDF for a loan secured by improved real estate or a mobile home.

Lenders will complete the form to determine whether the building or mobile home is in an identified Special Flood Hazard Area, whether flood insurance is required, and whether flood insurance is available. The requirement to use the SFHDF was passed by Congress as set forth in the *National Flood Insurance Reform Act of 1994*, Title V.

Use of the form will standardize the information required to make a flood hazard determination. Since the passage of the *Flood Disaster Protection Act of 1973*, the purchase of flood insurance has been required as a condition of receiving federally related financial assistance. A federal agency or federally regulated entity (including banks, credit unions, savings and loans) has the responsibility to require flood insurance for acquisition or construction purposes with respect to any building or mobile home that is in an identified Special Flood Hazard Area. Before the passage of the 1994 Act, there had been problems with the *mandatory flood insurance purchase* requirement. Historically, there had not been consistent application of the law among lending institutions and federal agencies. Although FEMA had a suggested lender's notice form, it was not consistently used. Also, the amount and type of data collected for flood hazard determinations varied greatly. A concise process and instructions in a single printed document did not exist. Lenders, appraisers and other parties frequently asked questions pertaining to community

participation, map numbers, and whether a determination applies to a parcel of land or a structure. The intent of the SFHDF and its accompanying instructions is to provide this information clearly.

The SFHDF asks for information needed to make a flood zone determination. The form has two important provisions. First, the form clarifies that the determination applies only to the building or mobile home. The determination form is not used for determining whether an unimproved parcel or portion of a parcel is in or out of the Special Flood Hazard Area. The Letter of Map Amendment and Letter of Map Revision processes are still being used to remove property from Special Flood Hazard Areas. Secondly, the determination made on the form is only acceptable to the extent that the accuracy of the information is guaranteed.

Responsibility for completing the SFHDF requests lies with the lender. Lenders frequently contract with flood hazard certification companies to do this work. By law, such companies must guarantee the accuracy of their determinations. You, as the local floodplain administrator, have no responsibility to fill out the form. If you want to complete the form, please check with your legal staff to determine if you can provide the required guarantees.

The Federal Emergency Management Agency (FEMA) has established an appeals process if a determination on the SFHDF is being disputed. For an \$80 fee, FEMA will review disputed determinations and comment. A joint request signed by the lender and borrower must be sent within 45 days of the lenders notification to the borrower that flood insurance is required. Items required for FEMA's review of a determination shall include:

1. Payment of the required fee.
2. A request for FEMA's review of the determination signed by the borrower and lender.
3. A copy of the lenders notification to the borrower that the structure is in the SFHA and that flood insurance is required. The request for review of the determination must be postmarked within 45 days of borrower notification.
4. A completed SFHDF with copies of all technical data used in making the determination.

5. A copy of the effective Flood Hazard Boundary Map or Flood Insurance Rate Map panel for the community in which the building or mobile home is located, with the building or mobile home location shown on the map. Portions of the map panel may be submitted but shall include the area of the building or mobile home in question together with the map panel title block, including an effective date, bar scale, and north arrow.

Within 45 days after receipt of a request to review a determination, FEMA will respond to the applicants in writing. FEMA either will reject the request because it was late or insufficient data was submitted, or will issue a statement indicating whether the building or mobile home is within the SFHA.

Does this mean an increase in the amount of questions for local floodplain administrators? Ultimately, the Standard Flood Hazard Determination Form and the NFIP Reform Act of 1994 will translate into more requests for floodplain information. However, time spent responding to the additional requests may be time well spent. Increased questions translate into increased awareness. For those who have dealt with floodplain management for any length of time, you understand the challenge of educating people about the risks of developing in flood hazard areas. A community's success at achieving an effective floodplain management program begins with people's education and awareness of the hazard.

The SFHDF form is available from three sources:

FEMAFAX - FEMA's fax-on demand system Simply dial (202) 646-3362 and request document #16002.

INTERNET - The form can be obtained via FEMA's *Index* page at <http://www.fema.gov/fema/fform.html>.

MAIL (single copies only) - By calling the Water Planning and Management Section at 265-6750, the form can be mailed to you.

Requests for a determination review should be submitted to:

Lender Determination Review Coordinator
c/o Dewberry and Davis
P.O. Box 2020
Merrifield, VA 22116-2020



FEDERAL EMERGENCY MANAGEMENT AGENCY
STANDARD FLOOD HAZARD DETERMINATION

See The Attached
Instructions

O.M.B. No. 3067-0264
Expires April 30, 1998

SECTION I - LOAN INFORMATION

| | | | |
|----------------------------|--------------------|--|--|
| 1. LENDER NAME AND ADDRESS | | 2. COLLATERAL (Building/Mobile Home/Personal Property) PROPERTY ADDRESS (Legal Description may be attached) | |
| 3. LENDER ID. NO. | 4. LOAN IDENTIFIER | 5. AMOUNT OF FLOOD INSURANCE REQUIRED 1 | |

SECTION II

A. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMMUNITY JURISDICTION

| NFIP Community Name | County(ies) | State | NFIP Community Number |
|---------------------|-------------|-------|-----------------------|
| | | | |

B. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) DATA AFFECTING BUILDING/MOBILE HOME

| NFIP Map Number or Community-Panel Number (Community name, if not the same as "A") | NFIP Map Panel Effective/ Revised Date | LOMA/LOMR | | Flood Zone | No NFIP Map |
|---|---|-----------|------|------------|-------------|
| | | Yes | Date | | |
| | | | | | |

C. FEDERAL FLOOD INSURANCE AVAILABILITY (Check all that apply)

- Federal Flood insurance is available (community participates in NFIP). Regular Program Emergency Program of NFIP
 Federal Flood insurance is not available because community is not participating in the NFIP
 Building/Mobile Home is in a Coastal Barrier Resources Area (CBRA), Federal Flood insurance may not be available.
 CBRA designation date: _____

D. DETERMINATION

IS BUILDING/MOBILE HOME IN SPECIAL FLOOD HAZARD AREA
(ZONES BEGINNING WITH LETTERS "A" OR "V")? YES NO

If yes, flood insurance is required by the Flood Disaster Protection Act of 1973.
If no, flood insurance is not required by the Flood Disaster Protection Act of 1973.

E. COMMENTS (Optional):

This determination is based on examining the NFIP map, any Federal Emergency Management Agency revisions to it, and any other information needed to locate the building/mobile home on the NFIP map.

F. PREPARER'S INFORMATION

| | |
|--|-----------------------|
| NAME, ADDRESS, TELEPHONE NUMBER (if other than Lender) | DATE OF DETERMINATION |
| | |

WORKSHOP WATCH



By Christopher M Thoms, Planner
Division of Water

On December 12, 1995, our staff conducted a Flood Loss Reduction Workshop in Warren County. Twenty three officials representing sixteen communities in a ten county area attended this session. The Floodplain Management staff extends our thanks to our host, Eric Partee, Director of the Little Miami Inc., for his help and hospitality.

As we go to press, a workshop has been scheduled for Belmont County on February 8, 1996 and for Seneca County on March 5, 1996. Contact our office for the time and location of the workshop nearest you.

We are still looking for additional workshop locations. By committing to be a local host, you provide the officials in your area an opportunity to increase their awareness and knowledge of National Flood Insurance Program (NFIP) topics. The workshop has been designed as a half-day session and is focused on assisting local officials with understanding floodplain management concepts and specific NFIP participation responsibilities. Workshop participants will be provided an opportunity to work in small groups through a hands-on exercise simulating development review and permit issuance for a proposed development in a special flood hazard area.

If you would like to be a host for a workshop in your area, please contact our office at (614) 265-6750. We will be happy to answer your questions or provide additional information. 



Y Ohio Floodplain Management Association Well Underway



By Jerry Brems, Director,
Kari Echard, CRS Coordinator
Licking County Planning Commission

The Ohio Floodplain Management Association (OFMA) has been in existence for several months having received a good response from the public as well as the private sector. At the November 1995 Water Management Association of Ohio (WMAO) Fall Conference, some thirty individuals met to formally create OFMA and elect its officers. OFMA is a division under WMAO, but maintains its own organizational structure and procedures. This affiliation benefits OFMA by allowing it to draw on WMAO's administrative support.

With the ground work set, it is now time to look forward to bigger and better things from OFMA. On May 16, 1996, WMAO will be holding its annual spring meeting in Akron, Ohio at the Akron Hilton. The theme for this meeting is Geographical Information Systems (GIS) relating to water resources. OFMA will be a host to several group discussions on the use of GIS in floodplain management. OFMA is working with the Ohio Emergency Management Agency and the National Weather Service to develop topics for the meeting on GIS applications with *real time* weather information. OFMA believes that using GIS to integrate flood hazard maps, land use maps and real-time weather information is the wave of the future.

If you would like to become a member of OFMA, please complete the application on the following page. For additional information call Jerry Brems, OFMA chair at (614) 349-6555. 

QUESTION: What is WMAAO?

ANSWER: WMAAO (Water Management Association of Ohio) is the ONE organization dedicated to ALL of Ohio's water resources.

QUESTION: Why join WMAAO?

ANSWER: Because of the unlimited resources it has to offer, which includes the following:

- 1) A quarterly publication (Ohio Water Table) which includes:
 - A President's report.
 - Reports from the V.P.'s on pending legislation or relative water issues.
 - Membership updates.
 - Informative technical articles.
 - A comprehensive calendar of upcoming WMAAO, and other water related organizations, meetings and educational opportunities.
 - Business card advertisement space.
- 2) Technical seminars.
- 3) A multi-day annual conference.
- 4) Networking with other water related organizations and associations, including (AWRA, OWEP, WRFQ, and more...)

WMAAO's Purpose:

To promote and support the development, conservation, control, protection and utilization of Ohio's water resources for all beneficial purposes.

To expand the network through which federal, state and local government agencies as well as private enterprises, water related association, and interested individuals can exchange ideas and information about Ohio's water resources.

To create through publicity, widespread interest in water resource development and conservation by the citizens of Ohio and to keep all members of the association fully advised on all matters pertaining to or affecting water resources development and conservation in the state.

To encourage legislation needed, both state and national, to carry out the association's objectives.



Cut along the dotted line

MEMBERSHIP APPLICATION FORM

Name: _____

Company: _____

Address: _____ City: _____ Zip: _____

Telephone: _____ Fax: _____

Other organizations, affiliations: _____

| MEMBERSHIP | ANNUAL DUES | BENEFITS |
|----------------|-------------|--|
| INDIVIDUAL | \$ 55 | 1 member |
| ORGANIZATIONAL | \$150 | 3 members, additional members \$50/person |
| SUSTAINING | \$400 | 6 members, additional members \$50/person, business card advertisement space in 4 water table issues |
| STUDENT | \$ 5 | 1 member |
| EMERITUS | \$ 25 | 1 member, must be 65 years of age with 5 years of membership in WMAO or be approved by the executive board |

For sustaining and organizational memberships please provide complete information on each individual included in the membership.

MEMBERSHIP TYPE: _____ The benefit of the advertisement space offered in the sustaining membership is also offered to any other organization or individual at a cost of \$125.

DONATIONS TO THE OHIO WATER EDUCATION PROGRAM (OWEP) ARE DEDUCTIBLE AS A CHARITY CONTRIBUTION UNDER FEDERAL INCOME TAX LAW - YOUR MEMBERSHIP DUES ARE NOT DEDUCTIBLE

_____ \$5 _____ \$25 _____ \$100

_____ \$10 _____ \$50 _____ Other

AMOUNT ENCLOSED \$ _____
(Please make check payable to WMAO)

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Christopher M. Thoms, Editor.

For more information or assistance with Ohio's floodplain maps and regulations call (614) 265-6750 or visit our offices.

If you know of someone who would want to receive a copy of *The Antediluvian*, please let us know. Please send us address corrections, additions, and office or personnel changes to our offices at 1939 Fountain Square Bldg E-3 Columbus, Ohio 43224



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