

# The Antediluvian

## Ohio's Floodplain Management Newsletter

Providing leadership in the cooperative management of Ohio's floodplains to reduce flood damage and recognize their natural benefits.



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Issue 1

### Making Allowance

By Christopher Thoms, CFM—Program Manager  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

An Ohio mayor, grieving the deaths and damage that resulted from a recent flood, demanded to know, *Who's to blame?* He was not referring to the damages, rather to that the flood occurred. It is one—but not the only—confusion about why, how, and who manage floodplains.

Nearby, a floodplain manager sought a determination of substantial damage, thinking that it would allow a couple to walk away from their flood-damaged home, concluding that **nobody** would then have to pay off the mortgage.

In another community, a landlord tried to insist the “government” pay him before he would allow a substantial damage inspection of a rental where it was hard to know whether floodwaters or deferred-maintenance had caused more damage. He didn't care who paid him, **anybody** would do.

After decades of neglect and a near-total failure to enforce their locally adopted flood damage reduction regulations, citizens and officials still thought that when a flood occurs, **somebody** in the government would pay for their recovery.

Pondering these examples, I recalled how, in a previous life as a high school teacher, I asked my students why they thought they should do family chores. As any parent knows, **everybody** answered, *allowance*. The students reasoned that they should only have to do those chores they were paid to do. But, as any parent knows, while the students did not emphasize it, most were aware of the direct benefit to themselves and their families of having done their chores. Of course, getting an allowance isn't bad either.

The similarity is troubling in at least two respects. Underlying all these examples is the idea that someone else should pay for our choices. In a family, the children receive an allowance from money earned by the parents. Similarly, governmental benefits are paid from money earned by us all. As with an allowance, government benefits shouldn't be unlimited or unwarranted. It is clearly a mistake to think that floods can be stopped; that a mortgage will be forgiven if flood damages are high enough; that unless paid to do so, a landlord is exempt from regulations; or that government should pay for the flood damage recovery of an individual or community that has disregarded their own flood damage prevention regulations. So, why, how, and who manage floodplains? Why? Because floods occur and have significant inherent risks. How? By using proven methods and minimum thresholds for safety to reduce or avoid some flood risks. Who? Everybody, with help.

There is a story about four people, namely: *Everybody*, *Somebody*, *Anybody*, and *Nobody*. There was an important job to be done and *Everybody* was sure that *Somebody* would do it. *Anybody* could have done it, but *Nobody* did it.

*Somebody* got angry about that, because it was *Everybody's* job.

*Everybody* thought *Anybody* could do it, but *Nobody* realized that *Everybody* wouldn't do it. It ended up that *Everybody* blamed *Somebody* when *Nobody* did what *Anybody* could have.

Everybody needs to be aware of the direct benefits of floodplain management: protecting lives and property from flood damage, along with protecting and preserving the beneficial functions of floodplains. The government benefits (*e.g.*, flood insurance and disaster assistance) that are connected to participation in the National Flood Insurance Program are not the goals of the NFIP. Rather, those benefits are the incentives to help achieve sound floodplain management. Of course, getting warranted benefits isn't bad either.



## Appeals and Protests: Clearing the Confusion

By Jonathan Sorg, CFM—Environmental Specialist  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

FEMA is in the process of completing a 5-year initiative aimed at updating the flood maps in most counties throughout Ohio. If your community recently received preliminary Digital Flood Insurance Rate Maps (DFIRMs) or it is scheduled to receive such maps, you have probably wondered if you will get the opportunity to comment on these preliminary products. You will get this opportunity during a formal review and comment period whereby you can submit objections to information shown on the preliminary maps or Flood Insurance Study.

FEMA welcomes public input through the appeals and protest process since these maps will serve as the basis for your community's floodplain management program. Because you will be using them on a regular basis, it is imperative that they be as accurate as possible, and local input can help ensure this. That said, it is important you understand the difference between an *appeal* and a *protest* so you know what kinds of data and/or information are required for each.

### **Appeal:**

An appeal is an objection to proposed base flood elevations (BFEs) shown on your preliminary DFIRMs. The key to this definition is the term *proposed*; not all BFEs on your preliminary maps may be subject to appeals. For example, if your preliminary DFIRMs include a new detailed flood study, that new study and its proposed BFEs could be appealed. However, if the preliminary DFIRMs include the same flood study from your current, effective FIRMs, that effective study could not be appealed (because it was offered an appeal when it was proposed).

Proposed BFEs shown on preliminary flood maps are determined by experienced, mapping experts using the latest engineering methodology and models. The results are based on professional judgment, the amount of data collected, and the precision of measurements made. Appeals can be based on the contention that methodology was not applied correctly, input data was insufficient or of poor quality, or the argument that the analyses contain irrefutable errors. In order to evaluate any of these issues, the proper documentation **and** data must be provided to show the proposed BFEs are scientifically or technically incorrect.

Supporting data and documentation may include (but is not limited to) a new hydrologic or hydraulic analysis or a documented rationale for an alternative methodology or model and revised flood profiles from such modeling. Please note that all maps and other support data must reflect current conditions and be certified by a Registered Professional Engineer or a Licensed Land Surveyor, whichever is applicable. Also, all elevation data must be adjusted to the North American Vertical Datum of 1988.

### **Protest:**

A protest usually involves changes to corporation limits, road or watercourse labeling, or floodplain boundary delineations. Documentation that must be submitted to FEMA and their mapping contractor varies, depending on the type of protest being submitted.

For instance, if you notice your community corporation limits are outdated and inaccurate on the preliminary DFIRMs, you need to submit an up-to-date map of your community, showing the changes that support your request. However, if you are protesting the floodplain delineation near a large development, you need to submit topographic maps or other ground elevation data with greater detail or that show more recent topographic conditions. Please note that all maps and other support data must reflect current conditions and be certified by a Registered Professional Engineer or a Licensed Land Surveyor, whichever is applicable, before they will be considered for incorporation into the maps. Also, all elevation data must be adjusted to the North American Vertical Datum of 1988.

Property owners and other citizens submitting appeals and/or protests must submit their written request and all supporting information to their local floodplain administrators. The local floodplain administrators must submit all appeals and protests to FEMA's mapping contractor as introduced at the Flood Risk Information Open House. Local administrators may also submit the appeals and protests to FEMA Region V.



## Green Infrastructure “Mitigation”: Does it work?

By Kari Mackenbach, URS Corporation and Drew Whitehair, formerly of the Ohio Emergency Management Agency, Mitigation Division

Several severe thunderstorms passed through Ohio between May 17-June 17, 2004 producing large amounts of rain in an already wet central and eastern Ohio. This resulted in flooding in this region. The Federal Emergency Management Agency declared 25 counties affected by these storms as disaster areas (FEMA DR-1519-OH, declared on June 3, 2004).

The City of Cuyahoga Falls, Summit County is one of the communities that sustained heavy damages as a result of the widespread flooding. These intense storms left a mark on the city’s residents and created a new level of understanding and appreciation for hazardous weather. City officials took action quickly in order to lessen the risk of flooding and in conformance with their Flood Prevention Initiative, submitted an application to the Ohio Emergency Management Agency for the acquisition and demolition of four residential properties through the Hazard Mitigation Grant Program (HMGP). Located in a highly urbanized residential community, these four homes were situated at the lowest elevation of a 111-acre watershed.

Upon the acquisition and demolition of these structures, city officials realized that the low-lying topography of the area would still collect polluted flood water. The pooled water on these newly acquired lots would also serve as breeding grounds for mosquitoes and microorganisms, which can become airborne and inhaled, this health concern necessitated remediation.

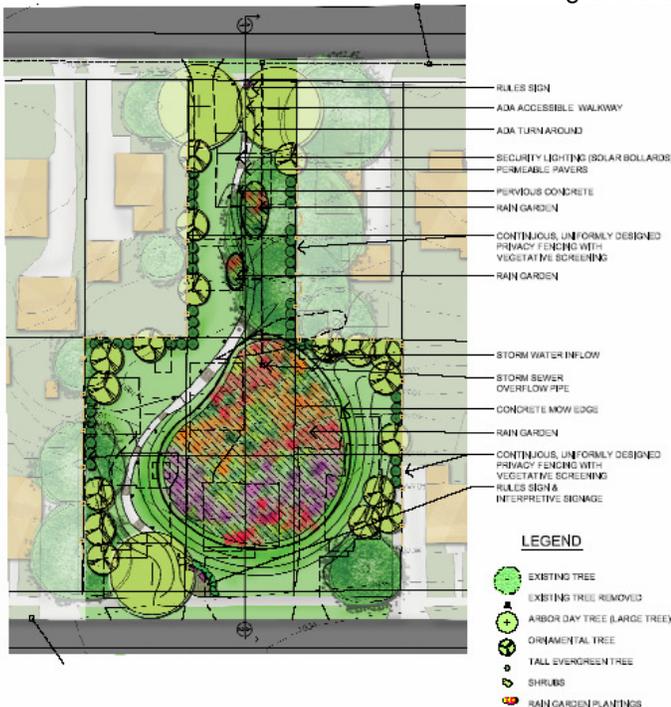


Picture of Mitigated Homes

The City of Cuyahoga Falls then hired the engineering firm, URS Corporation, to help develop a unique solution for this specific circumstance. This best management practice involved the conversion of the four vacant parcels into multiple rain gardens (also known as a bio-retention area).

Rain gardens are an attractive, landscaped area built in depressions, designed to capture and filter storm water runoff. Perennial, native, deep-rooted plants are used to absorb large amounts of water and help alleviate problems associated with flooding and drainage. The benefits of this solution would provide the city with not only aesthetic value and water quality benefits, but reduce the problem of standing water in this low-lying urban area. The Ohio EMA supported this effort as well as presented the idea to FEMA Region V to consider and approve. The goals of the project were to have:

### Concept Plan of Rain Garden Reserve



- An innovative design measures (an additional 5 acres of storage);
  - A balance of security and openness;
  - Passive education/outreach for residence;
  - Low impact/low maintenance design; and
- A municipal scale green infrastructure pilot.

Completed on Arbor Day 2008, a community dedication was conducted, deeming the area the first official “Rainscape”. Cuyahoga Falls coined the Rainscape name to describe the use of rain gardens and other bio-retention methods for the control of storm water management. Already garnering attention from communities throughout State of Ohio and surrounding

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states, Cuyahoga Falls continues to be a model community for innovative storm water management projects and solutions.

This Rain Garden Reserve will also be a place to educate youth on the aspects of environment. The rain gardens were constructed with City funds and will be accessible to the public and integrated into a park-like setting. Other green infrastructure and low-impact alternatives such as pervious pavement and solar ballards have also been incorporated into the design of the Rain Garden Reserve. This “park” is the first of its kind and the hope is that this technique can be adopted by other communities that are considering EMA mitigation funds. The next step for Cuyahoga Falls Rainscape is to monitor its performance over time.



*Rain Garden Reserve - A Cuyahoga Falls Community Conservation Rainscape*

*Arbor Day Dedication 4/25/08*

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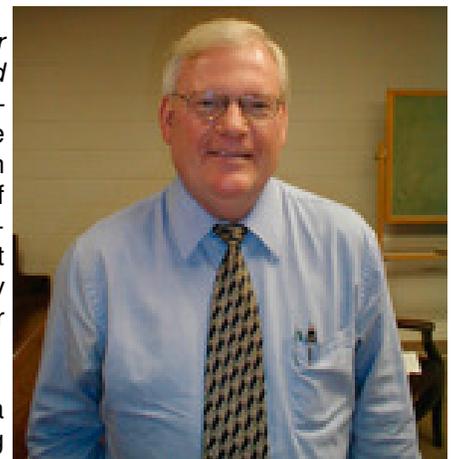
## Another Passing

By Christopher Thoms, CFM—Program Manager  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

*I am very sorry to report that Gary Ziegler, who has been battling cancer for quite a few years, passed away during the weekend. Gary's efforts had a major impact on bringing Westmoreland County's land use administration into the 21st Century, he is going to be very sorely missed. With those words Westmoreland County, Virginia Planning Commission Chairman Rob McDermott announced Gary's November 30, 2008 death. As many of you will remember, Gary was 2002-Chair for the Ohio Floodplain Management Association and longtime Floodplain Administrator and Development Services Director for the City of Findlay. For the last three years, Gary was the Westmoreland County, Virginia Zoning Administrator and Director of Planning.*

Gary held a bachelor's degree in planning and had a lifelong career as a land use professional. He was passionate about coaching and refereeing his youth soccer teams, often drawing from a wealth of sports illustrations.

Noted for his ability to remain unruffled during controversial and tense meetings, he was always ready to talk out a problem. Often invoking the “Ziegler rule”, which meant that any and all topics might be expounded upon. We will fondly remember the Ziegler proverbs such as *But I always have a saying: You know, if nothing's done, you'll get nothing.* Gary's enthusiasm and friendly manner will be greatly missed by all who were privileged to know him.



## Essential Information for the CFM Exam and Beyond

By Alicia Silverio, CFM—Senior Environmental Specialist  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

Interested in taking the Association of State Floodplain Managers' (ASFPM) Certified Floodplain Manager (CFM) Exam? Not sure where to begin or how to prepare? What's involved with maintaining the certification? These are some questions that may have crossed your mind as you considered whether you want to take the exam. We'd like to arm you with some information that will help you navigate your studies efficiently and prepare for this exam.

### Background

The ASFPM established the CFM Program as a national professional certification for Floodplain Managers. The CFM Program was developed to promote professionalism and continuing education in the field of floodplain management. Information regarding the CFM Program and exam can be downloaded from the ASFPM's website at: [www.floods.org](http://www.floods.org).

The CFM Exam is administered at various locations and dates throughout the nation. However, there is no need to travel outside Ohio to take the exam. ODNR and OFMA will be offering the CFM exam on the following dates:

- November 4, 2009 at 1-4pm: 138 East Court Street, Suite 806, Cincinnati, OH 45202
- December 3, 2009 at 1-4 pm: ODNR 2045 Morse Road, Building B-2, Columbus, OH 43229

Also, OFMA will host the Certified Floodplain Manager Refresher Course at ODNR (2045 Morse Road, Building I-1, Columbus, OH 43229) on Wednesday, October 28, 2009 from 8am-5pm. This workshop is an excellent opportunity to earn 6 CORE Continuing Education Credits (CECs) for CFMs. This eight hour study seminar will be presented in modules, by approved instructors, who have achieved CFM certification. The full-day review will provide a good basis for exam preparation. The workshop is targeted at seasoned floodplain managers with two or more years of experience who have read the FEMA 480 publication and studied the materials noted on the Association of State Floodplain Managers' "Exam Prep Guide." You can download the registration form at: <http://www.dnr.state.oh.us/tabid/3511/Default.aspx>.

### Preparing for the Exam

The ASFPM has developed a "Study Guide" to help test takers identify the material they should review prior to the exam. You can download a study guide from the ASFPM's website at: <http://www.floods.org/index.asp?menuID=215&firstlevelmenuID=180&siteID=1>. You can also download most of these materials from FEMA's website at [www.fema.gov](http://www.fema.gov).

When you've acquired the study guide, don't be daunted by the amount of information you should review. Take a methodical approach to tackling your studies:

- Begin studying for the exam by working through FEMA's **National Flood Insurance Program (NFIP) Floodplain Management Requirements, A Study Guide and Desk Reference for Local Officials** manual (also known as the "FEMA 480"). This manual is a great tool for establishing a strong understanding of the NFIP regulations and concepts.
- Once you have worked through the FEMA 480, review your community's floodplain regulations, Flood Insurance Rate Maps (FIRM), Flood Boundary Floodway Maps (FBFM) and Flood Insurance Study (FIS).
- Next, read the following sections of the Code of Federal Regulations (CFR), Title 44, Section numbers 59, 60.3, 61, 65, 67, 70, and 73.
- Work through FEMA's MT-EZ, MT-1, MT-2, and the Elevation Certificate.
- Review the remaining publications on the ASFPM study guide.
- Taking a CFM refresher course may be helpful as well.

### Application & Testing Process

Step 1. Submit a completed application and the required fee to the ASFPM. The application can be downloaded from the ASFPM's website at: [www.floods.org/pdf/certapp.pdf](http://www.floods.org/pdf/certapp.pdf). (If you are NOT an ASFPM Member, the application, processing, and exam fees are \$340. Save yourself \$140 by joining the ASFPM for \$100 and paying the Discounted Member Exam Fee for \$100!)

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Step 2. Complete and submit an Employment Verification Form.

Step 3. Take the Exam. You only need to bring a pencil and a photo ID.

Step 4. Upon completion, the proctor will return your exam to the ASFPM for grading. Those who take the CFM Exam must receive a grade of 70% or higher to receive CFM accreditation. The ASFPM typically sends results within a few weeks.

### Maintaining Your CFM Accreditation

Once you acquire CFM accreditation, you must obtain 16 Continuing Education Credits (CECs) during the two year renewal period, with a maximum of 12 CECs obtained in one year. To obtain credit for these CECs, CFMs must submit proof to the ASFPM via certificate of completion or CEC Verification Form. (You can acquire 12 CECs annually just by attending both days of the Ohio Statewide Floodplain Management Conference.)

### The Best Advice

- The CFM Exam is going to test your knowledge of the NFIP minimum criteria. Remember, as a Floodplain Manager, you have grown accustomed to administering YOUR community's regulations. It can be easy to confuse the NFIP minimum criteria with additional or higher standards your community has chosen to adopt. Verify your knowledge of the NFIP minimum criteria.
- Don't attend any conference or training and expect to be adequately prepared to take the CFM exam directly after. You should use any training or CFM prep course as review for the exam or as a method to identify topics that you should study more.
- Learning about the NFIP standards, insurance, mapping and associated programs is quite different than knowing how to apply them. Practice working through a sample permitting process, using the FIRMs and FIS to determine whether a site is located in or outside the Special Flood Hazard Area (SFHA).
- The CFM is a NATIONAL exam. The test can cover all aspects of the NFIP, including regulations that are not applicable in Ohio (e.g., Coastal V Zones). To best prepare for the test, learn the material outlined in the ASFPM study guide. The CFM Information Package also lists the exam topics and the percentage of total questions each topic comprises.

We hope these tips help you while preparing for the exam and beyond. Just remember, you can contact ODNR's Floodplain Management Program for assistance if you're having trouble understanding an NFIP concept or standard. Best of luck!

## Hazard Mitigation Assistance Grant Opportunities

By Steve Ferryman, CFM—Chief Mitigation Branch

Ohio Department of Public Safety, Emergency Management Agency

On June 1, 2009 the Federal Emergency Management Agency (FEMA) opened the application cycle for Fiscal Year 2010 Hazard Mitigation Assistance (HMA) grants. For the past few years, FEMA has been working to unify the guidance for all five of the hazard mitigation grant programs into one guidance document. The *Fiscal Year 2010 HMA Unified Guidance* document includes criteria for the following mitigation grant programs: Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA), Repetitive Flood Claims (RFC), Severe Repetitive Loss, and the Hazard Mitigation Grant Program (HMGP). The availability of this guidance marks the beginning of the application cycle for the four HMA pre-disaster mitigation grant programs (PDM, FMA, RFC, and SRL). Sub-Applications for PDM, FMA, RFC and SRL must be submitted in *eGrants* to the Ohio EMA by the specified deadline (*i.e.*, This year's sub-applications were due September 18, 2009). The *HMA Unified Guidance* document and instructions for registering in *eGrants* can be found on the Ohio EMA Mitigation Branch website: [www.ema.ohio.gov/MitigationBranch.aspx](http://www.ema.ohio.gov/MitigationBranch.aspx).

This year's September 18<sup>th</sup> deadline allowed Mitigation Branch staff time to review the HMA project sub-applications for eligibility and completeness. Sub-applications with identified deficiencies will be returned to the sub-applicant for revision. Mitigation Branch staff will be available to provide technical assistance on correcting

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identified deficiencies to help ensure that Ohio's HMA project sub-applications are nationally competitive. Identified deficiencies must be corrected and the revised sub-application resubmitted to the Ohio EMA in *eGrants*. Ineligible, incomplete or otherwise deficient sub-applications will not be forwarded to FEMA for funding consideration. Sub-applications will be reviewed and ranked by the State Hazard Mitigation Team before final submittal to FEMA on December 4, 2009.

There are several aspects of the HMA pre-disaster mitigation grants to be aware of:

- In general, local governments (counties, cities, villages, and townships) are eligible sub-applicants to apply through the Ohio EMA (the applicant). Individuals and businesses are not eligible to apply directly; however, an eligible local government can apply on their behalf. Additional information about sub-applicant eligibility for each grant program can be found on page 8 of the *HMA Program Guidance* document.
- Only those communities in good standing in the National Flood Insurance Program (NFIP) or those that have not yet been mapped are eligible sub-applicants.
- The programs are based on a nationally competitive process; therefore, only the most cost-effective projects nationwide can expect to be favorably considered and approved for funding.
- The following non-federal cost share (match) is required: PDM 25% (unless sub-applicant meets FEMA definition of small, impoverished community then 10%); FMA 25% (if property is on severe rep loss list then 10%); SRL 10%; and RFC 0% (this program is 100% federally funded).
- Sub-applicants must have a FEMA approved hazard mitigation plan (except under the RFC program). You must coordinate with the entity which has oversight of your community's hazard mitigation plan, which is usually your county emergency management office, to ensure that the mitigation project proposal meets either: a goal, objective, or action item in the community's hazard mitigation plan.

Costs incurred after the HMA application period has opened (*i.e.*, this year: June 1, 2009), but prior to the date of the grant award, are considered pre-award costs. Pre-award costs directly related to developing the sub-application may be funded through HMA, if the HMA grant is awarded. Additional information and examples of eligible pre-award costs can be found on page 27 of the *HMA Unified Guidance*.

Why pursue this opportunity? Because future disasters will occur and mitigation works! Since the creation of mitigation programs through the Robert T. Stafford Act in 1988, Ohio has experienced 24 Presidential disaster declarations, with total damages well exceeding \$1 billion. Federal and state mitigation funds have provided nearly \$138 million dollars for more than 200 projects in all 88 counties.

Eligible projects include the acquisition and demolition of flood prone structures, elevating flood prone structures, construction of high wind safe rooms that save lives in the event of an emergency or weather event, infrastructure mitigation, some storm water management projects, and the development of local mitigation plans. For a detailed list of eligible and ineligible project types, please review the *HMA Unified Guidance*.

### **Next Steps**

1. If you are interested in this opportunity, please complete an *eGrants* Authorization Form available on Mitigation Branch's website (if you are not already registered in *eGrants*) and forward to the Ohio EMA Mitigation Branch.
2. Before beginning to enter a project sub-application, make sure the project is an eligible project type. Review the list of eligible project types in the *HMA Unified Guidance*. Every year we receive a number of sub-applications for projects that must be rejected because the project is an ineligible project type.
3. Begin working on the project sub-application! Resources that you can take advantage of include:
  - Benefit-cost software produced by FEMA. All non-planning project sub-applications must include a benefit-cost analysis that utilizes FEMA approved methodologies.
  - FEMA's help desks. Information regarding the helpdesks can be found beginning on Page 160 of FEMA's *HMA Unified Guidance* document.
  - FEMA's website resources. The following webpage link contains information on the HMA grant programs and additional resources that will help develop project sub-applications such as sample scopes of work, engineering case studies, and tip sheets: [www.fema.gov/government/grant/hma/index.shtm](http://www.fema.gov/government/grant/hma/index.shtm).
4. Submit your completed project sub-application to Ohio EMA (through *eGrants*) by the deadline specified (see our website above).

We look forward to hearing from you! For questions, please contact the Mitigation Branch at 614-889-7153, by e-mail at [saferryman@dps.state.oh.us](mailto:saferryman@dps.state.oh.us), or by fax at 614-799-3526.



*Fact Sheet***FEMA**

## Disaster Assistance Employment Mitigation - FEMA Region V

### What is a Disaster Assistance Employee?

A Disaster Assistance Employee (DAE), also known as a reservist, is a nonpermanent, excepted service employee appointed under the authority of the Robert T. Stafford Act, P.L. 93-288, as amended. DAEs perform disaster response and recovery activities, usually at temporary work sites located in disaster damaged areas. Initial appointments are for periods of up to one year and may be renewed in increments of one year. DAEs are a critical staff resource to FEMA, as they perform key program, technical and administrative functions during disasters. DAEs must be free to travel for a minimum of 30 days at a time, usually with as little as a day or two of notice. Travel to and from a disaster location is paid for, along with day-to-day expenses for lodgings and an allotment for meals and expenses. DAEs receive a salary which is based on the kinds of work they perform. DAEs are not eligible for benefits.

### What are the qualifications?

We are looking for highly motivated and flexible individuals with the following qualities:

- Customer service oriented; able and willing to work within culturally diverse audiences, communities and groups;
- Sensitive in assisting people who have been through traumatic events;
- Possessing a specialized background with the ability to explain technical matters to non-technical audiences and individuals; and
- Able to perform consistently at a highly functioning level in a stressful and ever changing environment.

### What types of positions are available?

- |  |  |
|--|--|
| ◇ Floodplain Management Specialists                                | ◇ Hazard Mitigation Economic Analysts                  |
| ◇ Insurance Specialists  | ◇ Writers – Technical and Consumer Product Development |
| ◇ Building Code Specialists  | ◇ Administrative Specialists                           |
| ◇ Hazard Mitigation Community Planners                             | ◇ Environmental/Historic Preservation Specialists      |
| ◇ Grants Managers and Specialists: Hazard Mitigation Grant Program | ◇ Hazard Mitigation GIS Specialists                    |
| ◇ Civil Engineers (Structural or Hydrology & Hydraulics)           | ◇ Computer Graphics Technicians and Media Production   |
| ◇ Hazard Mitigation Public Outreach and Education Specialists      | ◇ Publications Development & Distribution Management   |

For questions regarding the specific duties related to the types of positions listed above, contact Rusty Rickart at (312) 408-5591.

## How do I apply for a Mitigation DAE position with FEMA Region V?

1. Fill out Optional Application for Federal Employment form (OF-612). Available to download at <http://www.opm.gov/forms/> or <http://www.fema.gov/career/of0612.pdf>
2. Send completed OF-612 and resume to [Bettie.Baker@dhs.gov](mailto:Bettie.Baker@dhs.gov) or mail to FEMA Region V, attn. Bettie Baker, 536 S. Clark Street, 6<sup>th</sup> floor, Chicago IL 60605

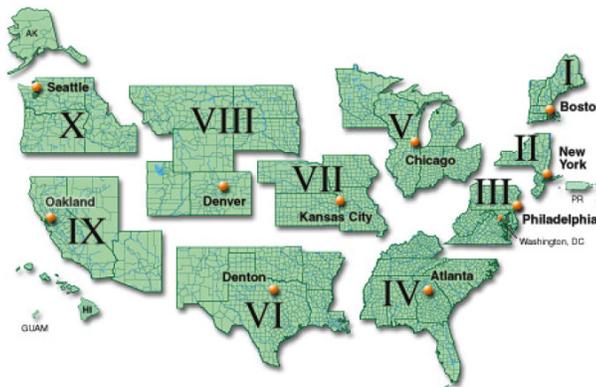
FEMA is an Equal Employment Opportunity Employer.

## About Mitigation

Hazard mitigation focuses on breaking the cycle of disaster damage, reconstruction, and repeated damage. Mitigation efforts provide value to the American people by creating safer communities and reducing loss of life and property.

## About FEMA Region V

From its office in Chicago, FEMA Region V works hand-in-hand with the emergency management stakeholders in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin to prepare for, respond to, and recover from disasters. Region V is the second most populated of the 10 FEMA regions, serving more than 50 million people. The region's most common challenges are floods, tornadoes, blizzards, and earthquakes.



## More Information At:

FEMA [www.fema.gov](http://www.fema.gov)  
 FEMA Region V [www.fema.gov/about/regions/regionv](http://www.fema.gov/about/regions/regionv)  
 FEMA Mitigation Directorate [www.fema.gov/about/divisions/mitigation.shtm](http://www.fema.gov/about/divisions/mitigation.shtm)

*FEMA's Mission: "to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery and mitigation."*

## Map Change Notification Project

By Tim Beck, CFM—GIMS Specialist

ODNR, Division of Soil and Water Resources—Floodplain Management Program

With Map Modernization projects going effective, one of the challenges is identifying areas affected by the new maps. The most effective way is to use GIS to compare the effective maps to the preliminary maps. As part of the 2008 Map Modernization project, the Ohio Department of Natural Resources (ODNR) Floodplain Management Program has helped identify areas where the Special Flood Hazard Area (SFHA) has changed, and identify the parcels affected.

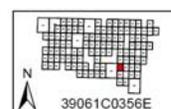
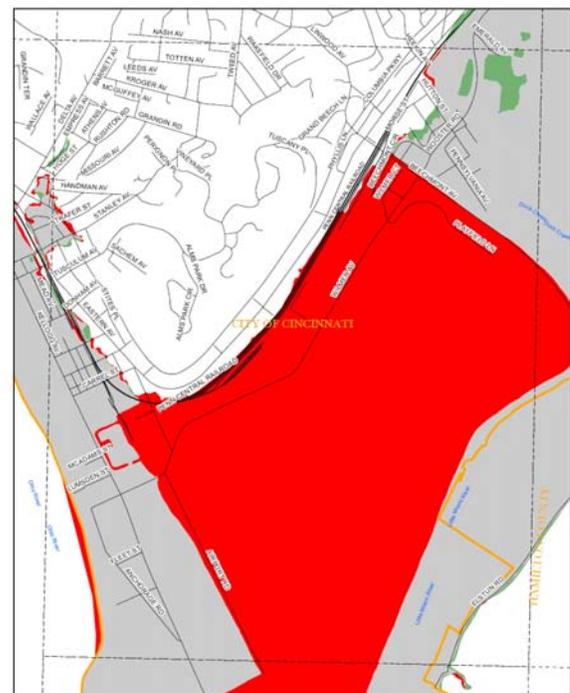
To identify where the floodplain has changed, we compared the current digital data available for the Special Flood Hazard Area (SFHAs) to the digital preliminary data by using the ArcGIS® *Erase* function. The *Erase* function allows the overlapping of the *Input Features*. Only those portions of the *Input Features* falling outside the *Erase Features*' outside boundaries are copied to the output *Feature Class*. By switching the *erase* and *input* layers, the expansion (Places where the SFHA widened) and contraction areas (Places where the SFHA Narrowed) remain visible. An *Identity* function was also performed on the preliminary data to add the FIRM\_PAN field to identify the panels to which the polygons pertain.

Using the SFHA that has changed, we selected the parcels affected by the new mapping and created an access database, which contains addresses of those affected. From the new database, the owners can be notified that the new mapping may affect their parcel or parcels.

Since not all communities have access to Geographic Information Management Programs to view the shapefiles produced, we generated Adobe PDF files that follow the preliminary FEMA panel scheme to show the results of the comparison between the preliminary data and the current digital data. The graphic shows an example of one of the PDF maps generated to show the areas where the SFHA widened and narrowed.

The shapefiles representing the change, the database of addresses affected, the PDF maps showing the areas of change to the SFHA, and the letter generated based on the database were provided to ten counties. The counties that were chosen were based on parcel data availability and were in the preliminary review phase of map modernization. The counties that received the map change notification data were Athens, Champaign, Clark, Clinton, Coshocton, Cuyahoga, Greene, Hamilton, Preble, and Ross. For the counties that were not done by ODNR, and are in preliminary map phase, please contact our office if you would like to discuss the methods used and data available from ODNR.

Preliminary Flood Hazard Maps vs. Effective Flood Hazard Maps



Example of an Outreach Map



## OFMA Update and Outlook

By Michael G. Milhalisin, CFM—OFMA Chair  
Chief Building Official, Geauga County Building Department

Last year, OFMA's Legislative and Policy Committee wrote two Congressional letters with regard to Floodplain Management. The first one was submitted by OFMA to the Ohio Congressional Delegation regarding project specific earmarks in competitive grant programs like Pre-Disaster Mitigation (PDM). The second letter to the Ohio Congressional Delegation was submitted in April by OFMA to oppose the addition of "Wind Coverage" to an NFIP policy.

Thanks to Alicia Silverio and her Conference Committee, along with the rest of OFMA membership, our 2008 annual conference was very well received including an impressive field trip of the Franklinton Floodwall. OFMA offered four regional CFM tests last year. Ohio had 63 CFMs throughout the state as of January 2009. Hopefully, we will continue our growth in both OFMA membership and CFMs. We have also been working with the Ohio Building Officials Association to finalize some outstanding issues with regard to the "Disaster Response Teams."



2008 is now thankfully behind us. 2009 has been even more challenging for both State and local governments. We are all faced with doing more with less help and relying on dwindling budgets. To give you an example, just look at ODNR! Not too long ago they had a staff of twelve to administer the State's floodplain regulations and help all the floodplain administrators throughout the State. The staff is now down to seven but they are expected to accomplish the same assigned tasks and still look for more ways to cut their budget. This is also a challenging year for OFMA. OFMA Board Meetings are held at ODNR on the third Wednesday of the odd number months. The meetings begin at 0930. The OFMA Board held our first meeting of the new year (the annual strategic planning meeting) on January 21, 2009 to set the priorities and projects for the coming year. Some of the issues OFMA is working on this year are: stormwater regulations and how they affect floodplain management; improving services for members; and continuing to improve disaster response capability concerning floodplain management. The board is looking at possibly providing a stormwater track at an annual conference to increase awareness of stormwater's affect on flooding and floodplain management.

Updating the OFMA website is another priority for this year. This will allow OFMA to provide valuable floodplain information and resources to the FPM membership. Work continues to be done to establish a network of Floodplain Managers, which in the event of a disaster could be formed into "Regional Response Teams" to assist the otherwise overwhelming job of post-disaster recovery floodplain permitting

On the national level, the ASFPM conference was held in Orlando, Florida the week of June 7-12, 2009 with an emphasis on examples of *Low Impact Developments*. And, one of our own, Kimberly Bitters, of ODNR, addressed the plenary session concerning *No Adverse Impact*. Congratulations Kimberly!

Closer to home, our 2009 Statewide Floodplain Conference was a great success! Again, thanks to Alicia, the committee and all of you. Speaking of conferences, the 2010 Annual Statewide Floodplain Management Conference is now being planned. Anyone interested in assisting should contact Alicia Silverio, Conference Committee Chair at 614-265-1006 or [Alicia.Silverio@dnr.state.oh.us](mailto:Alicia.Silverio@dnr.state.oh.us).

The OFMA Awards and Scholarship Committee solicits nominations throughout the year to identify extraordinary individuals and programs for their professionalism, enthusiasm, and support of floodplain management. If you know an individual or a program that you feel deserves nominating, please act now! The Committee appreciates your help in identifying those deserving of the recognition.

Last but not least, the OFMA leadership recognizes that we must increase and maintain our OFMA membership in these troubling times. If you have questions or ideas regarding FPM in Ohio, please contact any Board member. Contact information for your 2009 Board is at [www.ofma.org](http://www.ofma.org). Membership input is very important to the success of the OFMA organization. We look forward to hearing from you!



## Local Role in Long Term Sustainability

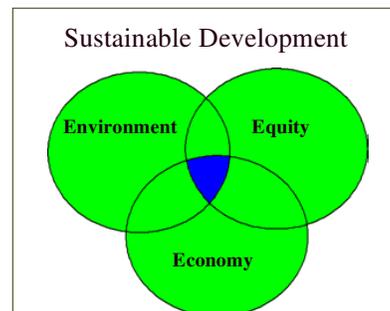
By Kimberly Bitters, CFM—Environmental Specialist  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

*(This article is adapted from a presentation given by Kimberly Bitters at the Association of State Floodplain Managers 2009 Annual Conference entitled “The Local Role in Long-term Sustainability.”)*

Many communities across the United States are continuously challenged with balancing shrinking budgets and satisfying increasing public needs. Addressing the public’s conflicting expectations of expanding infrastructure and services against balancing the local budget is making it difficult to address the problems facing our nation. It is painfully clear that local communities are in a tough spot trying to meet these conflicting needs! Worse, local officials exhaust valuable time and resources contending with crises such as recovering from a natural disaster. No doubt, there are solutions available, but will local officials have the knowledge and resources to implement them? Every one of these problems, and their potential solutions, further demands government intervention without additional taxes. Unfortunately, the reality of this ugly situation is that current development patterns continue to worsen these problems but the solution lies in our overextended local governments making the change. It is our local governments that have the potential to address these challenges.

Activities may look different around the country, but the goals of local government are generally the same: to protect the health and safety of residents and organize resource use in a way that protects the long-term viability of the community. Many argue that to accomplish these goals, government activities must learn from past mistakes and be altered to more equitably and efficiently use the resources available. In order to provide for the success, opportunity, and prosperity of future generations we must actively pursue sustainable development patterns. This involves recognizing that all development is not good development if it means robbing future generations to pay for today’s needs.

Most of us have heard the broad definition of Sustainable Development provided by the World Commission on Environment and Development from 1987: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. A particularly good depiction is three overlapping circles because it visualizes the idea that in the long-term equity, environment, and economy have equal value. This conceptual framework assumes that we have the ability to make decisions that will influence where in the system our community will exist. Depending on the values of our vocal constituents, one or the other may be more loudly grabbing our attention; but, they all deserve equal consideration. Unfortunately, those citizens who most need our attention don’t always have the forum, resources, or education to ask for it. Even so, it is in the best interests of the long-term viability of our communities to give all three equal consideration in allocating our resources. The question then becomes “How do we put our activities and influences into that relatively small piece of the pie that meets all three competing needs?”



As a result, our attention shifts to the question of which problems deserve local attention and effort to achieve sustainability? There are many problems that local governments are trying desperately to address: natural hazards, affordable housing, education, transportation, crime... And since we’re all here this week to consider flooding and associated risks I’m going to assume that we’re all on-board with the idea that flooding should be one of those subjects. However, in case there are skeptics among us let’s consider the details of flood risk with respect to sustainability as they relate to each of the three competing needs individually.

### Non-Sustainable Flood Impacts: Environment

When development is completed in a non-sustainable manner, the natural functions of the floodplain resource are lost. Environmental impacts that result from simply removing vegetation from riparian and coastal corridors to make way for structures and their associated fill, waste disposal systems, and material storage include loss of flood storage capacity, habitat, absorption/diversion of runoff, and the natural water filtration function of vegetated corridors. Of course, the associated problems include increased nutrient and chemical loads from runoff, bank de-stabilization, and direct contamination from leaking septic systems or toxic material storage.

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Unfortunately, the environmental impacts of non-sustainable development patterns are not contained to activities immediately adjacent to the water source. Development throughout the watershed can increase stormwater runoff, which increases the frequency, depth, as well as the area impacted by flood events. Of course, water quality is also impacted by land uses throughout the watershed.

### **Non-Sustainable Flood Impacts: Economics**

The primary argument against more restrictive development regulations is the potential for a negative effect on economic development. However, non-sustainable development measurably increases both public and private expenses in both disaster response and recovery. When considering the costs and benefits of such regulations, the potential loss of tax base, business continuity, and the long-term sustainability gained should be considered. Most restrictions on development limit, but do not prohibit, development. Therefore, the impact should not be considered to significantly reduce land values. Further, adverse impacts to neighbors and the community, as well as avoided damages from increased flood stages, should also be considered. It is important to remember that regulations are only part of the location equation. Local governments have the ability to further stimulate growth with economic incentives, training programs for the labor force, and various community amenities.

Many communities are struggling to keep up with maintenance of roads and bridges, not to mention the demand for expansion. Non-sustainable development is at the root of this problem in too many cases. When culverts and bridges need to be replaced within five or ten years of installation there is a serious problem. This important infrastructure is being overtaxed and required to carry loads that they were not designed for because of ineffective or nonexistent utility plans. The burden of replacing overtaxed or destroyed infrastructure due to non-sustainable development patterns can and should be avoided. As private flood damages increase, the public impacts are felt as well. Blighted neighborhoods, as a direct result of flooding or through deferred maintenance, can in themselves further discourage growth in other areas of the community. More indirect effects of flooding are seen through abandoned homes and businesses shrinking the tax base. In addition, public liability for not protecting the public health and safety has become more and more common.

### **Non-Sustainable Flood Impacts: Equity**

We often leave out the equity aspect of development impacts. That is because the social aspect is the mushy, difficult to define or predict part of the community. However, our communities are made up of more than just hard infrastructure. Those people who depend on the built environment and their quality of life has a huge influence on that environment. Our community's success is directly affected by the lowest common denominator – no amount of gates or additional police can obscure the community-wide impacts of poverty and blight. Frequently, the very citizens who are the most impacted by risk, those with the least resources available to recover, are the most likely to feel the impact of non-sustainable development. Even if the humanitarian concern isn't motivation to consider social equity, the impact on our communities' long-term success should mandate it's consideration.

Amplified environmental impacts on low-income areas can be a result of the population's lack of resources to represent their own interests. In floodplain management this can occur through inequitable redelineation of floodways (though the LOMC process) or loss of carrying capacity impacts downstream (as a result of filling, dredging, and stream modifications). As flood heights increase throughout the watershed, the impact to these areas increase and quality of life is further deteriorated in our poorest areas. When we allow impacts to be shifted to those less fortunate populations by those with more resources we are inevitably hurting the community-at-large.

### **How do we avoid these impacts of non-sustainable growth?**

We need to convince our local officials that they have the power to shape development patterns, protect their long-term economic viability, improve citizens' quality of life, and that the extent of future flooding impacts are a direct result of the choices they make today. To that end, the following recommendations can assist efforts to move towards sustainability:

1. Define Development Strategy
2. Influence Private Investment
3. Identify and overcome challenges
4. Participate in watershed-level management
5. Incorporate innovative techniques

#### **1. Define Development Strategy**

Each community must define their vision for what they want their community to look like in the future. That vision can help to prioritize goals and lead to an action plan that will make their vision a reality. To do this, obstacles to

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healthy growth must be identified and mitigated. Natural hazards are one of the largest obstacles and lack of planning for such risk can mean the difference between life and death – both to individuals and the long-term economic health of a community. This is where the local planning process can assist. Through the planning process, citizens are educated on the actual risk, which is frequently very different than perceived risk, and then they are provided the opportunity to participate in determining how to best find a balance between land-use and risk reduction. Getting citizens personally connected to the resource and the planning process can be the very thing that gives local officials the political backing they need to make necessary changes to move towards sustainability. Also, the local planning process provides the opportunity to truly consider where flooding is preventing the community from achieving goals and what actions are needed to address those problems. For instance, does downtown revitalization seem impossible due to repeated flooding? Are storefronts vacant because small businesses closed after a flood? Are industrial parks undeveloped due to flood-damaged infrastructure? Targeted land preservation and development based on topographic characteristics and flood history can help by shifting resources towards sustainable investment and mitigation opportunities. These localized planning activities help to define a realistic development strategy uniquely tailored to each community's true risks and needs.

“Each locality controls the character of its disasters, forcing stakeholders to take responsibility for natural hazards and realize that decisions they make today will determine future losses.”

Dennis Mileti, *Disasters By Design*

## 2. Influence Private Investment

The direct actions of local government aren't enough to get the job done. Local governments can drastically influence the character and location of private investment in a variety of ways. It is crucial for different offices and even levels of government to communicate clearly so that the private sector is hearing a consistent message for development requirements and goals. That means that in addition to direct regulation and stated plans, consideration should be given to natural hazards when determining tax and subsidy structures. Incentives should be provided only for development located outside of high-risk areas and designed to abate all adverse impacts. Of particular importance is mandating risk-planning and mitigation actions into government-sponsored infrastructure development. Strategic placement of infrastructure outside of high-risk areas can protect public investment, avoid adverse impacts, and guide private investment to safer locations. The tremendous infrastructure budget of combined local governments can be focused to create communities with drastically reduced risk. The public and local decision makers should actively appreciate their power to alter current government spending practices. Such intentional investment can transform our floodplains into profitable amenities creating economic vitality and uplifting the quality of life. Aligning the many tools available for influencing private investment will help the local development strategy to succeed.

## 3. Identify and Overcome Challenges

Creating a cohesive, useable strategy to move towards sustainability will require identifying challenges and implementing a plan to overcome them. Public skepticism of the actual risk stems from vague information that has not been well disseminated. To combat these problems we need a more specifically defined vulnerability analysis. Public understanding of the details of risk including exactly who and what is vulnerable helps build support. Commonly overlooked assets put at risk by increasing flood heights include historic and cultural resources. Also, flood damage can hinder economic growth through blight and the trickle-down effects of poverty. So we need to consider the potential resources that can be uncovered through corrective actions. Vocal constituents and short-term needs often override sound development choices. The short-term gain vs. long-term costs need to be considered. In some cases, short-term needs have to take priority, but having a comprehensive development strategy can bring attention back to the long-term goal of sustainability. ASFPM's *No Adverse Impact* philosophy recommends building risk identification and mitigation into a variety of community activities. Too frequently, local officials are faced with the difficult situation of hearing only the developer's opinion when reviewing and approving projects. Identifying all of the potential impacts for projects gives impacted property owners the chance to speak up during development hearings and voice both sides of the issue before the project has been approved. Through these actions, public support for solid development choices can move us toward sustainability.

## 4. Participate in Watershed-level Management

Support for local efforts in sustainability can be found through watershed-level management. Because impacts from each community's decisions are going to be felt by the entire watershed, it is in the best interest of every-

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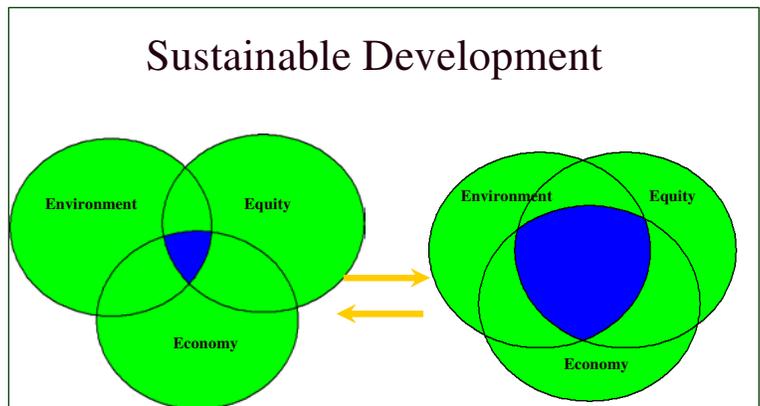
one to cooperate in finding holistic solutions. This means working together to identify root problems and creating solutions that will measurably reduce impacts. Watershed-level management can also help to reduce the strains of regional competition through alignment of policies and incentives. All too frequently, local decision makers are told by potential investors that relaxing development restrictions will encourage further development. What they're really saying is, "if you make us comply with all these regulations, we're going to go to your neighboring town because they will give us a deal." Stirring up competition between communities has proven successful because we've let it be successful. Watershed-level management can bring a united front dedicated to dealing with these problems by everyone who is impacted by them. By combining resources and reducing political fragmentation many challenges to sustainability can be overcome.

### 5. Incorporate Innovative Techniques

Local communities have a tremendous opportunity to improve their future through the numerous innovative techniques that are currently evolving. Sustainability doesn't mean slowing or prohibiting growth. It means taking advantage of opportunities to design our built environment in a lasting positive way. It also means the review process is applied fairly and consistently so that restrictions are predictable. Integrated stormwater, subdivision, zoning, and building codes that regulate based on factual representations of risk are a must. More restrictive standards cannot be adopted without clear direction from stakeholders based on good science. As the title of our conference says "Green Works" and green infrastructure is one of the most effective and cheapest long-term solutions available. The local toolbox for acquiring riparian and coastal buffers is continually expanding. Options such as transfer of development rights, purchase of development rights, easements, Planned Unit Developments, no build zones, and other techniques are numerous. Whether in the arid regions, where water is a commodity, or in the eastern US, trying to deal with stormwater as if it were a waste product; numerous best management practices and low impact development techniques are available to assist in dealing with stormwater issues. Taking advantage of these innovative techniques can boost local sustainability and promote continued improvements in these fields.

### Conclusion

Let's consider the overlapping circle analogy in more depth. At first glance, this concept might appear to assert that the area of overlapping circles will remain small as it is in the first picture. But, I like to think that we have some control over the location of the circles. And that there are a variety of activities that we can engage in to support local governments in making the target bigger as we move into the future. Many of the activities that we have discussed today set the stage for growing in a way that meets the needs of future generations. Activities such as defining a uniquely tailored development strategy, taking advantage of multiple tools to influence private investment, creating a plan to overcome challenges, participating in collaborative watershed-level management efforts, and setting precedents for incorporating innovative techniques will make it easier. Of course, it's never that simple because we effectively have a moving target with climate change, dynamic natural systems, and evolving community needs. To help with that, there are numerous resources available to help local communities adapt and create programs that meet their unique needs for a sustainable future.



ASFPM's **NAI Toolkit** has a tremendous amount of information on options for local communities to pursue sustainability. EPA's guidance **Protecting Water Resources with Smart Growth** is another wonderful resource that I regularly recommend to local communities. The Center for Watershed Protection's publication, **Managing Stormwater in Your Community** has some great information as well.

Because land use decisions are made locally, accountability can be supported by state and federal programs but cannot replace the local effort. Accountability for development decisions would include identifying and mitigating watershed-wide and cumulative project impacts. The significant investment required to measure impacts on this scale can be reasonably supported to protect everyone's property rights including those up/downstream. To accomplish the difficult task of pursuing sustainability, local officials have to take a great deal of initiative in leading the way. Educating the public, facilitating citizen involvement, forging partnerships, seeking out funding sources – all of this will be necessary to challenge the *status quo* and find a balance between fiercely competing needs.

## Duties and Responsibilities of the Floodplain Administrator

By Matt Leshner, CFM—Environmental Specialist

ODNR, Division of Soil and Water Resources—Floodplain Management Program

Every once in a while I'll get a phone call from a floodplain administrator and they ask, "What am I supposed to do for this type of development?". I figured it would be a good idea to review some of the duties and responsibilities of the floodplain administrator. Section 3.2 of the 2006 model regulations lists the following nine items:

- A. Evaluate applications for permits to develop in special flood hazard areas.
- B. Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.
- C. Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met, or refuse to issue the same in the event of noncompliance.
- D. Inspect buildings and lands to determine whether any violations of these regulations have been committed.
- E. Make and permanently keep all records for public inspection necessary for the administration of these regulations including Flood Insurance Rate Maps, Letters of Map Amendment and Revision, records of issuance and denial of permits to develop in special flood hazard areas, determinations of whether development is in or out of special flood hazard areas for the purpose of issuing floodplain development permits, elevation certificates, variances, and records of enforcement actions taken for violations of these regulations.
- F. Enforce the provisions of these regulations.
- G. Provide information, testimony, or other evidence as needed during variance hearings.
- H. Coordinate map maintenance activities and FEMA follow-up.
- I. Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas identified by FEMA, must meet the development standards of these regulations.

The overall responsibility of the floodplain administrator is to implement and enforce the local floodplain development regulations. This responsibility typically starts with informing the citizens of the necessity to obtain the proper permits for development in the floodplains. All development as defined in the floodplain regulations must be evaluated for compliance. Just as a reminder, that definition is "Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials." In other words, development includes buildings, utilities, filling/grading, and any changes to the watercourse itself such as erosion control or bank stabilization.

Once it has been determined that the project is located within the regulatory floodplain and that the activity falls within our definition of "development" an application for floodplain development permit should be submitted by the applicant and reviewed by the Floodplain Administrator. As a local floodplain administrator, you then review the proposed development to make sure it meets the local regulations, identify what type of information FEMA has provided for this particular flood zone (*i.e.*, Zone A, AE, AO, *etc.*), find the base flood elevation from the FIRM or another source, and determine the specific requirements for both the structural and non-structural aspects of the project. If the necessary provisions are met, based on floodplain regulations, then the permit to develop can be issued. If the proposed development will be noncompliant, then the application for permit is returned to the applicant with specific items to be altered or added prior to the next submission.

During construction, it is a good idea to perform periodic site inspections to confirm that the development is being constructed as noted on the application and site plans. If there are discrepancies with the original site design from the permit application, it is easier to fix the problems during construction instead of after the project is complete. Once the project is complete, make sure to keep all records necessary to confirm compliance with the regulations including: Flood Insurance Rate Maps (FIRMs), Letters of Map Change (LOMCs), record of issuance (or denial) of permits, post-construction elevation certificates, floodproofing certificates, engineering analyses, variances, and records of enforcement for violations of the community floodplain regulations.

When periodically updating FIRMs, FEMA seeks out local data and input to improve the maps. You should regularly document areas of concern within your community that experience flooding not identified on the

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Flood Insurance Rate Maps and where real world conditions portray something different than what the maps show.

Another duty that many floodplain administrators are not familiar with is the substantial damage determination. Substantial damage determinations are conducted following a disaster, whether from a flood, tornado, fire, earthquake, *etc.* All affected Pre-FIRM structures are evaluated to determine if the cost to repair is 50% or more of its market value. If so, the structure must be brought into compliance with the community's Post-FIRM floodplain regulatory standards.

Of all the tasks of the floodplain administrator, many may be done on a daily basis while some on only rare events. However, all these tasks are important to keep the community better prepared and safer for when the next disaster occurs.



## Thirty Years of Dedication

By Christopher Thoms, CFM—Program Manager  
ODNR, Division of Soil and Water Resources—Floodplain Management Program

One of the obvious and nearly universal effects of severe weather is that people are upset when severe weather harms them or their neighbors. When these people see officials and recovery-professionals, they may vent their anger on them—understandably. So, when a resident of a flooded neighborhood we were inspecting came running at us, we braced for the expected onslaught. Instead, he greeted us with a big smile and proclaimed himself a convert. This enthusiastic response was even more unusual when he explained that, prior to this latest flood, he had ignored advice by his local officials and our staff to observe local flood damage reduction regulations. Instead he placed his manufactured home close to a large river, without properly incorporating the required flood safety standards. His “conversion” resulted only after the flood tore away the entire side of his home facing the river. He was now telling everyone he met to, *listen to those floodplain guys!* Though glad of his help, it came at a high price.

While it is unacceptable to wait until catastrophic loss makes everyone a convert, a perpetual challenge is to effectively communicate our message to the wider population. The public depends on us to identify and publicize real risks and realistic defense strategies. It is not sufficient that we are accurate in what we know if we are ineffective in communicating it. The good news is that there is a group in Ohio whose focus is to effectively get the word out. They deserve our support.

Thirty years ago, a group of dedicated professionals started a cooperative effort to accomplish this goal when they formed the Ohio Committee for Severe Weather Awareness. The Committee now consists of representatives from the American Red Cross; Emergency Management Association of Ohio; National Weather Service; Ohio Insurance Institute; Ohio News Network; State Fire Marshal's office; and the Ohio Departments of Aging, Education, Health, Insurance, Natural Resources, and Public Safety. Using two annual Severe Weather Awareness Week campaigns, the student poster contest, press releases, and a website: [www.weathersafety.ohio.gov/](http://www.weathersafety.ohio.gov/), the Committee provides critical severe weather awareness information to the entire state. This past spring's campaign (March 22-28) featured the theme, **Stay Safe and Sound. Don't Drown** based on last year's winner of the *Severe Weather Poster Contest*, Miss Ivy Nguyen's poster (see *The Antediluvian* Volume XV Issue 2 p. 12). This winter's campaign will be November 15-21.



On a personal note, Matthew Leshner will be replacing me as ODNR's representative on the Committee. For more than 15 years, I have been honored and privileged to serve on the Committee. They are an exceptional group of people who I will continue to support and to look to for excellent, innovative, and effective severe weather awareness information. I encourage you to do the same.



## New Levee Outreach Toolkit

By FloodSmart Team

[www.floodsmart.gov](http://www.floodsmart.gov)

Levees are built to provide a specific level of flood protection. However, recent events have shown how storms can bring floodwaters that exceed that level, causing levees to overtop or fail. The flood losses that occur due to a levee failure can be devastating and have even a greater impact on home and business owners who do not carry flood insurance. It is important for residents living and working near levees to know about their flood risk and their insurance choices.

The National Flood Insurance Program (NFIP) and FloodSmart have recently created a new *Levee Outreach Toolkit* that contains materials developed specifically for outreach in communities with levees. The materials in this toolkit provide various audiences, including floodplain managers, with templated, flexible materials to adapt and use in addressing flood risks behind levees and the flood insurance implications of levee status changes, as well as flood risk zones and Special Flood Hazard Areas that are being remapped or revised.

### Communication Tips for a Successful Process

The following tips will help ensure that the overall approach to conducting community outreach is on target. Keep these tips in mind to make communications around levee and map changes in your area a smooth - and successful - process.

- **Start early.** Getting started on outreach efforts as early as possible will allow you to identify and address key issues and obstacles and secure the broad-based support needed prior to the rollout of new maps.
- **The media will tell the tale - engage them.** Local and regional media outlets have an interest in this issue and will want to know how map and levee changes affect the average citizen. Providing the press with access to good information in advance of the release of new maps will help ensure that they have a solid understanding of the process.
- **Reach out to representatives from affected industries.** Representatives of the insurance, realty and lending industries will all be affected by the changes that new maps bring. Keeping them updated about developments in the map change and levee review process, getting their feedback on outreach materials and using them to disseminate information to their colleagues are key to a successful communications effort.
- **Residents and business owners need clear messages about flood risks - as well as cost-saving options for protection.** Providing the public with messages and materials that stress both risks and available cost-saving flood insurance options can make the need or requirement for flood insurance more palatable.
- **Make sure you communicate often with all audiences.** Open, transparent and repeated communication goes a long way to building consensus and garnering buy-in in your community. Holding open houses or town hall meetings gives residents and business owners an opportunity to raise issues and concerns in a friendly, educational setting.

**Get key decision makers on board.** Local elected officials and county board members will ultimately be responsible for adopting ordinances that make new flood maps official and effective throughout the area. If the area around the levees is going through a map change, make sure key officials clearly understand the map change process, insurance implications and overall project benefits.

Please email us at [info@femafloodsmart.gov](mailto:info@femafloodsmart.gov) to request a copy of the Levee Outreach Toolkit. Please continue to visit FEMA.gov and FloodSmart.gov for information about map changes, levee status changes and flood insurance.



**FloodSmart.gov**  
The official site of the NFIP



## New Alliance Announces Flood Awareness Campaign: Ohio Department of Insurance and Ohio EMA Form Partnership with FLASH

(From FLASH news release dated September 14, 2009)

The Ohio Department of Insurance, the Ohio Emergency Management Agency and the Federal Alliance for Safe Homes, Inc. - FLASH, announced on September 14 a partnership to offer disaster safety and prevention information to Ohioans. The partnership was formalized at a signing ceremony at Ohio EMA on the one-year anniversary of the Hurricane Ike windstorm.

*This partnership will help families understand that luck is not their best option for confronting hazards like flooding, the nation's most common and costly natural disaster, said Leslie Chapman-Henderson, president and chief executive officer of FLASH. Affordable home protection options exist and flood insurance is one of the best ways to protect against financial ruin.*



Nancy Dragani, Mary Jo Hudson, and Leslie Chapman-Henderson sign Memorandums of Understanding.

*The Department of Insurance is honored to work with these two fine organizations to help keep Ohioans safe, said Mary Jo Hudson, director of ODI. Through our combined efforts, we will be able to reach people all across Ohio and get them the information they need to protect their families and homes.*

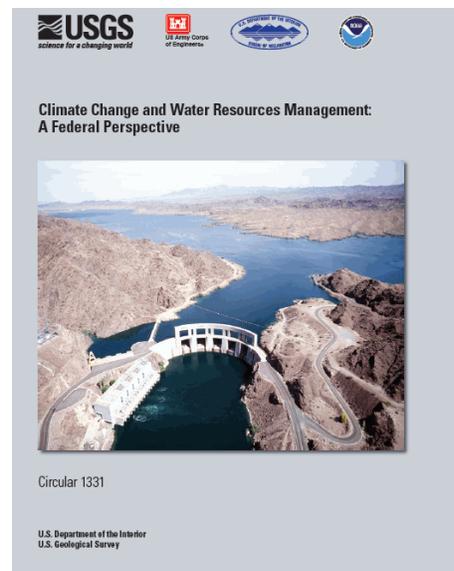
*Ohio EMA works with a variety of great agencies - all with strong missions, said Nancy Dragani, executive director of Ohio EMA. But it's partnerships like this one that allow our individual missions to reach farther and wider and ultimately make more of an impact on Ohioans.*

The newly formed alliance also announced a flood awareness campaign that provides Ohioans advice on safety and protection for themselves and their property, and information on purchasing flood insurance.

Visit the agencies' Web sites for informative safety information: [www.flash.org](http://www.flash.org), [www.ema.ohio.gov](http://www.ema.ohio.gov) and [www.insurance.ohio.gov](http://www.insurance.ohio.gov).



Recently, a publication entitled, ***Climate Change and Water Resources Management: A Federal Perspective*** was published as a joint effort of the United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), and the National Oceanic and Atmospheric Administration (NOAA). Circular 1331, as it is also referred to, discusses the many challenges facing today's "water managers." In addition, it addresses many aspects associated with the anticipated affects of climate change including decision-making and adaptation implications. ODNR highly recommends taking a look at this publication, which provides a glimpse into our federal government's recommendation for dealing with this important issue. The document can be found at the following website: <http://pubs.usgs.gov/circ/1331/>.



# ***The Antediluvian*** .....

## ***Ohio's Floodplain Management Newsletter***

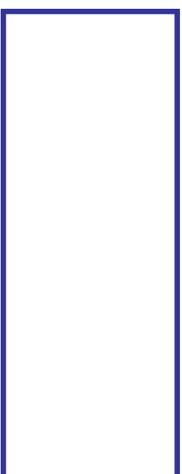


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Kimberly M. Biters, Editor.

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