

# Flood News for Michigan Floodplain Managers

A Newsletter of the  
Land and Water Management Division  
Michigan Department of Environmental Quality  
www.michigan.gov/deq

Steven E. Chester, Director

Jennifer M. Granholm, Governor

2009 1<sup>st</sup> Edition

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## 2010 MSFA Scholarship Application Period Notice

The Board of Directors for the Michigan Stormwater-Floodplain Association recently approved an open application period for academic scholarships. Students must be juniors or higher class levels and enrolled in engineering or related programs where studies and planned career paths are oriented to floodplain-stormwater management. The scholarship application and instructions are available on the MSFA website of <http://mi.floods.org>. The application submittal deadline is November 2, 2009.

## NFIP Basic Agent Tutorial Online Training and Online Registration for Instructor-Led Workshops

FEMA is happy to announce the availability of the NFIP Basic Agent Tutorial online training. Insurance agents can now access this course from the NFIP training webpage <http://www.nfipbureau.fema.gov/training/index.html>.

Registration instructions are also provided on the training website. Enhancements to the training system include user-friendly navigation and a personal page allowing students to track their training progress. The NFIP Basic Agent Tutorial

qualifies for continuing education credits in most states. A listing of training requirements by State is located at: [http://www.fema.gov/business/nfip/state\\_actions.sh](http://www.fema.gov/business/nfip/state_actions.sh) tm.

On the NFIP training webpage, insurance agents, lenders, and claims adjusters can find a schedule of instructor-led workshops offered in locations across the country. Online registration is available through the training webpage.



## An August 25, 2008 open letter to all Americans from the Federal Insurance Administrator

Mr. David I. Maurstad  
National Flood Insurance Program  
Mitigation Directorate, Federal Emergency Management Agency  
Department of Homeland Security  
Washington, D.C.

### Protecting Our Homes and Businesses Against Flooding is Critical

Again this year, thousands of people have experienced the terrible consequences of flooding. Those in the Midwest and the South have been hit particularly hard recently. Some have suffered the total loss of their homes to floodwaters. Others are still dealing with the difficult and costly work of making their homes livable again. Time and time again, we see too many Americans shoulder these burdens without the cushion of flood insurance. And when the next flood strikes, many others could find themselves in the same position. It does not have to be this way. As Federal Insurance Administrator, I want you to know that you have options for protecting your home and business against flooding. The best way to decrease financial burdens from flood losses is with flood insurance. Flood insurance is available for most homeowners, renters, and businesses, covering buildings and their contents. Please, take a moment now to consider the facts about flood risks and insurance.

1. Homeowners insurance does not cover flooding. A separate flood insurance policy is typically the only way to protect against flood losses.

2. In high-risk areas\*, there's a reason why flood insurance is required. By law, most mortgage lenders require flood insurance in these areas because there is a significant risk that you will be flooded. Even if your mortgage is paid off and flood insurance is no longer required by your lender, you can still purchase flood insurance.

\*For insurance purposes, a high-risk area is defined as an area with at least a one-in-100, or 1 percent, chance of being flooded in any given year. If your community participates in the National Flood Insurance Program (most do), the entire community is eligible to purchase flood insurance, inside and outside of high-risk areas. Underwriting restrictions apply in certain limited circumstances.

3. Flood insurance is also available if you live outside a high-risk area, and at lower cost. Floods occur in lower-risk areas, too. A quarter of all flood insurance claims come from lower-risk areas where flood insurance is not required. "Not required" doesn't mean "not needed." Flood insurance is a good idea whether or not a lender requests it.

4. If you live near a levee, you can, and should, purchase flood insurance. Many levees and flood control structures were resilient during recent floods. But levees can fail or overtop, and, as we've seen, with disastrous consequences.

5. Flood insurance can be purchased through most leading insurance companies. Rates are federally set and will not differ from company to company. For more information or help in finding an agent near you, please visit the National Flood Insurance Program (NFIP) website, [www.FloodSmart.gov](http://www.FloodSmart.gov).

The fact is, floods do not have to be a financial disaster. We don't know when the next flood will occur. But they have happened recently – and they will happen again. Taking steps now to cover your building and contents with flood insurance can make a world of difference for your property, your savings, and your future.

Please consider the risk. Consider the consequences. Talk with your insurance agent. Make the choice to protect your greatest investment. For more information about flood insurance, call 888-724-6973.

There is a new FEMA Floodplain Management Bulletin on how FEMA treats historic structures. This new Bulletin is available on FEMA's web site at: <http://www.fema.gov/library/viewRecord.do?id=3282> <http://www.fema.gov/library/viewRecord.do?id=3282>. Copies of the Bulletin are now available in the FEMA Distribution Center. The publication number is FEMA P-467-2.



## **Flooding Once in a Hundred Years? Don't Bet the Farm on It!**

*By Linda Burke, MDEQ, Hydrologic Studies Unit*

"The good news is that this has been reported to be a hundred-year flood, so we should be safe from flooding for quite some time." A local TV newscaster actually made this comment following the weather report regarding the September 13, 2008 storms in mid-Michigan. The term "100-year flood" is widely misunderstood by professionals and lay people alike. While an on-air comment like this may sound relatively harmless, it demonstrates, and actually promotes, the common misperception

that flood events come and go with the regularity of trains leaving a station. All aboard!

This public misperception can have devastating consequences. After historic flooding along the Mississippi River in 1993, some farmers reportedly canceled their flood insurance policies, thinking they would be safe from flooding for another 99 years. Of course, this left them uninsured for the only slightly smaller flood that occurred in June

2008, with no way to recuperate their catastrophic losses.

So what exactly is a “100-year flood”? Just like betting the ponies or playing the lottery, describing flood events is all about odds (or probability). What we call the “100-year flood” is a flood so large that has only a 1-in-100 chance of happening in any year. Because of the public misperception and misuse of the term “100 year flood”, floodplain management professionals may use the term “1 percent chance flood” to more accurately describe this event. For clarification, the event is commonly described as “the 100-year flood (the flood with a 1 percent chance of occurring in any year)”. (The same holds true for the “100-year storm”.)

Think about flipping a coin. The probability is 50 percent that a coin will come up “heads”, so we could call this the “50-percent chance result”. (In common terminology, we would call this the “2-flip result”, implying that the coin would come up heads every 2<sup>nd</sup> flip.) Even though the odds say the coin will come up heads half the time, everyone knows you can flip a coin three times and have it come up heads all three times. And when you flip the coin the fourth time, what are the odds it will come up heads? Still 50 percent – the coin still has two sides and can land on either one.

As floodplain managers, we have a duty to promote a better understanding that a significant flood event can occur in any year, in back-to-back years, even several years in a row. It’s all a matter of probability.

<b>Talk the Talk – Update your Terms</b>		
<b>Common Terminology</b>	<b>Odds of Occurring in Any Year</b>	<b>More Accurate Terminology</b>
10-year flood	1 in 10	10-percent chance flood
50-year flood	1 in 50	2-percent chance flood
100-year flood	1 in 100	1-percent chance flood
500-year flood	1 in 500	0.2-percent chance flood

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## **Michigan Committee for Severe Weather Awareness 2009 Poster Contest Winners**

One of the most successful activities of the MCSWA committee is its poster contest for severe weather awareness. This contest is open to any Michigan student enrolled in fourth or fifth grade. We received over 667 entries for the 2009 contest. The artwork portrayed below is from this year's contest winners.

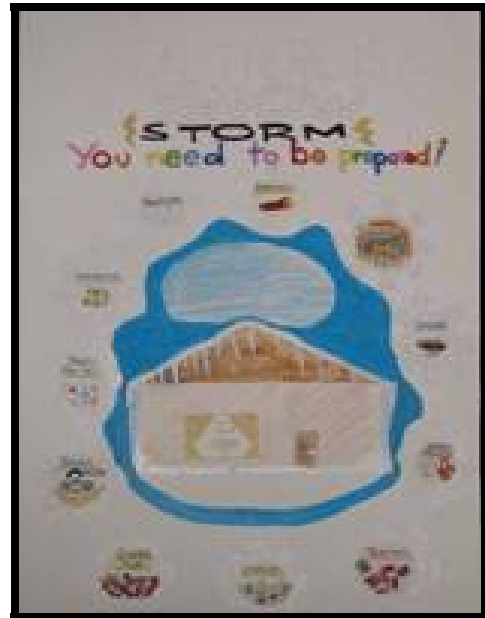
The committee is grateful for the continued support it receives from its member organizations, especially for the generous contributions of State Farm Insurance in supporting the development of this Severe Weather Awareness Week poster campaign. Their partnership and participation on the committee contribute significantly to accomplishing the committee's goal of increasing the public's awareness of severe weather.

Because of the committee's efforts in developing the severe weather poster contest and several hazard awareness campaigns to inform Michigan residents of the importance of being prepared for severe weather, the Michigan Committee for Severe Weather Awareness received the National Weather Association's Public Education Award for the year 2000. The NWA Public Education Award is presented annually to an individual, group, or organization providing significant contributions to increase the public's weather awareness.

Additional information and posters from past winners can be found at the [Michigan State Police](#) web site.



1st Place  
 School: Smalley Home School  
 Brownstown, MI



2nd Place  
 School: McGregor Elementary  
 Rochester Hills, MI



3rd Place  
 School: Madison Academy  
 Flint, MI



4th Place  
 School: Charlevoix Elementary  
 Charlevoix, MI

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## FEMA's Elevation Certificate (FEMA Form 81-31) and the Floodproofing Certificate (FEMA Form 81-65) Approved

The new expiration date for both forms is March 31, 2012. FEMA will permit a "phase-in" of the revised Elevation Certificate on a voluntary basis. During a 12-month transition period, beginning April 1, 2009, FEMA will accept either the new form or the old form. For more information and copies of the form, go to [http://www.floods.org/PDF/Committees/Insurance/EC\\_and\\_Floodproofing\\_Bulletin\\_04-09.pdf](http://www.floods.org/PDF/Committees/Insurance/EC_and_Floodproofing_Bulletin_04-09.pdf)

FEMA also announced changes to the National Flood Insurance Program (NFIP) affecting insurance effective October 1, 2009. A quick summary of the major changes for October 1, 2009 are:

- \* The basic limit is being increased.
- \* Premiums are being increased.
  - V Zones up to the 10% maximum
  - A Zones up to the 10% maximum except for AH and AO zones
  - X Zones up 8%
- \* Minimum deductibles are increasing. There will no longer be a \$500 deductible. Pre-FIRM standard deductibles will be \$2,000. Post-FIRM deductible will be \$1,000.
- \* A new Risk Rating Method for Leased Federal Properties has been developed.

For more information and the changes, go to

[http://www.floods.org/PDF/Committees/Insurance/October %2009 Program Change Bulletin 04-09.pdf](http://www.floods.org/PDF/Committees/Insurance/October_%2009_Program_Change_Bulletin_04-09.pdf)

### Paper to Digital Transition

Beginning on or after October 1, 2009, FEMA will provide a single paper flood map and Flood Insurance Study (FIS) to each mapped community. FEMA will convert all other distribution of maps and FIS reports for digital delivery. FEMA will continue to provide free digital map products and data to Federal, State, Tribal, and local NFIP stakeholders. FEMA announced this change in the [Federal Register](#) (PDF, 43KB), Vol. 23, No. 76, issued on October 23, 2008. Read more about the [digital transition](#).

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## Are You Ready? Paper to Digital October 1, 2009

Source: FEMA

Since the 1970s, the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP) has provided flood hazard maps and reports to help more than 20,000 participating communities manage and reduce risks. FEMA currently distributes both paper and digital flood hazard maps and reports.

Beginning on October 1, 2009, customers may order only digital flood hazard maps and reports. FEMA's Map Service Center (MSC) will not produce or distribute paper Flood Insurance Rate Maps (FIRMs), Flood Hazard Boundary Maps (FHBM), or Flood Insurance Study (FIS) reports

on or after this date, other than a single paper copy provided to communities when their maps are updated. Users of paper maps should start planning to make a transition to digital flood hazard maps and reports now.

**If you use paper maps now, FIRM scans and FIRMettes are the simplest way to use digital maps.** The simplest digital maps to use are digital pictures of FEMA's paper maps. FEMA's entire map inventory, both current and historical maps, is available. A FIRM Scan is a picture of a whole map. FIRM Scans are available by download and on CDs and DVDs. Because a FIRM Scan is a

picture of a whole map sheet, you need a specialized large-format printer to create a paper copy.

For those who print on smaller paper sizes, FEMA provides tools that allow users to create an individualized flood map called a "FIRMette." FIRMettes (see Figure 1) are portions of FIRM Scan images formatted to fit on printers commonly found in offices. You can make FIRMettes of any map in the FEMA inventory online using the FIRMette – Web tool. For those who prefer to work offline, FEMA also provides a FIRMette – Desktop tool that makes FIRMettes from FIRM Scan data that you have copied to your computer.

See the Map Service Center (MSC) web site at <http://msc.fema.gov> to access the FIRM Scan data, FIRMette tools, and related instructions.

As with paper flood hazard maps, remember to check for Letters of Map Change (LOMCs) that provide updates to the FIRM Scans and FIRMettes. These are listed in the MSC catalog for each FIRM Scan.

**FEMA publishes other digital maps that offer more flexibility and power.** In addition to FIRM Scans and FIRMettes, FEMA provides map data and tools with which users experienced with computer mapping systems can create custom maps or use with their own map data. These range from online map viewers that will be familiar to those who use

Internet mapping sites to data and services used with specialized Geographic Information System (GIS) software. These products provide flexibility and support sophisticated uses. Some contain updates from LOMCs. See the MSC web site at <http://msc.fema.gov> for more information.

**Digital maps and data can be used for official purposes.** FEMA's "Use of Digital Flood Hazard Data" policy establishes that paper and digital maps are equivalent and provides rules for using the maps and data. The policy and related information are available at <http://www.fema.gov/library/viewRecord.do?id=3235>. The policy implements section 107 of Public Law 108-264, 118 Stat. 724 (2004).

**FEMA will convert orders for paper products to the digital equivalent starting on October 1, 2009.** For MSC accounts that have orders for paper maps, FEMA will convert the orders to requests for the FIRM Scan products on CD. Orders for paper FIS reports will be filled with digital files. If you do not wish to receive digital products, please contact the MSC before October 1, 2009, at 1-800-358-9616.

Government organizations will continue to be exempt from fees for FEMA flood hazard products. If you have questions or comments about this change, please e-mail [FEMAMapSpecialist@mapmodteam.com](mailto:FEMAMapSpecialist@mapmodteam.com)

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## LFD Distribution Change

*By Kate Metzник*

As part of its Digital Vision initiative, FEMA set a goal of converting hard-copy flood hazard information to digital data. In keeping with this initiative, FEMA will discontinue mailing hard copies of the documents that are enclosed with Letters of Final Determination (LFDs) beginning January 1, 2009.

An LFD is a letter mailed to community officials to inform them that a new or updated FIRM will become effective in 6 months. Additionally, an LFD finalizes the Base Flood Elevations (BFEs) for the community. Upon receiving an LFD, a participating community must establish compliant floodplain management ordinances by the effective date of the new FIRM to remain in the NFIP.

Communities still will receive a hard copy of the LFD, but instead of receiving enclosures with the letter, FEMA will now make them available on FEMA's Web site at [www.floodmaps.fema.gov/lfd](http://www.floodmaps.fema.gov/lfd). The five enclosures to the LFD that will no longer be included with the letter include:

- Answers to Questions about the NFIP;

- Title 44 of the Code of Federal Regulations;
- “Frequently Asked Questions Regarding the Effect that Revised Flood Hazards Have on Existing Structures;”
- “Use of Flood Insurance Study (FIS) Data as Available Data;” and
- The Elevation Certificates necessary to ensure compliance with community floodplain ordinances.

FEMA mails LFDs to more than 2,000 communities per year at an average cost of \$30 per letter. Switching to digital enclosures will create a significant annual savings for FEMA. Moving to digital enclosures is a low-cost solution that is consistent with the goals of Digital Vision and accommodates the needs of individual communities.

Communities will still be able to request hard copies of enclosures through the FEMA Map Assistance Center at 1-877-FEMA MAP (1-877-336-2627). Additionally, a fact sheet describing the transition to digital LFD enclosures is available at [www.floodmaps.fema.gov/dfd](http://www.floodmaps.fema.gov/dfd).

### **Risk MAP (Mapping, Assessment, and Planning) Strategy**

Building upon the successes of [Map Mod](#), FEMA is developing a vision for flood hazard mapping efforts that will start in Fiscal Year 2009. The [Risk MAP \(Mapping, Assessment, and Planning\) Strategy](#) will enable FEMA to improve, maintain, and expand the flood hazard identification while leveraging more benefits and community action from updated NFIP maps.

FEMA is initiating Risk MAP through a multi year plan spanning FY10-FY14. The vision for Risk MAP is to deliver quality data that increases public awareness and leads to action that reduces risk to life and property. The plan was approved on March 16, 2009, and you can access the plan through this link: <http://www.fema.gov/library/viewRecord.do?id=3587>.



## **2009 Michigan Stormwater-Floodplain Association Conference**

The 22<sup>nd</sup> annual MSFA conference was held at the DoubleTree Hotel in Bay City March 10-13, 2009. It was well attended by over 110 people from around the state with roles and responsibilities in the discipline of managing local development to assure that losses, costs, and impacts to citizens from stormwater and flooding are minimized and floodplain benefits are maintained.

Presentations were made by 29 industry professionals. Ten companies and agencies provided sponsorship of the conference, and a dozen exhibitors supported the MSFA networking outreach efforts to bring community officials in direct communications with consultants, product suppliers, and service agencies involved in various aspects of stormwater and floodplain management.



**Hungry MSFA members – Awards banquet and general membership meeting**



**Bay Area Stormwater Authority Staff-outreach presentation for improving Bay area water quality**

## **Eleven Michigan CFMs Recognized**

Special recognition was bestowed upon 11 certified floodplain managers from Michigan. As part of the 2009 annual awards banquet and general membership meeting of the Michigan Stormwater-Floodplain Association, eleven professionals involved in the management of floodplain development throughout the state were given framed certificates acknowledging their efforts in becoming Certified Floodplain Managers. Such achievement indicates these professionals have become trained and knowledgeable in the many facets of nationally recognized concepts, methods, procedures, and regulations, all of which play a role in effective management of development within the state's floodplains. This past year these professionals successfully passed the Association of State Floodplain Managers' (ASFPM) written exam for becoming a nationally recognized Certified Floodplain Manager (CFM). Michigan now has 69 ASFPM-recognized CFMs.



From left to right: Ray Severy, Meridian Charter Township; Roger Garner, Midland County; Tiffany Clark, Spaulding Dedecker Associates; Warren Bender, Brooks Township; Russ Beaubien, Spicer Group; Mike Badamo, Spaulding Dedecker Associates; Mark Walton, NOAA Weather Service; Mary Weidel, USACE; and Dave DeGrowth, Bangor Township

Not pictured: Adam Ward, formerly of Spicer Group; and Ray Trudgeon, Spicer Group

**For NFIP Agent, Lender, and Adjuster Training and Schedules, go to the NFIP Bureau.FEMA.Gov Web Portal of:**

**<http://www.nfipbureau.fema.gov/training/index.html>**

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## Michigan Flood Insurance Agent Training

Source: *NFIPBureau.FEMA.Gov Web Portal*

The fee is \$65.00 per person. Register online at [www.michagent.org](http://www.michagent.org) or make checks payable to the Michigan Association of Insurance Agents (MAIA). Credit card payment is also acceptable.

Please see the registration form for details. If representatives of your company or institution are

unable to attend the workshops listed, the NFIP offers to arrange a sponsored workshop at your location for groups of 35 or more. For more information, contact Rich Slevin at (888) 318-5112, extension 4.

If you must cancel your registration, you will receive a refund minus 25 percent of the registration fee. There will be no refunds for no-shows. Registration cannot be transferred from one program to another unless the seminar is cancelled.

These seminars are approved for 4 hours PC/CE in the state of Michigan. Course provider is the Michigan Association of Insurance Agents – Provider #0007. Course Code is 49919 – Basics of Flood Insurance.

**What you will learn:**

On June 11, 2007, the Michigan Office of Financial and Insurance Regulation issued bulletin 2007-07-INS for the purpose of advising insurers and Michigan resident insurance producers of training requirements for selling federally backed flood insurance through the National Flood Insurance Program (NFIP).

The bulletin in part states, “An insurance producer who sells flood insurance may satisfy the minimum training and education requirements of the Act by

completing a course related to the NFIP. Failure to comply with the training and education requirements will jeopardize an insurance producer’s authority to write insurance through the NFIP.”

The full text of the commissioner’s bulletin can be found at: [ww.michigan.gov/cis](http://ww.michigan.gov/cis) by clicking on the link to Financial and Insurance Regulation and then “Bulletins.” This seminar provides a series of building blocks which address not only the most basic flood insurance issues, but some more advanced components, as well.

At the conclusion of this seminar, attendees with little or no prior NFIP experience will understand how to build a flood insurance policy from the ground up. Experienced attendees will develop an even better understanding of the Standard Flood Insurance Policy’s major coverage areas, FEMA’s elevation certificate, Increased Cost of Compliance coverage, and more.

**2009 Lender Flood Insurance Seminars  
NATIONAL FLOOD INSURANCE PROGRAM**

**Seminar Information:**

AUG 17	LANSING, MI	Sheraton Lansing	925 S. Creyts Road	1:00 pm – 4:00 pm
AUG 18	LIVONIA, MI	Embassy Suites	19525 Victor Parkway	9:00 am – Noon
SEP 1	MADISON, WI	Clarion Suites	2110 Rimrock Road	9:00 am – Noon
SEP 2	EDEN PRAIRIE, MN	Prairie Conference Center	7500 Flying Cloud Drive	9:00 am – Noon
SEP 3	DES MOINES, IA	Wallace State Office Bldg	502 East 9 <sup>th</sup> Street	9:00 am – Noon
SEP 15	INDIANAPOLIS, IN	Indiana Farm Bureau Bldg	225 East South Street	9:00 am – Noon
SEP 16	LOUISVILLE, KY	Holiday Inn Hurstbourne	1325 S. Hurstbourne	9:00 am – Noon
OCT 1	WESTLAKE, OH	LaCentre Conf Facility	25777 Detroit Road	9:00 am – Noon
OCT 2	COLUMBUS, OH	Crowne Plaza North	6500 Doubletree Avenue	9:00 am – Noon
OCT 6	SPRINGFIELD, IL	Illinois DNR Building	1 Natural Resources Way	9:00 am – Noon
OCT 7	SCHAUMBURG, IL	IDOT Building	201 West Center Court	9:00 am – Noon
OCT 8	BROOKFIELD, WI	Doubletree Hotel	18155 West Bluemound	9:00 am – Noon

What you will learn:

During this fast-paced workshop, topics will include:

- How to interpret the Mandatory Purchase Requirements
- How much flood insurance to require
- How to deal with flood zone discrepancies and the grandfather rating rule
- Understanding condominium compliance issues
- And Much More!!

Each workshop participant will receive a copy of FEMA's Mandatory Purchase of Flood Insurance Guidelines booklet.

How to Register:

Seminar is FREE. (Register Early as Seating is limited):

Name	
Company	
Street Address	City, State and Zip
Daytime Phone Number	Fax Number
Email Address	
Date of Workshop	Location

E-mail completed registration form to [rich@h2opartnersusa.com](mailto:rich@h2opartnersusa.com), or fax it to 1-888-317-4542. Online registration is available at: [www.nfipbureau.fema.gov/training](http://www.nfipbureau.fema.gov/training). Contact Rich Slevin at [rich@h2opartnersusa.com](mailto:rich@h2opartnersusa.com) with questions.



## Map Mod Countywide Studies Winding Down

The FEMA effort through the Map Modernization Initiative to update the FEMA flood maps for Michigan is moving into its final stages. The last Michigan counties selected for map updating by this Map Mod effort are in process and should be completed in the next year and a half to two years. The chart below provides key process dates for the Michigan counties where the mapping is in process or has been completed and maps have gone into effect. Questions may be directed to Les Thomas, MDEQ, Lansing, [thomasl@michigan.gov](mailto:thomasl@michigan.gov), 517-335-3448.

### FEMA MI Mapping Projections

Project Name	Projected, Actual Prelimin. Map Date	FEMA Open House "Proposed" Actual Date	Projected, Actual Map Effective Date
Allegan County	9/30/2009		
Alpena County	8/28/2009		
Antrim County			
Barry County	xx, 8/28/2007	xx	xx, 5/4/2009
Bay County	3/20/2009, 3/20/2009		
Branch County	9/5/2008, 9/5/2008	3/3/2009	12/18/2009, xx
Calhoun County	9/25/2009		
Charlevoix County	6/26/2009		
Cheboygan County	6/26/2009		
Chippewa County	8/15/2009		
Clare County	6/26/2009		
Clinton County	11/14/2008, 11/3/2008	4/1/2009	2/3/2010, xx
Crawford County			
Delta County			
Dickinson County			
Eaton County	12/5/2008, 12/5/2008	4/2/2009	3/17/2010, xx
Emmet County			
Genesee County	2/15/2008, 2/14/2008	4/29/2008	9/25/2009, 9/25/2009
Gladwin County			
Grand Traverse County	5/14/2009		
Gratiot County	6/13/2009		
Hillsdale County	5/31/2009		
Huron County	xx, 9/29/2006	xx	xx, 12/2/2008
Ingham County	5/29/2009		5/20/2010
Ionia County	5/31/2009		
Iosco County	7/24/2009		
Iron County			
Isabella County	6/26/2009		
Jackson County	8/15/2008, 8/15/2008	3/26/2009	2/17/2010

Kalamazoo County	8/31/2007, 8/31/2007	12/1/2008	3/2/2010
Kent County (Rev.'d Prelim)	4/3/2009, 3/23/2005		
Leelanau County	8/28/2009		
Lenawee County	9/25/2009		
Livingston County	xx, 4/13/2007	xx	xx, 9/17/2008
Manistee County			
Marquette County			
Mason County	4/14/2009		
Mecosta County	scoping meeting held 12/9/09		
Midland County	xx, 7/6/2007	xx	xx, 5/4/2009
Monroe County	12/18/2009		
Montcalm County			
Muskegon County	4/30/2009		5/20/2010, xx
Newaygo County	4/30/2010		
Oakland County, Troy, PMR	xx, 9/7/2007	xx	xx, 1/16/2009
Oceana County	5/14/2009		
Osceola County	9/15/2009		
Ottawa County	6/19/2009		
Roscommon County	9/28/2009		
Saginaw County	6/30/2009		
Sanilac County	5/29/2009		
Shiawassee County	6/26/2009		5/20/2010, xx
St. Clair County	9/24/2008, 9/24/2008	12/2/2008	3/2/2010, xx
St. Joseph County	xx, 10/10/2008	12/3/2008	2/17/2010, xx
Tuscola County	6/19/2009		
Van Buren County	8/8/2008, 8/8/2008	9/25/2008	12/3/2009, xx
Washtenaw County	7/31/2007, 7/27/2007	4/30/2008	10/16/2009, xx
Wayne County	9/30/2008, 9/30/2008	2/18&19/09	4/19/2010, xx
Wexford County			

4/23/2009

FY 2009

## Do You Know About the MCSWA?

If you have ever considered what makes up “Floodplain Management”, you may have wisely recognized that it is a multi-faceted interdisciplinary subject. And you likely realized that its effectiveness is influenced by inclusionary efforts to bring together related disciplines having floodplain related interests. One relationship that has and continues to develop is an educational outreach effort to communities and citizens throughout Michigan by the Michigan Committee for Severe Weather Awareness (MCSWA) <http://mcswa.org> .

The MCSWA was formed in 1991 by the governor of Michigan. Its mission is to promote safety awareness and coordinate public information efforts regarding tornadoes, lightning, **flooding**, and winter weather. Membership is open to all persons who desire to promote education and public awareness relating to severe weather preparedness and safety.

Knowledge about and preparation for severe weather is one way to mitigate against terrible and costly impacts on property and human lives which severe weather can cause. Each year the Governor’s office proclaims a “Severe Weather Awareness Week” supporting the MCSWA effort to develop educational programs providing information to citizens on precautions they can take for saving lives and protecting homes and families during severe weather.

This special week of dedication is kicked off and highlighted by the MCSWA’s annual flagship Severe Weather Poster Program contest awards ceremony in the Capitol Rotunda in Lansing. It is in its 17<sup>th</sup> year and it is open to all fourth and fifth grade students in MI. The MCSWA has developed a severe weather preparedness curriculum that fourth and fifth grade teachers can tailor into their existing spring classroom activities. The theme is to inform about the different types of weather hazards and to show how one can be prepared for the inevitable impacts when a severe weather incident develops. The curriculum culminates in a poster design contest where the students can creatively demonstrate what they have learned. See the results of this year’s contest by reading the accompanying poster contest article herein.

In addition to the school poster contest curriculum, the MCSWA also distributes a severe weather informational packet to all emergency management and media outlets statewide for dissemination to the general public. The following flooding article and information was included in the 2009 packets. The distribution of this information by the MCSWA demonstrates how important interdisciplinary relationships can be for floodplain management outreach efforts throughout the state.



### **Flooding Causes Four Deaths and Over \$100 Million in Damages in 2008 March 23, 2009 (GRAND RAPIDS, MI)**

*Source: MCSWA*

In 2008, 21 flash flood warnings and 137 flood warnings were issued by the National Weather Service across the state of Michigan. The impact of flooding on lives and property was significant, and 2008 will be remembered as a very active year. Flooding in 2008 resulted in the loss of four lives and over \$100 million in economic and property damage across the state.

To focus attention on flood safety planning, Governor Jennifer M. Granholm has declared March 29 – April 4, 2009, as Severe Weather Awareness Week in Michigan. Residents are encouraged to familiarize themselves with flood safety procedures.

“In 2008 significant flooding occurred in many areas across Michigan’s lower peninsula. Three out of the four lives lost to flooding in 2008 occurred in the early morning hours when automobiles were driven into flood waters. Flash flooding can be especially dangerous at night, as rapid flooding of low lying areas accompanied with swift currents can wash out roads and bridges. Washed out roads and bridges can be especially difficult to detect at night, and quickly lead to life threatening situations for travelers,” said Mark Walton, Service Hydrologist with the National Oceanic and Atmospheric Administration’s National Weather Service in Grand Rapids.

Flash flooding is the number one weather-related killer and is one of the reasons the National Weather Service is promoting the flood safety message of, “Turn Around Don’t Drown.” Flooding started early in 2008, with ice jams causing flooding in isolated locations along the Grand, St. Joseph, Muskegon, and White Rivers in February. In June, flooding resulted in a Presidential Disaster Declaration being declared for Allegan, Barry, Eaton, Lake, Mason, Osceola, and Ottawa Counties. Damage to public infrastructure (mostly roads and bridge washouts) was estimated to exceed \$8.8 million for these seven counties.

In September, flooding resulted in local states of emergency for Allegan, Eaton, and Kalamazoo Counties, and caused widespread flooding over much of the southern half of Michigan. Damage to public infrastructure was estimated to exceed \$11 million for this event. And finally in December, widespread flooding occurred in 17 counties in southwest lower Michigan when a rare December thunderstorm deposited several inches of rain over a rapidly melting snowpack.

The hardest hit area was Ottawa County, which during the height of the flooding had more than 80 county roads rendered impassable. Ottawa County declared a local State of Emergency and damage to public infrastructure (mostly road washouts), and private structures from flooding was estimated to exceed \$3 million.

The Michigan Department of Environmental Quality estimates that about 6 percent of Michigan’s land is floodprone. This includes about 200,000 buildings.

According to the Michigan Committee for Severe Weather Awareness, flooding along Michigan’s rivers can occur any time of the year, and is most likely the result of excessive rainfall and/or a combination of rainfall and snowmelt. Ice jams also cause flooding in winter and early spring. Severe thunderstorms may cause flooding any time of the year, although these are normally localized, and have more impact on watercourses with smaller drainage areas.

Often times, flooding may not necessarily be directly attributable to a river, stream, or lake overflowing its banks. Rather, it may simply be the combination of excessive rainfall and/or snowmelt, saturated or frozen ground, and inadequate drainage. With no place to go, the water will find the lowest elevations/areas that are often not in a floodplain. This type of flooding is becoming increasingly prevalent in Michigan, as development outstrips the ability of the drainage infrastructure to properly carry and disperse the water flow.

Residents should be aware that regular homeowners’ insurance policies do not cover damages that result from flooding. Coverage is available through a federal program, the National Flood Insurance Program (NFIP). However, in Michigan only about 15 percent of structures subject to flooding are actually insured against the risk. The Michigan Department of Environmental Quality estimates that about 6 percent of Michigan’s land is floodprone. This includes about 200,000 buildings.

Currently, there are approximately 817 Michigan communities participating in the National Flood Insurance Program, and over 25,732 policies in force with coverage of nearly \$3.96 billion. Since 1978, there have been 9,137 flood insurance claims filed in Michigan under the NFIP, for a total of \$40.9 million.

Under the NFIP, a flood is defined in part as a general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters, or from the unusual and rapid accumulation of runoff of surface waters from any source. It is important to note that this flood definition would cover general street flooding that was coming into a home, and does not have to come from a river.

In the standard NFIP flood insurance policy, direct physical losses by "flood" are covered. Also covered are losses resulting from erosion caused by waves or currents of water exceeding anticipated cyclical levels or erosion accompanied by a severe storm, flash flood, abnormal tidal surge, or the like.

Basement flooding is a covered hazard under the NFIP policy. However, homeowners should be aware that personal property is not covered in a basement location. Losses from water seepage, sewer back up, or hydrostatic pressure are covered only when they occur in conjunction with a general condition of flooding.

To purchase flood insurance under the NFIP, residents must live in one of the participating communities. Coverage can be obtained through most licensed property/casualty insurance agents. If you would like more information about the NFIP, please contact Les Thomas, Michigan Department of Environmental Quality, Land and Water Management Division, P.O. Box 30458, Lansing, MI 48909, by e-mail to [thomasl@michigan.gov](mailto:thomasl@michigan.gov), or by telephone at (517) 335-3448.

**For additional information:** visit [www.mcswa.org](http://www.mcswa.org) or contact Mark Walton, Chair, (616) 949-0643, extension 493, or any member of the MCSWA.



## Good-to-Know Tips for Flood-Related Issues

### ***Preparing for a Flood:***

- Make an itemized list of personal property well in advance of a flood occurring. Photograph the interior and exterior of your home. Store the list, photos, and documents in a safe place.
- Memorize the safest and fastest route to high ground. Assemble a disaster supplies kit containing: first aid kit, canned food and can opener, bottled water, extra clothing, rubber boots and gloves, NOAA Weather Radio, battery-operated radio, emergency cooking equipment, flashlight, and extra batteries.
- If you live in a frequently flooded area, keep sandbags, plastic sheets, and lumber on hand to protect property. Install check valves in building sewer traps to prevent flood water from backing up into the drains of your home.
- Know the elevation of your property in relation to nearby streams and other waterways, and plan what you will do and where you will go in a flood emergency.

### ***When a flood threatens:***

- If forced to leave your property and time permits, move essential items to safe ground, fill tanks to keep them from floating away, and grease immovable machinery.
- Store a supply of drinking water in clean bathtubs and in large containers.
- Get out of areas subject to flooding. This includes dips, low spots, floodplains, etc.

### ***During a flood:***

- Avoid areas subject to sudden flooding.
- Even six inches of fast moving floodwater can knock you off your feet, and a depth of two feet will float your car! Never try to walk, swim, or drive through such swift water.
- Do not attempt to drive over a flooded road. STOP! Turn around and go another way.
- Keep children from playing in floodwaters or near culverts and storm drains.

### ***After a flood:***

- Boil drinking water before using. If fresh food has come in contact with floodwaters, throw it out.

- Seek necessary medical care at the nearest hospital. Food, clothing, shelter, and first aid are available at Red Cross shelters.
- Use flashlights, not lanterns or torches, to examine buildings. Flammables may be inside.
- Do not handle live electrical equipment in wet areas. Electrical equipment should be checked and dried before being returned to service.



## **Common Questions About Floods**

### **1. What is a flood, and when do most occur?**

A flood is the inundation of a normally dry area caused by an increased water level in an established watercourse, such as a river, stream, or drainage ditch, or ponding of water at or near the point where the rain fell. Floods can occur anytime during the year. However, many occur seasonally after winter snow melts or heavy spring rains.

### **2. What are flash floods?**

Flash floods occur suddenly, usually within 6 hours of the rain event, and result from heavy localized rainfall or levee failures. Flash floods can begin before the rain stops. Water level on small streams may rise quickly in heavy rainstorms, especially near the headwaters of river basins. Heavy rains can also cause flash flooding in areas where the floodplain has been urbanized.

### **3. What are other causes of flooding in Michigan?**

Ice jams and dam failures can also cause both flooding and flash flooding.

### **4. Are people killed as a result of floods?**

Many people are killed by flash floods when driving or walking on roads and bridges that are covered by water. In fact, flash floods are the number one weather-related killer in the United States. Even six inches of fast-moving flood water can knock you off your feet, and a depth of only two feet of water will float many of today's automobiles. If you are in a car and water starts rising, get out and move to higher ground.

### **5. What is a flood watch?**

A flood watch indicates that flash flooding or flooding is possible within the designated WATCH area – be alert. It is issued to inform the public and cooperating agencies that current and developing weather conditions are such that there is a threat of flooding, but the occurrence is neither certain nor imminent.

### **6. What is a flash flood or flood warning?**

A flash flood or flood warning indicates that flash flooding or flooding is already occurring or imminent within the designated WARNING area – take necessary precautions at once. When a flash flood or flood warning is issued for your area, act quickly. Get out of areas subject to flooding and avoid areas where flooding has already occurred.

### **7. What is a flash flood or flood statement?**

A flash flood or flood statement is used for follow-up information regarding a flash flood or flood event.

# Ways to Protect Your House and Property from Flooding

Basement flood protection can involve a variety of changes to your house and property – changes that can vary in complexity and cost. You may be able to make some types of changes yourself. Complicated or large scale changes or those that affect the structure of your house or its electrical wiring and plumbing should be carried out only by a professional contractor licensed to work in your state, county, or city. Below are some examples of flood protection.

- **Install Sewer Backflow Values.** In some flood prone areas, flooding can cause sewage from sanitary sewer lines to back up into houses through drainpipes. Sewage backup not only causes damage, but also creates health hazards. Backflow valves have a variety of designs ranging from simple to complex. This is something that only a licensed plumber or contractor should do.
- **Raise or Flood Proof Heating, Ventilating, and Air Conditioning Equipment.** In flood prone houses, a good way to protect HVAC equipment is to elevate it above the areas that flood. Another method is to leave the equipment where it is and build a concrete or masonry block flood wall around it.
- **Anchor Fuel Tanks.** Unanchored fuel tanks can be easily moved by floodwaters. One way to anchor a tank is to attach it to a large concrete slab whose weight is great enough to resist the force of floodwaters. Elevate tanks to a minimum of at least one foot above the base flood elevation (BFE). Floating and/or damaged tanks pose serious threats not only to you, your family, and your house, but also to public safety and the environment.
- **Raise Electrical System Components.** Any electrical system component, including service panels (fuse and circuit boxes), meters, switches, and outlets, are easily damaged by floodwaters. All components of the electrical system, including the wiring, should be raised at least one foot above the base flood elevation (BFE).
- **Raise Washers and Dryers.** Washers and dryers can easily be damaged in a flood. In order to prevent this from happening, utilities can be placed on cinder blocks one foot above the base flood elevation (BFE).
- **Add a sump pump in your basement.** Sump pumps can help keep groundwater from entering your home's interior.
- **Cut drywall so that it is one half to 1 inch off the floor.** This is especially important in basements. Concrete floors commonly absorb ground moisture – especially in winter months. That moisture can wick up the wallboard if it's touching the floor, allowing mold to grow out of sight within the walls. (You can hide the gap with wood or rubberized floor trim.)
- **Don't forget to buy flood insurance.** Flood insurance provides year-round financial protection and improves your ability to quickly recover when severe storms strike and cause unexpected flooding. Call your local insurance agent or 1-800-720-1090 to reach National Flood Insurance Program specialists.



## Common Questions About Flood Insurance

### 1. Is flood damage covered by my homeowners insurance?

Flood damage is excluded in nearly all homeowners and renters insurance policies but, if desired, can be purchased as a separate policy.

### 2. Where do I get flood insurance?

Any licensed property/casualty insurance agent can sell a flood insurance policy. If you experience trouble in locating an agent, contact the National Flood Insurance Program's (NFIP) agent referral program at 1-888-CALL FLOOD.

### 3. Is there a waiting period before my flood insurance policy becomes effective?

There is a 30-day waiting period before a new or modified flood insurance policy becomes effective.

**4. Are all flood insurance policies the same?**

Flood insurance coverage can be purchased for homes and businesses – separate coverage must be purchased for the building and its contents.

**5. Do I need to live in a floodplain to get flood insurance?**

You do not need to live in a floodplain to purchase flood insurance – coverage is available to any building located in a community that has qualified for the National Flood Insurance Program. For a listing of Michigan communities participating in the NFIP, you may visit <http://www.fema.gov/fema/csb.shtm>

**6. Is water backup in basements covered by a flood insurance policy?**

Coverage for water back up in basements (drains/sewers) is excluded from the flood insurance policy.

**7. Can I get coverage for water back up in basements?**

Although basement water backup is excluded under most homeowners' insurance policies, coverage can be obtained by purchasing an endorsement. Most insurance companies offer sewer and drain backup as optional coverage. Coverage and limits vary by insurance company, so check with your agent/company about specifics. Some insurers include full coverage for sump pump failure, while others specify items that are covered.

**8. Are there steps I can take to minimize losses from water backup in basements?**

- Never store perishables or valuables in basements that you can't afford to lose or replace.
- Do not store any item near basement drains.
- Check storm drain lines to make sure they're clear of debris, roots, etc.
- Grade the property around your home to drain water away from it.
- Install gutters and make sure downspouts are extended away from the foundation in order to carry water away from the basement walls.
- Use shelving or store items several inches above the potential water level in order to prevent loss.
- If you do have some water seepage following storms, take corrective measures to alleviate problems in the future.



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<p>Editor: Les Thomas          Articles are by the Editor unless noted otherwise.</p> <p>For questions, comments, or information, contact:</p> <p>Les Thomas          MDEQ          LWMD          P.O. Box 30458          Lansing, MI 48909-7958          Telephone: 517-335-3448          Fax: 517-373-6917          e-mail: thomasl@michigan.gov</p>	<p>The MDEQ will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to:</p> <p>MDEQ          Office of Personnel Services          P.O. Box 30473          Lansing, MI 48909</p>	<p>This newsletter is supported by funding under a Cooperative Agreement with the Federal Emergency Management Agency. The substance and findings are dedicated to the public. The MDEQ, LWMD, is solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the views of the federal government.</p>	<p>Printed by Authority of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.</p> <table style="width: 100%; border: none;"> <tr> <td>Total Number of Copies Printed</td> <td style="text-align: right;">2,900</td> </tr> <tr> <td>Cost Per Copy:</td> <td style="text-align: right;">\$1.17</td> </tr> <tr> <td>Total Cost:</td> <td style="text-align: right;">\$3,397.83</td> </tr> </table> <p style="text-align: right;"><b>EQC2760</b></p>	Total Number of Copies Printed	2,900	Cost Per Copy:	\$1.17	Total Cost:	\$3,397.83
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## **Flood News for Michigan Floodplain Managers**

**A Newsletter of the  
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Michigan Department of Environmental Quality**