



FLOODPLAIN & SHORELAND

MANAGEMENT *Notes*

VOLUME 15, ISSUE 1

SPRING 2016

The goals of the Wisconsin Floodplain Management Program are: to protect life, health and property; to minimize costs for flood control projects; to reduce tax dollars spent for rescue, relief and repair of flood damage; to shorten business interruptions caused by flooding; to prevent future flood blight areas; to discourage victimization of unwary land and home buyers; and to prevent increased flood levels caused by unwise floodplain development.

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Introducing Michelle Staff as the new WDNR Floodplain Management Policy Coordinator

We are pleased to introduce Michelle Staff as the new WDNR Floodplain Management Policy Coordinator,



working out of the central office in Madison. She started with the department on February 22 and has the statewide responsibility for managing Wisconsin's floodplain program by serving as the primary floodplain zoning policy and enforcement specialist for the department. She will be the State's National Insurance Program (NRIP) coordinator for the ad-

ministration of the NFIP in Wisconsin and the Community Rating System (CRS). Michelle has worked the last 20 years in county government in both Jefferson and Waukesha County. She has a BS in Geography/Geology from UW-Whitewater and Master of Public Administration (MPA) from UW-Oshkosh. As a Zoning/On-Site Waste Management Technician in Jefferson County, she worked in the administration and enforcement of zoning, floodplain, land division, sanitation, and subdivision ordinances. During the 2008 flooding event throughout Jefferson County, Michelle conducted over 500

substantial damage assessments and issued hundreds of land use permits for flood damage repairs. She saw firsthand how a flooding disaster can impact a community. She is excited about her new position as the DNR Floodplain Management Policy Coordinator as it will let her focus on floodplain management. She lives in Janesville with her husband and three children.

You can contact Michelle by either e-mail at Michelle.Staff@Wisconsin.gov, phone 608-266-3093 or cell 608-220-5633.

Risk MAP Spring 2016 Update - Wisconsin

FEMA's national Risk Mapping, Assessment and Planning (Risk MAP) program is intended to result in local activities that reduce risk. In 2014 in partnership with the State of Wisconsin, FEMA Region V initiated efforts designed to engage selected communities in discussions about local risk reduction activities that result in safer communities. Since then, FEMA Region V and State representatives have been facilitating meetings with community officials, mitigation consultants and regional stakeholders to define desired local mitigation

implementation steps, challenges and needed technical support. This effort enhanced existing mitigation planning efforts by identifying federal and state tools, resources and technical assistance that may enable progress on local risk reducing mitigation activities.

FEMA, the Wisconsin Department of Natural Resources, and the Division of Emergency Management have been working with FEMA consultant STARR to provide technical assistance to selected Wisconsin communities

with a strong interest in reducing local risk from natural hazards. Over the past few months, the team has expanded local GIS databases for Wisconsin communities that will help them track risk and manage assets, assisting them with future flood risk reduction decisions.

The program is now wrapping up efforts to support communities with local mitigation needs. Going forward, FEMA and the state will be considering additional technical assistance support and

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other efforts to help communities take action to reduce flood risk.

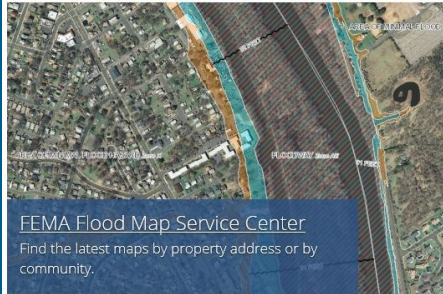
If you have any questions about the program, please contact any of the following project partners:

Meg Galloway, WI DNR, at meg.galloway@wisconsin.gov

Roxanne Gray, WI DEM, at roxanne.gray@wisconsin.gov

Tom Smith, FEMA RV, at thomas.smith6@fema.dhs.gov

Nate Catania, STARR, at cata-nianc@cdmsmith.com



FEMA Flood Map Service Center
Find the latest maps by property address or by community.



FEMA

Questions about Flood Insurance??

FEMA has a service center for flood insurance policies holders.

Call 800-621-FEMA



“Thanks for all of the great questions and the positive feedback.”

Rock Lake, Lake Mills, WI. Photo taken by Michelle Staff



Think Spring!! Shoreland Team Update:

Spring is right around the corner and I think things are gearing up to be a busy construction season. Just in time to put into practice the statutory changes that the shoreland program has experienced this past year. Hopefully the information that was shared in the memo and during the working sessions will help with county administration. I want to thank the individuals who helped plan the accommodations that made the working session day work. Thanks for all of the great questions and the

positive feedback.

The shoreland team currently has 20 ordinances in for review. As most of you know there have been some recent legislative changes. These changes will be covered at the WCCA Spring Conference at Stoney Creek. The model ordinance will be updated to reflect these changes and hopefully by the time you are reading this article it will already be in your hands. A reminder that due to Act 55 the content of the model ordinance is now the minimum and

the maximum that has to be adopted to be compliant. Other matters can be regulated as long as they further the purpose of shoreland zoning. Please provide the team enough time to adequately review and comment on your proposed draft. We are currently recommending that you submit the draft for review and comment prior to scheduling any public hearings with your committee or planning county board dates. Any questions on shoreland policy, please contact Kay Lutze at (920) 662-5159.

Reminder of the shoreland county coverage by contact person:

- | | | |
|---|--|--|
| Kay.Lutze@wisconsin.gov – Adams, Columbia, Crawford, Dane, Dodge, Florence, Forest, Grant, Green, Iowa, Jefferson, Juneau, Lafayette, Monroe, Oneida, Richland, Rock, Sauk, Vernon and Vilas. | Michael.Wenholz@wisconsin.gov – Ashland, Barron, Bayfield, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Iron, Jackson, LaCrosse, Marathon, Pepin, Pierce, Polk, Portage, Price, Rusk, Saint Croix, Sawyer, Trempeleau, Washburn, Wood | Dale.Rezabek@wisconsin.gov – Brown, Calumet, Door, Fond du Lac, Green Lake, Kenosha, Kewaunee, Langlade, Lincoln, Manitowoc, Marinette, Marquette, Menominee, Milwaukee, Oconto, Outagamie, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha, Waupaca, Waushara, Winnebago |
|---|--|--|

Shoreland-Wetland Zoning District



The shoreland-wetland zoning district is created as part of the county shoreland zoning ordinance and is comprised of the wetlands located in the shoreland as depicted on the Wisconsin Wetland Inventory. This district is created to maintain safe and healthful conditions, to prevent water pollution, to protect fish spawning grounds and wildlife habitat, to preserve shore cover and natural beauty and to control building and development in wetlands whenever possible.

The permitted uses that shall be allowed within the wetland zoning district are identified in NR 115.04(3). Any use not permitted within that list is prohibited unless the wetland (or portion of) is rezoned and shall by amendment outlined in NR 115 and Wi. Stats. Uses cannot be added to or subtracted from the identified uses within NR 115.

Counties will notice that when revising their ordinance for compliance with NR 115 there is new language that will be required regarding the wetland maps.

WHAT IS THE NEW LANGUAGE NECESSARY FOR ORDINANCE REVISIONS?

The two model ordinance provisions below provide the language that satisfies the map amendment language within NR 115.

2.2 SHORELAND-WETLAND MAPS The most recent version of the Wisconsin Wetland Inventory as depicted on the Department of Natural Resources Surface Water Data Viewer is made part of this ordinance. The maps can be viewed at <http://dnrm.wisconsin.gov/SL/Viewer.html?Viewer=SWDV&runWorkflow=Wetland>

3.1 DESIGNATION. This district shall include all shorelands within the jurisdiction of this ordinance which are designated as wetlands on the most recent version of the Wisconsin Wetland Inventory as depicted on the Department of Natural Resources Surface Water Data Viewer.

Referencing the most recent version of the inventory as depicted on the DNR Surface Water Data Viewer not only ensures that the best available information is being used but reflects the digital update that was done for each county. It is also important to recognize that there is no specific reference to acreage and should not be referenced in ordinance text.

As you are aware, the Wisconsin Wetland Inventory (WWI) maps show graphic representations of the type, size and location of wetlands in Wisconsin. These maps have been prepared from the analysis of high altitude imagery in conjunction with

soil surveys, topographic maps, previous wetland inventories and field work. While the current county ordinance may reference a prior, most likely paper version, it should be noted that the inventory reflects the official record of wetlands within Wisconsin. Additionally, the most recent version (and not a specific date) of the wetland inventory should be referenced. An outdated version that depicts the wetland zoning district, does not provide the public, other agencies or staff with the best available information nor are you using the official record to establish the wetland zoning district.

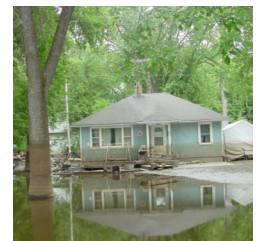
The principal focus of the WWI is to produce wetland maps that are graphic representations of the type, size and location of wetlands in Wisconsin. Within this context, the objective of the WWI is to produce reconnaissance level information on the location, type, size of these habitats such that they are accurate at the nominal scale of 1:20,000 scale aerial photographs used for interpretation. The DNR recognizes the limitations of using remotely sensed information as the primary data source. They are to be used as a guide for planning purposes. The most accurate method of determining the legal extent of a wetland for federal, state or county regulations is a field delineation of the wetland boundary by a professional trained in wetland delineation techniques. Any questions on shoreland policy, please contact Kay Lutze at Kay.Lutze@Wisconsin.gov or (920) 662-5159.

What is meant by substantially damaged or substantially improved?

Structures located in the floodplain are considered substantially damaged if they are damaged by 50% or more of the structure's equalized assessed value as listed before the damage occurred. The cost of repair is based on local market costs for the community and includes the cost of labor at prevailing wages. Under Wisconsin regulations, structures substantially damaged by flooding must meet the elevation

standards for new construction as stated in Ch. NR 116, Wis. Admin. Code or if located within the floodway the structure must be relocated. Structures damaged by non-flood disasters must meet the NFIP elevation requirements as stated in 44 CFR 60.3. If a building is substantially damaged, no repairs can be authorized until the community determines if the requirements of the floodplain zoning ordinance can be met. Sub-

stantially improved structures are those structures which have had additions or been modified by 50% or more of the structure's equalized assessed value at the time the work was proposed and is cumulative over the life of the structure. A builder's estimate for the improvement is frequently used to determine the cost of the project. Any questions on this topic, please contact Michelle Staff at 608-266-3093.



Floods are the #1 natural disaster in the United States.

Is your Floodplain Ordinance up to date?

WDNR issued a model floodplain ordinance in January 2012. The updated model was the result of three years of collaboration between WDNR and FEMA. The Standard Model Floodplain Ordinance is recommended for all communities without WDNR produced Flood Storage Districts. The Model Floodplain Ordinance with Flood Storage Modifications includes the language required to ensure flood storage districts are appropriately regulated.

The Model clarified some outdated sections, provided further guidance on how to treat non-conforming structures, added additional technical standards for conducting engineering studies, strengthened the ties between local ordinance amendment processes and the re-

quirements for Letters of Map Revision, and added a number of new definitions. The Model also included language on the limits Sec. 87.30 (2), Stats. places on fines in the floodplain (\$50/day/violation).

Communities are required to update the local ordinance to the new Model when new Flood Insurance Rate Maps are issued. However, FEMA would like Wisconsin Communities to adopt the January 2012 sooner rather than later.

Please contact Michelle Staff or your Regional Water Management Engineer for further information. Go to http://dnr.wi.gov/topic/floodplains/staff_flood.html for the most current contact information.



“TMAC also seeks a balance of Federal, state, local, and private members, and the geographic distribution of members from across the nation.”

FEMA Technical Mapping Advisory Council (TMAC) Update

Mandated in Section 100215 of the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12), the Technical Mapping Advisory Council (TMAC) was re-established in July, 2014, to “review and make recommendations to the Federal Emergency Management Agency (FEMA) on matters related to the national flood mapping program.”

The 21 members of the TMAC form an advisory committee consisting of acknowledged leaders in the technical fields of surveying, cartography, remote sensing, geographic information systems, and other professions associated with preparation and publication of Flood Insurance Rate Maps (FIRMs). Beyond technical skills, the TMAC also seeks a balance of Federal, state, local, and private members, and the geographic distribution of members from across the nation. The TMAC includes two members who work and reside within FEMA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin), Steve Ferryman of Ohio and Sally McConkey of Illinois.

FEMA Technical Mapping Advisory Council, Interim TMAC 2015 Annual Report, (Washington: FEMA, 2015), 1. <http://www.fema.gov/media-library/assets/documents/111853>.

The interim 2015 Annual Report outlines the activities and accomplishments of the TMAC through its first year. Included in the Annual Report is a list of 22 recommendations, in policy or

regulatory practices, reflecting nine topic areas that include Community of Users and Uses; Flood Hazard Identification – Program Goals and Priorities; Flood Hazard Identification – Core Data, Models, and Methodology; Flood Hazard Identification – Production Processes; Flood Risk Assessment and Communication; Data Distribution and Management; Federal Partner Collaboration; Cooperating Technical Partners; and Maintenance and Funding.

Virtually all the recommendations of the TMAC will eventually affect the end user of NFIP products, many of the proposals, while important, might be considered “back shop” type of changes, and may not be widely seen or appreciated by the general public. Among the suggestions of the TMAC that could, in the future, have a lasting impact on communities are recommendations that FEMA fully transition from panel-based paper maps to a complete digital environment; structure-based risk determinations; offer community-based incentives to reduce risk; and increase the data partnerships with the states and local communities.

More information on the TMAC, a Frequently Asked Questions flyer, and its publications may be found on the web at <https://www.fema.gov/technical-mapping-advisory-council>. Final publication of the Future Conditions Report and the 2015 Annual Report is expected in early 2016.



FEMA

STRECH YOUR THINKING...



The photo below shows a Zone A Special Flood Hazard Area (SFHA). A Letter of Map Amendment (LOMA) has been issued for the residence using a BFE developed by FEMA. Is the residence considered out of the floodplain?

The residence would be considered out of the floodplain for flood insurance purposes. However, it would still be considered in the floodplain for regulatory/permitting purposes. For a structure to be considered out of the floodplain for regulatory purposes, it must meet the requirements of NR 116.18 Wisconsin Administrative Code, which states: No area in the floodplain may be removed from the floodplain unless it can be shown that the area has been filled to the flood protection elevation and is contiguous with lands lying outside the floodplain. A LOMA with a BFE developed by FEMA does not meet these requirements. Since this is a Zone A, it would be considered a floodway until a H & H analysis was conducted by the property owner and approved by a DNR Water Management Engineer.

FEMA Tutorials — <http://www.fema.gov/online-tutorials>

The Federal Emergency Management Agency (FEMA) develops multimedia tutorials to provide in-depth training on different facets of the National Flood Insurance Program (NFIP) and to support public education and outreach efforts as part of the Risk Mapping, Assessment and Planning (MAP) strategy. The tutorials are intended for the general public, mapping professionals, mitigation planners and community officials interested in learning about available NFIP tools, including how to read a Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) Report and how to use FEMA flood hazard mapping software applications utilized in the NFIP. The tutorials are free.

Just 6 inches of moving water can knock you down, and 2 feet of water can sweep your vehicle away.





Inundation mapping locations

“While the flood depths are color coded to indicate the general depth of flooding for a particular area, one of the most remarkable features of the site is the ability to zoom to a property or structure”



Rock River Flood Inundation Mapping Project

In 2012, Wisconsin officials began working with the US Geological Survey (USGS), US Army Corps of Engineers, the National Weather Service (NWS), local communities, and others to develop inundation mapping for several reaches of the Rock River in south central Wisconsin.

Following discussions on project goals, resources, risks, and other factors, five sites along the reach of the river as it flows through Dodge, Jefferson, and Rock Counties were chosen as inundation mapping locations. In the end, the five communities with flood depth mapping are, from upstream to down, Watertown, Jefferson, Fort Atkinson, the area around Lake Koshkonong, and Janesville/Beloit.

As explained by Roxanne Gray (WEM) and Chris Olds (DNR) in a November 2015 presentation, the focus of the Rock River Inundation Mapping Project was the “development of map libraries that contain a series of sequential maps that help communicate where flooding may occur over a range of river levels” and that are “connected to real-time and forecasted river levels at USGS stream gages”. This information may then be “utilized for preparedness, timely response, recovery, mitigation and planning, environmental and ecological assessments”.

Knowing the extent of a flood, that is, the spatial limits of where floodwaters will impact a property, is very important - for mitigation, planning, construction, and many other reasons. Fortunately, that type of information is widely available nationwide for millions of miles of riverine and coastal areas and for tens of thousands of lakes across the United States thanks to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Maps (FIRMs) and associated products.

The implications for a structure in a time of flood are vastly different based on the height of the water that will be inundating the structure. As estimated using the National Flood Insurance Program’s (NFIP) Flood Smart website’s “What Could Flooding Cost Me?” interactive estimator tool, while even one inch of water in a 2000 square foot home could inflict about \$20K damage to a home, four feet of water has the potential to treble the repair cost to nearly \$75,000!

And the danger to those people caught up in flooding is even more profound. While slogging through a couple of inches of floodwaters, even still water, may be unpleasant, anything above the knees can be outright exhausting or even deadly for the young, elderly, or otherwise impaired.

Gray and Olds reported that the project was designed to be a user-friendly tool that would assist local officials and residents to “make informed decisions” regarding mitigating, responding to, and promoting preparedness of the flood hazard risk in those communities included in the coverage of the project. These goals would be aided by the tool in helping the communities “improve protective measures and evacuation options prior to floods” and to “identify cost-effective mitigation measures” that would allow lower costs for “future response, repair and recovery”.

While the flood depths are color coded to indicate the general depth of flooding for a particular area, one of the most remarkable features of the site is the ability to zoom to a property or structure and pinpoint an estimated flood depth at that exact point.

Other features of the site include a variety of base maps based on personal preference, the National Flood Hazard Layer overlay, comparison of flood stage extents, the ability to download data from the site (including shapefiles, hydrographs, and other files), and all other data streams typically available for NWS gage stations.

And beyond the Rock River in Wisconsin, inundation mapping is now available for over 75 sites in nearly 20 states from New York to Washington and in five of the six states of FEMA Region V. To find those sites enabled with this feature, please visit the NWS website for inundation locations nationwide, including the Rock River sites, at <http://water.weather.gov/ahps/inundation.php> and for a tutorial <http://bit.ly/RockRiverTutorial>



Training Opportunities – Spring/Summer 2016

Wisconsin Emergency Management (WEM)

Visit the WEM Training Management System website to register for these and other courses. WEM's training schedule website may be found at <https://www.trainingwisconsin.org/index.aspx?>

Minnesota Division of Homeland Security and Emergency Management (HSEM)

For classes that may be available from HSEM, please visit their training website at https://app.dps.mn.gov/HSEM_Training/view_class_list.asp.

Illinois Emergency Management Agency (IEMA)

The IEMA offers many training courses at locations across Illinois, many of which include important information on mitigation and other related topics. Please visit the IEMA training website at public.iema.state.il.us/iema/Training/OnlineReg/classes.asp for a list of trainings and a calendar of scheduled classes and locations.

Iowa Homeland Security & Emergency Management (IHSEMD)

Information on other upcoming trainings offered by Iowa Homeland Security & Emergency Management can be found by visiting its training page at http://homelandsecurity.iowa.gov/quick_links/training.html.

Association of State Floodplain Managers (ASFPM)

ASFPM has an online training program and training is added regularly. See <http://www.floods.org/n-calendar/webinars.asp> for more information.

FEMA's Emergency Management Institute (EMI)

E0105: Public Information and Warning. March 23-24, June 29-30, and August 17-18, 2016. Emmitsburg, MD. This course introduces participants to what the Public Information Officer (PIO) does in Emergency Management, along with basic information about the Integrated Public Alert and Warning System (IPAWS). The PIO topics covered include the role of the PIO; communication tools and resources encompassing social media; effective communication; preparing the community through outreach and other means; and communication in an incident. The IPAWS topics covered include what the system is and does, preparing alert and warning messages, and writing common alerting protocol messages.

E0273: Managing Floodplain Development through the NFIP. March 7-10, 2016, June 27-30, and September 12-15, 2016. Emmitsburg, MD. This is a basic NFIP four day course that lays the foundation for working with the NFIP in application within the field, and is targeted for local, Tribal, State and Federal Floodplain Managers. Topics covered include outreach, mapping (risk determination), rules and regulations, permitting, elevation certificate, substantial damage and substantial improvement, flood insurance and legal issues as well as other important topics.

E0278: NFIP/Community Rating System. April 18-21, July 18-21, and September 19-22, 2016. This course covers the CRS, a nationwide initiative of FEMA's National Flood Insurance Program. It describes activities eligible for credit under CRS, how a community applies, and how a community modifies an application to improve its classification.

E0279: Retrofitting Floodprone Residential Buildings. May 2-5, 2016. Emmitsburg, MD. This course provides engineering and economic guidance to architects, engineers, and local code enforcement officials in retrofitting existing 1- to 4-family residential structures situated in flood-prone areas. The retrofitting measures presented are creative, practical, compliant with applicable floodplain regulations, and satisfactory to most homeowners.

E0282: Advanced Floodplain Management Concepts II. July 11-14, 2016. Emmitsburg, MD. This course is designed to provide participants with the requisite knowledge to more effectively address issues concerning: Placement of manufactured homes and recreational vehicles in the floodplain; National Flood Insurance Program Flood Insurance Principles for the Floodplain Manager; Higher Standards in Floodplain Management; and Hydrology and Hydraulics for the Floodplain Manager. See EMI website for recommended prerequisites.

E0284: Advanced Floodplain Management Concepts III. August 29 – September 1, 2016. Emmitsburg, MD. This advanced floodplain management course is a dynamic and interactive instruction that covers the following five topics in detail: Floodway Standards; Disconnects between National Flood Insurance Program Regulations and Insurance; Common Noncompliance Issues; Digital Flood Insurance Rate Maps (DFIRMs); and Substantial Improvement/Substantial Damage. See EMI website for recommended prerequisites.

E0291: Community Dam Safety, Preparedness & Mitigation. February 29 – March 3, 2016. This course will teach dam owners; emergency service providers; emergency planners and managers; land use and transportation planners; community leaders; and other members of the community to work together through upfront planning to reduce the risks and mitigate the consequences resulting from a dam failure, and to recover more effectively in the event of a failure.

L0580: Emergency Management Framework for Tribal Governments. April 4-7, 2016, Cass Lake, MN and May 16-19, 2016, Fort Totten, ND. This course provides tribal leaders with a basic understanding of emergency management principles and their role in leading and directing their Tribes in implementing comprehensive emergency management systems.

E0582: Mitigation for Tribal Governments. May 9-12, 2016. This course will provide tribal representatives with an understanding of mitigation opportunities and techniques, examples of mitigation success stories to reduce future losses from natural or other hazards, and an overview of available FEMA mitigation programs. Primary emphasis is on helping tribal emergency managers and planners recognize a successful planning process, identify planning team members, identify mitigation planning requirements and effective mitigation opportunities to improve the sustainability of their tribal community, and better protect tribal citizens, lands, culture, and sovereignty.

EMI also offers many more courses in Emmitsburg, around the country and through webinar training opportunities online. For additional information on EMI classes and webinars, please visit EMI's training calendar website at <http://www.training.fema.gov/emicourses/schedules.aspx> and its course catalog at <http://training.fema.gov/emicourses/docs/fy15%20catalog.pdf>.

Other Trainings and Conferences

Wisconsin Association for Floodplain, Stormwater, and Coastal Management (WAFSCM) Annual Conference. TBA, Fall 2016. Visit the WAFSCM website for more information at <http://www.wafscm.org/annual-conference/>.

Association of State Floodplain Managers. June 19-24, 2016. Grand Rapids, MI. The ASFPM annual conferences are recognized as the most important floodplain conference in the United States year after year. With more than 100 speakers and well over 1200 participants, they are the national conferences all community, state and federal floodplain managers plan to attend. Please visit the ASFPM's conference website for more information at <http://www.asfpconference.org/>.

2016 Upper Mississippi River Conference. October 13-14, 2016. Moline, IL. For more information on this conference, please see <http://www.riveraction.org/umrc/>.

PROTECT YOURSELF BEFORE A FLOOD

Preparing for Spring Flooding - Homeowners

While floods can occur at any time, spring is a time of greater risk. Everyone, whether a homeowner, farmer, business owner, dam owner or local government should take steps to prepare for high water and the potential problems.

Flooding can result in:

- damage or destruction of buildings;
- contamination of private wells and drinking water;
- potential public safety hazards down stream if dams fail or are damaged;
- washed out driveways and culverts;
- manure contaminated run-off resulting in water quality problems and potential fish kills.

The most important thing to do is to determine what is a structure's flood risk? To find out if a structure is located in an area at risk for flooding, contact the local Zoning Administrator. Every community that participates in the NFIP has on file a Flood Insurance Rate Map (FIRM) which depicts areas determined by FEMA to be at risk to flooding. While the best thing to do to protect a home or business from flooding is to either avoid building in the floodplain or elevate

and reinforce the structure, there are several things that can be done before a flood occurs. Some quick and relatively inexpensive things you can do to protect your home or business are:

- Elevate the furnace, water heater, electric panel, air conditioner and other utilities if susceptible to flooding.
- Install "check valves" in sewer traps to prevent flood water from backing up into the drains of your home.
- Construct interior barriers to stop low level floodwater from entering portions of a basement or building.
- Seal walls in basements with water proofing compounds to avoid seepage.
- Remove inventory or important papers and possessions from the basement or other areas vulnerable to flood waters.
- Back up important computer files and store in a secure off site location.

DNR has produced a brochure entitled *Living in the Floodplain: What You Need to Know – Who You Need to Know*. If you would like a free copies of this brochure, it is also downloadable at http://dnr.wi.gov/topic/floodplains/documents/LITF_Brochure.pdf

“New septic systems or additions to existing septic systems are prohibited in floodways”



Septic Systems - What to Do After a Flood

The Environmental Protection Agency (EPA) has developed a brief two page brochure on what to do when a septic system is affected by flooding. The brochure can be downloaded from the EPA website <http://bit.ly/SepticFlood>

The brochure focuses on the water quality issues related to flooded septic systems. For floodplain managers in Wisconsin, other factors must be taken into consideration when responding to questions regarding flooded septic systems.

Consideration must be given to the kind of septic system being applied for and where the proposed system is to be located. Also, a floodplain development permit is required if any soil is disturbed.

Floodways. New septic systems or additions to existing septic systems are prohibited in floodways under Section NR 116.12(1)(e) and Sec. NR 116.15(2)(b), Wisconsin Administrative Code. Any permit requests for new or additions to ex-

isting systems in the floodway must be denied. Replacement or repair of failing septic systems are allowed if it has been required by a government agency to correct a public health hazard and must meet the requirements of DSPS 383, Wis. Admin. Code.

Floodfringe. New, addition to and replacement of septic systems are permitted in the floodfringe. Such systems must be floodproofed to the flood protection elevation and meet the requirements of any local ordinance as well as the requirements found in Chapter DSPS 383, Wis. Admin. Code.

General Floodplain. A determination of the appropriate flood zone must be conducted in order to ensure the appropriate regulations are applied.

For more information on septic systems contact Michelle Staff or DNR Regional Water Management Engineer.

Wisconsin Association of Floodplain Coastal and Stormwater Managers

The Wisconsin Association of Floodplain, Coastal and Stormwater Managers (WAFSCM) is a professional organization focused on the managing water to ensure public safety as well as protecting the environment. The organization was formed as an association in 2000 and currently has over 200 members. Members include federal, state and local officials as well as consultants and members of the public interested in promoting public awareness of appropriate floodplain, stormwater and coastal management. In 2004, WAFSCM became a State Chapter of the national Association of State Floodplain Managers (ASFPM).

WAFSCM promotes the common interest in floodplain, stormwater, and coastal management, to enhance cooperation between the various elated private, local, regional, state, and federal agencies; and encourages and ensures effective, new and innovate approaches to managing the state's floodplain, stormwater, and coastal systems. The purpose of WAFSCM is to:

1. Promote public awareness of proper floodplain, stormwater, and coastal management;
2. Promote the professional status of individuals involved in floodplain storm- water, and coastal management;
3. Promote a liaison between individuals concerned with proper

floodplain, stormwater, and coastal management and to encourage the exchange of ideas;

4. Keep individuals concerned with proper floodplain, stormwater, and coastal management well informed through educational and professional seminars and to provide a method for dissemination of information;

5. Inform concerned individuals of pending floodplain, stormwater, and coastal

management legislation and other related floodplain, stormwater, and coastal management matters; and

6. Study and support legislation pertinent and necessary to the effective implementation of floodplain, stormwater, and coastal management matters.

Detailed information regarding WASFCM including upcoming workshops, conferences and membership can be found at www.wafscm.org. A membership form can be found on the final page of this newsletter.

For more information regarding the Association of State Floodplain Managers go to www.floods.org.



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This newsletter is supported by funding through FEMA Cooperative Agreement EMC-2014-CA-7006 as part of the Community Assistance Program—State Support Services Element of the National Flood Insurance program. The contents do not necessarily reflect the views and polices of the federal government.

“Floodplain and Shoreland Management Notes” is published by the WDNR, Bureau of Watershed Management. Its purpose is to inform local zoning officials and others concerned about state and federal floodplain management, flood insurance, shoreland and wetland management, and dam safety issues. Comments or contributions are welcome.

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- **Kay Lutze, 920-662-5159**
Kay.Lutze@Wisconsin.gov

Dam Safety Contacts:

- **Bill Sturtevant, 608-266-8033**
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