



FLOODPLAIN & SHORELAND MANAGEMENT *Notes*

VOLUME 17, ISSUE 2

SPRING 2018

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.

INSIDE THIS ISSUE:

CRS Success	2
Retirements	3
Around the State News	4
Training Opportunities	5
New York City Flood Story	6

Winter Floods in February

On February 19-20, heavy rains impacted southeastern Wisconsin resulting in widespread flooding to portions of southern Wisconsin due to the frozen ground. The National Weather Service issued flood warnings on at least eight waterways, including the Fox River at Burlington and Munster, the Rock River at Watertown and Avon, the Sugar River at Albany and Broadhead, and the Pecatonica at Martintown and Blanchville.

In Janesville, police and firefighters rescued people from vehicles stranded in high water. Fire fighters from Milton and Janesville were called to Milton Propane to secure tanks that began floating in the high water. Photos show dive teams in shoulder-deep water making their way to secure the tanks. Fire officials from Milton and Janesville assisted with rescue boats to secure more than a couple hundred propane tanks of various sizes. The Pecatonica River crested at more than 15 feet in Darlington after the heavy rains fell. Several businesses along Highway 23 were closed as stores were left inaccessible. After the flooding, the temperature dropped below freezing creating ice over the flooded areas which in some areas was 8 inches thick.

Many communities across southern Wisconsin were hit with flooding. Flooding from the soaked Sugar River and its tributaries hit the Village of Monticello hard with road closures and home damages. In Milwaukee, an intersection near Holton & Locust flooded during the morning rush which created huge backups. A flooding record was set in Turtle Creek in Beloit, which rose to 11.7 feet, surpassing the old mark of 8.4 feet in 2017. Southern Wisconsin received record rainfall for the month of February within an 24 hour period.



Milton Propane—Photo via Facebook



Fire fighters securing tanks—Photo from Milton Fire Department via Facebook



Rock County—Photo from DNR Staff

CRS Helps Boulder, Colorado, build Resilience

As the state's number-one community for flash flood risk, Boulder, Colorado, is no stranger to flood hazard mitigation. The city has a long history of floodplain management planning, dating back to a plan designed by Fredrick Law Olmstead in the early 1900s that indicated the need to preserve the floodplains as natural open space.

The 25-square-mile city is situated at the base of the Rocky Mountains, below a cluster of steep drainageways that can swell dramatically during spring snowmelt or severe thunderstorms—or both. Boulder is affected by 15 major creeks and flooding is complicated by 23 irrigation channels.

Outdoor activities and natural areas are important to Boulder's residents, so the community has worked to protect its waterways. Combining these natural features with recreational opportunities such as hiking trails, bikeways, and nature centers, has been an ongoing component of the city's effort to build resilience and enhance its quality of life.

Because of the high risk of flash floods, Boulder put a priority on a warning system many years ago, and that system has grown more sophisticated as technology has improved. Public awareness campaigns, a website with flood-related information, library holdings, and the production of materials directly pertinent to the local flood hazard have helped make people aware of the flood potential.

With this background of extensive management of floodprone areas, "Entering the Community Rating System was a logical next step for us," explains Stafford. Boulder entered the CRS in 1992 as a Class 8 and has steadily increased its CRS-credited work to achieve a Class 5 in 2012.

The flood insurance policy holders in Boulder have realized total annual flood insurance premium reductions of over a half million dollars by virtue of Boulder's CRS rating. This savings has been a selling point to the City Council for implementation of and improvements to the credited components of the floodplain management program.

"But just as important—if not more so—the CRS discount has been a big help in deterring efforts to diminish or 'tweak' existing regulatory standards," Stafford observes. If the standards are altered so that the CRS rating goes down, residents will lose their flood insurance discounts.

One clear example of the mitigation benefits of Boulder's program can be seen at the Toby Lane Development, which was planned for an area within the newly re-mapped floodplain of South Boulder Creek. The city started regulating development in the remapped floodplain even before the map was approved by the Federal Emergency Management Agency. Houses were required to meet the local higher freeboard standard of 2 feet above the 100-year flood elevation. Because the homes were elevated, they remained undamaged in the 2013 flood.

Boulder's progressive outlook about building community resilience, protecting the environment, and minimizing flood damage has been strengthened by the CRS, according to Stafford, because the CRS provides support, encouragement, and incentives to greater enhance those undertakings. "The CRS has been a great complement to our ongoing efforts to forge a resilient and hazard-resistant community," Stafford concludes. A snapshot of the numerous floodplain management and CRS activities being carried out in Boulder, Colorado. For more details, see the [City of Boulder's website](#). Article from NFIP/CRS Update February/March 2018



The Toby Lane Development in Boulder, Colorado, remained undamaged in the 2013 flood because the homes were elevated 2 feet above the base flood elevation.

Courtesy City of Boulder

State Mitigation Office Retires after 42 years!



Photo by Chad Berginnis,
ASFPM Executive Director

On March 29, 2018, a large crowd gathered together to celebrate the retirement of Roxanne Gray, the nation's queen of hazard mitigation. Roxanne was Wisconsin's first State Hazard Mitigation Officer (SHMO) and started Wisconsin Emergency Management 42 years ago. Wisconsin Emergency Management (WEM) supports 72 Wisconsin counties and tribes in bringing emergency preparedness, response, recovery and mitigation services to the state's 5.6 million citizens. Roxanne has provided support for over 40 major disaster declarations and has brought \$100 million in mitigation dollars to the citizens of Wisconsin. Pictured is Roxanne with Brian M. Satula, Administrator of the Division of Emergency Management in the Department of Military Affairs.

Congratulations to Roxanne on her retirement!!

State Dam Safety Engineer Retires!!



Bill with the media.
Photo DNR

Bill Sturtevant started working for Wisconsin Department of Natural Resources (DNR) in 1986 as an Assistant State Dam Safety Engineer. His entire 32 year career at DNR was spent in the Dam Safety program, the last 11 as the State Dam Safety Engineer. Bill's favorite activities were related to being out in the field for inspections, leading emergency response actions related to dam failures, helping dam owners find the best and reasonable solution to their problems, and mentoring staff. He also helped bring about many improvements to the program during his career. Bill's departure leaves a big void in the Dam Safety program. We hope to begin the process of filling the position in the very near future.

Wisconsin Represented at FEMA National Workshop



Katie Sommers presenting
at FEMA Hazard Mitigation
Workshop . Photo DNR

Katie Sommers, Wisconsin Hazard Mitigation Section Supervisor, presented at the 2018 FEMA Annual Hazard Mitigation Stakeholder Workshop on March 13 at the Emergency Management Institute in Emmitsburg, Maryland. The workshop audience was comprised of State, Territory and Tribal representatives from Hazard Mitigation offices as well as National Flood Insurance representatives from each State and Territory.

FEMA requires State hazard mitigation plans to include a risk assessment of all-natural hazards that affect the State. States must also complete a Threat and Hazard Identification and Risk Assessment (THIRA), which identifies risks to the State's core capabilities from natural, technological, and human caused hazards. For its 2016 State plan update, the State of Wisconsin combined these two risk assessments into one document. The session explained the process used, and challenges and opportunities encountered along the way.

Kickapoo Watershed Discovery Meeting



DNR staff working with local officials to identify flood risks.



Photos DNR

DNR and FEMA held a Risk Map Watershed Discovery meeting on March 26th at the Vernon County Administrative offices in Viroqua, WI. Those present were community representatives from four counties: Vernon, Monroe, Richland, and Crawford. The first half of the meeting was a presentation from DNR and FEMA staff focusing on

Risk Map Products, an over view of Risk Map, mitigation planning and funding, and National Flood Insurance Program Benefits and Responsibilities. The second half of the meeting was a mapping break out session to discuss local concerns, additional data available, and potential mitigation opportunities. Stakeholders were able to mark points of interest on maps and fill out comment forms regarding their areas of concerns.

The goal of the Discovery process is to work closely with communities to better understand local flood risk, mitigation efforts, and other topics and spark watershed-wide discussions about increasing resilience to flooding. The Discovery process of FEMA's Risk MAP program helps communities identify areas at risk for flooding and solutions for reducing that risk. During Discovery, FEMA partners with: the community, including leaders, floodplain administrators, engineers, watershed council representatives, planners, emergency managers, and GIS specialists; Federal, State, and regional, non-profit organizations; those concerned with flooding or land use; and other locally identified stakeholders.

DNR Shoreland/Floodplain Technical Working Session held across the State



DNR staff working with County Zoning staff — Green Bay, WI
Photo DNR

Kay Lutze, DNR Shoreland Policy Coordinator, and Michelle Staff, DNR Floodplain Management Policy Coordinator, held day-long technical sessions across the State in January and February. Each day-long session provided technical zoning scenarios, and the main topics covered were based on county staff survey results, include nonconforming structures, impervious surfaces, buffer requirements, etc. These working sessions combined shoreland and floodplain elements to work through. These workshops were primary for County Zoning staff and were held in Spooner, Eau Claire, Green Bay, Fitchburg and Antigo.



County Zoning staff working through scenarios - Fitchburg, WI

Questions about Flood Insurance??

FEMA has a service center for flood insurance policies holders.

Call 800-621-FEMA



Training Opportunities

The CRS offers webinars to help communities understand and meet their CRS requirements. Many will be recorded, so they can be accessed later. Registration is free but required, as space is limited. Some courses provide continuing education credits for Certified Floodplain Managers (CFMs). See the [CRS Resources website](#). The one-hour webinars listed below are on the calendar, and others will be scheduled. All webinars begin at 1:00 pm EST / 10:00 am PST.

- Activity 330 (Developing Outreach Projects)— March 20, 2018
- Activity 510 (Floodplain Management Planning)— March 21, 2018
- Preparing an Annual Recertification — April 17, 2018
- Preparing an Impact Adjustment Map — April 18, 2018
- Introduction to the CRS — May 15, 2018
- The CRS and Coastal Hazards — May 16, 2018

Also, FEMA's Emergency Management Institute (EMI) in Emmitsburg, Maryland offers training on topics related to floodplain management, mitigation, and construction, including the basic CRS course (E0278). These are oriented to local building, zoning, planning, and engineering officials. Tuition is free for state and local government officials, travel stipends are available, and on-campus lodging is free. Free transportation is provided from the airport to the campus and back to the airport. The only out-of-pocket expense is a meal ticket—all-you-can-eat breakfast, lunch, and dinner. Go to the welcome page of the EMI website for specific details. The application to attend can be found at this page on the EMI website, or call EMI at 1-800-238-3358 or (301) 447-1035. Signed applications should be submitted through the state's Emergency Management Training Officer. For more information and classes available see the [EMI web site](#).

Planning a Resilient New York City



Following Hurricane Sandy in October, 2012, the New York City Department of Planning created Flood Resilience Zoning to allow for recovery, promote rebuilding, and increase the city's resilience to climate-related events, including coastal flooding and storm surge. The New York City Department of City Planning created a short video to illustrate special zoning regulations that apply in the floodplain. It explains NYC's flood risk and how flood resilient construction is an important part of

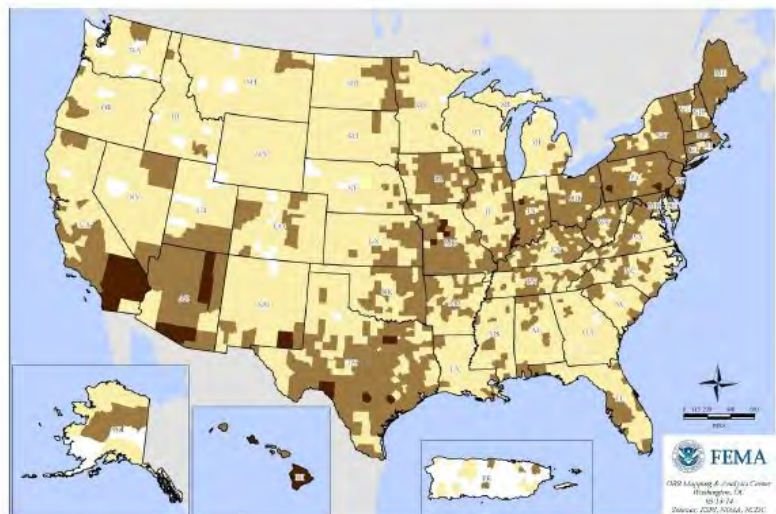
NYC's effort to build multiple lines of defense from coastal flooding. City Planning developed the video to generate input on how zoning could be further modified to remove regulatory barriers to resiliency investments and make neighborhoods more resilient.

City Planning is currently working with community members and property owners across the city's floodplain to update the Flood Resilience Zoning rules through a future citywide zoning text amendment. The effort to update the zoning text is also informed by DCP's initiatives in specific neighborhoods – in residential, commercial and manufacturing areas – throughout the city's floodplain to tailor strategies to the needs and opportunities of the area. Since 2013, extensive community engagement through various climate resiliency initiatives has helped inform some of the ways that zoning might be improved. This work is part of the City's #OneNYC plan to make our neighborhoods, economy, and public services ready to withstand and to emerge stronger.

KNOW THE RISK

FREQUENCY OF FLOOD EVENTS BY COUNTY: 1996–2013

This map depicts all coastal, flash, lakeshore, storm surge, or other flooding identified by the National Oceanic and Atmospheric Administration (NOAA).





Save These Dates Now:
June 17-21, 2018 for

ASFPM's 42nd Annual National Conference in Phoenix
"Managing Floods Where the Mountains Meet the Desert"

The ASFPM annual conference is recognized as the most important floodplain conference in the United States year after year. With more than 120 speakers and 1,200 participants, they are the national conferences all community, state and federal floodplain managers plan to attend. Because of that, many of the most important consulting firms and product vendors associated with floodplain management attend.

In recent years, the attendance has had about an equal number of private, local, state and federal participants from all over the U.S. and several foreign countries.



PO Box 7921
Madison, WI 53707-7921

This newsletter is supported by funding through FEMA Cooperative Agreement EMC-2017-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 policies 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.

Floodplain Contact:

- Michelle Staff, 608-266-3093
Michelle.Staff@Wisconsin.gov

Shoreland Contact:

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

Dam Safety Contacts:

- Meg Galloway., 608-266-7014
Meg.Galloway@Wisconsin.gov