FLOODPLAIN MANAGEMENT TODAY

Published by the FLOODPLAIN MANAGEMENT DIVISION



DEPT. OF NATURAL RESOURCES

JULY 2024

Floodplain Changes Threaten Nebraska's State Tree

By Adele Phillips, CFM

Nebraska's charismatic State Tree is notable for its fast growth, majestic stature, generous canopy, golden autumn color, shimmering leaves, and the delicate "cotton" wafting from its limbs in late spring. Although designated as the state tree relatively recently in 1972, the tree has long provided for the needs of Indigenous peoples and settlers in the form of landmarks, firewood, food, transportation, medicine and construction material. As many outdoor enthusiasts have probably observed, cottonwood trees provide habitat for many birds and small mammals:

- beavers use the saplings for food and to build dams
- eagles and other raptors nest in the branches, and wild turkeys roost in them
- caterpillars of butterfly species such as the striking mourning cloak, eastern tiger swallowtail, and viceroy all feast upon its leaves while promethea silk moths and cottonwood dagger moths live among them.

An estimated 40 different animal species benefit from these trees.

Tolerant of harsh floods, the stabilizing roots of cottonwood stands also provide watershed protection, filtration, and erosion control.

Despite the tree's significance, however, Nebraska's cottonwood tree population continues to decline due to changes in flood regime, land conversion, herbicide damage, and livestock grazing. Development

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Fun Had by All at the Nebraska Children's Groundwater Festival

By Erin Wendt

On Tuesday, May 14, 2024, members from the Floodplain Division of the Nebraska Department of Natural Resources (NeDNR) traveled to Grand Island for the Nebraska Children's Groundwater Festival. The event was hosted at the Central **Community College and College** Park campuses by the Central Platte Natural Resources District. Of the 36 presenters at the event, the Floodplain Management team's "Building a Floodplain Town" presentation drew in five groups of around 20-30 students in each group, with students from three different schools attending the sessions.

"Building a Floodplain Town" began with having students color and personalize their own miniature paper houses, and then fold and tape their house together. Once students had finished creating their homes, they were invited to walk to the front of the classroom and place their homes wherever they chose on NeDNR's Floodplain Simulation Table. Once all the homes were placed in the Table, the important connection between

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Floodplain Division teammates Erin Wendt and Deanna Ringenberg teach youths the importance of preserving wetlands and floodplains, and the various solutions people can take to protect themselves if they are already living in a floodplain, at the 2024 Children's Groundwater Festival in Grand Island, Nebraska. Photo courtesy Megan Grimes, Nebraska Association of Resources Districts.

Three Things to Know About New HUD FFRMS Rule

By Chad Berginnis, CFM Director, Association of State Floodplain Managers

In late April, the Department of Housing and Urban Development (HUD) announced a final rule in the Federal Register to implement the Federal Flood Risk Management Standard (FFRMS). For those who are unfamiliar with the scope of HUD's responsibilities, they are the federal agency responsible for national policy and programs that address America's housing needs, improve and develop the nation's communities, and enforce fair housing laws. HUD's programs touch virtually every community: from rental assistance through Section 8 vouchers to mortgage finance through the Federal Housing Administration (FHA), and to community development assistance through Community Development Block Grants (CDBG). Because HUD's fingerprints are everywhere, their final rule to implement the FFRMS may be one of the most significant among all federal agencies. To ensure its success, all of us are going to have to do our part and we don't have much time to spare much of the rule becomes effective June 24, 2024 while other aspects of it take effect January 1, 2025.

While this rule has many significant features, I want to highlight three of the most important changes impacting us as floodplain managers:

- the preference for defining the FFRMS floodplain by the Climate Informed Science Approach;
- 2. the new requirement in the Minimum Property Standards, and
- the new flood Notification of Flood Hazard requirements.
 I urge all of you to ponder these new provisions and how your communities can best help address them.

CISA First

The new rule establishes a preference for (but does not yet require) use of a Climate Informed Science Approach (CISA) to determine the floodplain of concern for HUD-funded projects,

when possible. The floodplain identified using CISA provides the elevation and flood hazard area that results from using a climate-informed science approach based on bestavailable, actionable hydrologic and hydraulic data. CISA maps can provide more accurate and forward-looking information than existing Flood Insurance Rate Maps (FIRMs), many of which have not been updated in years or even decades. When CISA maps are not available for a particular HUD-funded project, the rule provides multiple alternate approaches to identify the FFRMS floodplain, including adding freeboard to the 100year flood elevation Freeboard Value Approach (FVA) or using the 500-year flood elevation. This means with or without available CISA mapping, there will be a predictable and practicable option for compliance with the rule that still promotes resilience.

What I find important about the rule is that when a community has developed CISA data — and we are now entering an era where some communities are doing that — there is a process whereby HUD can recognize and utilize that best locally available data for CISA. Given that HUD has not yet endorsed any Federal CISA data, this



will occur gradually over time. In the meantime, there is a **Federal Flood Standard Support Tool (FFSST)** to help with determining CISA, FVA ,or 500-year floodplain for a site.

Minimum Property Standards – New 2 Foot Freeboard Requirement

Perhaps one of the most widespread of all HUD's programs is the availability of Federal Housing Administration (FHA) loans. An FHA loan is a mortgage that is insured by the FHA. The FHA doesn't directly lend money, but instead provides mortgage insurance to private lenders who are approved by the FHA. Just how important are FHA loans nationally? According to FHA's Fiscal Year 2023 report, FHA endorsed 580,000 home purchase mortgages through its forward mortgage program, and over 82 percent went to first-time home buyers. The original mortgage amount of all endorsed forward mortgages, including both purchase and refinance mortgages, in FY 2023 totaled \$208 billion.

FHA financing represents a significant source of financing for first-time home

- See FFRMS cont. on page 5.

Welcome to the NFIP, Arapahoe, Barada, Filley, and Reynolds!

NeDNR is excited for the residents of Arapahoe, Barada, Filley, and Reynolds, who will soon have access to federally-backed flood insurance--among other benefits--by virtue of their community's participation in the National Flood Insurance Program.

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Two Exciting Announcements!

The Floodplain Management Division is pleased to announce that Elijah Kaufman is stepping into the role as Nebraska's new State NFIP Coordinator. Elijah joined the floodplain team 4 years ago as an NFIP specialist and we look forward to his continued growth with our team.

After nearly 9 years with NeDNR, Chuck Chase has retired from his position as Outreach Coordinator. He has shared a tremendous wealth of knowledge with many floodplain administrators and professionals, both novice and experienced over the years. We hope Chuck's retirement involves many days filled with camping and relaxation.

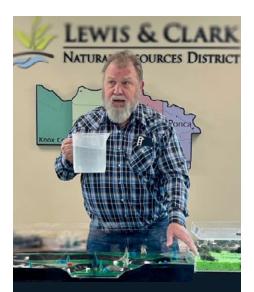
Cottonwood continued from page 1.

of flood control structures and channelization of rivers such as the Missouri, Republican, Platte, Elkhorn, and Blue have affected natural flows resulting in less widespread flooding and reduced the presence of bare soil and sand necessary for cottonwood regeneration. Meanwhile, conversion of riparian bottomlands to row crops has further reduced land available for cottonwoods to re-establish. Aerial application of herbicides when conditions are too windy or too hot can cause chemical drift consequently causing leaf damage, slow growth, and die back.

One of the best actions we can take to help bring back the cottonwood population--aside from planting new trees--is to allow for its natural regeneration within marginal or floodprone cropland. Leaving post-flood deposits of silt and sand undisturbed also provides an important seedbeds to receive the cottonwood's wind- and water-borne seeds.

Cottonwood trees display their autumn colors along the North Platte River near Sutherland, Nebraska. Photo courtesy Chris Helzer / The Nature Conservancy.



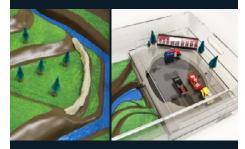


Bring Floodplain Education to Your Event or Classroom!

Are you looking for an interactive way to teach about flooding? Children and adults alike will enjoy using our floodplain simulation model to learn about the dangers and impacts of unplanned development and human activity in the floodplain.

Students can learn the value of wetlands and retention ponds in flood management. They can construct levees and discover how stream flow is affected, and can affect downstream communities.

If you would like us at your event, reach out to Michele York to schedule: (402) 471-1214 or Michele.York@Nebraska.gov



Various development scenarios and their effects on flow and flood behavior can be explored using modeling clay and props representing reservoirs, wetlands, parking lots, and more. Images courtesy Ward's Science.

New Community Boundaries? Be Sure to Let FEMA Know

By Martin Koch, CFM, AICP

Nebraska's communities have the ability to change their jurisdictional boundaries. Changing their jurisdictional boundaries includes annexing neighboring communities and adopting or modifying an Extraterritorial Jurisdiction (ETJ). According to 44 CFR 59.22 (a)(9)(v), communities must notify the FEMA Regional Office and the State within one year of when these boundary changes take place so the community can accurately adopt and enforce the floodplain management regulations for the newly annexed community or ETJ area. This includes adoption of Flood Insurance Rate Maps (FIRMs) for newly added panels in the community's jurisdiction. More information about annexation and jurisdictional change and the notification process can be found in Unit 7, Section B of the FEMA 480 Manual (NFIP Floodplain Management Requirements).

How do I notify my Region of a change in my community's boundaries?

To notify Region 7, communities must send an annexation package that consists of two key pieces of information: (1) the adopted and signed ordinance approving the annexation; and (2) documentation containing maps, legal descriptions, or other information that indicates the boundaries of the annexed properties and the communities involved. Email the annexation package to **fema-r7floodplain@fema.dhs.gov**.

Additionally, there are several key considerations for communities that are part of the National Flood Insurance Program (NFIP) involving annexations. When new panels are added to a community's jurisdiction, flood zones within those panel become part of the annexing community's responsibility. This means the annexing community will need to update their Floodplain Management Ordinance if they have one and are part of the NFIP. Additional information regarding the requirements for community regulations can be found in 44 CFR 60.3.

Within the National Flood Insurance Program, a community's ETJ is considered to be part of the community. ETJs are granted to communities through state statutes and are generally exercised in the unincorporated areas of the county adjacent to the community (usually 1 to 3 miles beyond corporate limits). When annexations occur, the corporate boundaries change, and with it the limits of the ETJ. This means updates to the community's **Floodplain Management Ordinance** to adopt the new panels and potential shifts in eligibility and pricing for structures in the ETJ.

Another key consideration for annexations depends on participation, or lack thereof, in the NFIP. If the annexing community participates in the NFIP, the annexed community will become eligible for flood insurance. However, if the annexing community does not participate in the NFIP and annexes a community that does, the annexed community will no longer be eligible for flood insurance once their current policy expires. Only when the annexing community joins the NFIP can the previously participating community be eligible for flood insurance again.

Additionally, the status of a community in the Community Rating System (CRS) is subject to change through the annexation process. An annexation and the resulting change in a community can change the CRS discount property owners receive.

- See Boundaries cont. on page 6.

FFRMS continued from page 2.

buyers and is therefore important in nearly all communities. What happens then, if new housing doesn't meet HUD's minimum property standards? It doesn't qualify for a FHA mortgage! Beginning on January 1, 2025, the new minimum property standards will kick in and require that, in order to qualify for a HUD mortgage (and this also applies to low-rent public housing programs), the lowest floor must be two feet above the base flood elevation (2-foot freeboard requirement), if the home is in an identified Special Flood Hazard Area (SFHAs).

In my opinion, any community that doesn't have a 2-foot freeboard in their ordinance will be risking cutting off a vital source of mortgage funding because it is impossible to pre-identify which homes might have a buyer that will need FHA financing. Again, this will only apply to new construction and only in mapped SFHA's. Given that it takes time to adopt changes to local floodplain management codes, I urge you to consider adopting at least a 2-foot freeboard if your community hasn't already done so then you will not have to worry which homes meet the new Minimum Property Standard requirement.

NOTE: Are you interested in increasing your community's freeboard to 2 feet? Contact us and we will assist.

Notification of Flood Hazard Requirements

HUD's final rule includes several strong and important notification requirements, such as the requirement that HUD (or HUD's designee) or the responsible entity must ensure that any party participating in a financial transaction for a property located in a floodplain and any current or prospective tenant is notified of the hazards of the floodplain location is retained. In addition, **24 CFR 55.4** defines the notification requirements for property owners, buyers, developers, and renters and identifies specific hazards and information that must be included in these notices based on the interests of these parties.

The required information for owners, buyers, and developers includes the requirement or option to obtain flood insurance, the approximate elevation of the FFRMS floodplain, proximity of the site to flood-related infrastructure including dams and levees, ingress and egress or evacuation routes, disclosure of information on flood insurance claims filed on the property, and other relevant information such as available emergency notification resources. For HUD-assisted, HUD-acquired, and HUD-insured rental properties, new and renewal leases are required to include acknowledgments signed by residents indicating that they have been advised that the property is in a floodplain and flood insurance is available for their personal property. Renters must also be informed of the location of ingress and egress or evacuation routes, available emergency notification resources, and emergency procedures for residents in the event of flooding. HUD encourages a proactive and systematic approach to notification requirements for properties in floodplains to ensure that prospective buyers and renters are made aware of potential flood risk so that they can make risk-informed decisions.

The way I translate the proactive and systematic approach is that all of us in the floodplain management community need to think about how to provide this information. For example, how would somebody find the proximity of the site to floodrelated infrastructure, such as dams and levees? State, regional and local authorities typically maintain that information; are there systems available to provide this information

to owners, buyers, and developers? Ingress and egress or evacuation routes, emergency procedures for residents and emergency notification contacts are typically maintained by local authorities - again, hypothetically how would or could folks easily get that information? In terms of flood claims filed on the property, while FEMA can provide that for existing property owners, are FEMA's systems ready to handle a large number of requests in a timely manner? The point is that the new notification requirements are going to be a bit of a lift on everyone's part and local floodplain managers in particular need to be aware of the new pieces of data that they need to be providing. HUD is currently developing further guidance on these notification requirements.

If you are a local or state floodplain manager, one good resource is the two webinars that HUD has developed for the FFRMS implementation. The

- See FFRMS cont. on page 6.

Riverine Flooding is the nation's 3rd costliest natural disaster.

Find an Insurance Provider

Festival continued from page 1.

wetlands, rivers, and floodplains was explained by having mock-rainstorms over the wetland. In the first scenario, the wetland provided a secure place for the heavy rain to be stored, slowly releasing it into the river downstream. The second scenario had the wetland paved over with a parking lot, which created fast moving water into the river and flooding occurred. Students were asked to share the differences they noticed between the two scenarios and to come up with potential solutions now that the wetland was gone, and flooding became a problem to solve.

This activity at the Nebraska Children's Groundwater Festival taught students about the importance of preserving wetlands and floodplains, and the various solutions people can take to protect themselves if they are already living in a floodplain.

Boundaries continued from page 4.

If the annexing community is at a higher CRS rating than the annexed community, property owners in the annexed community will see a decrease in their flood insurance cost. However, if the annexing community is at a lower rating than the annexed community, those in the annexed community will see an increase in their flood insurance cost.

Lastly, filling out elevation certificates for areas that have been annexed requires special attention. According to Section B of the Elevation Certificate instructions, when a "building is in an area that was previously mapped in one community and is now mapped in another due to annexation or dissolution, enter the community name and six-digit Community Identification Number of the community the building is now located in..." Additionally, the FIRM Panel that shows the building should be used, even if it is not listed in the current community's jurisdiction.

FFRMS continued from page 5.

first of those webinars occurred on May 30 but you can watch the recording and view the slides.

As flood disaster costs rise at an unsustainable rate. HUD's rule for implementing the FFRMS is both strong and necessary. It is also equitable. One thing I particularly appreciate about the rule is that poor and disadvantaged homeowners and renters are expected to have the same level of flood protection as someone who has the means to afford it. I applaud the vision and the perseverance of HUD to get the final rule completed, and ASFPM is committed to working with HUD through this implementation period. It is critical that floodplain managers in our states and communities are aware of not only these three items highlighted in my column, but the many other elements of the new FFRMS rule so together we can reduce flood losses in the nation.

Your Suggestions Welcome!

What common permitting situations you have experienced in your community and would like to see discussed in the NeDNR Floodplain newsletter?

Do you have events and training opportunities to announce?

Please send suggestions and requests to Adele Phillips at Adele.Phillips@Nebraska.gov

Coming Soon!



Training and Events:

Self-Paced NFIP 101: Introduction to Floodplain Management

FEMA's Floodplain Management Training, Education, and Development Committee has launched a new online NFIP 101 course. This training is hosted in partnership with ASFPM and will help new and experienced floodplain administrators, emergency managers, elected officials, and others learn more about the NFIP and its requirements. The course is free and **does not require** ASFPM membership.

The self-paced course will take about 14-18 hours to complete. There is no time limit, so you can finish the course over days, weeks, or months. Those new to floodplain management who wish to learn the basics and earn professional credit may complete an exam and, if passed, receive 12 continuing education credits from ASFPM. The course is also useful as a reference guide for more experienced floodplain administrators who are seeking a refresher on basic floodplain management tools, terms, and concepts. To learn more, visit this link.

2024 NeFSMA Annual Conference

July 18, 2024 Younes Conference Center Kearney, NE

To learn more, visit this link.

Training and Events Continued:

07.17 Nature Based Solutions Workshop

8:00 AM - 12:00 PM Central Community College Kearney, NE

This free workshop is hosted by Nebraska Silver Jackets, and its goal is to help participants gain a general understanding of nature-based solutions as they apply to flood risk management, as well as develop skills to build long-term mitigation strategies to reduce risk within their community. The workshop features presentations from United States Army Corps of Engineers (USACE), Natural Resources Conservation Service, Nebraska Association of Resources Districts, and various state departments. To read the agenda and to register, visit this link.

07.18 2024 NeFSMA Annual Conference

8:00 AM - 4:30 PM Younes Conference Center North Kearney, NE

Join your peers for the Nebraska Floodplain and Stormwater Managers Association Annual Conference, full of informative sessions. To review the conference schedule and to register, visit this **link**.

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07.18 - .19 2024 Tools of Floodplain Management

Day 1: 1:00 PM - 5:00 PM Day 2: 8:00 AM - 3:00 PM Police Department Jefferson City, MO

The 2024 Tools of Floodplain Management workshop is a free, 2-day course designed for floodplain administrators. It covers various important issues as well as dayto-day activities, incorporating updated National Flood Insurance Program information and forms. We recommend that those wishing to take the Certified Floodplain Managers (CFM) exam complete the Tools of Floodplain Management workshop prior to taking the CFM exam. This course has been approved for 9 Continuing Education Credits (CECs) for Certified Floodplain Managers. For more information visit this link.

07.23 Grants Training Workshop 9:00 AM - 1:00 PM

9:00 AM - 1:00 PM Independence, KS

Join Kansas Dept. of Agriculture in learning about various federal grant opportunities from FEMA-DHS, U.S. Dept. of Interior, USACE, U.S. EPA, U.S. Dept. of Housing and Urban Development, and more. To register, visit this **link**.

08.13 & 09.10 Making Mitigation Work Webinar Series 12:00 PM to 1:00 PM

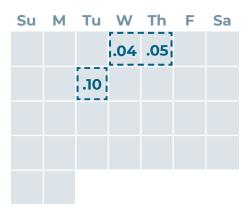
Colorado's Natural Hazards Center, in partnership with the Federal Emergency Management Agency, is pleased to present the Making Mitigation Work Webinar Series. These free one-hour webinars feature innovative speakers and highlight progress in mitigation policy, practice, and research. To learn more, visit this **link**.

09.04 - .05 □ Flooding Hazards

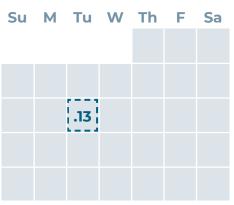
5:00 PM - 9:00 PM each day

Brought to you by the Iowa Homeland Security and Emergency Management, this 8-hour virtual training addresses the current science of the causes of floods, flood forecasting, flood risk assessment, and best practices for the preparation and mitigation of both short- and long-fuse flooding events. Key concepts and discussion topics will be reinforced with facilitator-led group activities that utilize real-world flood scenarios. The goal of this course is to prepare participants to recognize the conditions that lead to flood events. evaluate their community's risk, and prepare appropriately. For more information visit this **link**.

September



August



Want More Information?

Visit the NeDNR Floodplain Management website at: https://dnr.nebraska.gov/floodplain Check out our Interactive Floodplain map at: http://ne.gov/go/floodriskmap

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This newsletter is produced by the NeDNR Floodplain Management Division and is partially supported by funding through a Cooperative Agreement with the Federal Emergency Management Agency. The contents to not necessarily reflect the view and policies of the federal government.