# Floodplain Management Today

Published by the Nebraska Floodplain Management Division

Spring 2026

## Spring Outreach Events and Presentations

Erin Wendt, CFM

The Nebraska Floodplain Management Division's outreach team presented at several events this spring to a variety of professionals within the floodplain management field. These events included the Professional Surveyors Association of Nebraska (PSAN) Winter Conference, the Nebraska Planning Conference, the Nebraska Municipal Clerks Institute and Academy, and the Nebraska Association of Emergency Managers (NAEM) Annual Conference. The outreach team will also host their annual two-day Floodplain Conference in late April.

The spring outreach season began on February 13 when State National Flood Insurance Program (NFIP) Coordinator, Elijah Kaufman, traveled to Kearney, Nebraska for the PSAN Winter Conference. Kaufman gave two presentations over the course of the conference: the Federal Emergency Management Agency (FEMA) Elevation Certificate, and he co-presented with Professional Land Surveyor Brian Yentes on the electronic Letter of Map Amendment (eLOMA) process. Kaufman was pleased with the attendance at both presentations because surveyors are an important piece in the field of floodplain management. "Nebraska surveyors play a significant role in floodplain management. Whether the survey is for construction designs or completed construction, local floodplain administrators rely on surveyed elevations to make sure their community's homes and businesses are protected from flooding. Surveyors also serve as a direct point of contact with developers, and can help them understand floodplain requirements before, during, and after a project. Providing floodplain education to our surveyors is crucial for ensuring every project has an advocate for

floodplain management," Kaufman said. The Floodplain Management Division presents at the PSAN Winter Conference annually.

The Floodplain Management Division then attended the Nebraska Planning Conference on March 5, also in Kearney, Nebraska. NFIP Specialist Isabella Bialas and Kaufman presented "Community Planning and Flood Resilience: Resources to Prepare for a Safer Future."

Bialas and Kaufman led this presentation with Dr. Zhenghong Tang, Ph.D. of the University of Nebraska-Lincoln co-presenting. “Overall, we found the content to flow very well and believe attendees are able to bring back valuable information to their communities,” Bialas said. The presentation focused on topics such as integrating floodplain management into comprehensive local plans, a discussion of recent flood risk research, and the various economic opportunities communities can pursue from the State for flood risk mitigation.

The Nebraska Municipal Clerks Institute and Academy was held March 16 through March 20, in La Vista, Nebraska, and Kaufman attended the fourth day of the conference with Recovery Section Manager Lexy Hindt of the Nebraska Emergency Management Agency (NEMA). The pair focused their presentation on emergency preparedness in the state. Hindt presented an overview of FEMA disaster programs and processes administered through NEMA, and Kaufman discussed community flood preparedness with a focus on identifying flood hazards, an introduction to the NFIP, and establishing floodplain management standards and plans. He also gave special attention to the risk associated with campgrounds in Special Flood Hazard Areas (SFHAs) as a result of the devastating floods in Texas last July.

On April 8, Kaufman and Outreach Coordinator Erin Wendt presented at the NAEM Annual Conference in Kearney, Nebraska. They have both attended the NAEM conference annually since 2024, beginning with just a booth at the event but have now presented twice. This year, Kaufman and Wendt discussed the severe hailstorm that impacted Fremont in the spring of 2025 where dozens of structures required substantial damage assessments. The presentation also included an introduction to the Floodplain Management Division’s plan to create a Disaster Assistance Response Team (DART) to assist communities throughout the state of Nebraska with post-disaster substantial damage assessments.

Lastly, the Floodplain Management Division will hold their annual two-day Floodplain Conference at their Fallbrook office on April 22 and 23. Day one of the two-day conference will begin with the Division’s four-hour Basic Floodplain Management course. This course discusses all things floodplain management – from an introduction to the NFIP, to Letters of Map Change, and how to resolve floodplain management violations. The afternoon of day one will include presentations on mitigation and grant opportunities and as well as a panel of Floodplain Administrators from throughout the state to discuss their struggles and successes in the field.

Day two of the conference will include presentations from the Nebraska Game & Parks Commission, the National Weather Service, and Nebraska Silver Jackets. Also scheduled for the day is another panel of Floodplain Administrators to discuss their experiences with NFIP violations and how they worked to resolve them. The Floodplain Conference is

scheduled to end with a Tabletop Exercise—a discussion-based session created to work through scenarios and allow participants to gain experience that can be transferred to real events. The Division has conducted a tabletop exercise every year for their Floodplain Conference, with the scenarios and locations changing for each conference but always focusing on a flooding event.

If you are interested in attending any future Floodplain Conferences or trainings, or would like the Floodplain Management Division to present at an event, please visit the contact page and reach out to a member of the outreach team.

Nebraska Floodplain Management Division presenting at the 2026 Nebraska Planning Conference in Kearney, Nebraska

Floodplain administrator panel at the 2025 Floodplain Conference.

# Floodplain Administrator Spotlight: Nick Elledge, Nuckolls County

Mercy Kipenda, CFM

The Nebraska Floodplain Management Division helps delineate floodplains as a Cooperating Technical Partner (CTP) with the Federal Emergency Management Agency (FEMA). Mapping projects by the Division help keep communities informed about their flood risk. When a project concludes, communities receive updated floodplain maps with a new effective date, triggering the map adoption process. Under the National Flood Insurance Program (NFIP), communities must adopt these maps before their effective date or risk suspension from the program.

Recently, Nuckolls County received their Letter of Final Determination (LFD), giving them 180 days to adopt the newly issued floodplain maps through their floodplain ordinance. The outreach team of the Floodplain Management Division works closely with local Floodplain Administrators (FPAs) to amend or draft new ordinances in time before the map effective dates; a critical time for FPAs who often juggle multiple roles.

Despite these challenges, Nick Elledge, Nuckolls County FPA and Emergency Management Director, was outstanding to work with. He communicated effectively, stayed calm under pressure, and remained committed even as the deadline approached. When FEMA disapproved of the final ordinance filing just two days before the effective date, Nick sprang into action to make the required changes, track down the Board Chairperson, and secure approval one day before the deadline.

Nick has served as Nuckolls County's FPA for eight years, and his dedication exemplifies the hard work FPAs do to protect their communities from flood hazards. Thank you, Nick, and all FPAs, for your commitment and adaptability!

## Welcome to the NFIP, Octavia!

The Nebraska Floodplain Management Division is excited for the residents of this community as they 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. To learn how your community can join, reach out to the team! Contact information is on the last page of the newsletter.

## Natural Functions of the Floodplain

Anna Crist, CFM

What can floodplains do for you? Floodplains are natural features in landscapes that become inundated when there is excess water. They are officially defined by the Federal Emergency Management Agency (FEMA) as "any land susceptible to being inundated by water from any source." Floodplains are generally flat areas close to a water source. However, they can extend a great distance and include regions with higher ground elevation where flooding is not always anticipated.

While floodplains are regions that pose potential hazards to people and development, they do possess natural functions that can help minimize flood risk, improve water quality, and support ecological systems. Managing development within floodplains is not only essential for protecting lives and property but also maintaining these important functions.

When flooding occurs, whether it is caused by an ice jam, heavy rain, or other influences, water can flow at extremely high rates, eroding the soil and picking up loose material creating debris. Fast moving flood waters have the potential to pick up vehicles, damage structures, and threaten the lives of individuals caught in the path.

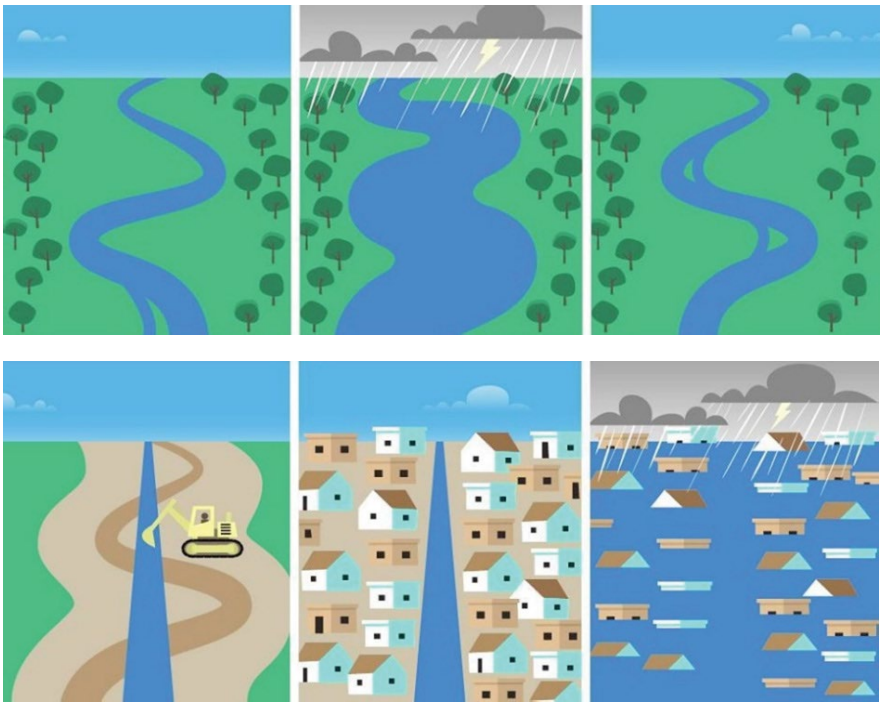
If their natural state is preserved, floodplains serve as a place for excess water to flow freely away from settlements and minimize potential damage. Highly vegetative floodplains help reduce erosion through stabilizing root structures and slow the speed of flood waters with increased friction and absorption rates. Wide and natural floodplains give high concentrations of water the space needed to spread out and provide temporary storage, further reducing the depth and speed of flood waters downstream.

The highly saturated and nutrient rich landscape of floodplains not only supports wetlands and provides excellent habitat for animals and plant life but also allows for groundwater aquifer recharge. The excess water that is held in the floodplain has more time to infiltrate

the soil and collect as groundwater storage that many Nebraskans rely on for irrigation, drinking water, and surface water recharge. Additionally, as water passes through the soil, any pollutants that may have been carried from upstream are filtered out, preventing the contamination of other water sources.

If development in floodplains goes unmanaged, the efficacy of these functions can be greatly affected by loss of open space and vegetation. A study which tracked residential development and flood risk in Nebraska found that within Dodge, Douglas, and Sarpy counties in eastern Nebraska, more than 2,250 new residential buildings have been constructed in the floodplain. This is twenty-one (21) times the number of demolitions that have taken place in high-hazard flood zones (Lee et al, 2026). Increased development in the floodplain means there is a greater number of people living and/or operating businesses in high hazard areas at risk of experiencing devastating loss caused by flooding. This encroachment of development can lead to the loss of floodplain functions causing an increase in flood rates, water elevations, and flow speeds making floods more hazardous. Preserving natural floodplains is a great way to minimize flood risk, improve water quality, and protect communities.

Citation: *Lee, J., Jahangeer, J., Andrews, J. et al. Tracking residential development and flood risk in Eastern Nebraska: a Geo-AI imagery change detection approach. Spat. Inf. Res. 34, 19 (2026).* https://doi.org/10.1007/s41324-026-00678-9



# 2D LOMRs in a 1D Regulatory World

Jamie Reinke, PE, CFM

The Floodplain Management Division is seeing a rise in requests to review 2D models for Letters of Map Revisions (LOMRs) in areas that currently use 1D regulatory data. We've put together some tips and requirements for LOMR submittals to help communities handle these incoming requests. By addressing these points early, it can simplify the review process before the files reach FEMA.

First, determine if a FEMA-approved 2D methodology exists for the project area. In Nebraska, certain conditions, such as ice-affected flooding, lack updated FEMA procedures for 2D modeling.

Second, evaluate if a 2D model actually improves upon existing 1D data. While 2D modeling excels in wide, shallow floodplains, it offers little benefit in narrow, channelized floodplains and floodways. Switching to 2D without a clear benefit can create a burden with inconsistent data and the need to manage multiple models for a single stream.

Finally, consider the age of the existing 1D model and any future mapping plans. If the current 1D model uses modern terrain and methodology, it may be more efficient to stick with 1D rather than 'patching' a small 2D segment into a larger reach. This is especially true if a full watershed-scale 2D update is already planned for the near future. We strongly recommend consulting with local floodplain administrators to ensure the chosen approach doesn't create unnecessary regulatory hurdles.

If you determine that a 2D approach is most appropriate, we recommend using a 1D/2D hybrid model. This integrates results into a single model, making it easier to match regulatory boundaries and manage data long-term.

If a hybrid model is not feasible and you must "piece-in" a standalone 2D section, you will need to determine how to tie into the existing models, at the upstream and downstream ends of the main stem and at any tributary confluences. The modeler must carefully determine the upstream and downstream limits to ensure a smooth transition and acceptable tie-ins. The tie-in requirements at floodplain boundaries, floodway boundaries, and base flood elevations (BFEs) remain the same as they are for traditional 1D LOMRs. These extents may need to be more substantial than was historically needed to achieve a reasonable tie-in. Submittals must address how tributaries tie into the main study stream. This is especially critical in areas where backwater from the larger river influences the confluence with the tributary.

Additionally, if the LOMR does not update regulatory hydrology, you must verify that the peak flow magnitudes of the model match the peak flows listed in the Flood Insurance Study (FIS) at all reported locations.

As with any LOMR, multiple simulations must be provided for the submittal. To ensure a valid comparison between these phases, modelers must verify that the geometry and generated mesh are identical across all simulations, except where changes are necessary to reflect the proposed project or physical changes in the area that occurred after the effective date. These simulations should be analyzed and refined sequentially: if the Duplicate Effective model contains significant cell errors, these must be resolved in the Corrected Effective model before the Existing Conditions or Proposed Conditions models are developed. Following FEMA guidance and standard review checklists, the Nebraska Floodplain Management Division strives to correct any cell errors exceeding 0.2 ft unless a reasonable technical justification is provided.

Be aware that floodway surcharge requirements differ between 2D and 1D studies. While a standard 1D study requires surcharges to remain between 0.0 ft and 1.0 ft at every cross-section, a 2D study typically allows for a broader range, between -0.5 ft and 1.5 ft, at every cell within the floodway. However, to maintain consistency with 1D regulations and minimize regulatory impacts, any 2D study must still achieve a surcharge between 0.0 ft and 1.0 ft at any cell that affects an insurable structure.

Additional guidance and resources have been prepared to help modelers through the process. The resources we recommend reviewing first are the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping Activities Under the RiskMAP Program including, but not limited to:

FEMA Policy Standards for Flood Risk Analysis and Mapping Policy (Rev. 14)

General Hydrologic Considerations (November 2022)

Hydrology: Rainfall-Runoff

Analyses (November 2024)

Hydraulics: Two-Dimensional Analysis (November 2023

Floodway Analysis and Mapping (November 2023)

Contiguous Community Matching (December 2020)

The Association of State Floodplain Managers (ASFPM) also recently released several new resources for 2D modeling, which include:

FEMA Risk MAP 1D vs. 2D Modeling (September 2025)

FEMA Risk MAP Community Role in the Mapping Process (September 2025)

FEMA Risk MAP Managing Floodplains with 2D Modeling (September 2025)

The Nebraska Floodplain Management Division is happy to answer questions or provide assistance as we navigate the transition from 1D to 2D modeling. Please feel free to reach out to our in-house mapping staff if you need support.

## Save the Date! Nebraska Floodplain and Stormwater Managers Association Annual Conference

July 16, 2026

Kearney, Nebraska

## Facts of Flood Insurance with DOI

Nebraska Department of Insurance

Could a flood happen to me? After seeing videos of floods across the country, many Nebraskans think back to March 2019 when the entire state seemed underwater. However, during those floods only one to two and a half inches of rain fell. It was snow covering the ground and one to two feet of ice that could not be absorbed, causing the extreme flooding. Many factors can cause flooding: substantial rainfall, snowmelt, ice jams, and sewer systems being unable to handle excessive runoff.

Nebraskans need to be aware of two facts from the Department of Insurance's perspective. Your homeowners policy does not cover floods. There are affordable flood insurance policies to purchase that do cover you in the event of flooding through the National Flood Insurance Program (NFIP). While they are available, a 30-day waiting period is typical when purchasing a policy. If you want to know what it may cost, NFIP has a quote tool to find out the cost of a flood insurance policy for your specific needs.

The second fact is to read your policy. It's imperative to know what is covered, the limits of your policy, and if you have a deductible. Use your agent as a resource to talk over details and coverage of your policy.

While a flood is not something anyone expects, it's important to prepare for one. Take a few steps to help make your claims process following flooding easier by keeping a home inventory list, taking photos and videos of all your possessions, and keeping receipts of household items. Having this information can help keep track of losses and make the claims process smoother if flooding occurs.

For more information on flood insurance, please visit the DWEE flood insurance page and the DOI insurance page.

## We're updated our website!

After the merger of the Nebraska Department of Natural Resources and the Nebraska Department of Environment and Energy last July, we have a new website for the Nebraska Department of Water, Energy, and Environment!

The Floodplain Management Division will provide more information and guidance on navigating the site in the future.

If you have questions or need help finding a certain page, please reach out to the Division. Contact information is available on the last page of the newsletter.

## Training and Events

### 2026 Nebraska Floodplain Conference

### Nebraska Floodplain Management Division

### Wednesday & Thursday, April 22nd - 23rd | 8 AM - 5 PM | In-person - Lincoln, NE

Join the Floodplain Management Division for one or both days of FREE back-to-back floodplain training!

Day 1: Floodplain Management Workshop

The day will begin with the Basic Floodplain Management class detailing the fundamentals of floodplain management. The topics include floodplain development permits, map

reading, LOMAs and LOMR-Fs, substantial damage and improvement, and more! The afternoon will begin with a spotlight on grant funding opportunities with presentations from partner agencies on flood mitigation actions and disaster preparedness planning. The day will end with a panel of Nebraska Floodplain Administrators discussing floodplain management struggles and successes in the field.

Day 2: Floodplain Day

The Nebraska Game and Parks Commission, Nebraska Silver Jackets, National Weather Service, and a panel of Nebraska Floodplain Administrators will speak on a wide array of floodplain related topics in the morning, and the afternoon will feature an exciting hands-on table top exercise that you definitely don't want to miss! Is your community prepared for emergency response to a flood event involving an RV park and summer camp?

For more information and to register, please visit this link.

### Floodplain Management Scenarios and Having Difficult Conversations *After Hours*

### Nebraska Floodplain Management Division

### Wednesday, May 13th | 6 - 8 PM | Virtual

Join the Nebraska Floodplain Management Division for a 2-hour virtual class covering multiple topics to help floodplain administrators feel more confident addressing their day-to-day challenges. This class is perfect for those unable to attend a class during the day!

The first hour of the class will walk through real-life scenarios that floodplain administrators may face. This could include:

- Permitting a residential structure in Zone A floodplain
- Proposed improvements to a grandfathered structure
- What to do if you discover unpermitted work

The second hour will look at tools, tips and resources that will help in navigating difficult conversations with community members regarding floodplain management.

Please register in advance at this link.

## No-Rise Analyses in Areas with 2D Mapping

### Nebraska Floodplain Management Division

### Thursday, May 14th | 1:30 - 2:30 PM | Virtual

Please join the Nebraska Floodplain Management staff for an hour-long informative virtual class describing the requirements for a no-rise analyses in an area with 2-Dimentional study results.

The presentation will highlight:

- Differences in a 2D no-rise from a traditional 1D no-rise
- Required documentation for submittal to the community
- New resources available for managing floodplains in areas with 2D study results

Please register in advance at this link.

## EO273 Managing Floodplain Development through the NFIP

### National Disaster & Emergency Management University

### May 18th - 21st | In-person - National Emergency Training Center Emmitsburg, MD

This course provides officials with the knowledge and skills to administer and enforce floodplain management regulations. The course focuses on the NFIP and concepts of floodplain management, flood maps and studies, ordinance administration, and the relationship between floodplain management and flood insurance.

The course is designed to provide new floodplain administrators with the information and communication techniques to explain the impact of floodplain management decisions on insurance, public safety, and health. The course provides an overview of NFIP minimum floodplain management regulations based on the types of flood hazards identified, Substantial Improvement (SI)/Substantial Damage (SD), and describes the use of a permitting process as a floodplain management oversight and compliance tool. Appropriate Letters of Map Change (LOMCs) for specific circumstances and the LOMC forms and possible flood hazard mitigation solutions are also identified. The course explains the roles and responsibilities of a floodplain administrator prior to and after a disaster event.

Register in advance at this link.

### Association of State Floodplain Managers (ASFPM) 2026 Annual Conference

### Association of State Floodplain Managers

### May 31st - June 4th | Virtual or In-person - Milwaukee, WI

Join us on the shores of Lake Michigan in Milwaukee, Wisconsin for this landmark event—ASFPM's 50th Annual National Conference, themed: "The Fresh Coast Legacy: 50 Years of Floodplain Management." This milestone event celebrates five decades of progress in flood risk reduction and community resilience across the nation. Conference Highlights:

- 200+ concurrent sessions led by experts from across the field
- Field tours and hands-on workshops that bring real-world solutions to life
- Robust networking opportunities with professionals, policymakers, and partners
- Inspiring plenary sessions reflecting on the past and envisioning the future

Session topics include mitigation, modeling, mapping, NFIP, dams and levees, risk communication, extreme weather trends, natural and beneficial functions, whole community approach, and more!

Please register in advance at this link.

### Basic Floodplain Management

### Nebraska Floodplain Management Division

### Wednesday, June 17th | 10 AM - 3 PM | Virtual

Please join the Nebraska Floodplain Management staff for a free 4-hour virtual class on the fundamentals of floodplain management. This class is suitable for both novice and seasoned floodplain administrators, as well as anyone responsible for local floodplain administration.

The class will cover the following topics, and more:

- •Floodplain Development Permits and the Permitting Process
- •Map Reading
- •LOMAs and LOMR-Fs
- •Substantial Damage and Improvement

There will be an hour break for lunch. Continuing education credits are available for Treasurers of Nebraska counties/municipalities that participate in the National Flood Insurance Program (NFIP) and for Certified Floodplain Managers (CFMs).

Please register in advance at this link.

## Contact Us:

| | | |
|---|---|---|
| Jamie Reinke, PE, CFM | Division Manager | (402) 471-3957 |
| Michele York | Administrative Programs Officer | (402) 471-1214 |
| Elijah Kaufman, CFM | State NFIP Coordinator | (402) 471-0640 |
| Anna Crist, CFM | Outreach Coordinator | (402) 471-0585 |
| Erin Wendt, CFM | Outreach Coordinator | (402) 471-0572 |
| Isabella Bialas, CFM | NFIP Specialist | (402) 471-3929 |
| Mercy Kipenda, CFM | NFIP Specialist | (402) 471-3947 |
| Jared Ashton, PE, CFM | Project Engineer | (402) 471-0500 |
| Deanna Ringenberg, PE, CFM | Project Engineer | (402) 471-1221 |
| Stefan Schaepe, PE, CFM | Project Engineer | (402) 471-0644 |
| Rebecca Podariu, EI, CFM | Engineer | (402) 471-0307 |
| Jeehoon Kim, CFM | Senior Floodplain Mapping Specialist | (402) 471-1223 |
| Ryan Stastny, CFM | Senior Floodplain Mapping Specialist | (402) 471-2243 |
| Karl Merchant | Senior Floodplain Mapping Specialist | (402) 471-2240 |
| Harrison Jones | Floodplain Mapping Specialist | (402) 471-2242 |