

# FLOODPLAIN MANAGEMENT TODAY

## Tiny Houses

By Steve Samuelson, CFM, NFIP Specialist for the Kansas Department of Agriculture

There are television shows about tiny houses and the idea is growing in popularity. For this reason, there have been questions raised about putting smaller homes in the floodplain. Ignoring any building codes or zoning issues and just considering floodplain regulations, here are things to consider.

A tiny house is still a house. No matter the square footage, it is a residential structure. Every set of floodplain regulations has very clear specific requirements that residential structures be elevated above the base flood elevation (BFE). In most communities that requirement is one foot but it is two feet in some standards.

### Also Inside This Issue

<b>Nebraska's Five-Year Business Plan</b>	<b>2</b>
<b>RiskMAP- The Regulatory Process</b>	<b>4</b>
<b>Training Opportunities</b>	<b>7</b>

communities that freeboard elevation communities that have adopted higher standards.



Figure 1. Tiny house in a recreational vehicle park.

A tiny house is also a development in the floodplain. All development must be anchored to prevent flotation, collapse or lateral movement. It has to be attached to a permanent foundation. The argument has come back that the tiny house was delivered on back of a truck so it is just temporary. There is no allowance for a temporary residential structure in your floodplain regulations.

Another issue that has come up is that some tiny houses may be set up in recreational vehicle or camper parks. There are allowances for recreational vehicles that are not elevated and anchored on a foundation to be on site less than 180 days or be fully licensed and ready for highway use. In order for a tiny house to qualify as a recreational vehicle, compare the building to the definition found in most floodplain management regulations. Is the tiny house built on a single chassis, 400 square feet or less when measured at the largest horizontal projections,

designed to be self-propelled or permanently able to be towed by a light duty truck and designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel or seasonal use? Any tiny house that can meet that definition could be considered to be a recreational vehicle and allowed to meet the recreational vehicle requirements for floodplain management.

There has also been some confusion about tiny houses being called accessory structures because they were placed on a property that already had a larger primary structure. There have also been cases of someone who purchased a shed from a lumberyard, had it delivered and then moved in to it and turned it in to a house. To be very clear about this, when people will be living and sleeping in the structure then it is a residence and it is not to be considered a shed or an accessory structure. The tiny house must meet all of the same requirements of any other larger house. A house is a house and the size does not matter.

## Nebraska's Five-Year Business Plan

By Jamie Reinke, PE, CFM

As part of NeDNR's Cooperating Technical Partners (CTP) agreement with FEMA, the Floodplain Management team is tasked with developing a vision for mapping priorities for five-years into the future. NeDNR and FEMA have separate mechanisms for how projects are selected, but often the mapping priorities of the two agencies are well aligned.

NeDNR, by state statute, prioritizes mapping needs by considering the following factors:

1. Potential for future development;
2. Potential for flood damage or loss of life;
3. Probability that adequate data and maps will be prepared within a reasonable time by other sources;
4. Availability and adequacy of any existing maps;
5. Availability of flood data and other information necessary to produce adequate maps; and
6. Degree of interest shown by the local governments in the area in utilizing flood data and maps in an effective flood plain management program.

Similarly, FEMA has identified the following types of projects as the highest priority:

1. On-hold County Wide Projects
2. Levee PMR Projects
3. On-going Watershed Projects

4. Watershed Projects
5. Paper Inventory Reduction Projects

NeDNR uses the data associated with regulatory maps throughout the state regularly, whether for a Base Flood Elevation (BFE) Determination or for providing technical assistance to communities. When we use this data, it often becomes clear which areas of the state are in need of updated regulatory maps, however, we are still required to consider the state statutes and FEMA's priorities before identifying a project for future funding.

NeDNR works to sequence projects in our five-year business plan in a logical manner to address these mapping needs. Projects are selected at a watershed level and, when possible, NeDNR is leveraging the work of other agencies to avoid overlapping efforts and to maintain cost-efficiency. This allows NeDNR to maximize funding opportunities to provide more of the state with updated, high-quality regulatory products.

The FEMA Fiscal Year 2018 Business Plan update is due by the end of May. NeDNR is soliciting comments for the upcoming update. If you are interested in reviewing and commenting on the current business plan you can find it [here](#).

Comments are due to Katie Ringland at [katie.ringland@nebraska.gov](mailto:katie.ringland@nebraska.gov) by March 1, 2018.

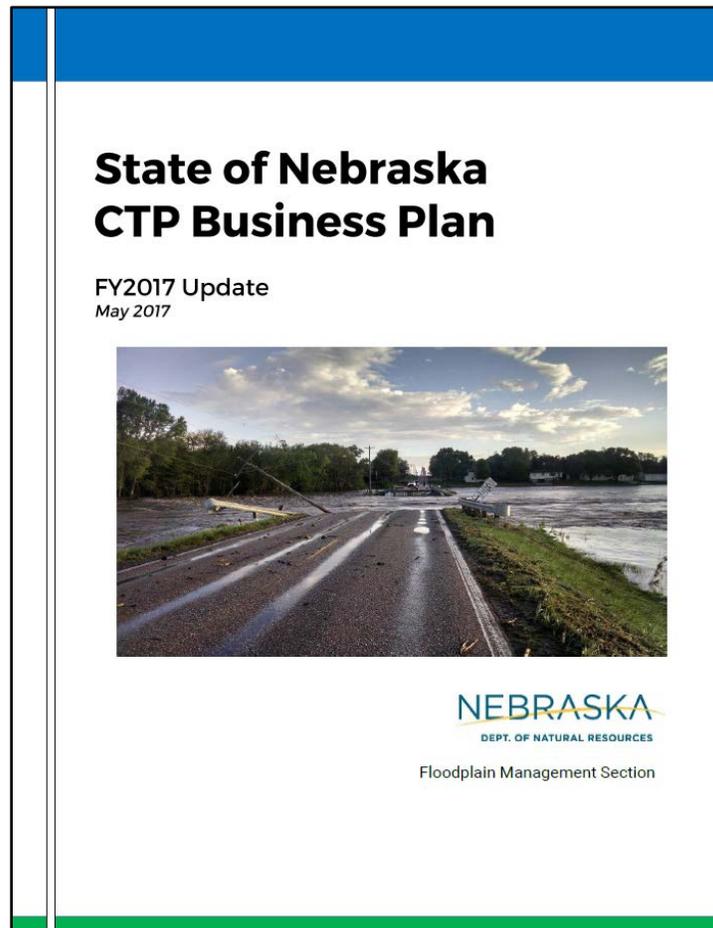


Figure 2. NeDNR's FY2017 Business Plan.

## The Risk MAP Process: The Regulatory Process

By Jared Ashton, PE, CFM and Ryan Kelly, CFM

To help community officials better understand Risk MAP and their role in the process, NeDNR is publishing a series of newsletter articles to explain each phase of the Risk MAP program. The July 2017 Floodplain Management Today Newsletter covered the **Discovery Phase** and the September 2017 edition covered the **Data Development Phase**. This edition will conclude the series with the **Regulatory Process**, which includes the final phases of Risk MAP: Preliminary and Post-Preliminary.

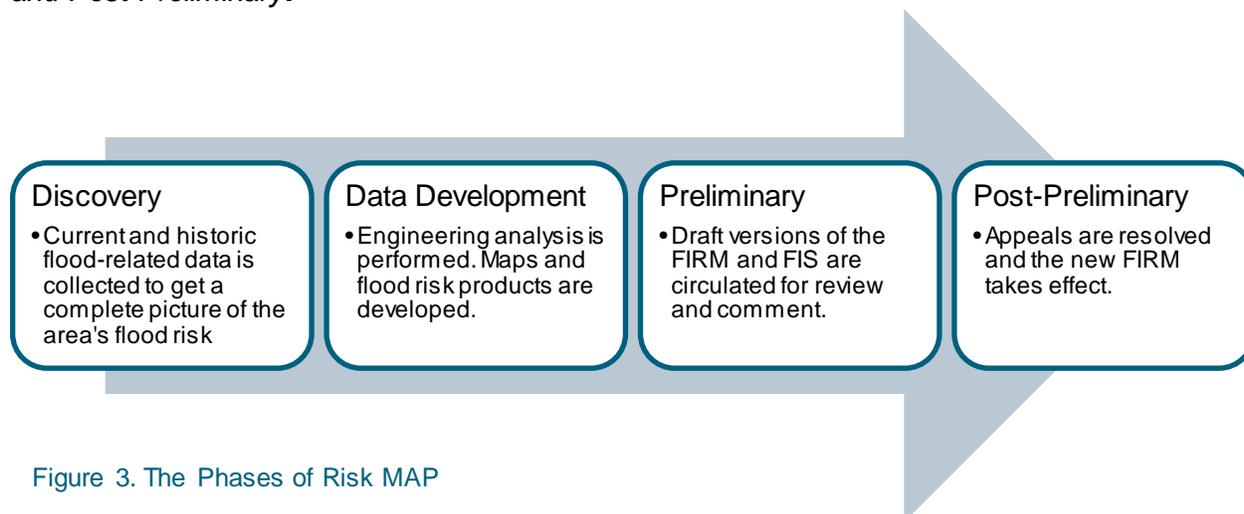


Figure 3. The Phases of Risk MAP

### Preliminary Map Production

After completion of the review and comment period following the Flood Risk Review Meeting, NeDNR begins to produce the Preliminary Flood Insurance Rate Map (FIRM) panels, the Preliminary Flood Insurance Study (FIS) report, and the FIRM database on a countywide basis. After completion of the preliminary products, FEMA completes a mandatory Quality Review (QR) of the data. Once FEMA concludes their QR, the Preliminary products are distributed to all affected communities for review and comment. The Preliminary products are also uploaded to FEMA's Map Service Center at this time. Currently, NeDNR schedules a Public Open House shortly after Preliminary products are distributed to allow property owners to speak with NeDNR and FEMA representatives to determine how the new study will impact their individual properties and discuss any questions they may have.

### Post-Preliminary Process

The Post-Preliminary Process (PPP) of a flood risk project is the process that guides regulatory mapping products from Preliminary issuance through the effective date. The effective mapping products, including the Flood Insurance Rate Map (FIRM) panels, the Flood Insurance Study (FIS) report, and the FIRM database, become the regulatory flood information for the flood risk project area, replacing any existing products for each community.

The PPP takes approximately two years to complete, depending on the impact of schedule alterations. Two major goals of the PPP are to ensure that all individuals within the project area are given due process to appeal information presented on the new maps and to confirm that all FEMA's quality standards for all elements of the flood study are met. Many of the steps involved

in PPP are dictated within the Code of Federal Regulations (CFR), and must be strictly adhered to. If certain steps involved in the CFR are not met, there is a risk that steps within PPP will have to be repeated, lengthening the timeline.

Following the Issuance of the Preliminary products, a 30-day review and comment period is provided for community officials, the public, and other stakeholders. Review comments during this time can include anything from technical issues, to typographical errors, to floodplain and floodway boundary delineation discrepancies. If minor errors are found, they are corrected so that the proper information is represented in the Preliminary mapping products. More serious inconsistencies can lead to a process known as “Revised Preliminary”, which can delay the PPP from moving forward.

After the 30-day review and comment period has taken place, FEMA and the mapping partners hold what is called a “Consultation Coordination Officer” (CCO) Meeting. The purpose of this meeting is to engage with community officials and other interested parties and explain the impacts of the new or modified FIRM, FIRM database, and FIS report on their community.

Next, a 90-day statutory appeal period begins for appeal-eligible communities. To be appeal-eligible, a community will typically have a change in Special Flood Hazard Area (SFHA) boundary or Base Flood Elevations (BFEs) resulting from the flood risk project. It is important for communities to be aware of their opportunity to appeal the flood risk information. In order to ensure this, FEMA only initiates the appeal process after providing the following notifications:

- Publishing a proposed flood elevation or SFHA designation in the Federal Register for comment.
- Directly notifying the Chief Executive Officer (CEO) of the community of the proposed flood elevation determination or SFHA designation.
- Publishing the proposed flood elevation determination of SFHA in a prominent local newspaper at least twice during the 10-day period following the notification of the community CEO.

**DEPARTMENT OF HOMELAND SECURITY  
FEDERAL EMERGENCY MANAGEMENT AGENCY  
Proposed Flood Hazard Determinations for Adams  
County, Nebraska and Incorporated Areas**

The Department of Homeland Security's Federal Emergency Management Agency has issued a preliminary Flood Insurance Rate Map (FIRM), and where applicable, Flood Insurance Study (FIS) report, reflecting proposed flood hazard determinations within Adams County, Nebraska and Incorporated Areas. These flood hazard determinations may include the addition or modification of Base Flood Elevations, base flood depths, Special Flood Hazard Area boundaries or zone designations, or the regulatory floodway. Technical information or comments are solicited on the proposed flood hazard determinations shown on the preliminary FIRM and/or FIS report for Adams County, Nebraska and Incorporated Areas. These flood hazard determinations are the basis for the floodplain management measures that your community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program. However, before these determinations are effective for floodplain management purposes, you will be provided an opportunity to appeal the proposed information. For information on the statutory 90-day period provided for appeals, as well as a complete listing of the communities affected and the locations where copies of the FIRM are available for review, please visit FEMA's website at [www.fema.gov/plan/prevent/fhm/bfe](http://www.fema.gov/plan/prevent/fhm/bfe), or call the FEMA Map Information eXchange (FMIX) toll free at 1-877-FEMA MAP (1-877-336-2627).  
June 14, 21, 2017

Figure 4. Adams County Public Notice. Published June 14 & 21, 2017 in *The Hastings Tribune*.

The 90-day appeal period can officially begin after the second publication in the local newspaper. During the appeal period, any community or individual can submit an appeal to FEMA if they have information that the flood hazard determinations proposed by FEMA are scientifically or technically incorrect. Appellants are required to demonstrate that alternative methods or applications result in more correct estimates of flood hazard determinations, thus demonstrating that FEMA's estimates are incorrect. At the conclusion of the 90 days, NeDNR has 30 days to complete the review of all appeals that were submitted. After appeal resolution, the flood risk project is subjected to the final three FEMA QRs, which are scheduled to take a

minimum of 60 days, and then the flood risk project continues to the Letter of Final Determination (LFD) phase.

The LFD is a letter sent by FEMA to the CEO of every community impacted by the project. The LFD states that all appeals in the project area have been resolved and the flood risk project will continue forward. At this point, the flood hazard determinations are final: the SFHA designation and BFE determinations for the project area have been found to be technically sound and can no longer be changed as part of this mapping project.

After receiving the LFD, there is a 6 month compliance period before the maps become Effective. During this time, the next steps will vary by community, but the steps that a community must take to become compliant before the map becomes effective will be clearly outlined in the LFD.

After the 6 month compliance period, the maps and the regulatory products produced during the flood risk project become the effective flood risk information for the project area. Communities are encouraged to use the new products to take steps to mitigate identified flood risk and also to plan for future development.

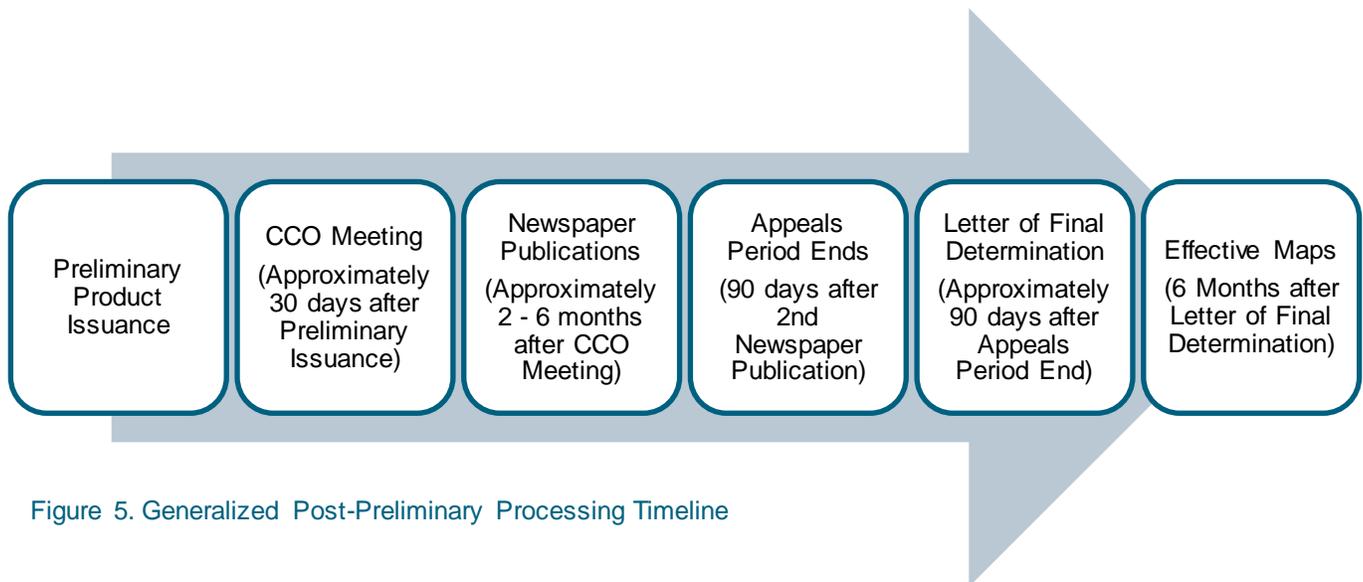


Figure 5. Generalized Post-Preliminary Processing Timeline

## Mark Your Calendar

If you have questions about any of these opportunities, please contact Chuck Chase.

### **CFM Study Session and Exam**

January 31, 2018, Papio-Missouri River NRD (8901 S. 154<sup>th</sup> Street), Omaha, NE

8:30 am - 12:00 pm (Study Session);

1:15 pm - 4:15 pm (Exam).

To apply, visit the following website. The application for the exam is through the Association of State Floodplain Managers, not NeDNR.

<http://floods.org/index.asp?menuid=405&firstlevelmenuid=180&siteid=1>

The CFM Exam Prep Guide and other resources for preparing for the exam are available on the site as well. If you are interested in additional information or study materials, please email Chuck at [chuck.chase@nebraska.gov](mailto:chuck.chase@nebraska.gov).

### **Substantial Damage Estimations**

February 7, 2018, Topeka, KS, 8:30 am – 12:30 pm.

The Kansas Department of Agriculture/Division of Water Resources will host this free seminar on substantial damage estimations. Substantial Damage Estimations are one of the most difficult parts of the National Flood Insurance Program. Come to this course and learn as much as you can before you have a fire, flood or tornado in the floodplain in your community. A laptop computer is necessary for this class.

The course has been approved by the Association of State Floodplain Managers for 4 hours of credit for Certified Floodplain Managers. Class size is limited to 25 and will be on a first come basis. You must download the SDE software on to your own lap top prior to the class. Students will be notified of the class address and other information after registration. Please direct questions and registration forms to: Steve Samuelson at [steve.samuelson@ks.gov](mailto:steve.samuelson@ks.gov) or 785-296-4622.

### **Basic Floodplain Management Workshop**

February 28, 2018, Fairbury, NE, 8:30 am – 12:00 pm.

The Nebraska Department of Natural Resources will be holding their Basic Floodplain Management Course from 8:30 am – 12:00 pm. It will be held at the Fairbury, Nebraska Union Bank & Trust, 1313 K Street. This basic course will cover the permit process, map reading, and elevation certificates. This is a great opportunity for new floodplain administrators to learn the basics of floodplain management. It is also a great refresher for floodplain administrators who desire a basic refresher.

### **Advanced Topics in Floodplain Management Workshop**

February 28, 2018, Fairbury, NE, 1:00 pm – 4:30 pm.

The Nebraska Department of Natural Resources will be holding their Advanced Topics in Floodplain Management Course from 1:00 pm - 4:30 pm. It will be held at the Fairbury, Nebraska Union Bank & Trust, 1313 K Street. This advanced course will provide in-depth discussion of pertinent technical bulletins, substantial improvements, and substantial damage. It will also have a forum of special topics. This course is a good opportunity to go beyond the basics in your understanding of the NFIP.

To register for the Basic or Advanced course send your name, organization, phone, and e-mail address to: [chuck.chase@nebraska.gov](mailto:chuck.chase@nebraska.gov) or call 402-471-9422.

## WANT MORE INFORMATION?

**Visit NeDNR’s Floodplain Website at**  
<https://dnr.nebraska.gov/floodplain>

**Or Contact**

<b>Katie Ringland, PE, CFM</b>	Floodplain Chief & Engineer	402.471.2094
<b>Jamie Reinke, PE, CFM</b>	Mapping Project Manager & Engineer	402.471.3957
<b>Chuck Chase, CFM</b>	NFIP & Outreach Specialist	402.471.9422
<b>Jared Ashton, PE, CFM</b>	Engineer	402.471.0500
<b>Stefan Schaepe, EI, CFM</b>	Engineer	402.471.0644
<b>Deanna Ringenberg, EI</b>	Engineer	402.471.2243
<b>Ryan Johnson, CFM</b>	Floodplain Mapping Specialist	402.471.1221
<b>Ryan Werner, CFM</b>	Floodplain Mapping Specialist	402.471.3941
<b>Ryan Kelly, CFM</b>	Floodplain Mapping Specialist	402.471.8608
<b>Shuhai Zheng, Ph.D., PE, CFM</b>	Engineering Programs and Services Division Head	402.471.3936

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