

# The Flood Record

March 2023

## Illinois One Day NFIP 101 Virtual Class – April 19, 2023

Are you new to floodplain management, need a refresher course, or planning to take the CFM exam? IDNR is hosting a day long virtual NFIP 101 class on Wednesday, April 19<sup>th</sup>, from 8:30 am to 4:30 pm with instructors from IDNR, FEMA, and the Illinois State Water Survey. The class will cover NFIP basics including:

- Map reading
- Floodplain mapping and map changes
- State floodway regulations
- Local regulations
- Flood insurance
- Community Rating System
- Mitigation
- Coastal zones

To register go to: <https://www.illinoisfloods.org/meetings/register/options/1027>. For registration questions contact Sarah Harbaugh at [iafsm@illinoisfloods.org](mailto:iafsm@illinoisfloods.org) or 630-443-8145. For all other questions please contact Erin Conley at [Erin.c.conley@illinois.gov](mailto:Erin.c.conley@illinois.gov) or Marilyn Sucoe at [Marilyn.sucoe@illinois.gov](mailto:Marilyn.sucoe@illinois.gov). (5 PDHs and 4 CECs)

## Illinois and FEMA Floodplain Management Webinar Series

Illinois has added six webinars to the four remaining FEMA monthly webinar series. We hope that some of these one-hour virtual training sessions will fit into your schedule. Please share this information with your building inspectors, permit staff, engineers, and public work staff. Use the links below to register or add to your calendar. Webinar attendance for FEMA-led webinars will be submitted to ASFPM for CECs for CFMs.

- 3/16/23 (Thurs), 11 am-12 pm, [Illinois Floodplain Mapping 101](#) (including Letters of Map Change)
- 3/29/23 (Wed), 9-10 am, [FEMA Substantial Improvement/Damage](#)
- 4/4/23 (Tues), 11 am-12 pm, [Illinois Floodplain and Floodway Permitting](#)
- 4/18/23 (Tues), 11 am-12 pm, [Illinois Updated Floodplain Model Ordinance](#)
- 4/26/23 (Wed), 9-10 am, [FEMA Development Permitting](#)
- 5/2/23 (Tues), 11 am-12 pm, [Illinois Floodplain Mapping 101 \(including Letters of Map Change\)](#)
- 5/23/23 (Tues), 11 am-12 pm, [Illinois: Flood Insurance Basics](#)
- 5/31/23 (Wed), 9-10 am, [FEMA NFIP Compliance](#)
- 6/6/23 (Tues), 11 am-12 pm, [Illinois Community Rating System Overview](#)
- 6/28/23 (Wed), 9-10 am, [FEMA Insurance is Mitigation](#)

## Illinois Floodplain Management Office Hours

IDNR staff will host monthly virtual office hour sessions on the dates listed below. Save the links below to your calendar and join us with any floodplain related questions. No registration is required.

- [March 9<sup>th</sup>](#), Thursday, 10 to 11 am
- [April 13<sup>th</sup>](#), Thursday, 10 to 11 am
- [May 11<sup>th</sup>](#), Thursday, 10 to 11 am

### In this Issue

- Illinois and FEMA Floodplain Management Webinar Series
- Illinois Floodplain Management Office Hours
- What is a Floodway? When do I need a State Floodway Permit?
- CFM Exam has Gone Digital
- Flood Insurance Guides
- How to use USGS Streamstats to Determine a Drainage Area
- FEMA Mapping Status

# What is a Floodway? When do I need a State Floodway Permit?

FEMA defines a “Regulatory Floodway” in the Code of Federal Regulation (44 CFR 59.1) as “the channel of a river or other watercourse and the adjacent land that must be reserved to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.” Regardless of whether a floodway is defined on your Flood Insurance Rate Map, A FLOODWAY IS PRESENT IN ALL WATERWAYS.

As the local official, your ordinance requires that you:

- Review all applications for development within [flood-prone areas](#)
- Require a state floodway permit if development is within the jurisdiction of the state as defined by 17 IL. Admin. Code Chapter 1 Sections 3700 and 3708.

What does this mean? If you know an area is prone to flooding, you must review permits for development to make sure the building sites will be reasonable safe from flooding and that the development will not increase damages or raise the base flood elevation. You must also check the drainage area to the development site to determine if a state floodway permit is required. The [USGS Streamstats](#) online tool is available to help determine a drainage area for most defined channels (See page 3 article for instructions on how to use this tool).

The state floodway rules define the state jurisdiction based on an urban or urbanizing drainage area of 1 square mile or more and a rural drainage area of 10 sq. miles or more. Remember, the floodway rules apply to all waterways regardless of floodplain mapping. **The “3700 Rules” apply across the entire state for all unmapped floodways that meet the drainage area criteria.** The “3708 Rules” apply to mapped floodways in Northeastern IL.

The Illinois floodway rules apply regardless of a communities’ membership in the National Flood Insurance Program (NFIP) and regardless of if they have a local floodplain ordinance. There are 895 NFIP communities across the state but around 500 that are not members. Development in non-participating communities must still comply with the state floodway regulations, as well as another other applicable state and federal regulations.

## CFM Exam has Gone Digital

AFSM will no longer be hosting in-person CFM exams. To take the on-line exam your total fee will be: \$185 for members and \$255 for non-members. You will need to fill out the Application Package and the On-Line Exam Application. You can get more information and the application package from the IASFM website: [Floodplain Manager Certification - Illinois Association for Floodplain and Stormwater Management \(illinoisfloods.org\)](#)

## Flood Insurance Guides

If you are hosting a spring flood awareness open house or would like to add flood insurance information to your website, FEMA has prepared the following guides:

[Risk Rating 2.0 Rate Explanation Guide](#)

[Risk Rating 2.0 Discount Guide](#)

[Levees in Risk Rating 2.0](#)

**Rate Explanation Guide**

FEMA's new rating methodology, **Risk Rating 2.0: Equity in Action**, considers specific characteristics of a building – the **Where, How, and What** – to provide a more modern, individualized, and equitable flood insurance rate. Understanding these characteristics helps to identify the building's unique flood risk and associated premium.

**WHERE It is Built (Property Address)**

FEMA uses the building's property address to determine flood risk for the property. The property address is used to determine:

- **A building's distance to flooding sources**, including the distance to the coast, ocean, rivers, and Great Lakes.
- **The ground elevation** where the building is located relative to the elevation of the surrounding area and the elevation of nearby flooding sources.
- **Other characteristics** such as the community where the building is located and how that relates to the Community Rating System discount or whether the building is on a barrier island.

**HOW It is Built (Building Characteristics)**

Knowing the physical characteristics of a building provides a deeper understanding of the building's individual flood risk and how it may impact premium. Relevant variables include:

**Building Occupancy**  
The type and use of the building being insured sets available coverage rates and determines what is covered as indicated in the policy form.

**Foundation Type**  
The foundation type provides important insight as to where the flood risk is likely to begin. The structure, the walls, based on whether a building is elevated, underground, or ground, or above ground.

**First Floor Height**  
Buildings whose first floor is higher off the ground have lower flood risk.

**Number of Floors**  
Buildings with more floors carried their risk over a higher area.

**Unit Location**  
Individual units on higher floors have lower flood risk than units on lower floors.

**Construction Type**  
Masonry walls perform better in different flooding events than wood frame walls.

**Flood Openings**  
Floor openings can lower a building's flood risk on the other hand, they can allow flood water to flow through a building's enclosure or structure.

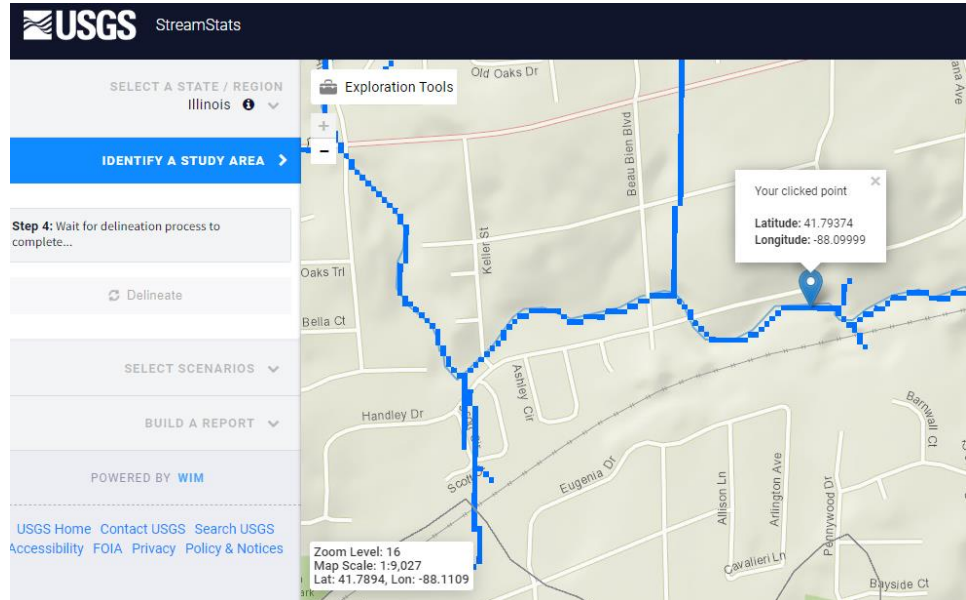
**Machinery & Equipment**  
Flooding above the first floor increases the risk of damage to machinery & equipment covered in the policy.

FEMA  
MAY 2022

## How to use USGS Streamstats to Determine a Drainage Area

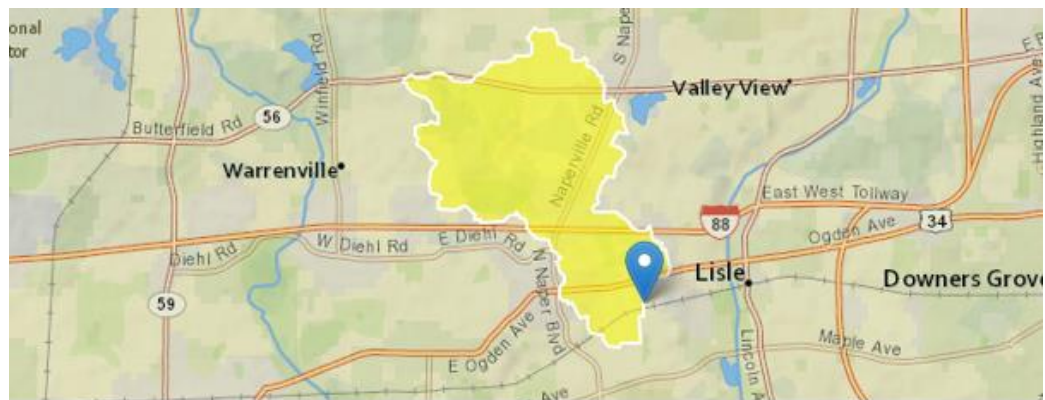
USGS Streamstats is an easy online tool that can help you calculate the drainage area to most defined waterways in Illinois. In areas where the channel is ill-defined, areas of very flat topography, or in Zones AH and AO, the tool may not be able to provide a drainage area. Follow the steps below for an estimated drainage area you can use in making your permitting decisions. If you are unable to use the tool for your development site, please contact the IDNR Floodway Permit staff for assistance at \_\_\_\_\_.

1. Go to [USGS Streamstats](#) and use the map to zoom into a location or use search tool to enter an address, community name, or the latitude/longitude, such as 42.53582, -93.78792.
2. Select Illinois as your state and the waterways will appear as bright blue lines. If no lines appear, you will not be able to use the tool to calculate the drainage area.



3. Click the "Delineate" button on the left and a cross will appear. Move the cross onto a blue line at the downstream point for the drainage area delineation. If you have chosen a valid point, the delineation will begin. It may take several attempts to select a valid point for the delineation to begin.
4. Once the delineation is complete, click the "Continue" button on the left side of the screen.
5. Now click the down arrow next to "Basin Characteristics" and scroll down to check "DRNAREA". Scroll to the bottom of the list and select the "Continue" button. You may also choose other characteristics listed.
6. After calculating, the Basin Characteristics report will be shown. Select "Open Report".
7. The report will open in a separate window showing the basin outline and the drainage area in square miles.

The tool can also be used to estimate flows. This can be added in Step 5 by selecting Peak-Flow Statistics and Bankfull Statistics.



### Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5.07	square miles



## FEMA Mapping Status

Digital FIRMs for all of Illinois is getting closer. Countywide mapping is in progress for nineteen counties. Ford County maps will be effective soon and the long-awaited preliminary maps are finally on the horizon for the Metro East counties. Only four counties remain unfunded for digital maps.

Below are the targeted time frames for the steps in the mapping process. All meetings and open houses are expected to be virtual until further notice. For additional information go to [www.Illinoisfloodmaps.org](http://www.Illinoisfloodmaps.org).

### Effective (6 months after LFD date)

None

### LFD

None

### Preliminary Maps:

- Clay Co Countywide Maps - 7/21/2022
- Cook and Kane PMR Poplar Creek and Spring Creek – 9/22/2021
- Effingham Co Countywide Maps - 7/21/2022
- Lake County PMR Lake Michigan, Mill Creek, and other lakes and creeks– 5/19/2020
- Madison Co Countywide Maps – 8/12/2022
- Monroe Co Countywide Maps – 7/15/2022
- St. Clair Co Countywide Maps – 8/10/2022
- Stark Co Countywide Maps – 12/15/2022

### Community Officials Meeting (CCO)

- None

### Public Open Houses

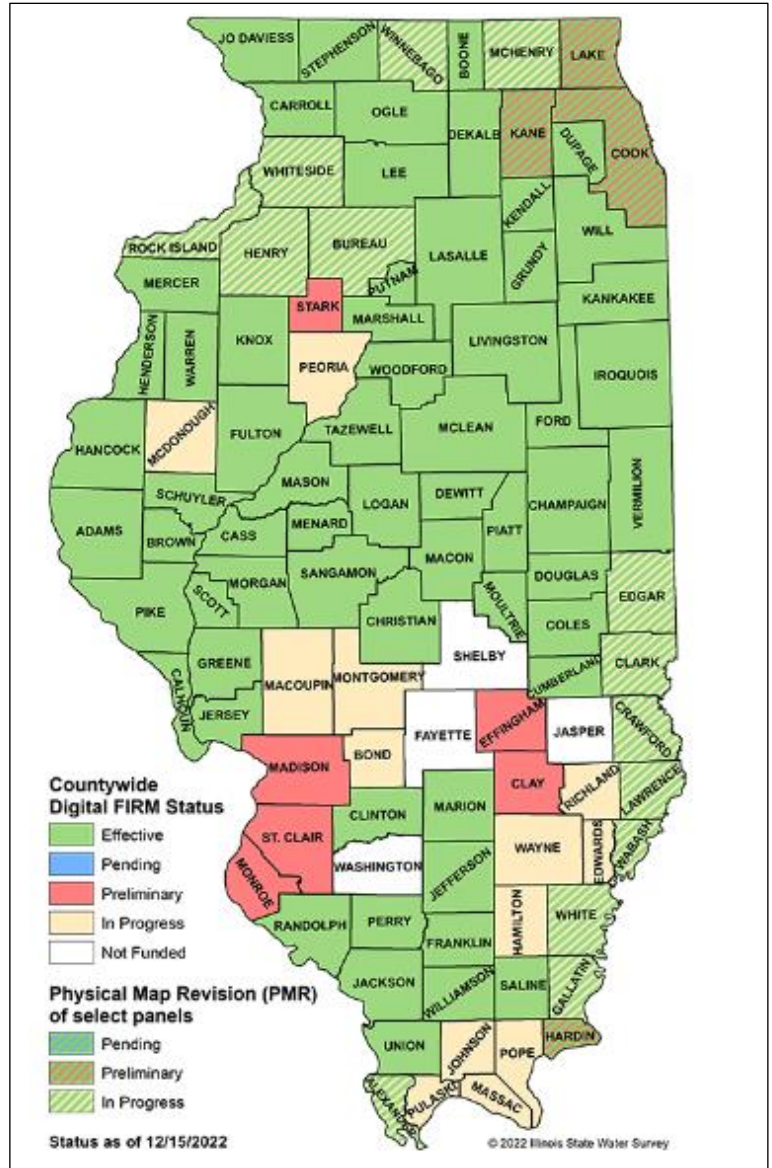
- Clay County Countywide 3/8/2023
- Effingham Co Countywide – 3/9/2023
- Stark County Countywide – Spring 2023

### Flood Risk Review Meeting and Comment Period

- Lower and Middle Wabash – Spring 2023

### Project Initiation Meetings

- Montgomery County – Spring 2023



If you are a new local floodplain administrator, send any contact updates to Erin Conley, State Floodplain Manager at [erin.c.conley@illinois.gov](mailto:erin.c.conley@illinois.gov).