



June/July 2024: Navigating QC Floods

The recent floods that have devastated Northwest Iowa remind us that floods can happen anywhere at any time. We are all at risk. We are especially at risk when we least expect. Unseasonal, extreme rain events breach levees, but also fill basements. Flash floods don't happen just in the Mississippi, but also on creeks and streams. These irregular weather events and floods are becoming more frequent due to climate change.



Picture of Spencer, Iowa after flooding on June 24, 2024.

As local rivers rise, we must learn what will affect our individual neighborhoods and homes. At River Action, we created this guide to help our Quad City communities navigate available resources to stay up to date on flood stages and flood protection.

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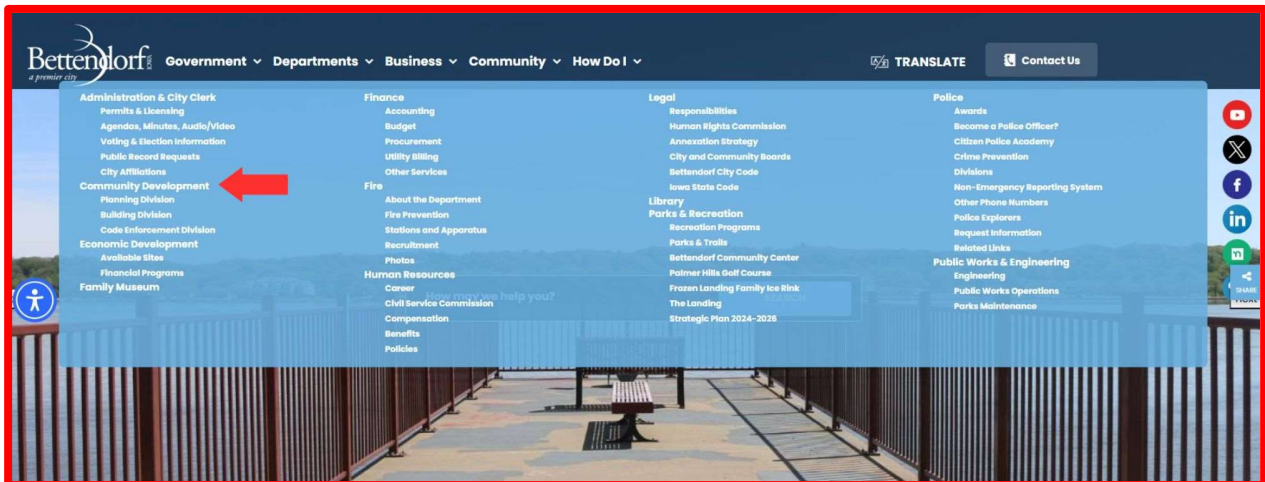
Iowa Flooding

Bettendorf

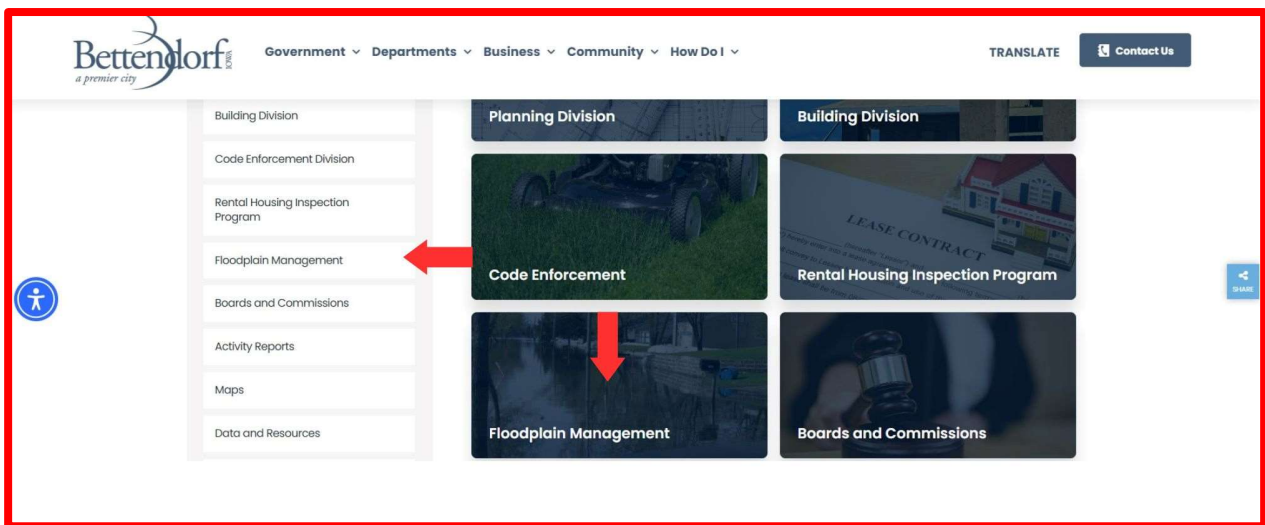
Bettendorf also has flooding information at bettendorf.org.

The city provides a chart listing the actions taken at each flood stage. There is also a floodplain map available.

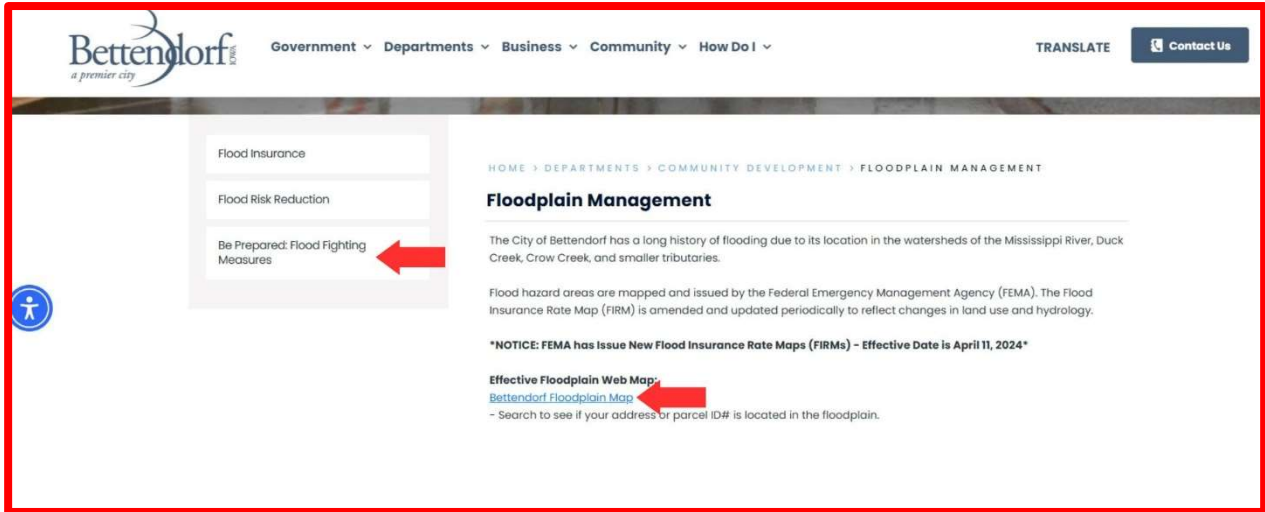
1. Click on **Departments** in the display bar across the top of the screen.



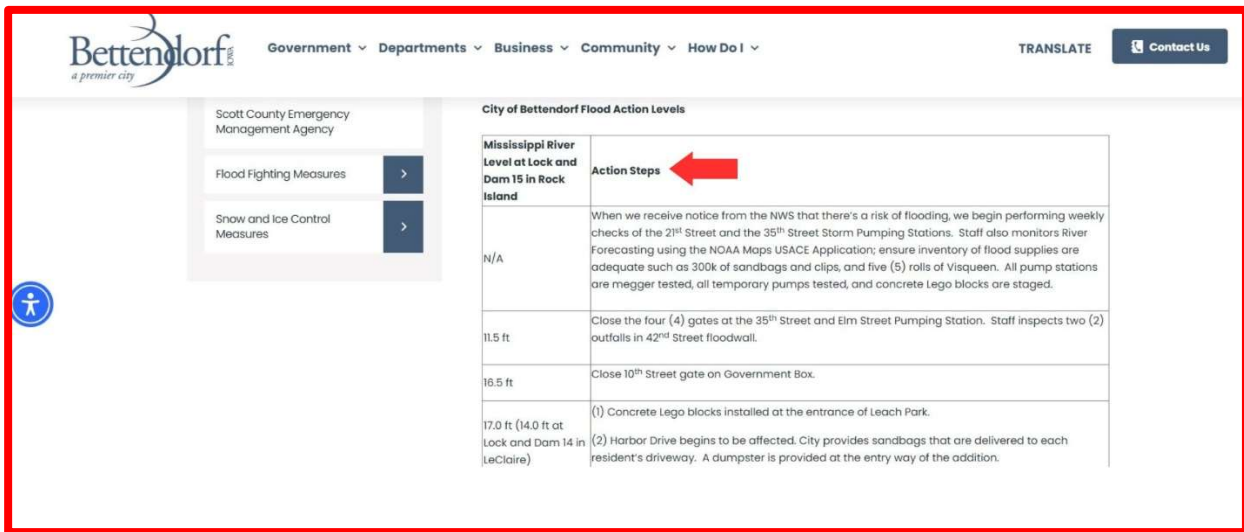
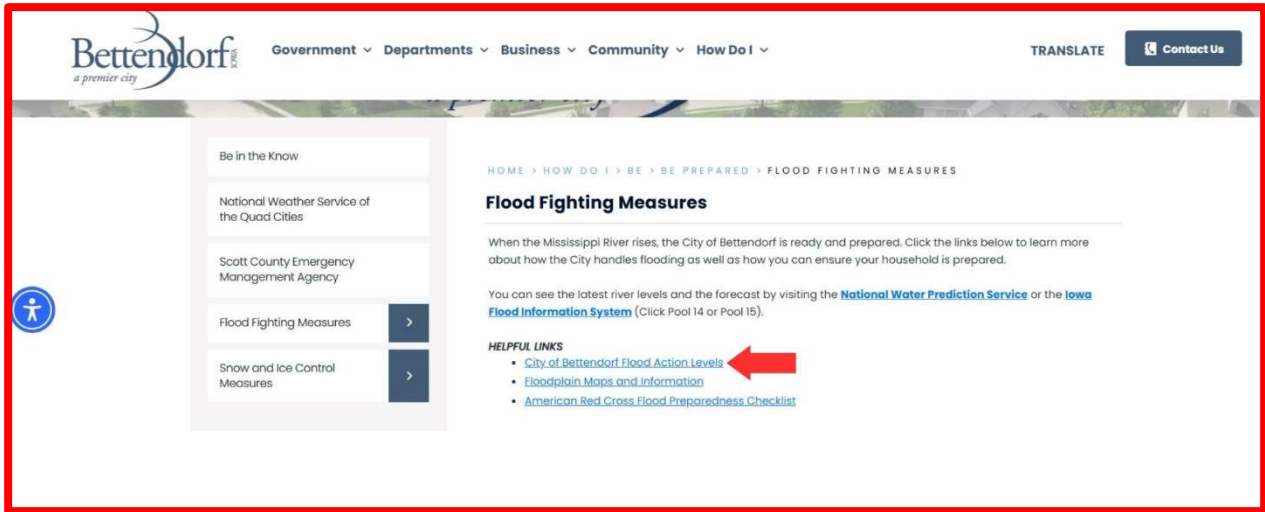
2. In the drop-down menu, select **Community Development**.



3. Select **Floodplain Management** whether in the side bar or the icon in the center.



4. The resulting window will provide a variety of helpful links, one being the **Flood Action Levels**.



Buffalo

For Buffalo Residents, the City of Buffalo has a tab on their website for flood information.

Here is the link:

[Buffalo, Iowa - Flood Information](#)

1. The first part of the page gives you instructions on how to use online tools to understand river levels and the guide for reading the river level maps.

River Levels


This is a simplified guide to some of the most useful tools on the new AHPS website. Please refer to the full instruction manual here for additional details.

https://www.weather.gov/media/owp/operations/nwps_user_guide.pdf

1) Log in here: <https://water.noaa.gov/>

Should look like the picture to the right when you open the website.

Colored circles = current stage colored to standard flood categories
Colored squares = current 7 day forecast flood level colored to standard flood categories
Green blobs = flood watches & warnings *circle inside a square shows current and forecasted stages




2. The second section focuses on flood information and in the red box you can check how up to date it is.

Flood Information

****Updated 6/27/2024****

City officials are watching the river levels closely and monitoring those affected. The current forecast indicates by July 4, the Mississippi will be at 17.5'. This moderate level of flooding affects those residents along the 1400-1500 block of Front Street (south side) and Buffalo Shores recreation area. Buffalo Shores campground will be closing June 28.



- 3. Lastly, there is a data section where you can see observed precipitation and forecasted precipitation to gauge how prepared you need to be for the next flood. The graphic should have the date it was produced in the upper right-hand corner.

FLOOD
Data

See the links below for more information.

Observed Precipitation: Northeastern Missouri, central Iowa, and central Illinois saw the highest precipitation amounts yesterday, with Missouri seeing upwards of 2.5 inches of rain, and portions of Iowa and Illinois seeing 1.5-2 inches. Central and eastern Iowa and western Illinois saw up to 1 inch of rain. There were reports of flash flooding in and around Clinton County Iowa, with some isolated locations reporting up to 5 inches of rainfall in a very short time span (observed

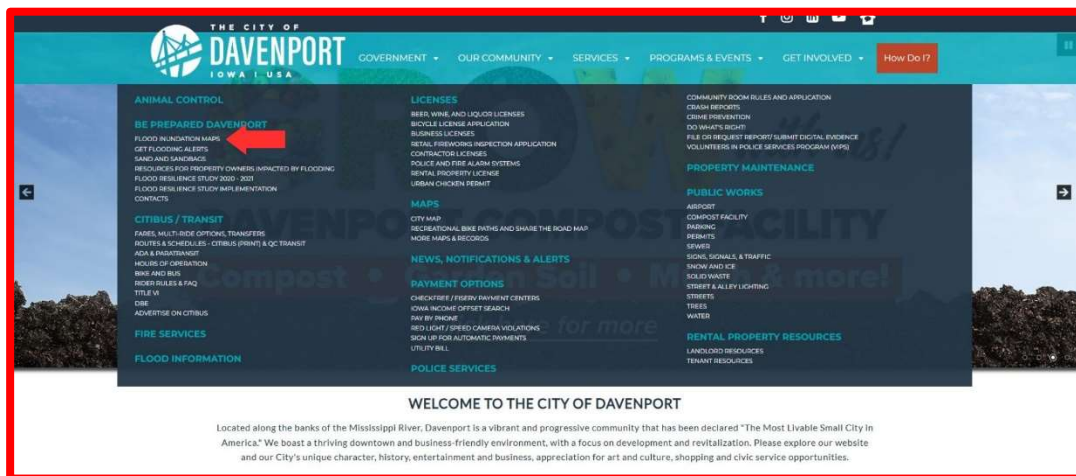
Davenport:

If you would like to access information about flooding on the Iowa side of the river, a great resource that you can use is on [Home - City of Davenport \(davenportiowa.com\)](https://www.davenportiowa.com), through their flood map web application.

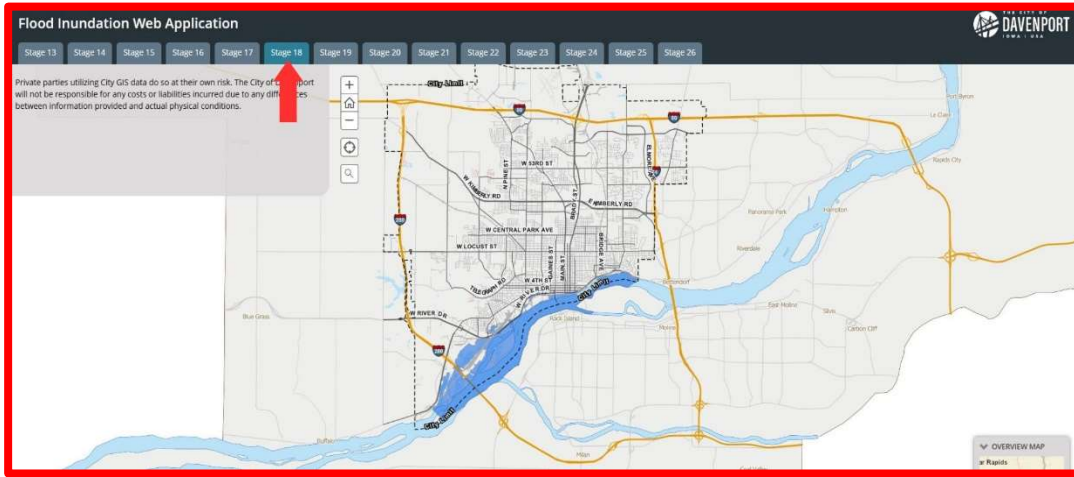
1. Once you click on the website, you will see a display bar at the top of your screen listing the various resources available. You will want to click on the **services** drop down menu.



2. Once the drop-down menu appears, click the **Flood Inundation Maps** link.

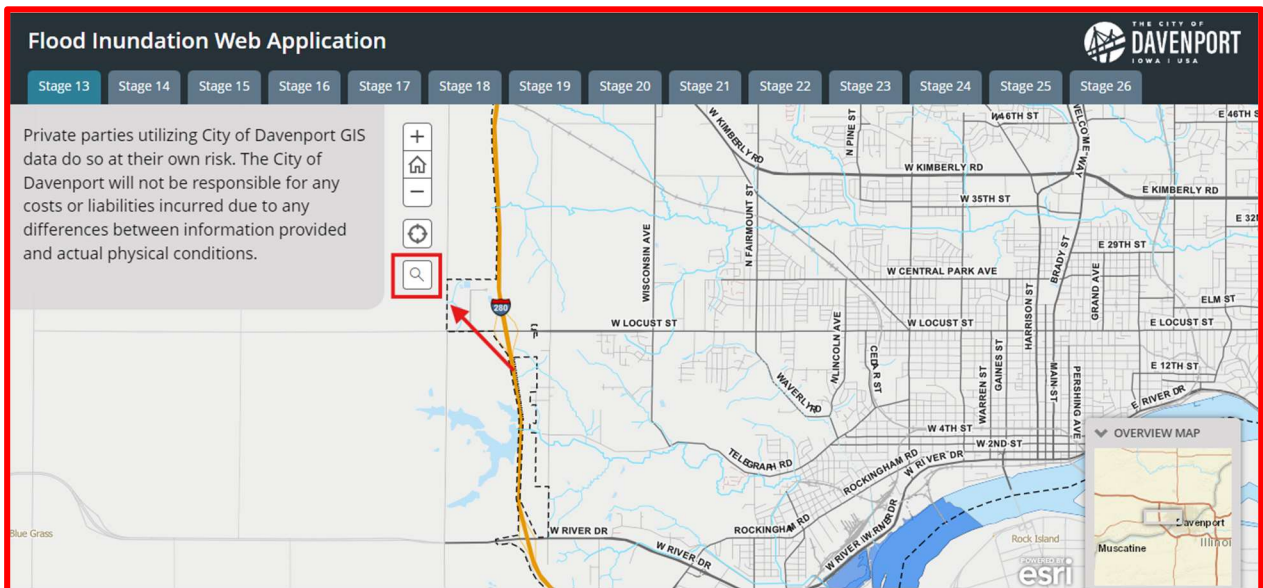


3. The link will bring you to the **Flood Map Web Application**, where you can choose the flood stage of your area of concern and view a realistic depiction of the areas that will experience flooding.



For more information about recent flooding events, visit the website of your local news provider for updates in real time and safety warnings for areas near you.

4. To search your specific address, you can press the magnifying glass in the column of tools on the left side of the screen.



Illinois Side

For those who reside on the Illinois side of the Quad Cities, there are a couple resources you can access as well.

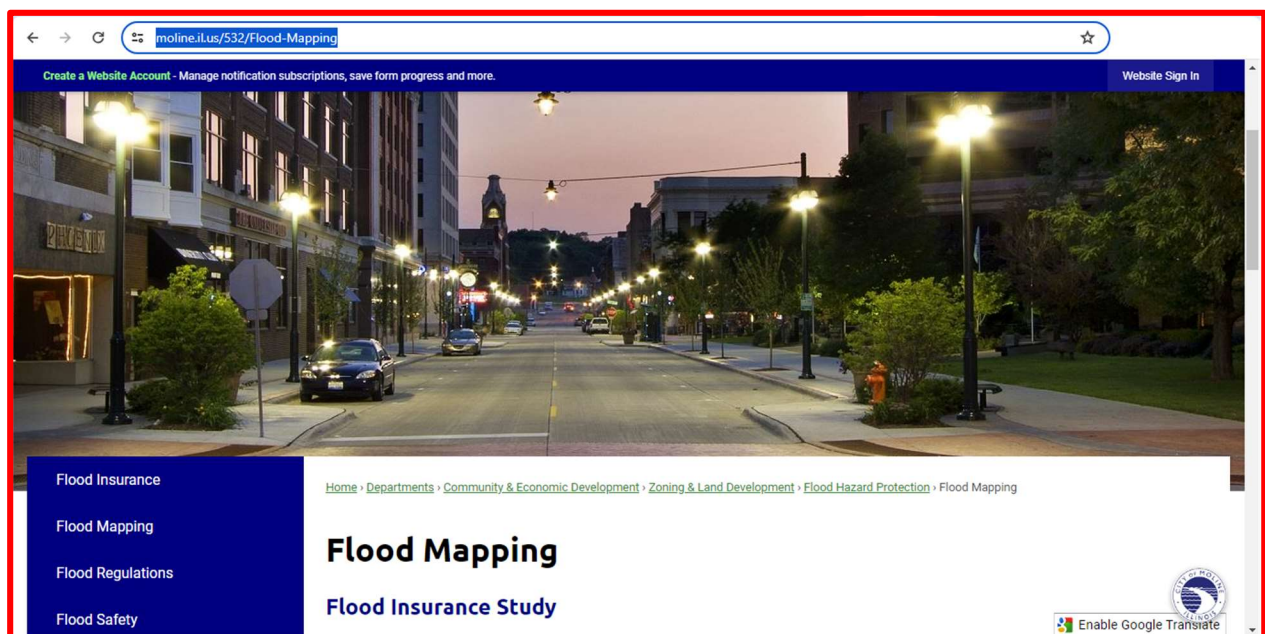
Here are some links that are important:

- [Rock Island County Website](#)
- [What Are Flood Zones and Maps?](#)
- [Moline Flood Mapping](#)

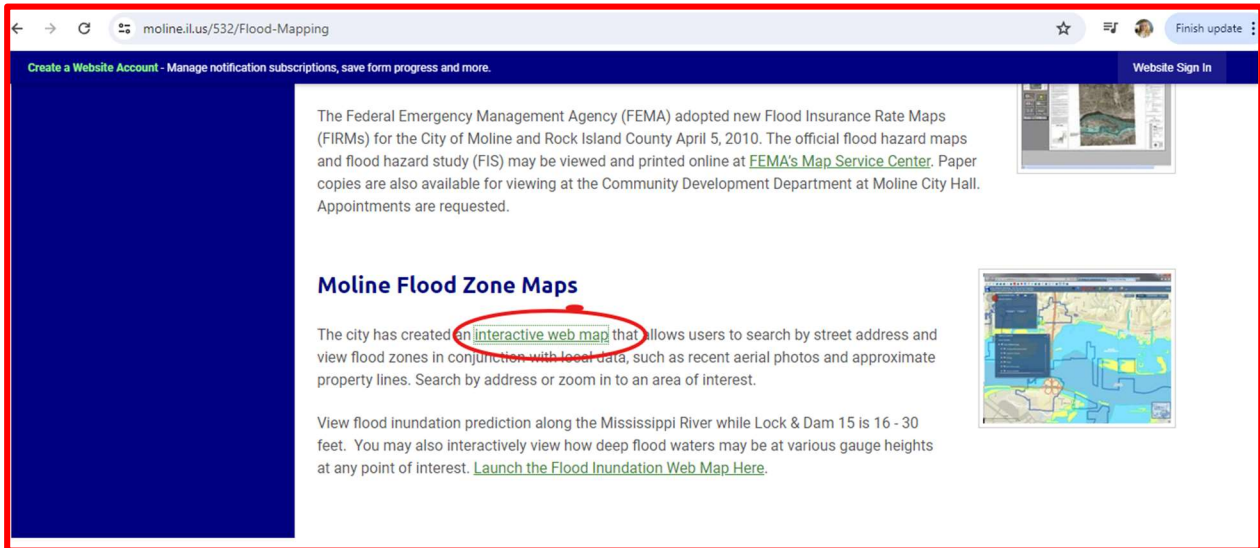
Moline Flood Zones Map

The next map we will look at is the City of Moline Flood Zones which looks at most of Rock Island County as well.

1. To find the map, first follow this [link](#) which leads you to the Moline Flood Maps page:

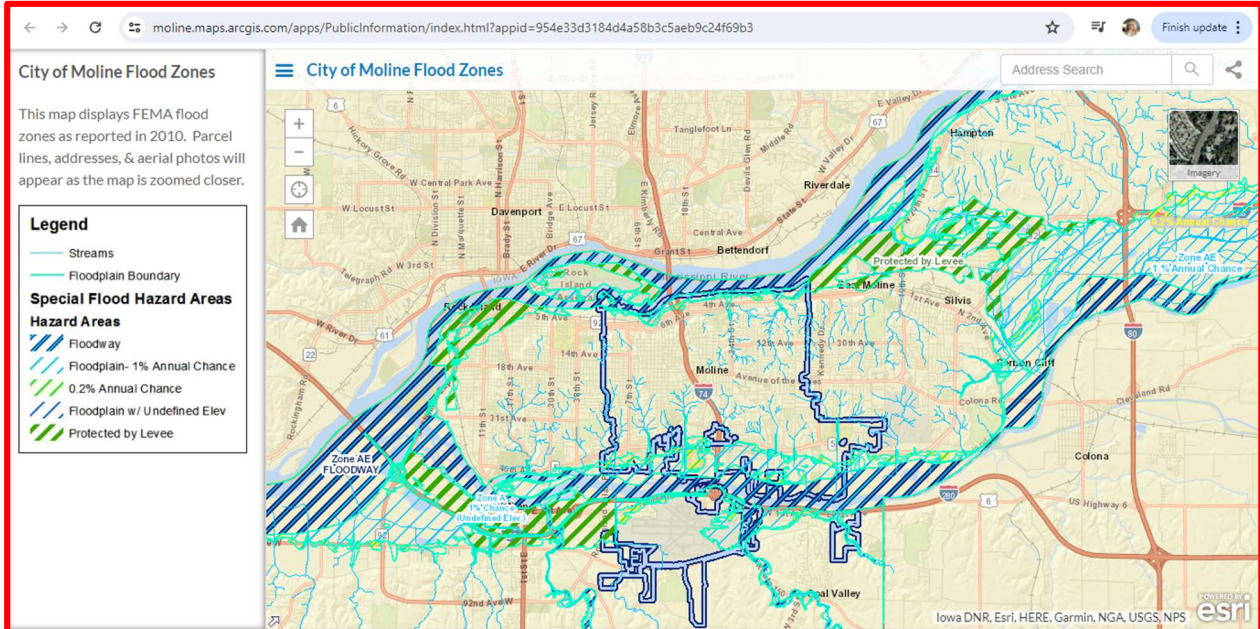


2. If you scroll down on this page to the “Moline Flood Zone Maps” header, you will follow the first link.

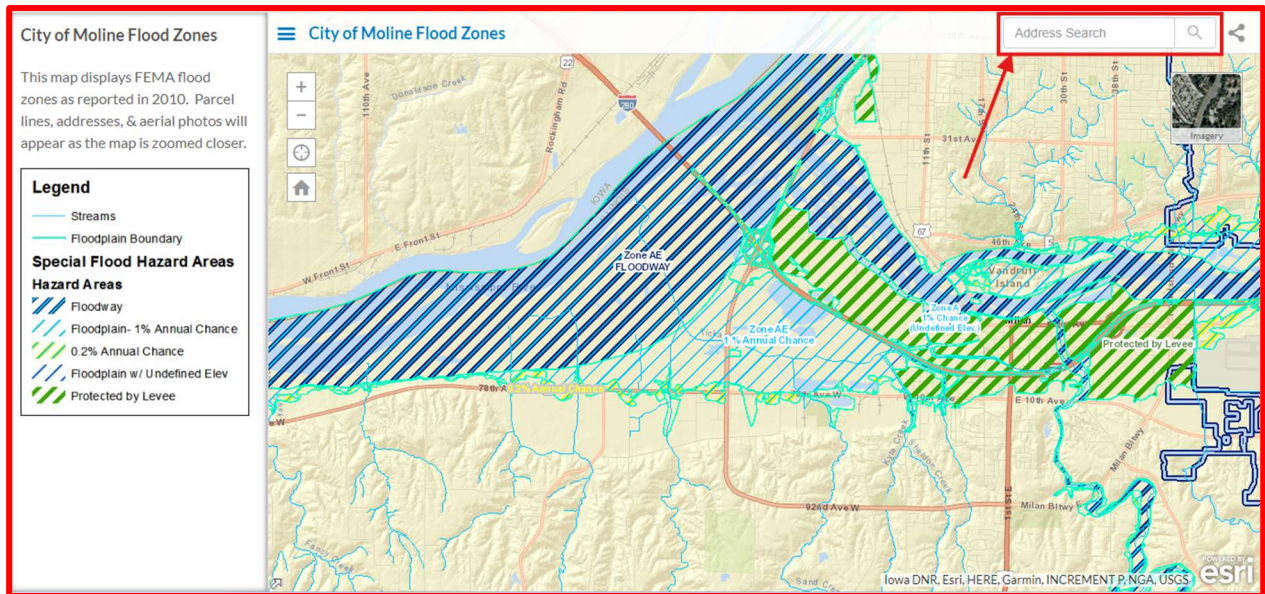


3. That link should take you to this site:

The Moline Flood Zones allow you to look at flood zones all the way up to Hampton and down to at least Mill Creek.



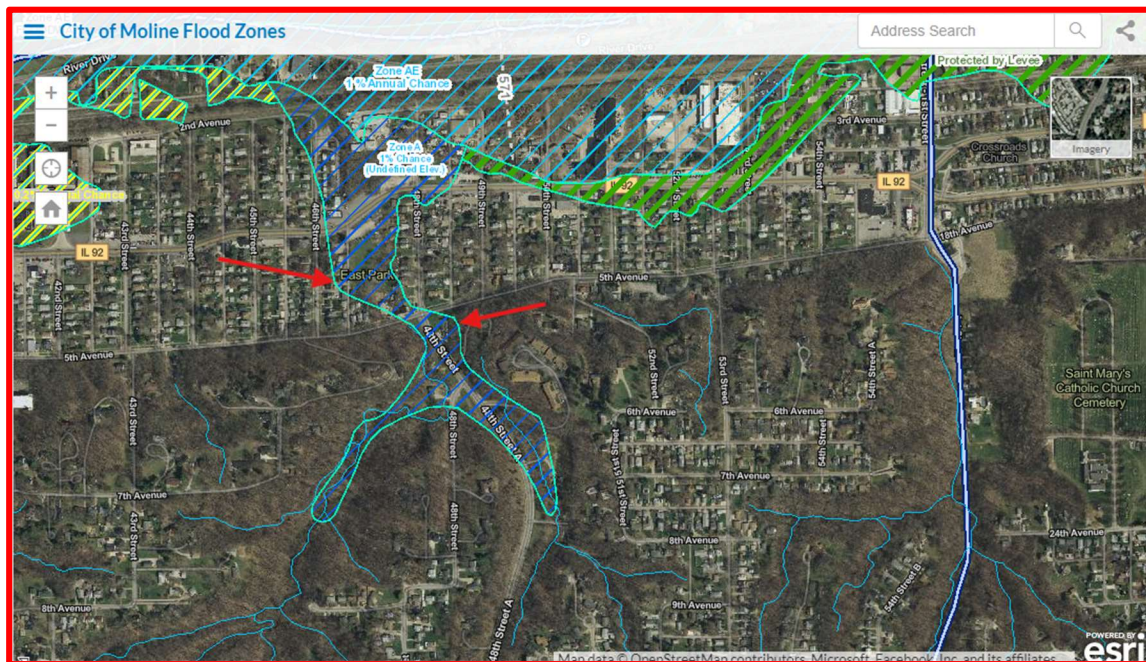
The Site also allows you to look up your own address in the top right corner.



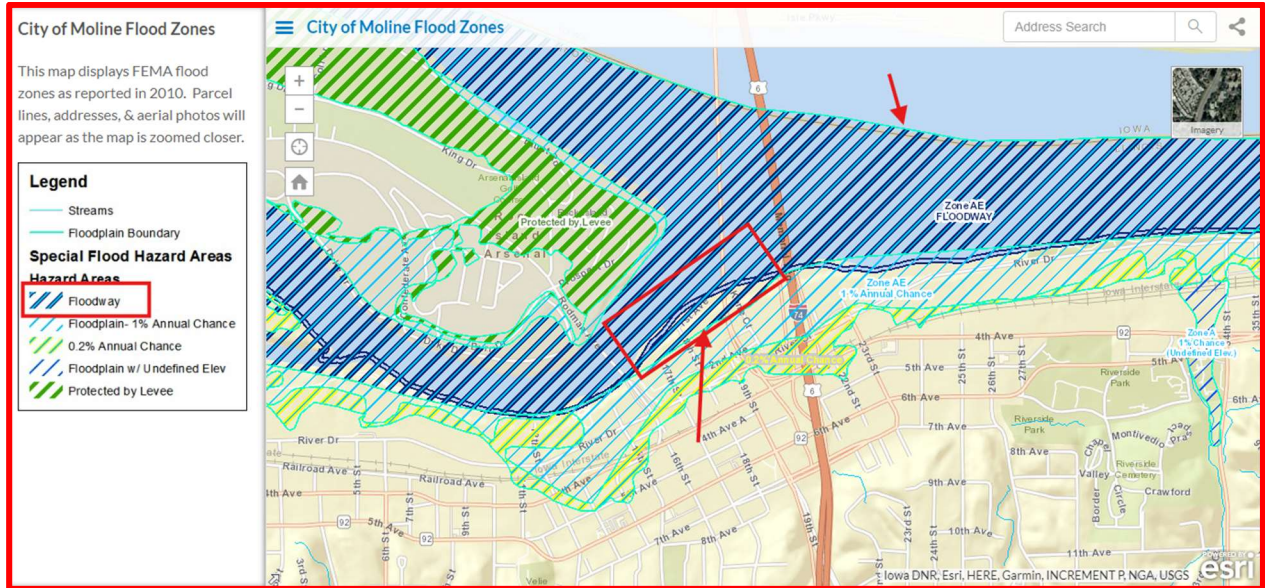
How do we read this Map?

First, the blue lines represent streams. These are areas of water that shed off from the main bodies. For example, a creek can be a stream that sheds from the main body, the Mississippi River. Just like rivers, streams can flood as well.

Second, is the flood plain boundary in the neon blue. This highlights the boundaries of the floodplain and the flood zones on this map.

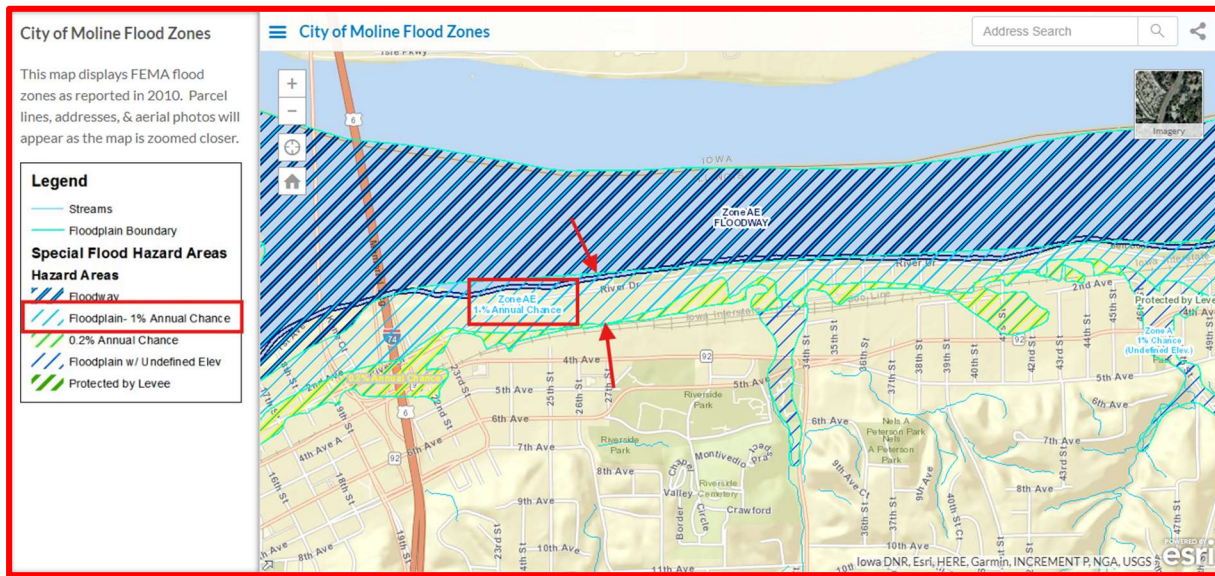


The next area is called a **floodway**. This is defined by **thick blue lines**. A floodway is the **channel of the river**, and any land areas close by reserved for the river to flood in a way that will lessen the overall flood height. For example, the area in the red box is land also designated floodway.

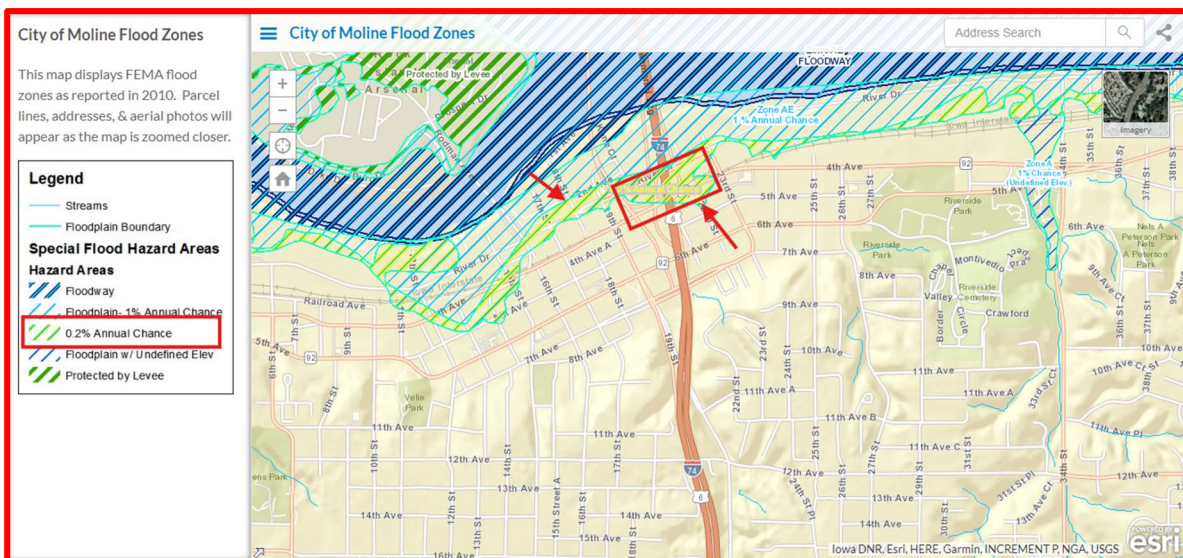


The light blue area is the Floodplain 1% Annual Chance area, this is also called an AE zone. First, an area with a 1% annual chance is an area that has a **1 in 100 chance of having a 100-year flood or exceeding the 100-year flood**. For example, in 2019, Davenport experienced a flood that exceeded the 100-year flood at 22.1-foot crest.

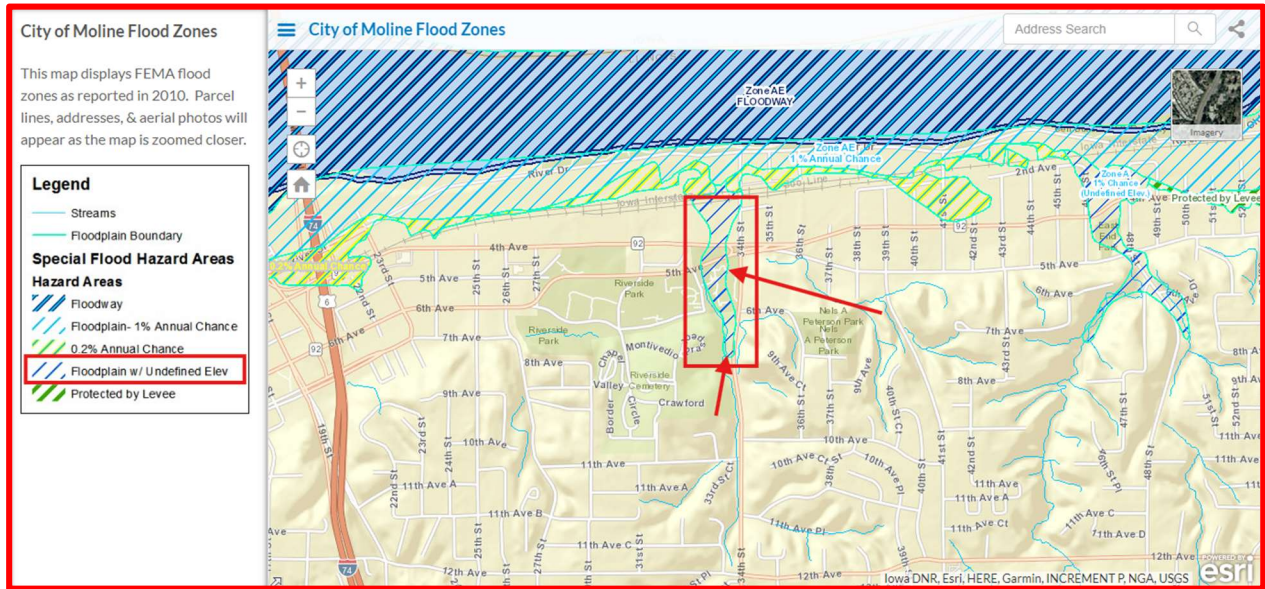
So, the area in the red box has a 1% chance every year that it might have a 100 year flood. This does not mean that there is a 1% chance for any flood. But based on this calculation you can figure out what your chance of a 20 year flood would be every year as well.



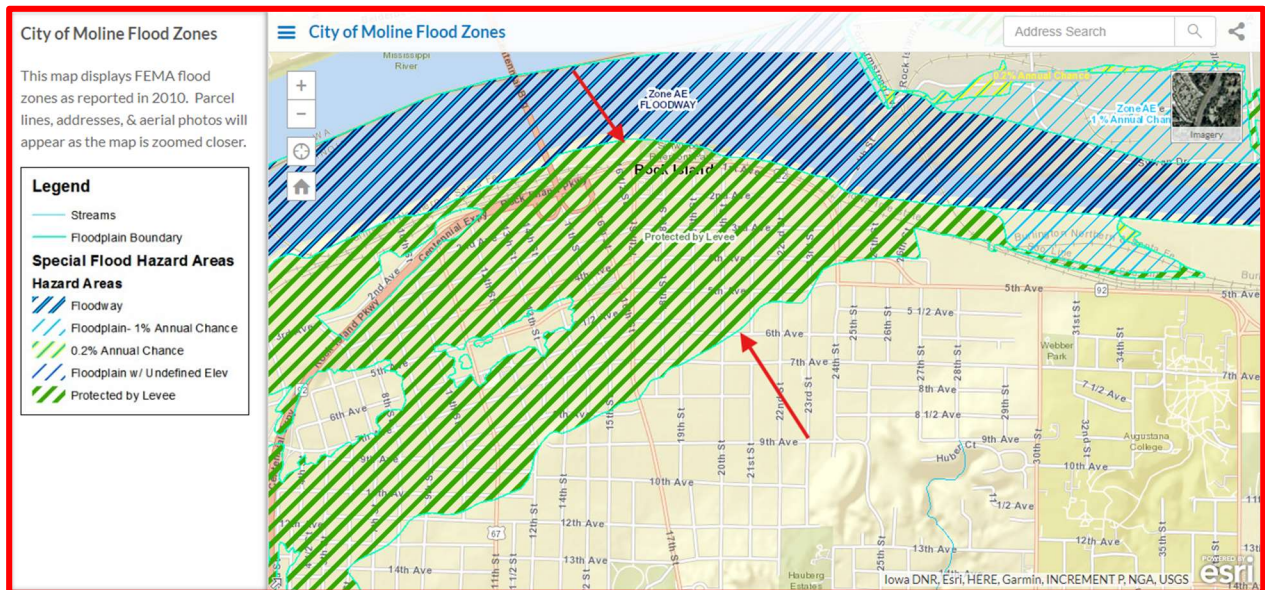
The .2% floodplain is the yellow and green shaded area. This area is in the 500-year floodplain and has a .2% chance of the 500-year flood happening every year.



The **thin blue lines** represent a **floodplain area with undefined elevations**. So this area can flood but they are unsure at what elevation and has a 1% chance of flooding still.



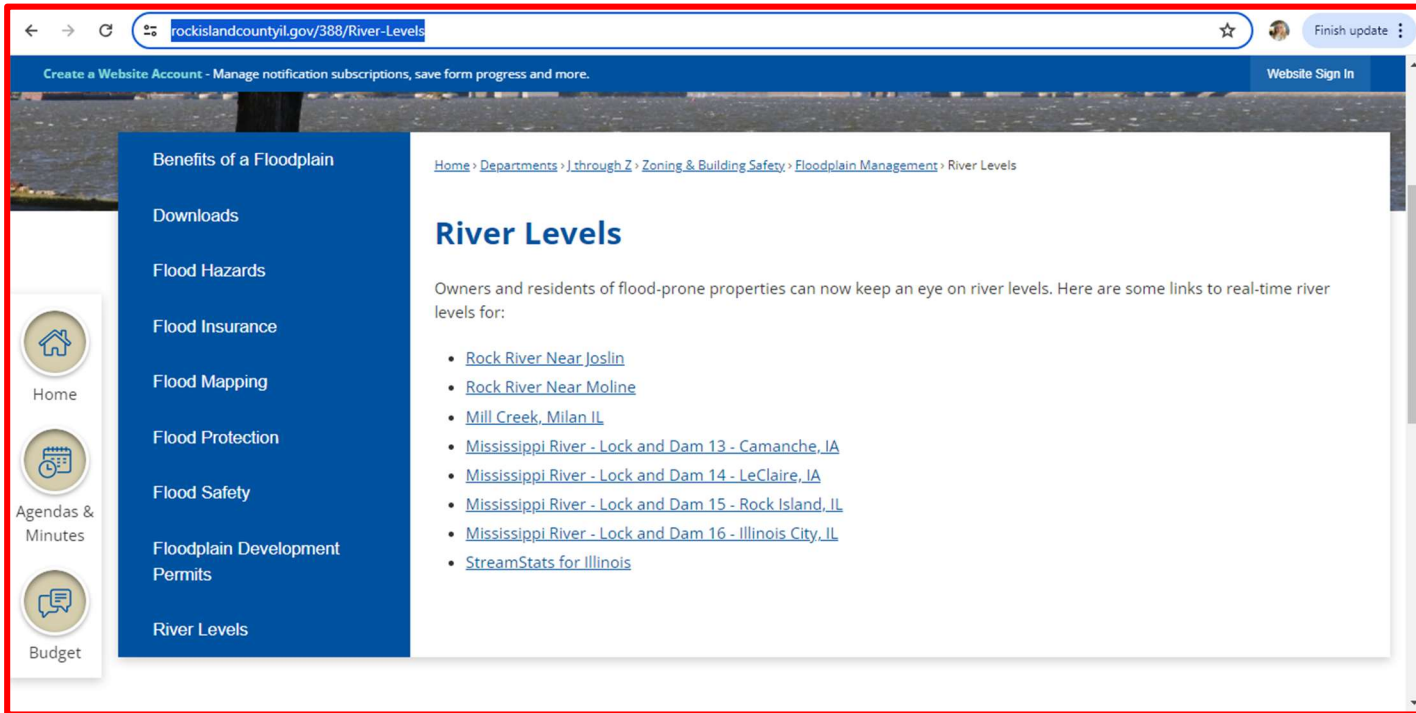
Lastly, we have the **area protected by levees that are thick green lines**. These are areas protected by levees or floodwalls and have less of a chance of flooding than the other areas do. **This area can still flood in the event of a major flood.**



Rock Island County

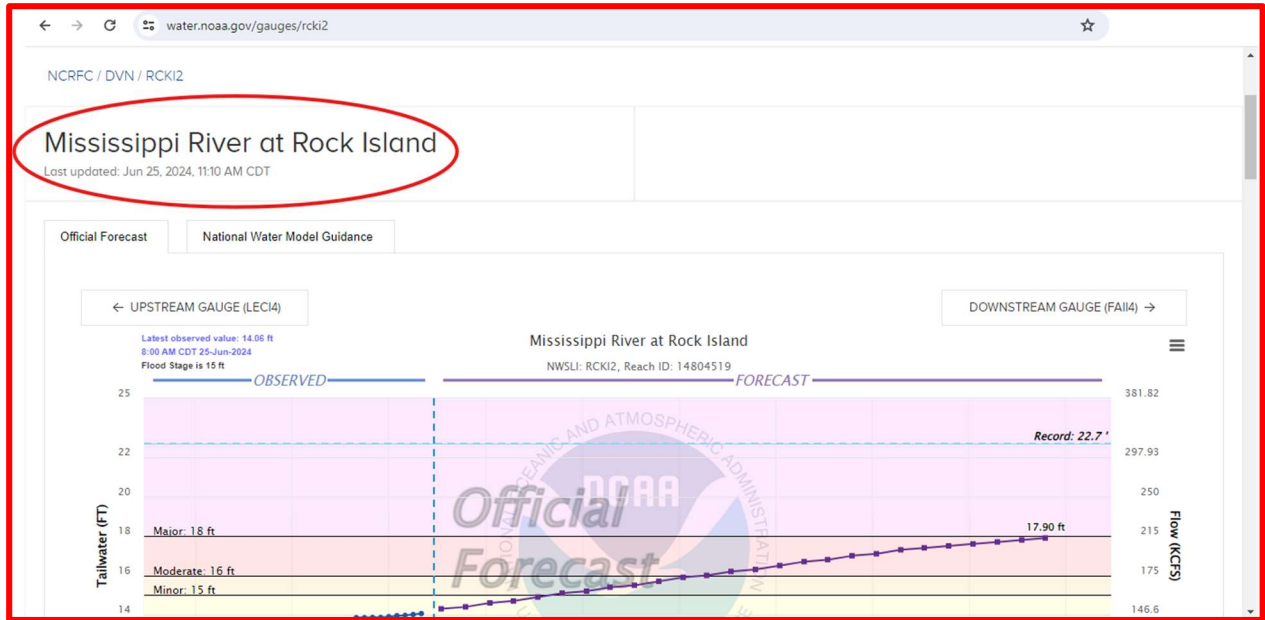
If you would like to know river levels now and predicted river levels of the coming weeks, follow this link to [Rock Island County Website](https://rockislandcountyil.gov/388/River-Levels) .

The following link will bring you to this webpage:



1. Each link will take you to different river level measurements and predictions at each Lock and Dam.

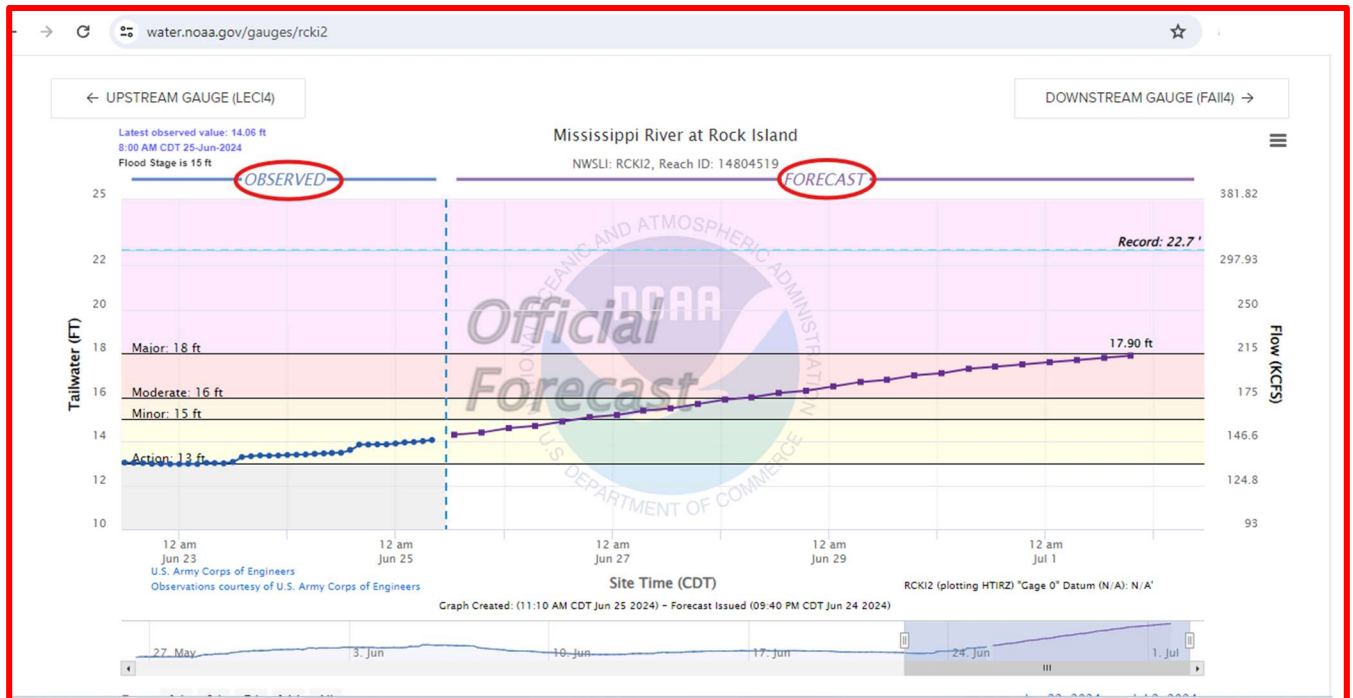
2. For example, let's look at Lock and Dam 15:



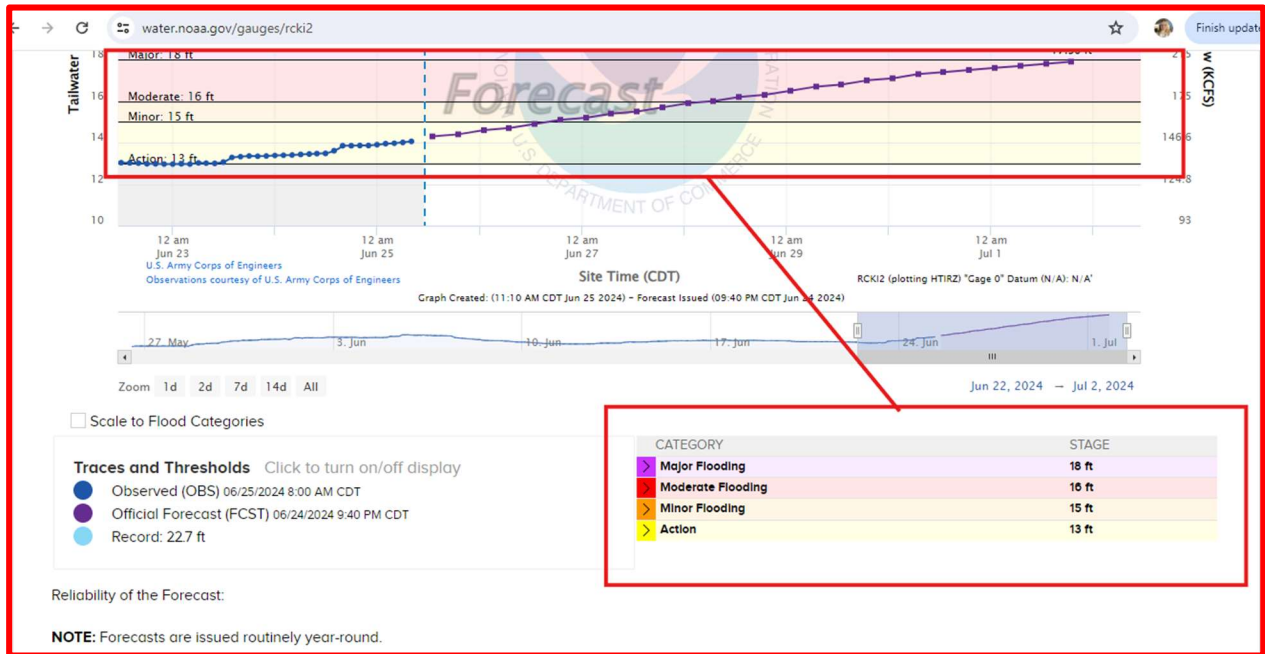
On the website, you can see where the river is being measured and the last time the information was updated.

- 3. There are a couple things to note which make reading this graph easier. First notice that **the graph is split between the observed**, or the actual measured water levels, **versus the forecasted**, or the predicted water levels based on past data and coming weather.

The forecasted data is important so that people can prepare ahead of time for the likelihood of a flood.



4. Next, if you scroll down to the section just under the graph, you will find the legend for flooding. This correlates with the shaded areas of the graph. **What does each of the different categories mean?**



Here are the definitions of each category:

Major Flooding is extensive flooding of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations.

Moderate Flooding is some flooding of structures and roads near streams. Some evacuations of people and/or transfer of property to higher elevations are necessary.

Minor Flooding is minimal or no property damage, but possibly some public threat or inconvenience.

So, each shaded category tells us what to expect in the upcoming flood predictions.

Now you know how to read the Flood Map like a pro!