The background is a topographic map with a dark teal overlay. It shows various elevation contours and labels such as '1840 Zone AE', '1839', '1840', '1841', '1842', '1844A', and '1848'. Street names like 'E Schimmer Dr', 'S Stuhr', 'Sunset Terrace Rd', and 'W US Highway 34' are also visible. The word 'Nebraska' is written vertically on the right side.

# The New Floodplain Interactive Map and Nebraska Real-time Flood Forecasting (NeRFF)

**Elijah Kaufman, CFM**  
NeDNR Floodplain Management  
State NFIP Coordinator

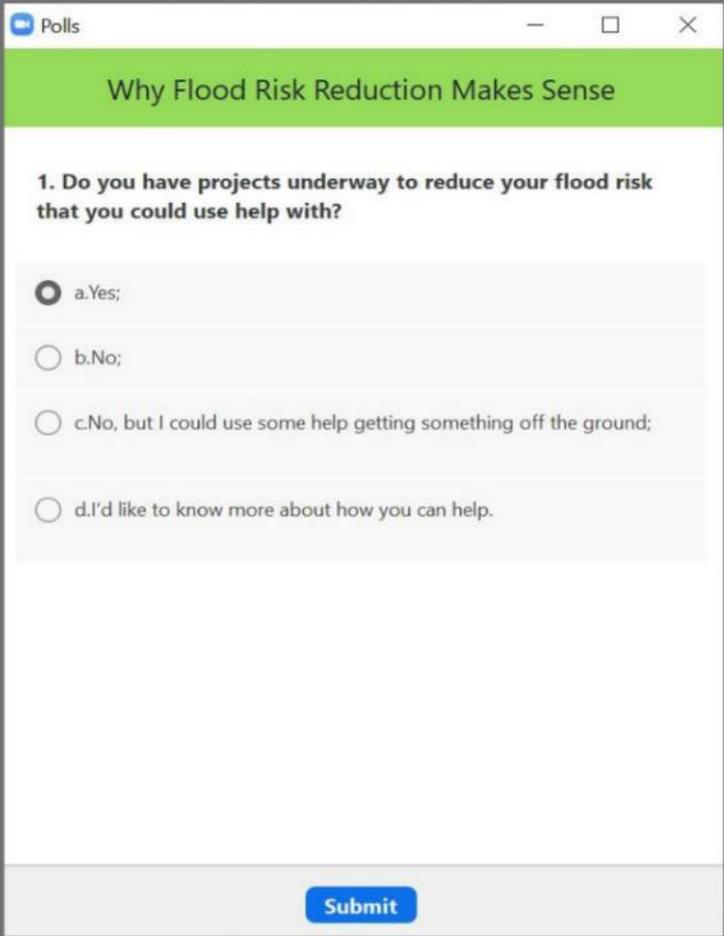
**Erin Wendt, CFM**  
NeDNR Floodplain Management  
Outreach Coordinator

# Rules of the Road

- Attendees will be muted during the presentation
- Use the chat to ask questions during the presentation; we will pause for questions at various points
- If you want to share your video, please do
- For technical difficulties, send a private chat to Michele York or email [michele.york@nebraska.gov](mailto:michele.york@nebraska.gov)
- We will be recording this class for those unable to attend today

# Poll Questions

- Total of 3 poll questions. Your answers are anonymous
- If you are a Certified Floodplain Manager (CFM) or a Nebraska Municipality Treasurer requesting Continuing Education Credit (CEC) today, you must answer **all** poll questions. We will report only full participation
- Only the person registered and logged into Zoom will receive credit. If multiple people are viewing the presentation together, you will each need to log into Zoom using your unique link and answer the poll questions separately to receive credit



The screenshot shows a Zoom window titled "Polls" with a green header bar that reads "Why Flood Risk Reduction Makes Sense". Below the header, the poll question is displayed: "1. Do you have projects underway to reduce your flood risk that you could use help with?". There are four radio button options: "a.Yes;", "b.No;", "c.No, but I could use some help getting something off the ground;", and "d.I'd like to know more about how you can help.". A blue "Submit" button is located at the bottom right of the poll interface.



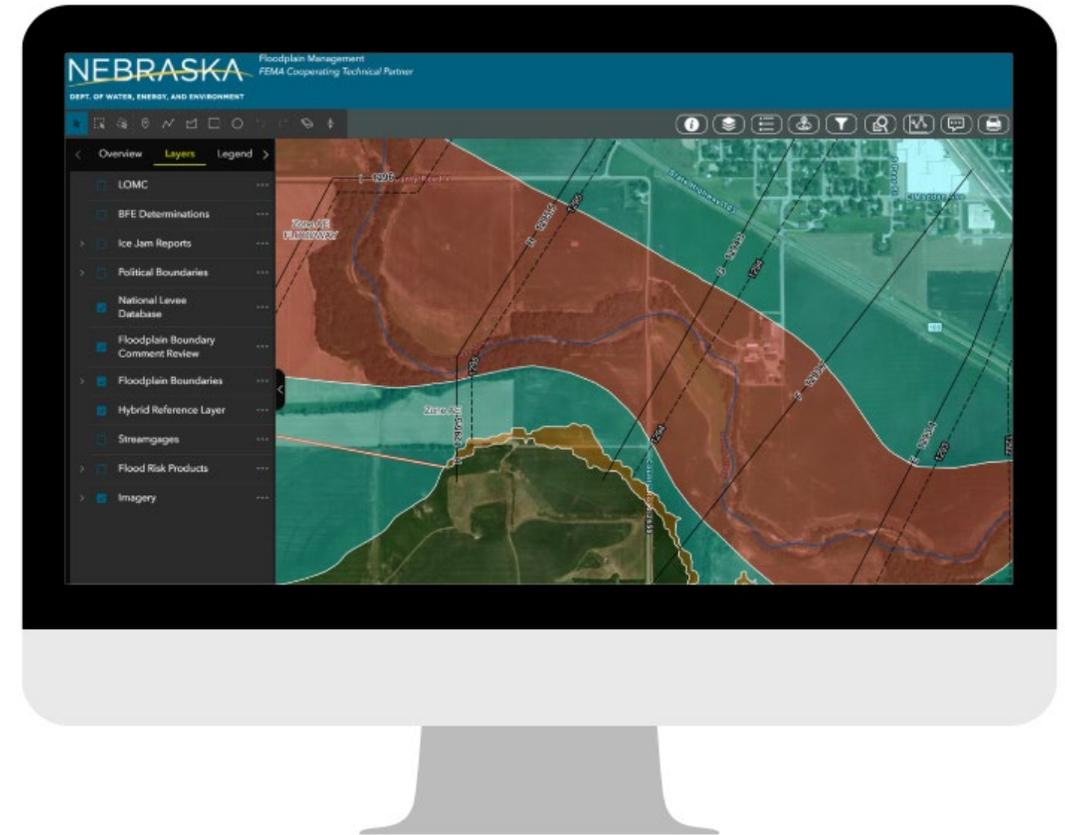
# The New Floodplain Interactive Map and Nebraska Real-time Flood Forecasting (NeRFF)

**Elijah Kaufman, CFM**  
NeDNR Floodplain Management  
State NFIP Coordinator

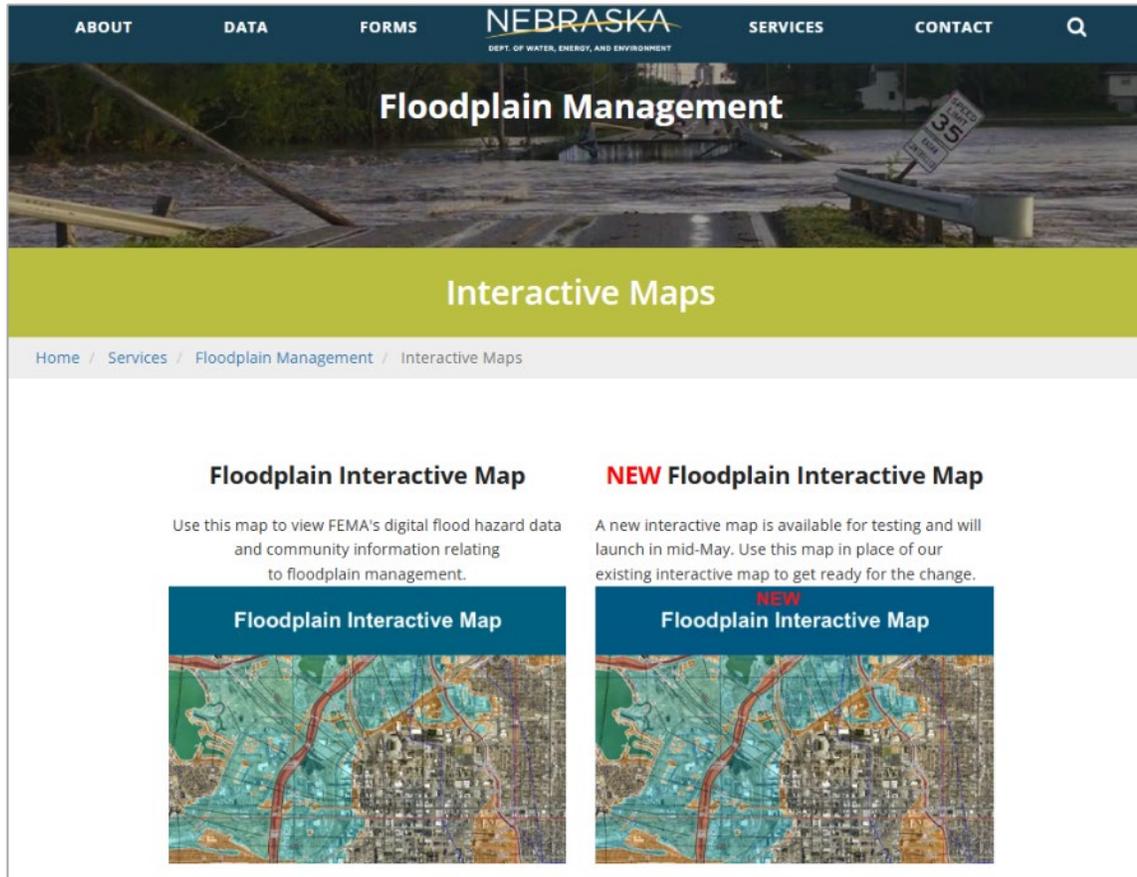
**Erin Wendt, CFM**  
NeDNR Floodplain Management  
Outreach Coordinator

# Agenda

- 01 The New Interactive Map
- 02 Managing Layers
- 03 Available Tools
- 04 Introducing NeRFF
- 05 Using NeRFF
- 06 Future Plans for NeRFF



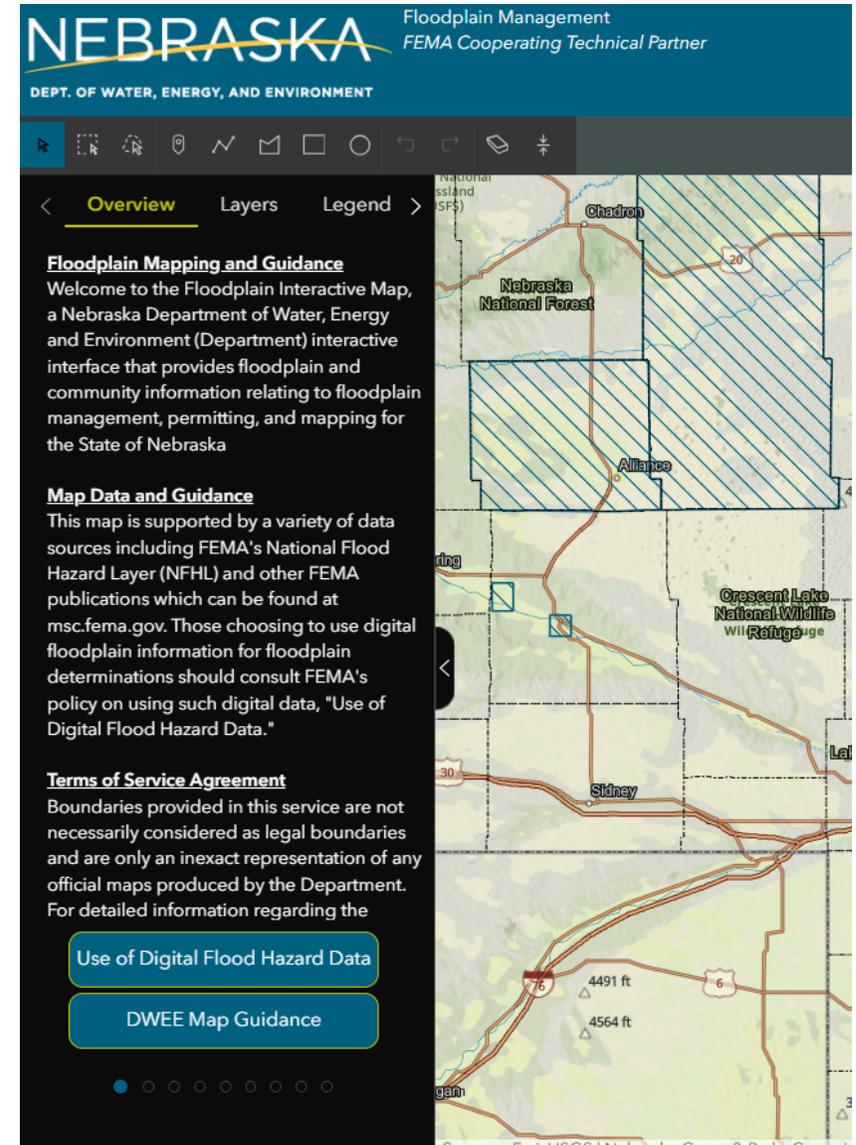
# The New Interactive Map



- Now available on our interactive map webpage:  
<https://dnr.nebraska.gov/floodplain/interactive-maps>
- Combines faster load times with better functionality
  - Layers are maintained and stored in-house
  - More consistent connectivity

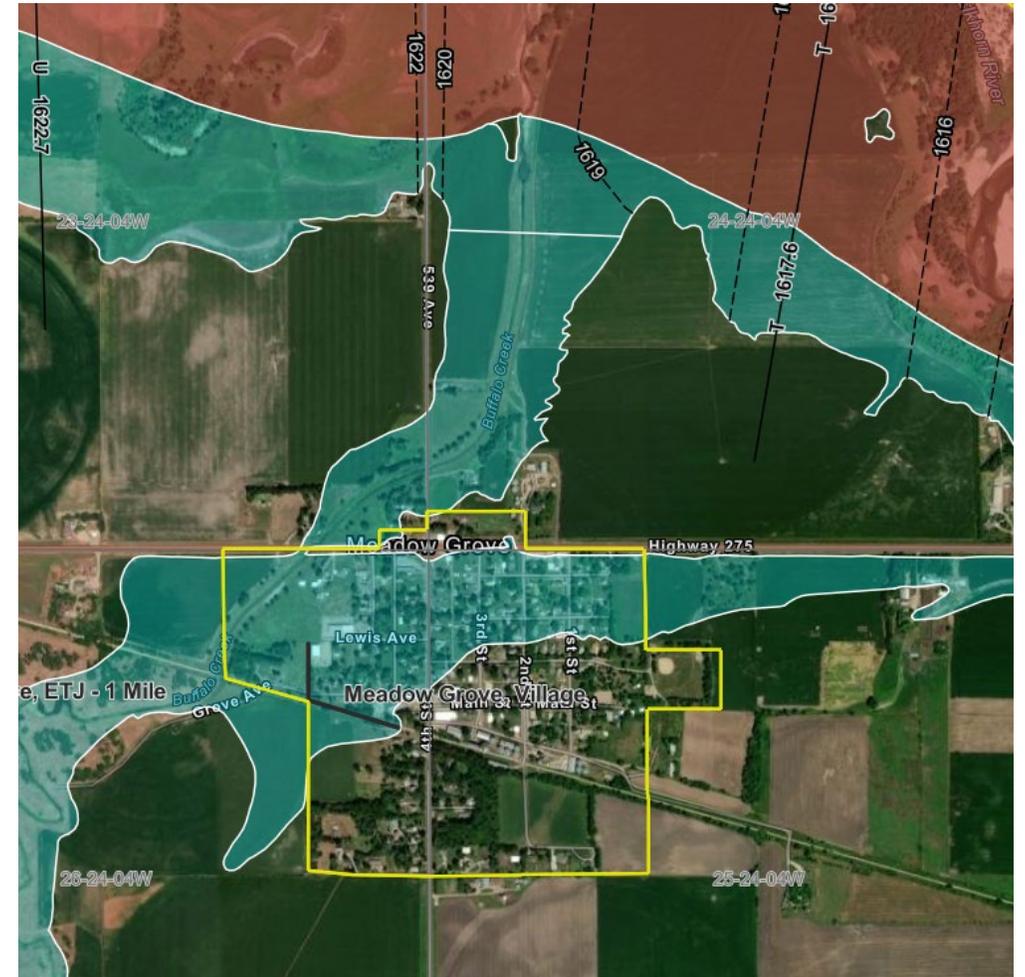
# The New Interactive Map

- What changed?
  - Splash page with disclaimers no longer appears when opening the map
  - Layers, legend, and map guidance on the left, rather than the right
  - Tool bar is at the top left, rather than the top right
  - When using the search bar, you need to select from the drop down in order to zoom to the location



# The New Interactive Map

- What hasn't changed?
  - Floodplain layers and symbology
  - BFE request process
  - LOMC layer
  - Drawing and print functions



# Navigating the DWEE Website



Formerly Nebraska Department of Natural Resources & Nebraska Department of Environment and Energy

## Welcome

The Nebraska Department of Water, Energy, and Environment (DWEE) is the result of merging two state agencies, effective July 1, 2025: the Nebraska Department of Natural Resources and the Nebraska Department of Environment and Energy. This new department brings together our state's efforts in water management, energy policies, and environmental protection. While we transition into a unified online presence, please continue to use the legacy websites for current services and information.



Water Planning



Surface Water



Groundwater Registrations



Water Quality



State Energy Info & Stats



Permitting



Dam Safety



Floodplain Management



Water Administration



Land & Waste



Air



Aid

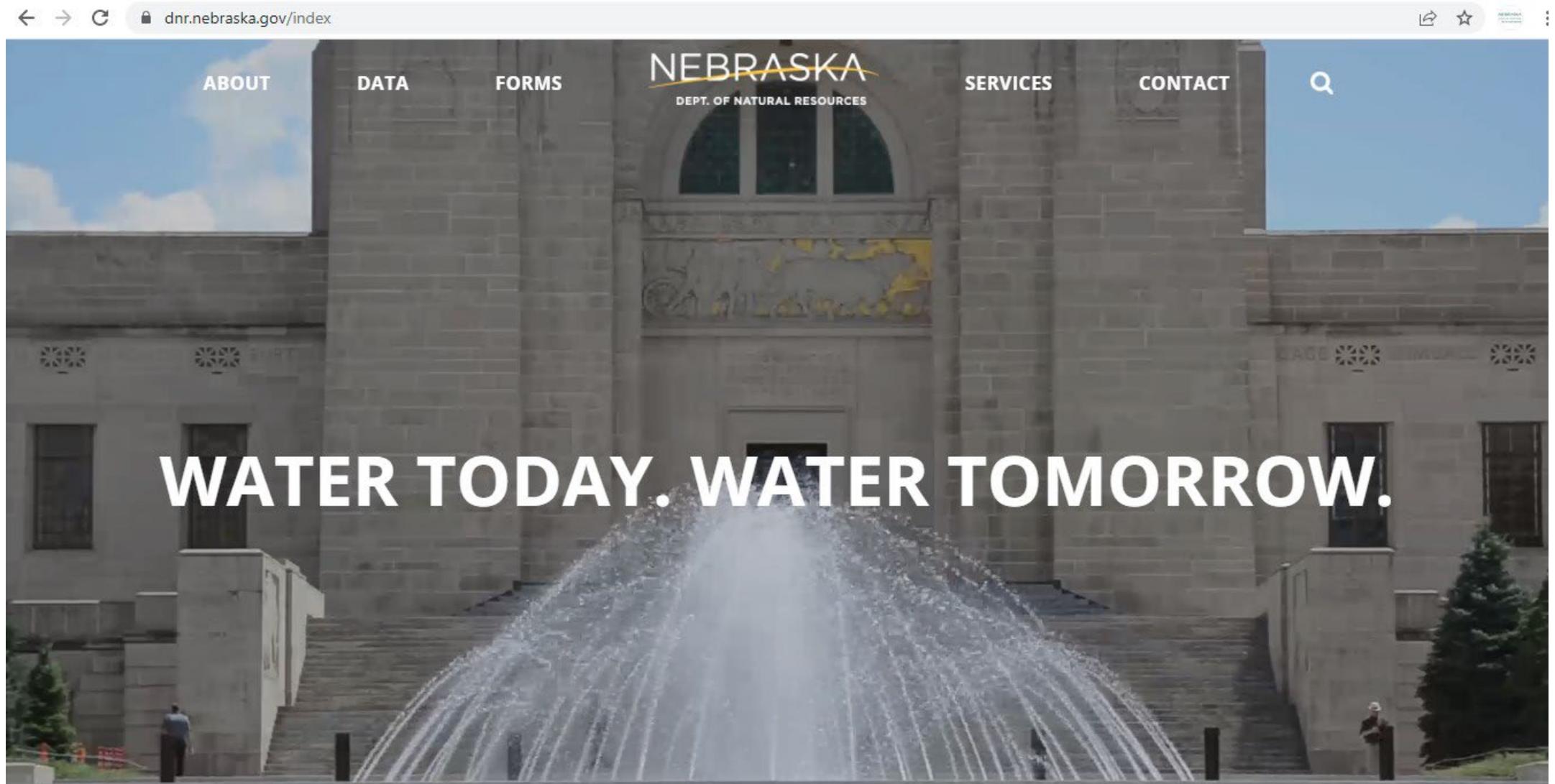
Visit Nebraska Department of Natural Resources (DNR)

Visit Nebraska Department of Environment and Energy (DEE)

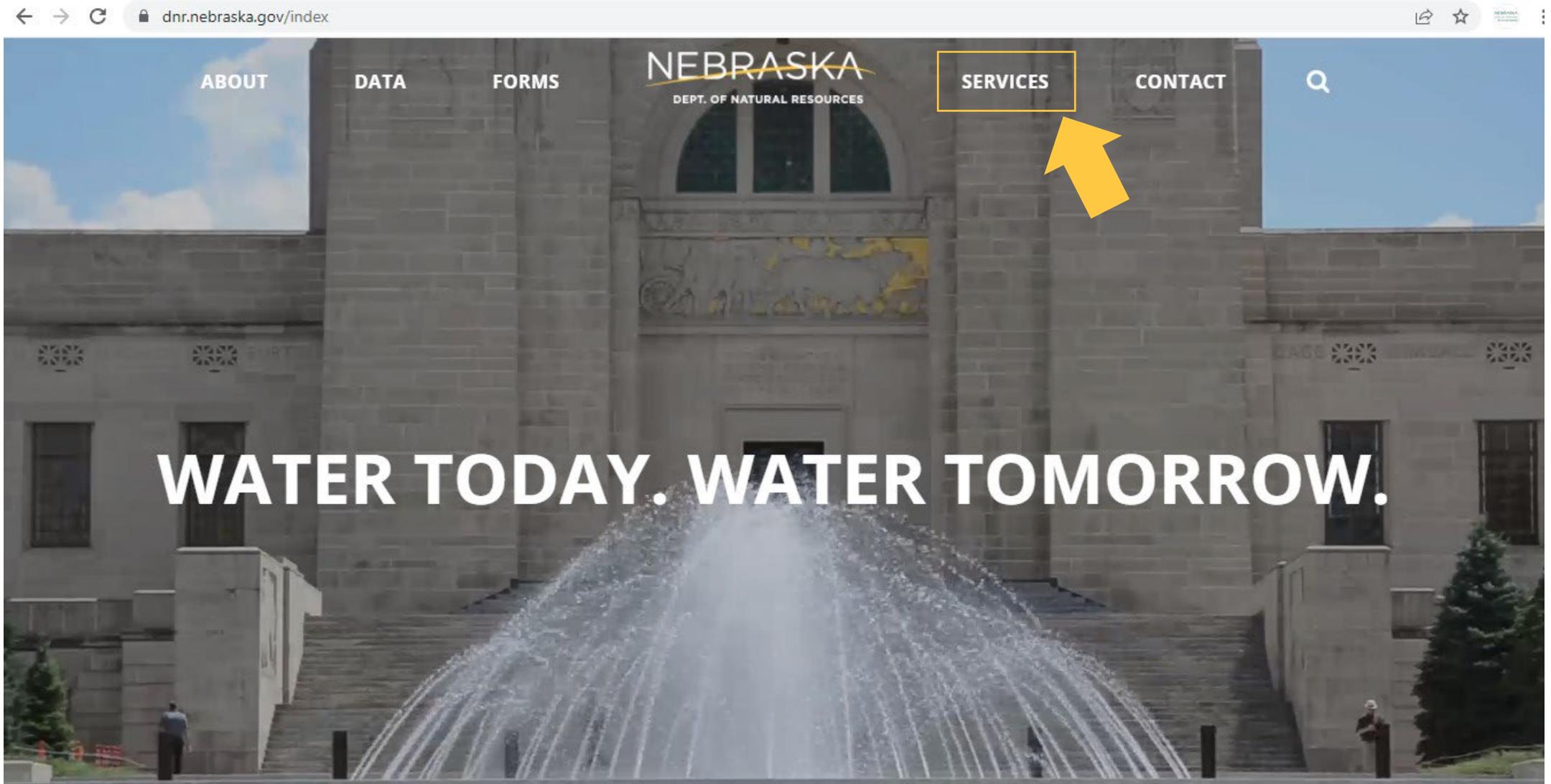


<https://dwee.nebraska.gov/>

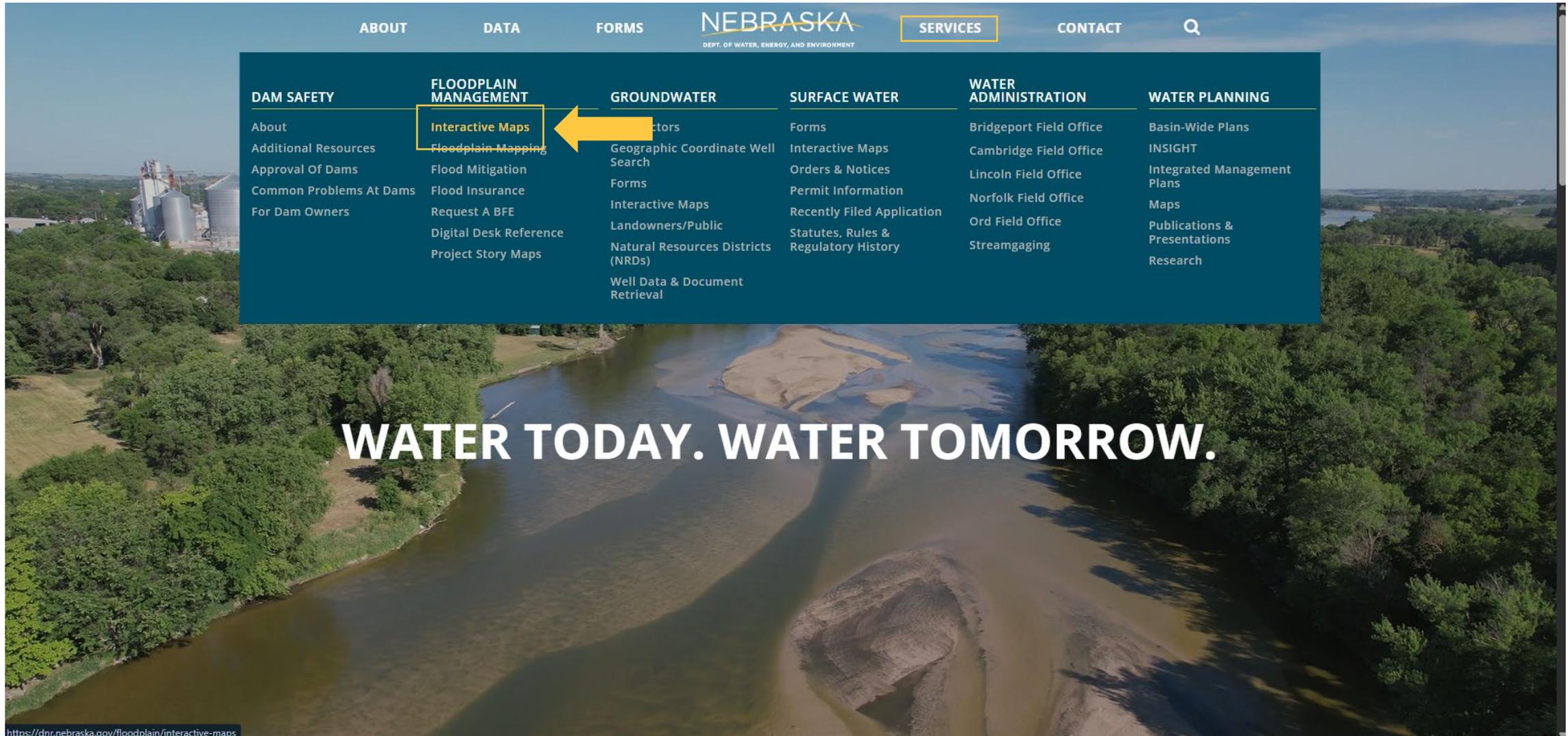
# Navigating the Website



# Navigating the Website



# Navigating the NeDNR Website



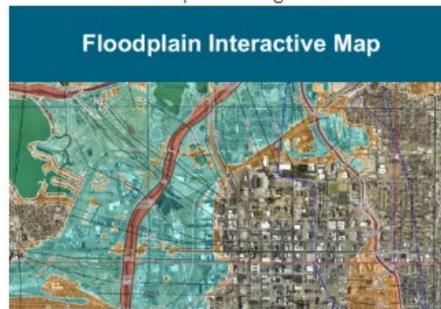
WATER TODAY. WATER TOMORROW.

# Navigating the Website



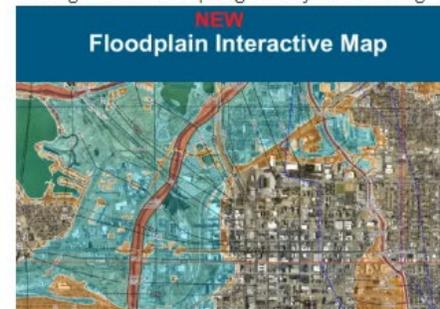
## Floodplain Interactive Map

Use this map to view FEMA's digital flood hazard data and community information relating to floodplain management.



## NEW Floodplain Interactive Map

A new interactive map is available for testing and will launch in mid-May. Use this map in place of our existing interactive map to get ready for the change.





**Overview** Layers Legend

### Floodplain Mapping and Guidance

Welcome to the Floodplain Interactive Map, a Nebraska Department of Water, Energy and Environment (Department) interactive interface that provides floodplain and community information relating to floodplain management, permitting, and mapping for the State of Nebraska

### Map Data and Guidance

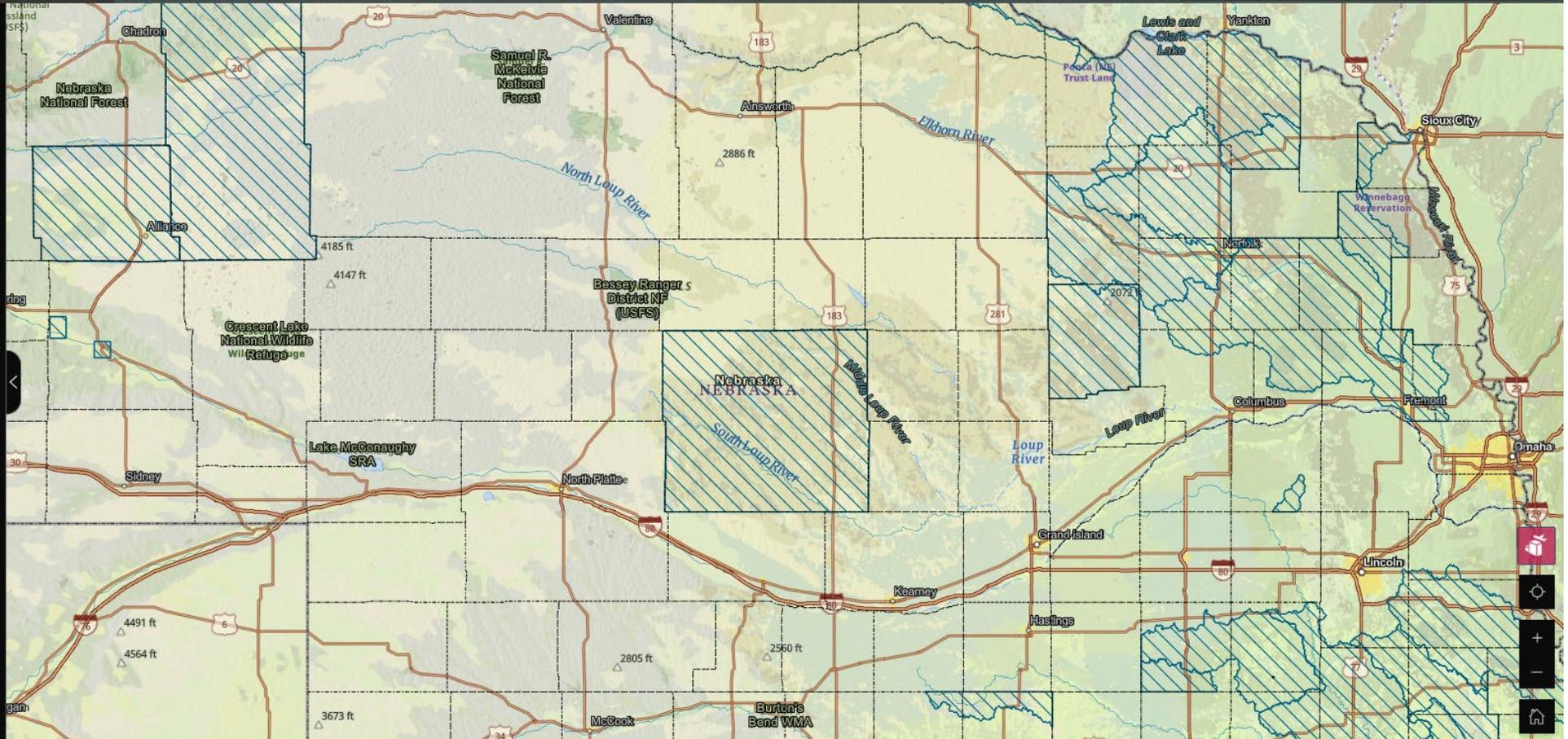
This map is supported by a variety of data sources including FEMA's National Flood Hazard Layer (NFHL) and other FEMA publications which can be found at [msc.fema.gov](https://msc.fema.gov). Those choosing to use digital floodplain information for floodplain determinations should consult FEMA's policy on using such digital data, "Use of Digital Flood Hazard Data."

### Terms of Service Agreement

Boundaries provided in this service are not necessarily considered as legal boundaries and are only an inexact representation of any official maps produced by the Department. For detailed information regarding the

Use of Digital Flood Hazard Data

DWEE Map Guidance



# Managing Layers





# LOMC

Point layer showing all LOMAs or LOMR-Fs present in the community. Shown as purple dots that can be selected to learn more.

The screenshot displays a GIS application interface. On the left, a 'Layers' panel lists various data layers. The 'LOMC' layer is checked and highlighted with a yellow arrow. The main map area shows an aerial view with green floodplains and a purple dot representing a LOMC. A popup window titled 'LOMC Information' is open, showing details for 'LOMC 8885'.

LOMC 8885	
LOMC Type	LOMA
LOMC ID	8885
Community	Omaha
LOMC CID	315274
LOMC Outcome	S-REM
LOMC Vertical Datum	NAVD88

## BFE Determinations

PLSS Sections that have a Valid Base Flood Elevation (BFE) Determination will be highlighted in yellow. This layer toggles those highlighted sections on and off.



The screenshot displays a GIS application interface with a map of Eustis, Florida. The map shows a river and surrounding areas, with floodplains highlighted in yellow and green. The 'Layers' panel on the left is open, showing a list of layers. The 'BFE Determinations' layer is checked and highlighted in yellow. Other layers include LOMC, Ice Jam Reports, Political Boundaries, National Levee Database, Floodplain Boundary Comment Review, Floodplain Boundaries, NFHL, Flood Awareness Areas, Effective Paper Map, Hybrid Reference Layer, and Streamgages. The map shows roads such as Road 748, Highway 23, N Wright St, N Clay St, N Halo St, N Window St, W Anthony St, W Railroad St, E Railroad St, E Allison St, S Main St, and W Canyon Rd. The area is labeled 'Eustis' and 'Zone A'.

## Ice Jam Reports

Use this layer to view recent reports made by certified users of our ice jam reporting page. Reports will appear as a snowflake icon, and will display information about waterflow at the location.



The screenshot displays a GIS application interface. On the left, a 'Layers' panel is visible with the following items:

- LOMC
- BFE Determinations
- Ice Jam Reports
- Political Boundaries
- National Levee Database
- Floodplain Boundary Comment Review
- Floodplain Boundaries
- NFHL
- Flood Awareness Areas
- Effective Paper Map
- Hybrid Reference Layer
- Streamgages

The main map area shows a satellite view of a river area with several overlays: a red 'Zone AE FLOODWAY' area, a yellow boundary line, and a blue line labeled 'Missouri River'. A snowflake icon is placed on the river. A popup window titled 'Ice Jam Report Information' is open, showing a photo of a frozen river. The popup includes a 'Zoom to' button and a close button. The bottom of the screen shows the text: 'Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, Iowa DNR, Nebraska Game & Parks Commission, Esri, T'.

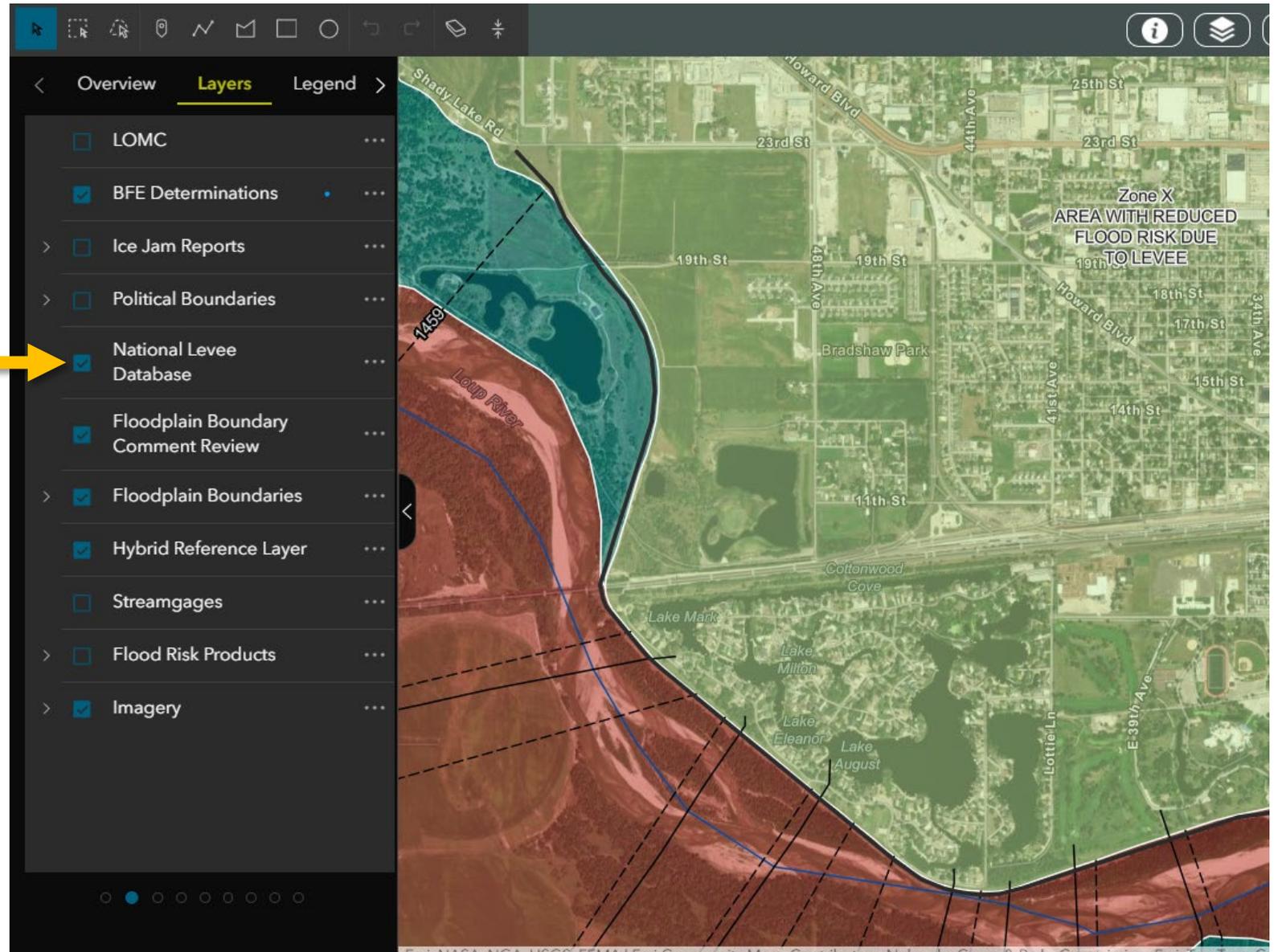
## Political Boundaries

This layer shows community boundaries, including city limits and Extra Territorial Jurisdictions (ETJs). You can now toggle off PLSS and County Boundaries.

The screenshot displays a GIS application interface with a map of Eustis, Nebraska. The interface includes a top toolbar with navigation and tool icons, and a left sidebar with a 'Layers' panel. The 'Layers' panel is currently active, showing a list of layers with checkboxes and expand/collapse icons. The 'Political Boundaries' layer is checked and highlighted with a yellow arrow. Below it, 'County Boundaries', 'Community Boundaries', and 'State Boundary' are also checked. A yellow bracket groups 'County Boundaries', 'Community Boundaries', and 'State Boundary'. 'PLSS' is checked and highlighted with a yellow arrow. Other layers include 'National Levee Database', 'Floodplain Boundary Comment Review', 'Floodplain Boundaries', and 'NFHL'. At the bottom of the layers panel, there is a 'Flood Awareness' section with a row of seven circles, the second of which is filled with blue. The map itself shows a satellite view of the area with various boundaries overlaid: a yellow line for 'Political Boundaries', a blue line for 'County Boundaries', and a white line for 'Community Boundaries'. The map also shows 'Highway 23', 'Road 416', 'Road 748', 'Road 749', 'W. Canyon Rd', 'Middle Canyon Rd', 'E. Canyon Rd', 'State St', 'E Railroad St', and 'Salina St'. The text 'Eustis, Village Eustis' and 'Eustis, ETJ - 1 Mile' is visible on the map. The bottom of the map has a copyright notice: 'Esri, NASA, NGA, USGS, FEMA, Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies'.

## National Levee Database

This layer shows nationally accredited levee systems. Levees are indicated by the dark gray line, typically along a watercourse.



## Floodplain Boundary Comment Review

This layer is used for comments provided by users during the preliminary stages of a FEMA funded floodplain mapping project.



Overview **Layers** Legend

- LOMC
- BFE Determinations
- Ice Jam Reports
- Political Boundaries
- National Levee Database
- Floodplain Boundary Comment Review
- Floodplain Boundaries
- Hybrid Reference Layer
- Streamgages
- Flood Risk Products
- Imagery

FloodplainBoundaryComments: Jared

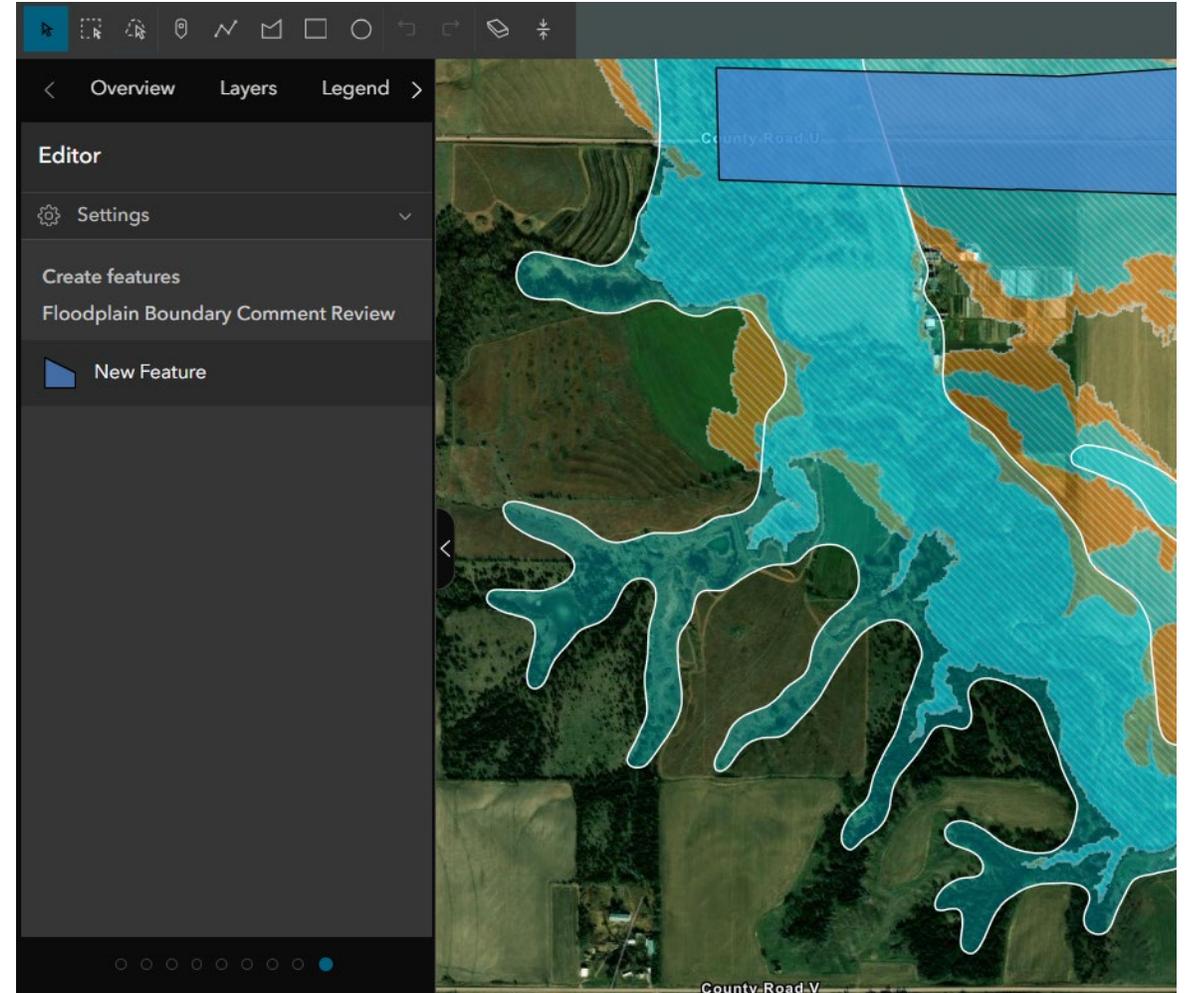
Zoom to

Job Title	Engineer
Community	Western
Comments	DOuble check road centerline is captured. verify road overtopping location
Date	

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, Nebraska Game & Parks Commission, Esri, TomTom, G

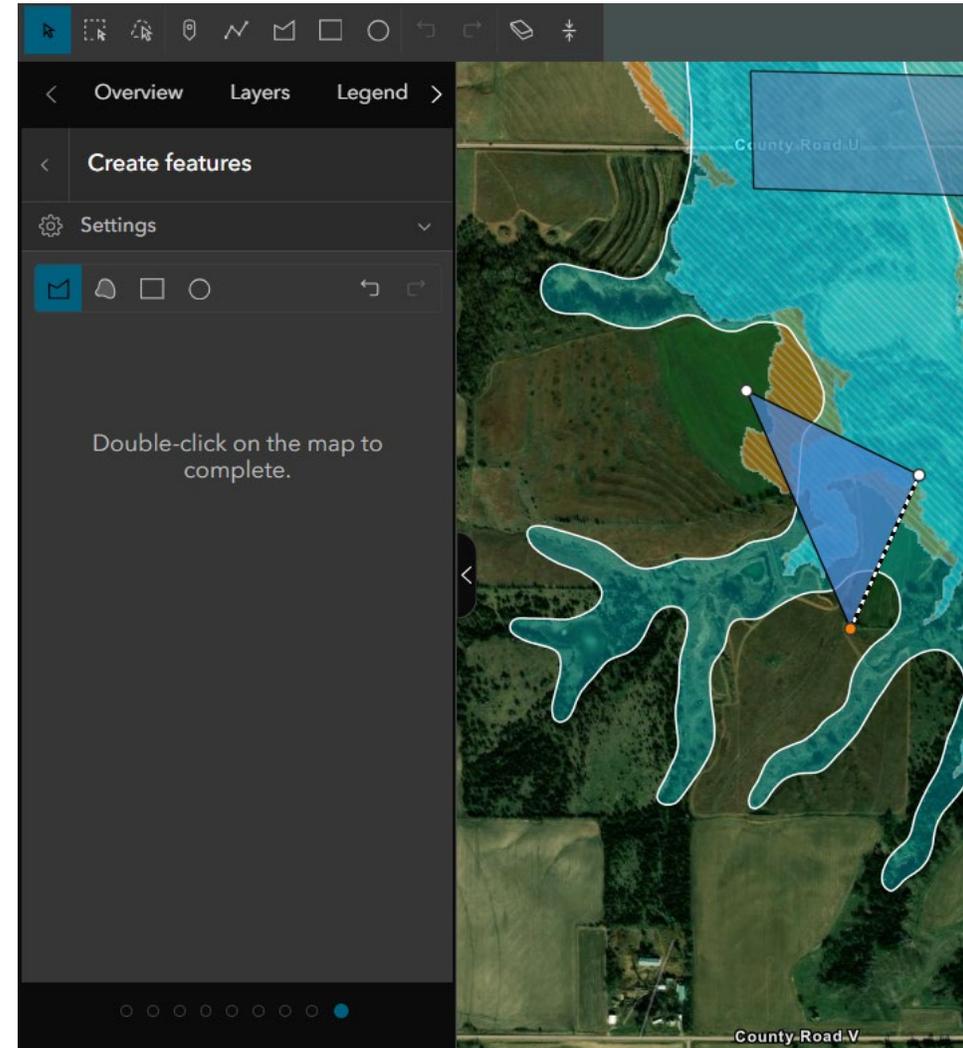
# Creating a Boundary Comment

1. Turn on the “Floodplain Boundary Comment Review” layer
2. Click the  icon next to the search bar
3. Select “New Feature” from the menu on the left side of your screen



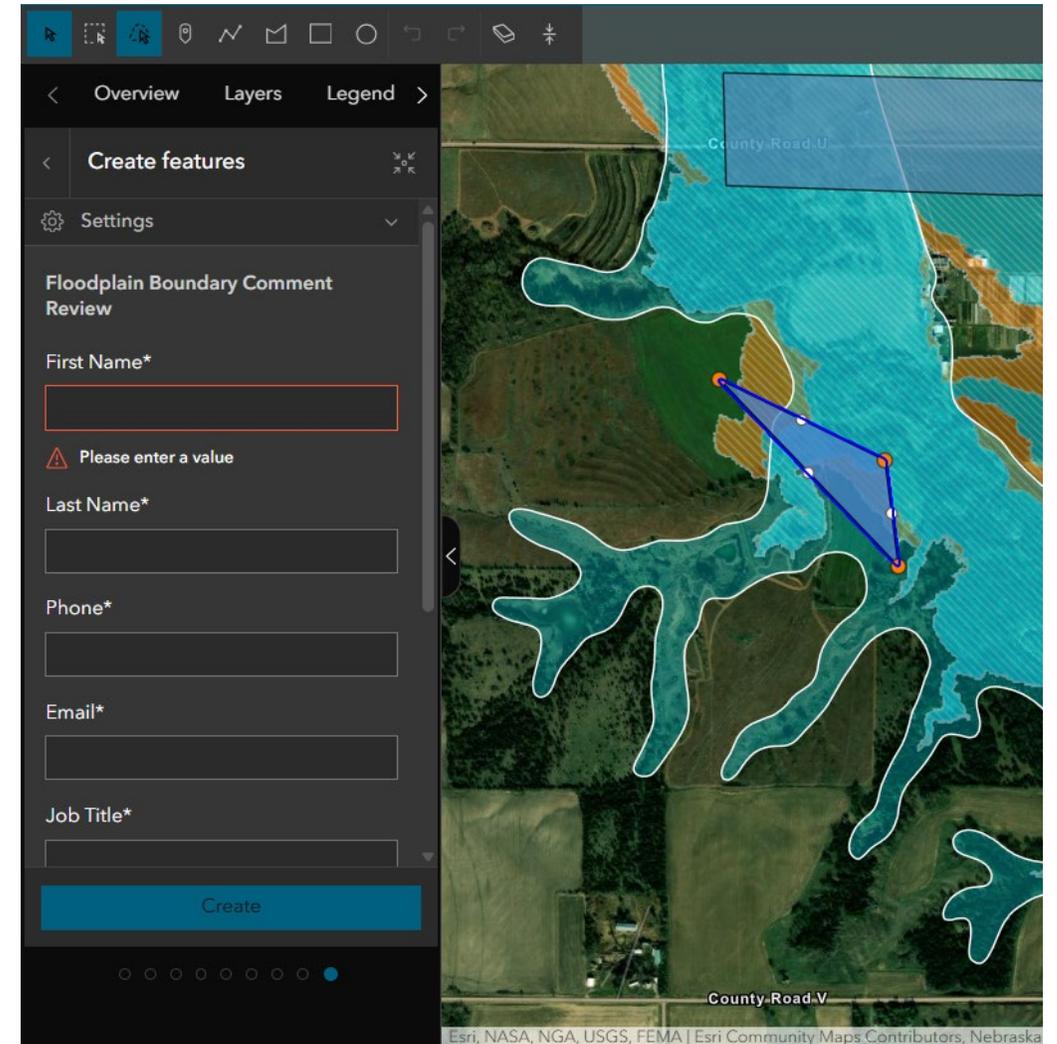
# Creating a Boundary Comment

1. Turn on the “Floodplain Boundary Comment Review” layer
2. Click the  icon next to the search bar
3. Select “New Feature” from the menu on the left side of your screen
4. Draw a shape around the area you would like to comment on, double-click to finish drawing



# Creating a Boundary Comment

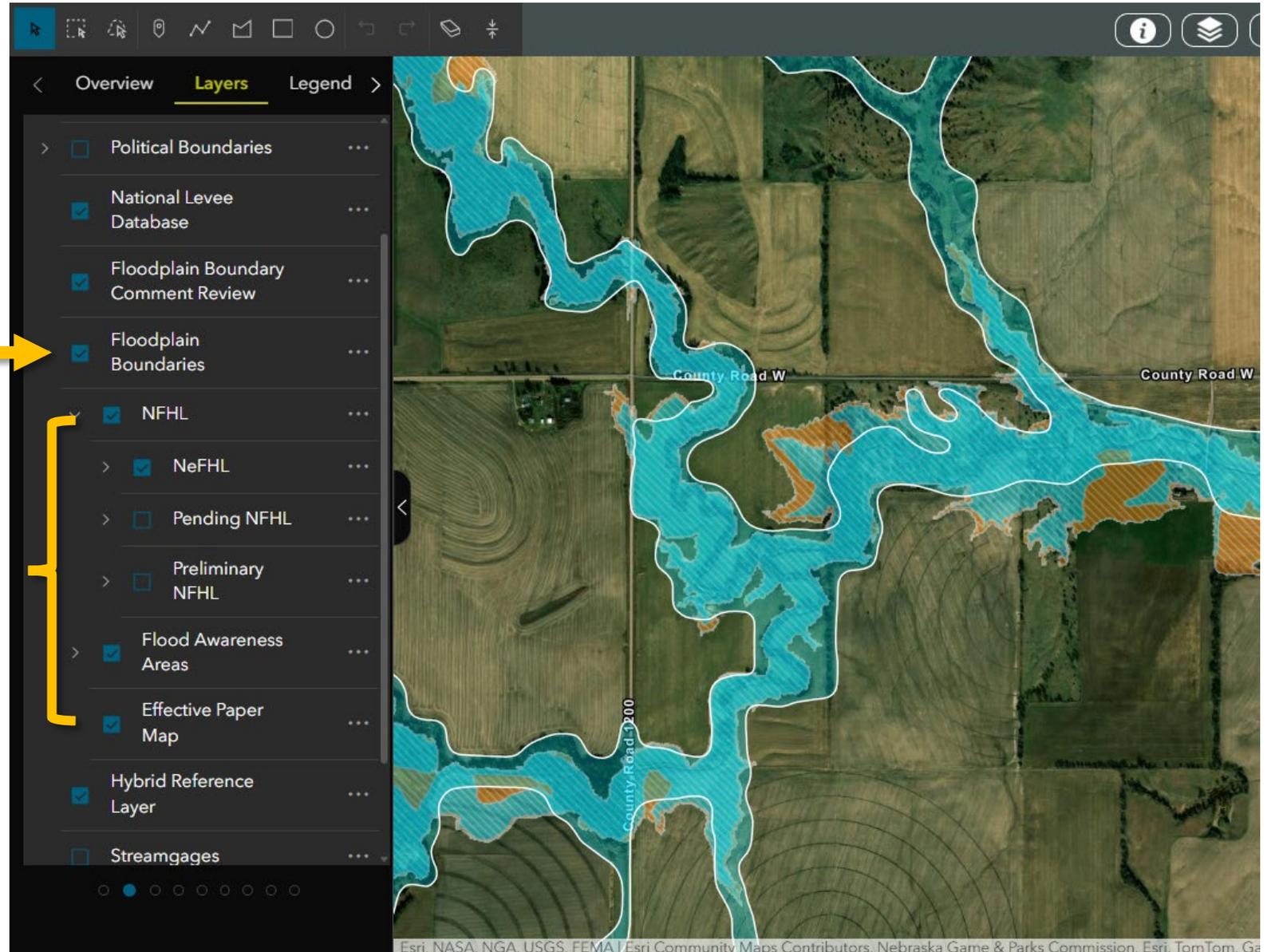
1. Turn on the “Floodplain Boundary Comment Review” layer
2. Click the  icon next to the search bar
3. Select “New Feature” from the menu on the left side of your screen
4. Draw a shape around the area you would like to comment on, double-click to finish drawing
5. Enter the required information, and click “Create”



## Floodplain Boundaries

This layer includes:

- NFHL
  - The regulatory floodplain (NeFHL)
  - Pending NFHL
  - Preliminary NFHL
- Flood Awareness Areas
- Effective Paper Map



## Floodplain Boundaries

To view only regulatory boundaries, select the NeFHL and Effective Paper Map:

NFHL

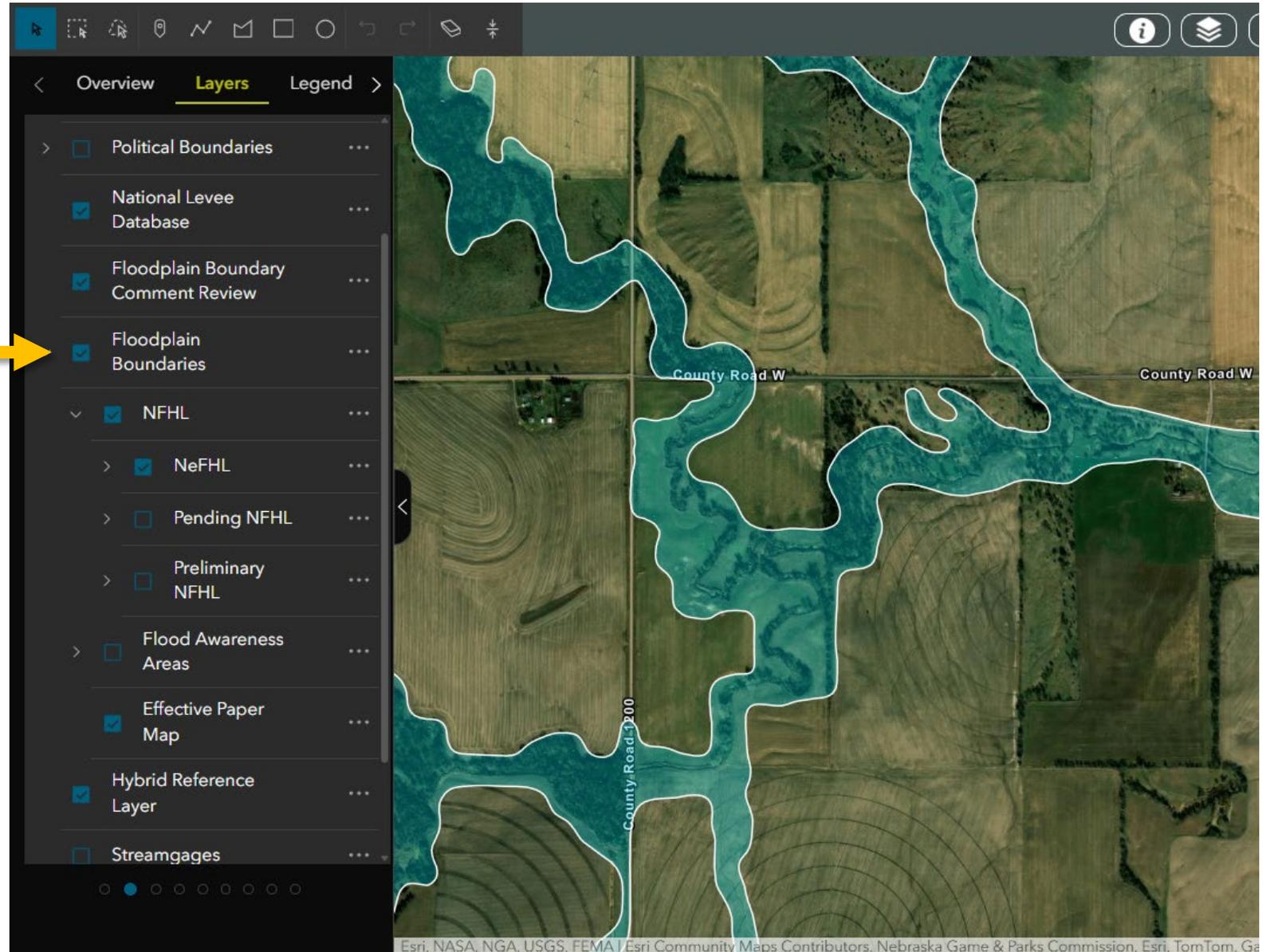
The regulatory floodplain (NeFHL)

Pending NFHL

Preliminary NFHL

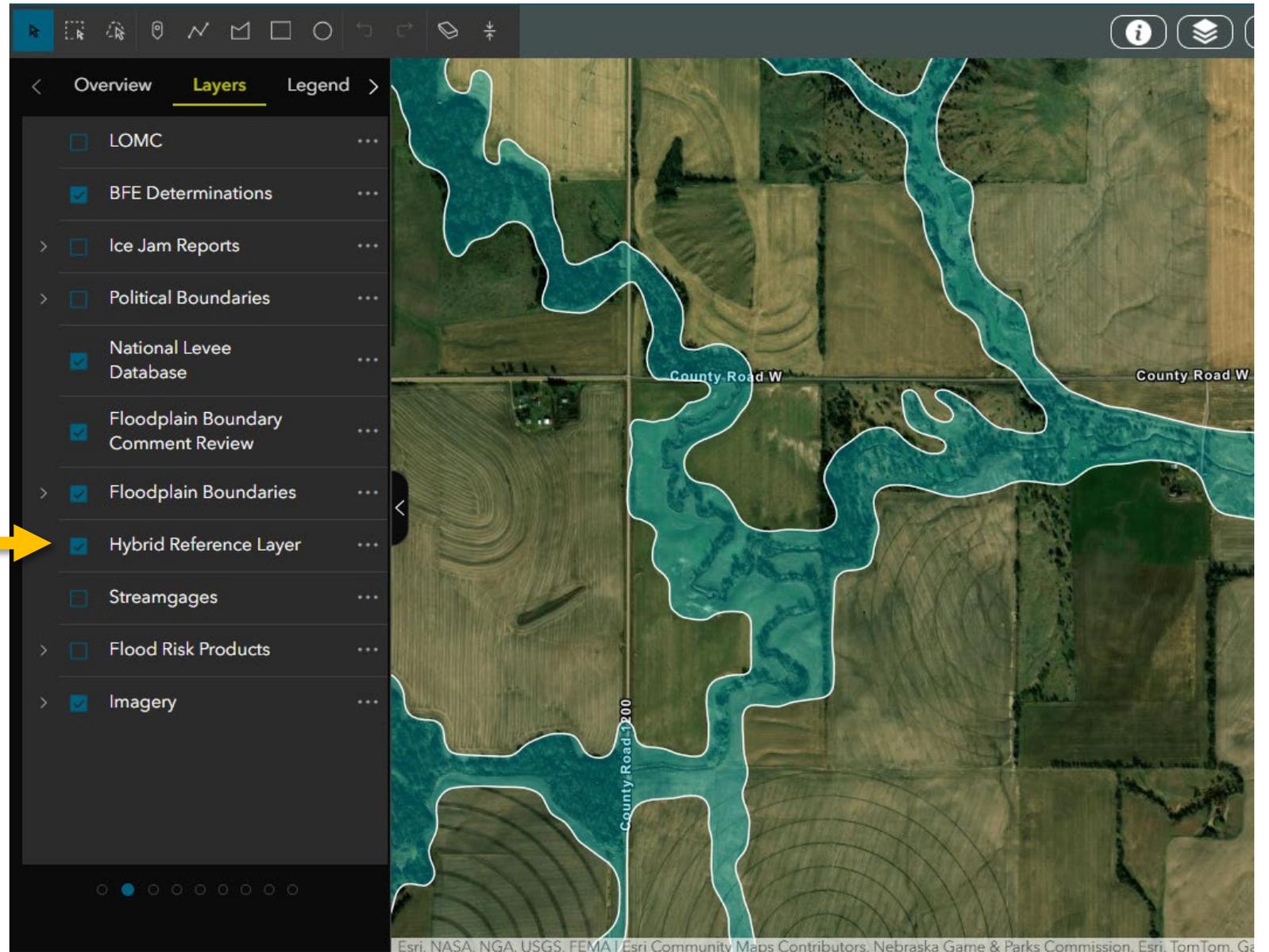
Flood Awareness Areas

Effective Paper Map



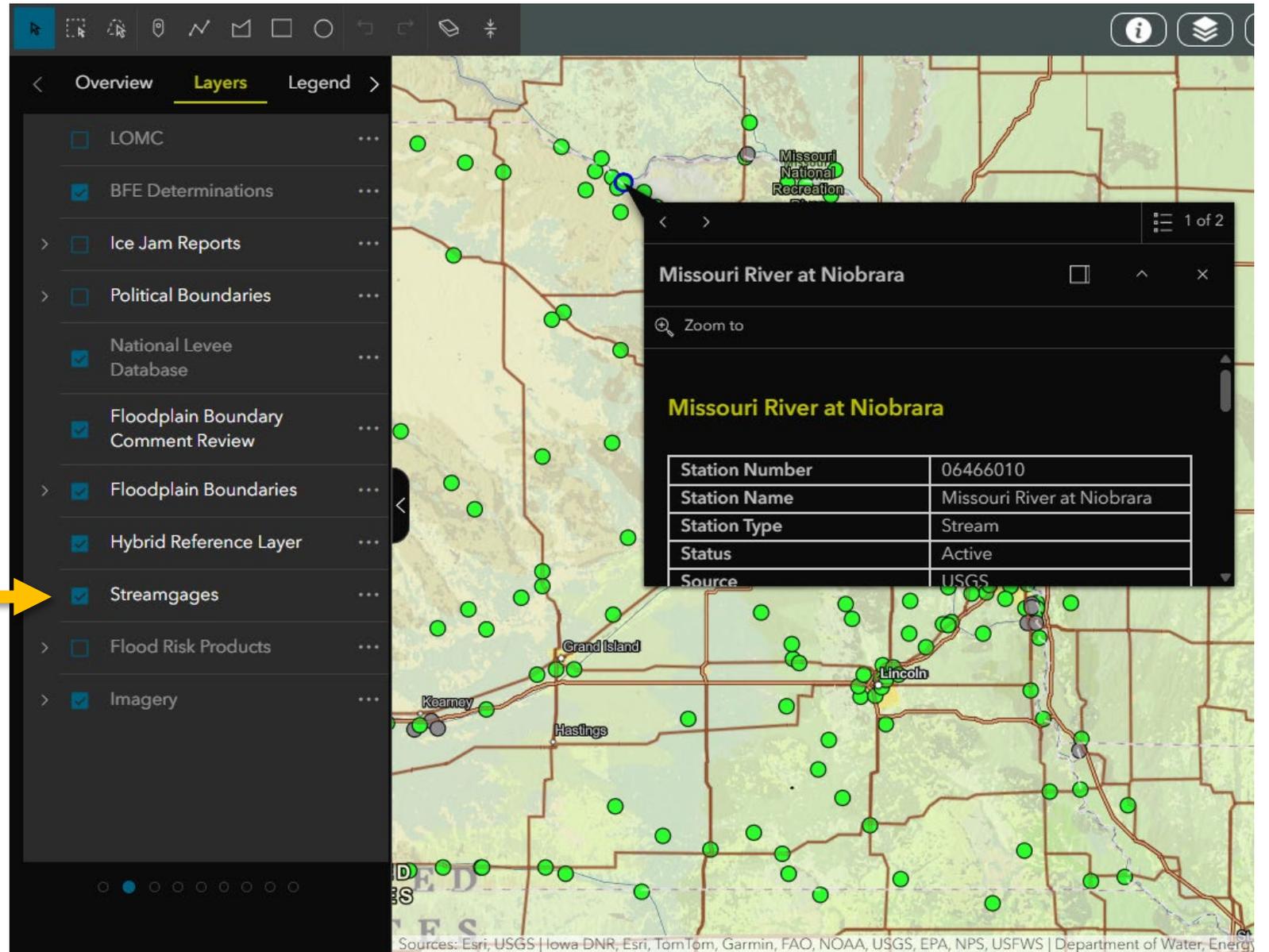
## Hybrid Reference Layer

Displays a detailed overlay reference with road names, community labels, water features, landmarks, railways, etc.



## Streamgages

Point layer showing all active streamgages for Nebraska. Colors will coordinate with the current flood stage. Clicking on a gage will open a window displaying the most current data for the watercourse at the gage site.



The screenshot shows a GIS application interface. On the left, a 'Layers' panel is visible with the following items:

- LOMC
- BFE Determinations
- Ice Jam Reports
- Political Boundaries
- National Levee Database
- Floodplain Boundary Comment Review
- Floodplain Boundaries
- Hybrid Reference Layer
- Streamgages
- Flood Risk Products
- Imagery

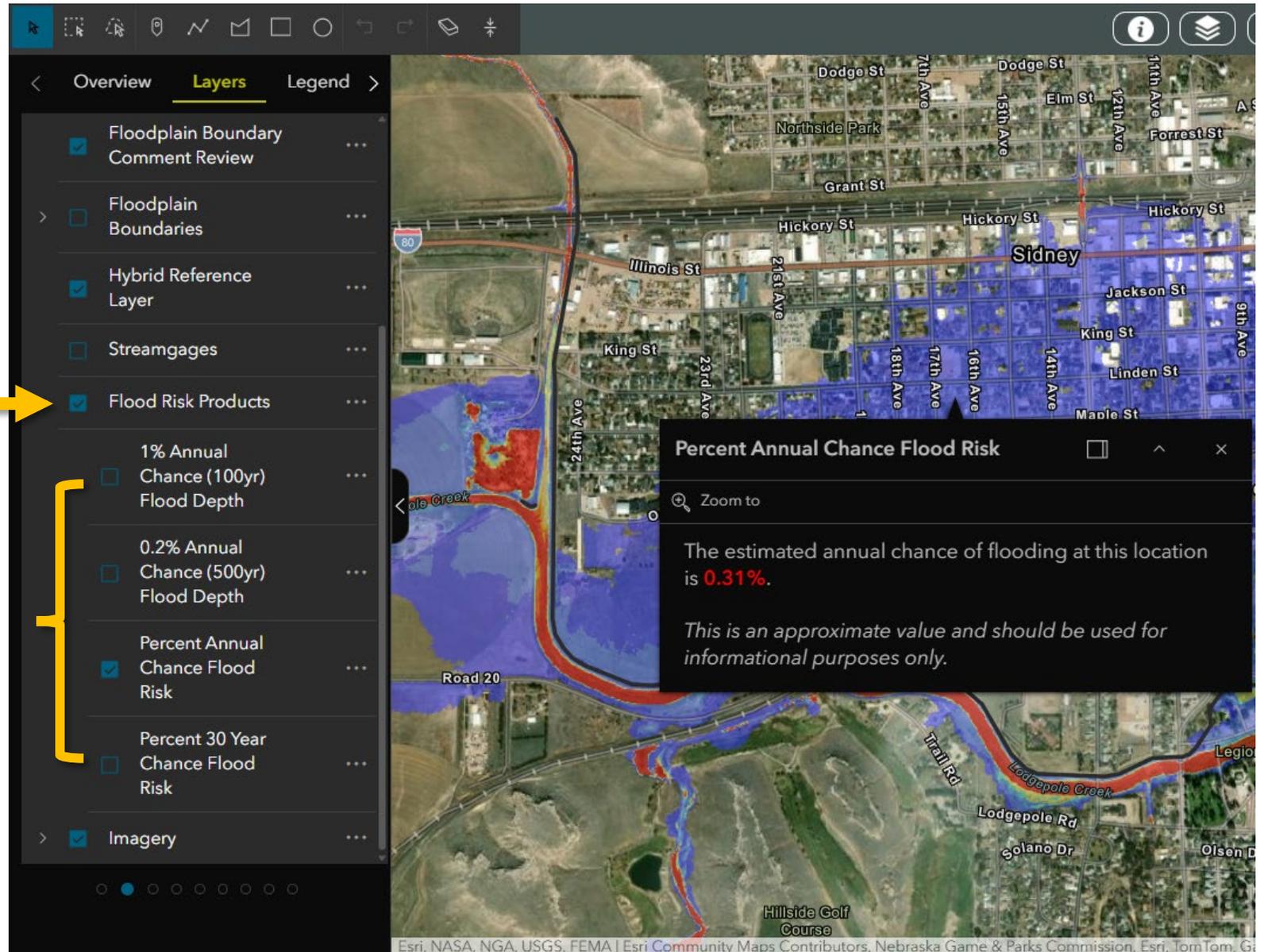
The main map area shows a map of Nebraska with numerous green circular markers representing streamgages. A pop-up window titled 'Missouri River at Niobrara' is open, displaying the following data:

Missouri River at Niobrara	
Station Number	06466010
Station Name	Missouri River at Niobrara
Station Type	Stream
Status	Active
Source	USGS

At the bottom of the application, there is a footer with the text: 'Sources: Esri, USGS | Iowa DNR, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS | Department of Water, Energy'

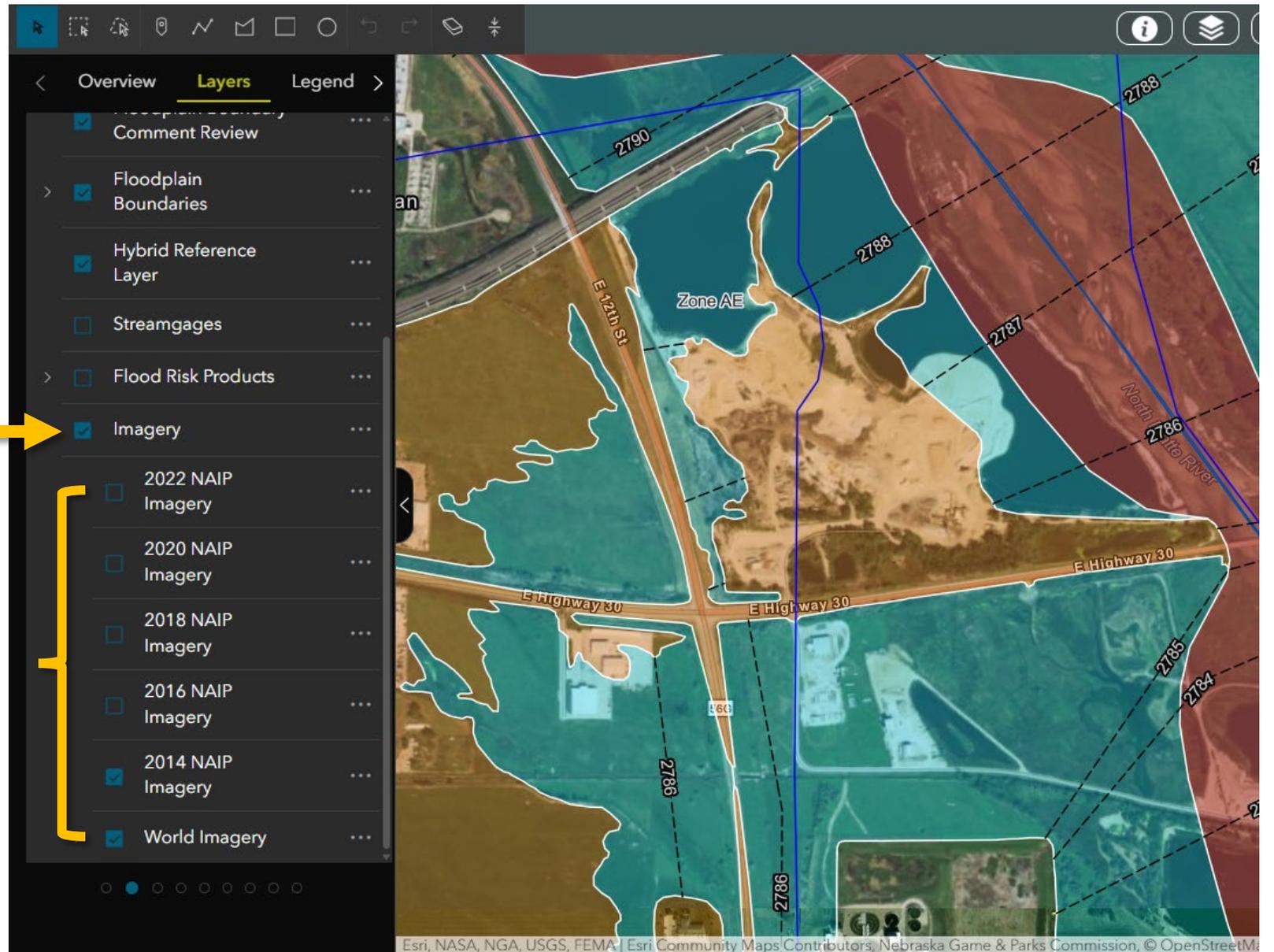
## Flood Risk Products

Layer displaying additional flood risk information beyond the regulatory data. Data includes depth “grids” and percent annual chance layers that allow you to click on any location to find site specific flood risk information.



## Imagery

Toggle between different aerial imagery using this layer.



# Available Tools

# Available Tools



- All tools can be found along the top bar. These include:

Selecting Tools

Drawing Tools

Legend

Streamgage camera filter

Elevation Profile

Floodplain Bounday Review Comments

Print Map View

Attribute Table

# Available Tools



## Selecting Tools



Select Feature: Use this to select features and read information



Select by Rectangle: Use this to select all features within a rectangle



Select by Lasso: Select features within a custom drawn polygon

# Available Tools



## Drawing Tools

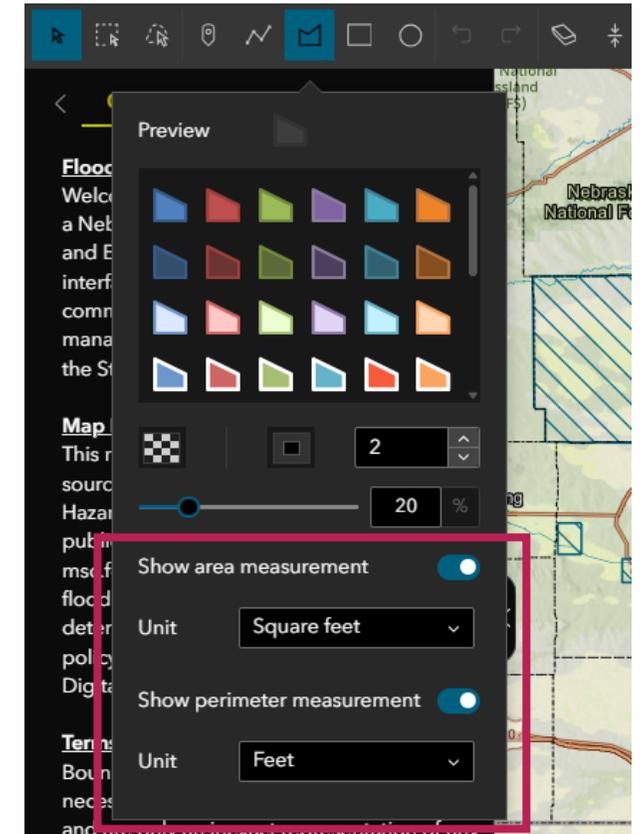
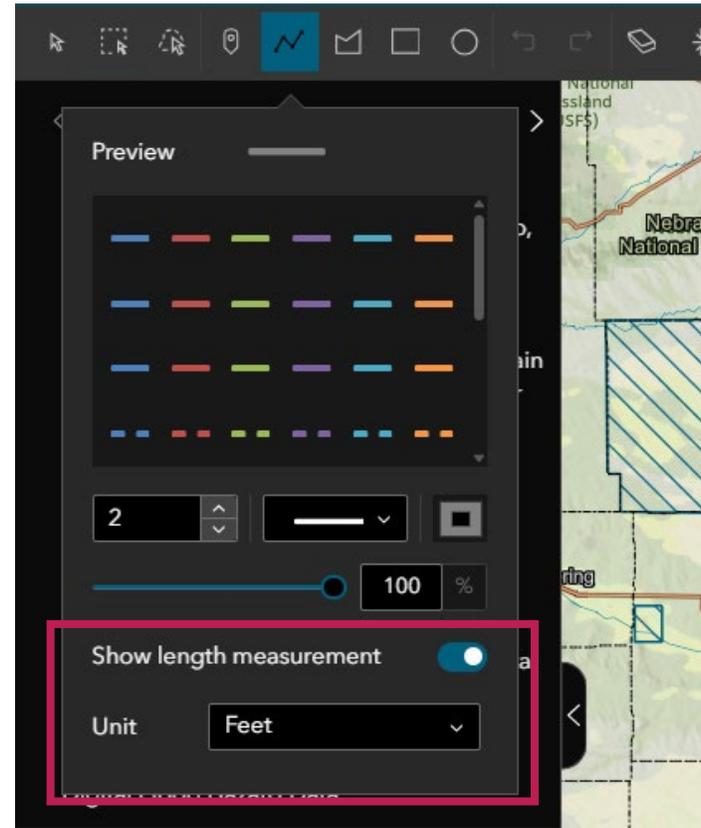
-  Draw a Point: Place points on the map
-  Draw a Polyline: Draw a custom line on the map
-  Draw a Polygon: Draw a custom shape on the map
-  Draw a Rectangle: Draw a rectangle on the map
-  Draw a Circle: Draw a circle on the map
-  Undo, redo, erase, and “collapse” the drawing window

# Available Tools



## Making Measurements

- When drawing any shape, toggle the “show length/area/perimeter measurement” button
- Select the preferred unit of measurement



# Available Tools



## Other Tools

-  Application Overview: Returns to the disclaimer information
-  Map Layers: Opens layer selection
-  Legend: Opens the general map legend
-  NeFHL Legend: Opens the floodplain boundary legend
-  Streamgage Camera Filter: Filters only streamgages with live camera feed

# Available Tools



## Other Tools

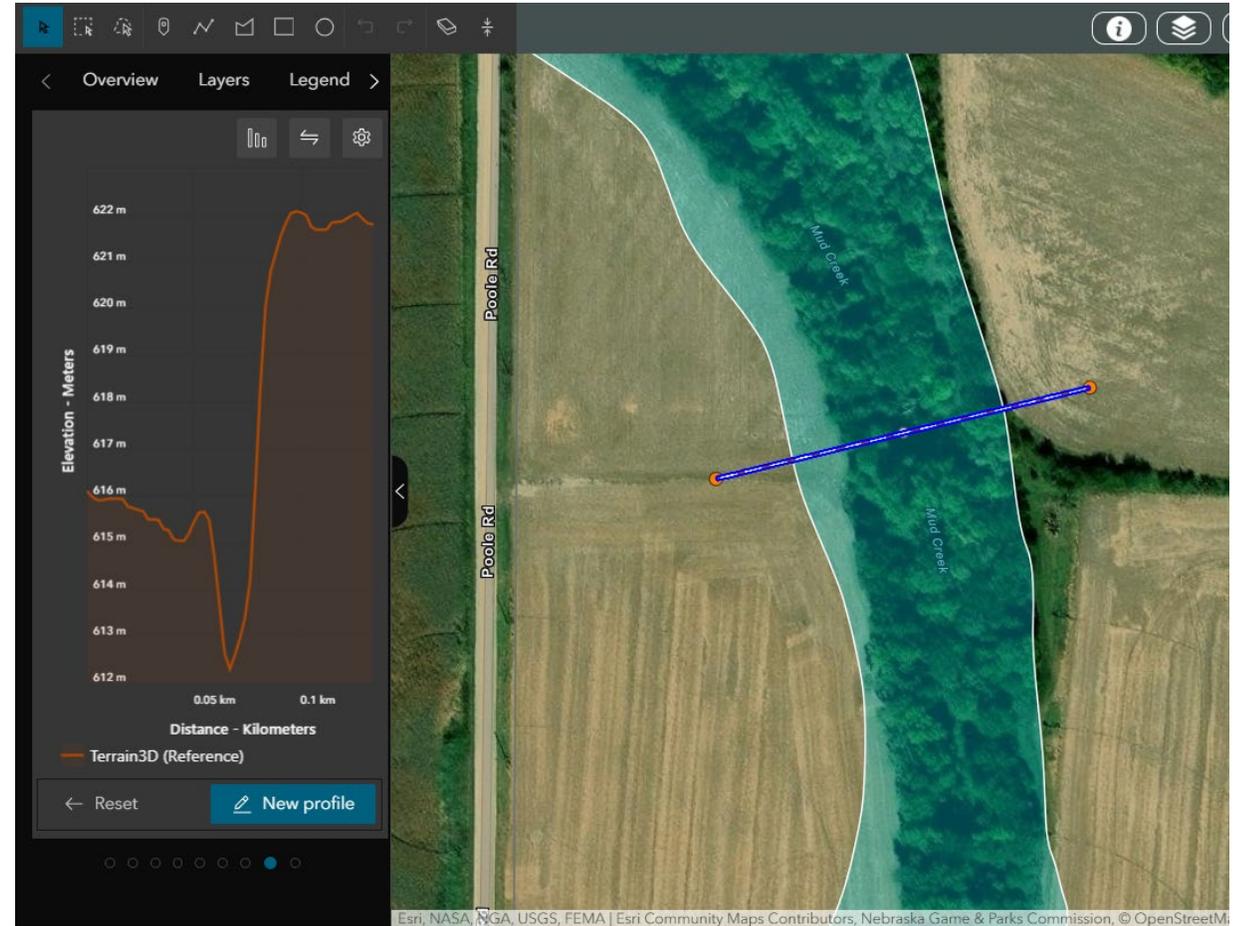
-  Popular Searches: Search for your community by name
-  Elevation Profile: Allows users to view elevation information along a profile
-  Floodplain Boundary Comments: Opens commenting tool
-  Print Map View: Opens the printer tool to print the current or custom view
-  Attributes: Opens the attribute tables for available layers

# Available Tools

Using the Elevation Profile tool



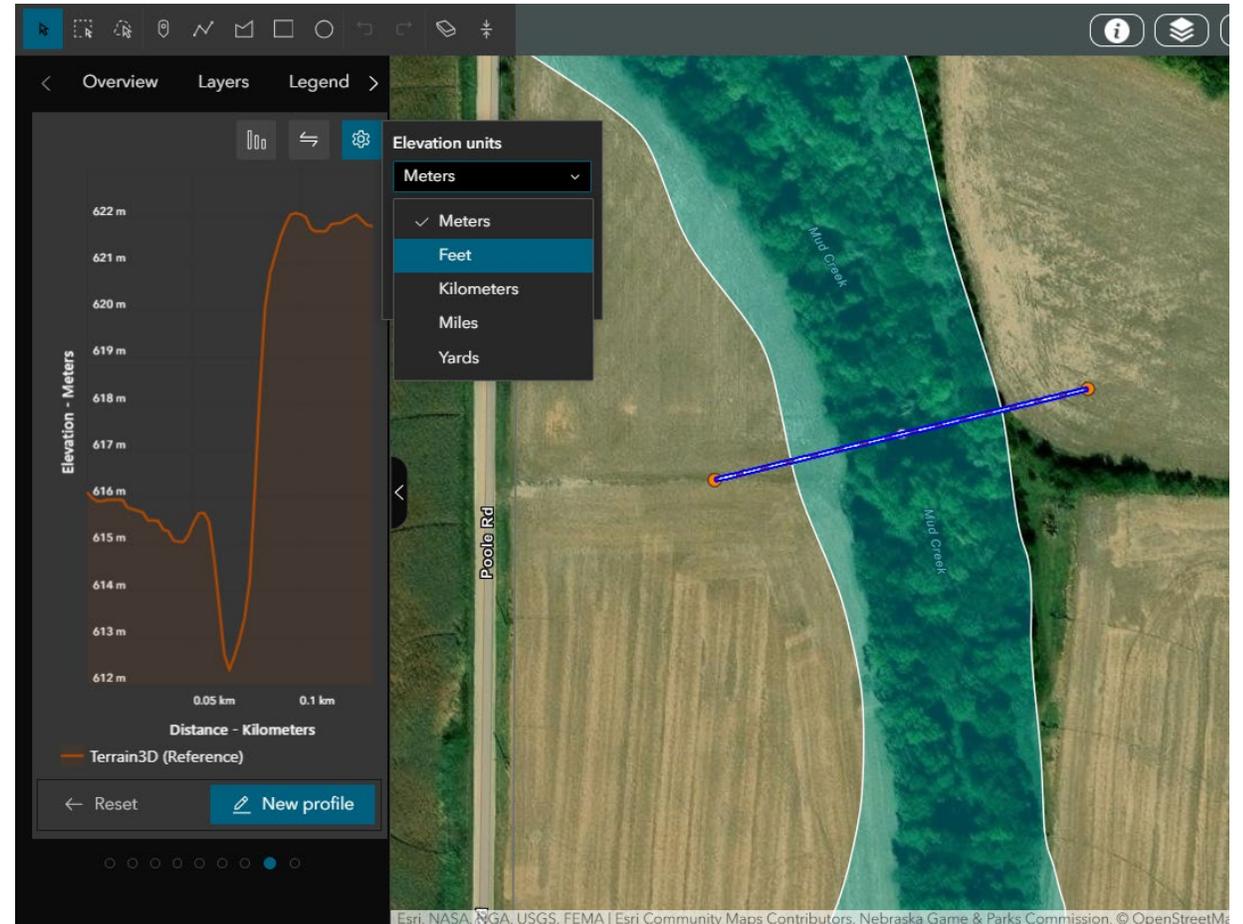
1. Read the disclaimer
2. Click “Draw”
3. Draw a line across the area you need elevations for, and double-click to finish drawing



# Available Tools

Using the Elevation Profile tool 

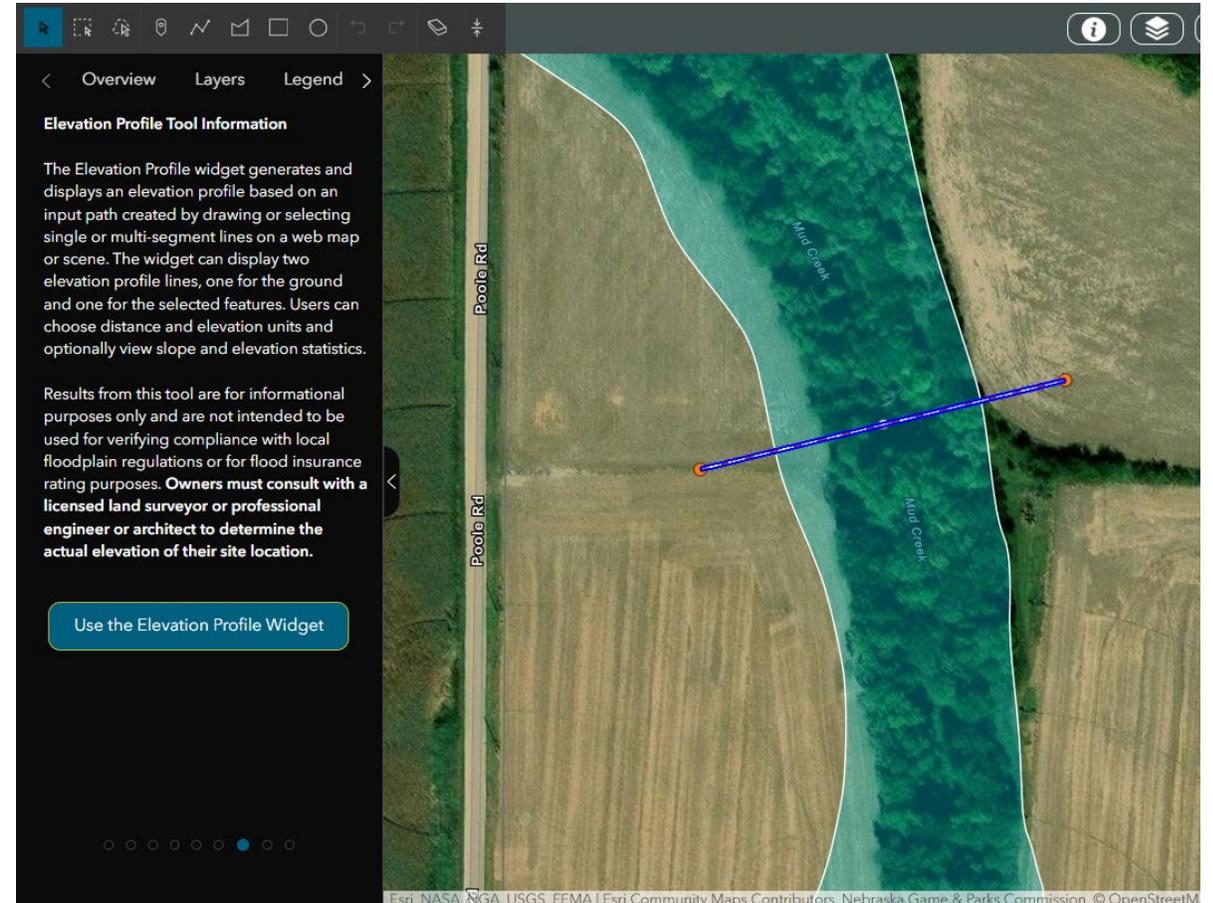
1. Read the disclaimer
2. Click “Draw”
3. Draw a line across the area you need elevations for, and double-click to finish drawing
4. Change units by clicking the  icon and using the drop downs



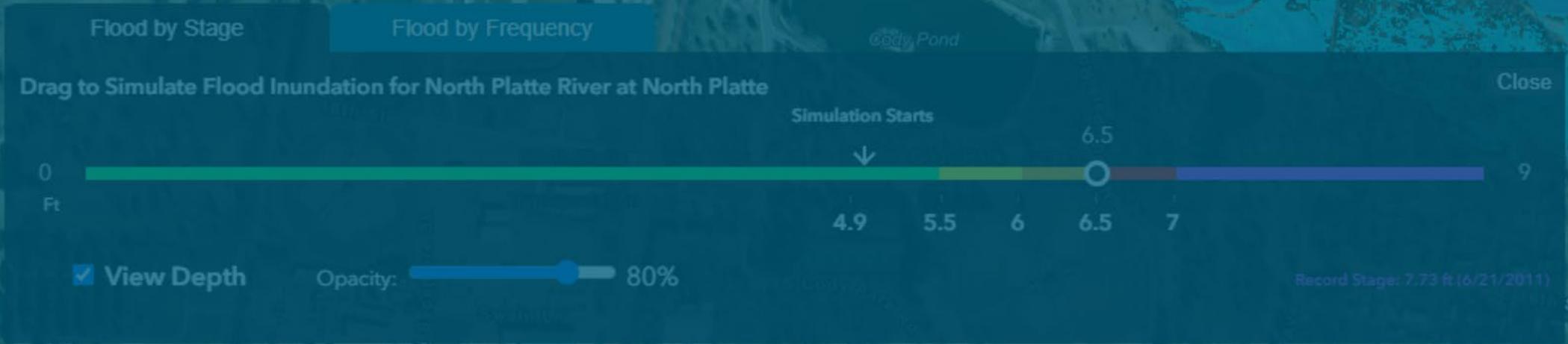
# Available Tools

## Using the Elevation Profile tool

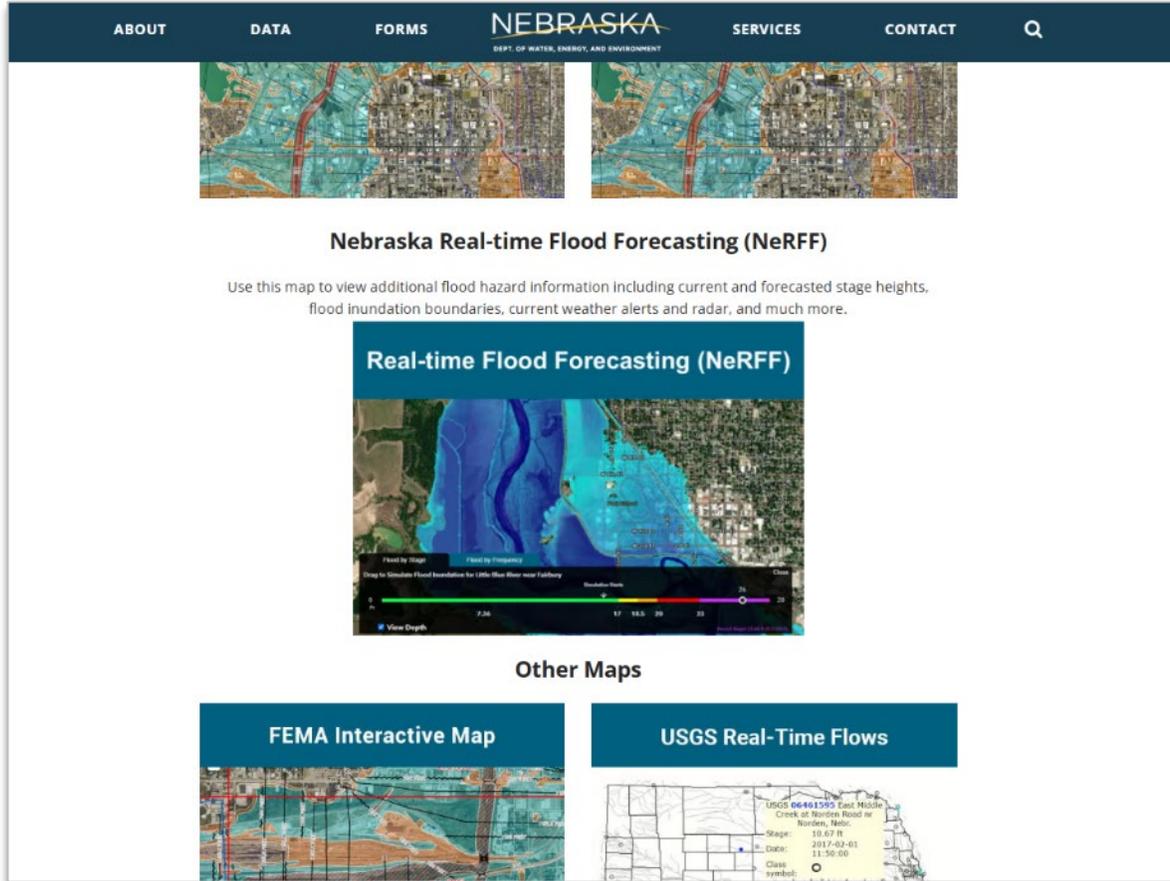
- This tool is for information purposes only, and cannot replace surveyed elevations for permitting, LOMC, or proof of compliance
- The full disclaimer can be read when you first click on the tool



# Nebraska Real-Time Flood Forecasting



# Nebraska Real-Time Flood Forecasting



The screenshot shows the top navigation bar with links for ABOUT, DATA, FORMS, NEBRASKA (DEPT. OF WATER, ENERGY, AND ENVIRONMENT), SERVICES, CONTACT, and a search icon. Below the navigation bar are two side-by-side satellite maps showing flood inundation boundaries. The main heading is "Nebraska Real-time Flood Forecasting (NeRFF)". Below this is a descriptive paragraph: "Use this map to view additional flood hazard information including current and forecasted stage heights, flood inundation boundaries, current weather alerts and radar, and much more." A central map titled "Real-time Flood Forecasting (NeRFF)" displays a river with blue and cyan flood inundation areas. Below the map is a legend and a "View Depth" slider. At the bottom, there are two sections: "Other Maps" with "FEMA Interactive Map" and "USGS Real-Time Flows". The FEMA map shows a different view of the same area with various flood hazard zones. The USGS map shows a map of Nebraska with a specific location highlighted and a data table.

ABOUT DATA FORMS NEBRASKA DEPT. OF WATER, ENERGY, AND ENVIRONMENT SERVICES CONTACT Q

## Nebraska Real-time Flood Forecasting (NeRFF)

Use this map to view additional flood hazard information including current and forecasted stage heights, flood inundation boundaries, current weather alerts and radar, and much more.

### Real-time Flood Forecasting (NeRFF)

View Depth: 7.20 17 18.5 20 21

#### Other Maps

##### FEMA Interactive Map

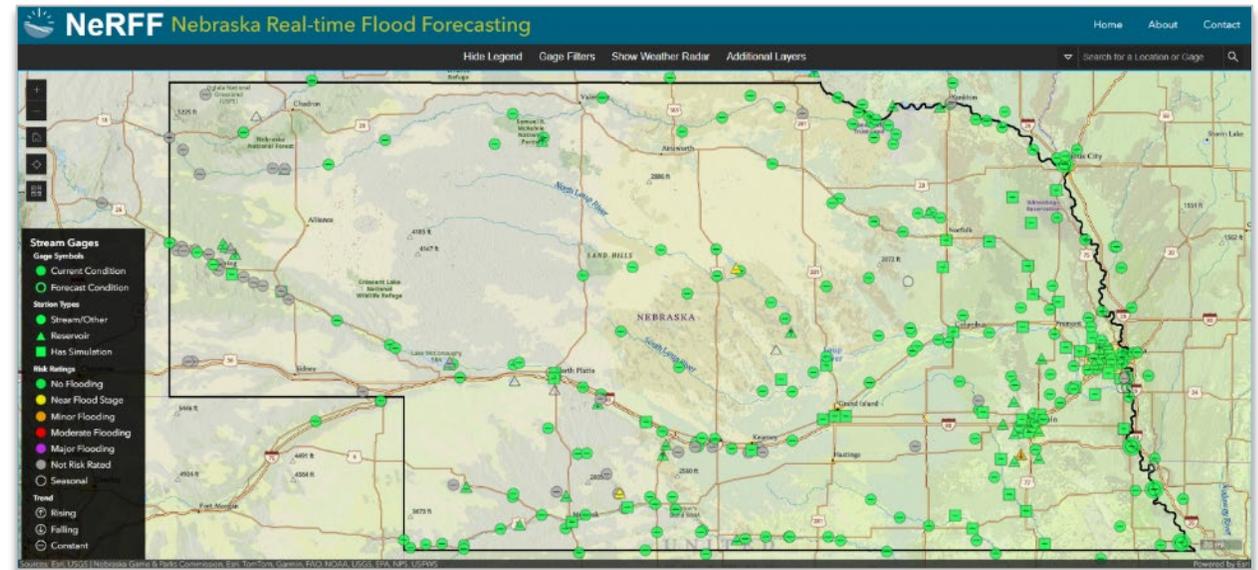
##### USGS Real-Time Flows

USGS 66491 D995 East Middle Creek at Norden, Norda, Neb.
Stage: 10.67 ft
Date: 2017-02-01 11:50:00
Class symbol: ○

- Now available on our interactive map webpage:  
<https://dnr.nebraska.gov/floodplain/interactive-maps>
- NeDNR received requests for inundation boundaries during the 2019 Flood Event
  - We had accurate predictions for National Weather Service, but did not have the time to run inundation boundaries
  - After the flood, we decided we needed to prepare for the next event and have the data ready in advance

# Nebraska Real-Time Flood Forecasting

- Online flood inundation tool
  - Has pre-computed inundation boundaries for 54 communities with stream gages
  - Landing page highlights gage flood stages and forecasted stages
  - Also has radar, live camera feeds, watershed boundaries, and much more



# NEBRASKA

DEPT. OF WATER, ENERGY, AND ENVIRONMENT

The Nebraska Real-time Flood Forecasting (NeRFF) Map is a tool being provided by the Nebraska Department of Water, Energy, and Environment (DWEE) and the Nebraska Emergency Management Agency, with funding from the Federal Emergency Management Agency and the State of Nebraska. The Map is intended to be used to provide flood hazard data to property owners and emergency managers prior to and during flooding events. The information provided does not supersede the Effective Special Flood Hazard Areas. The map is not intended to be used for the issuance of Floodplain Development Permitting, Insurance Rating, or obtaining Letters of Map Change. DWEE will continue to improve, add data to, and update the Map, therefore the appearance and functionality may change over time. Additionally, the Map utilizes data from many sources and may not perform if those source sites are down.

The following are a list of assumptions made during the modeling process. This is not an inclusive list.

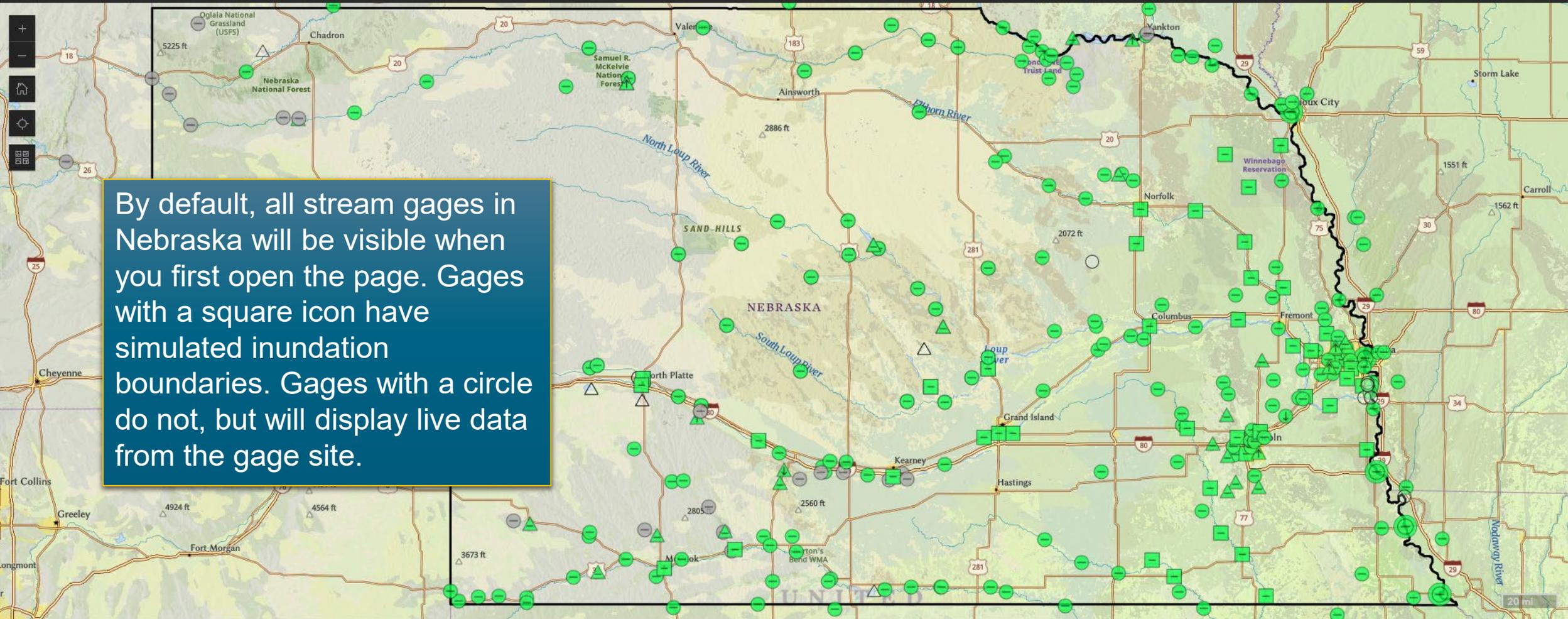
- Levees and levee closure structures were included in the analysis only if they were listed in the US Army Corps of Engineers' National Levee Database (NLD). No levee breach analyses were completed: levees were assumed to perform until overtopped.
- Bridges and culverts were modeled unobstructed: ice Jams and debris collection were not considered.
- Inundation boundaries were only developed for the listed stream: tributaries were not taken into account.
- Lakes, ponds, and lagoons were assumed dry until overtopped.
- The critical facilities layer is draft and subject to change at any time.

The models used to develop the inundation boundaries and depth grids were developed using the best available topographic, land use, and flood insurance study data, as well as best engineering practices at the time of their development. Any change to the topography or land use will impact the accuracy of the inundation boundaries. These are not regulatory models and were developed solely for informational purposes. Any use of these models or modifications beyond that are not recommended, but may be conducted based on the discretion of a licensed professional engineer. The Department of Water, Energy, and Environment makes no claims, representations, and warranties, express or implied, concerning the validity, the reliability, or the accuracy of the data and data products furnished by the Department. The Department of Water, Energy, and Environment assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of their cause, or for any decision made, action taken, or action not taken in reliance upon the information contained in these models. All models and reports are available from DWEE, upon request.

Click "Agree" to view the map.



Agree

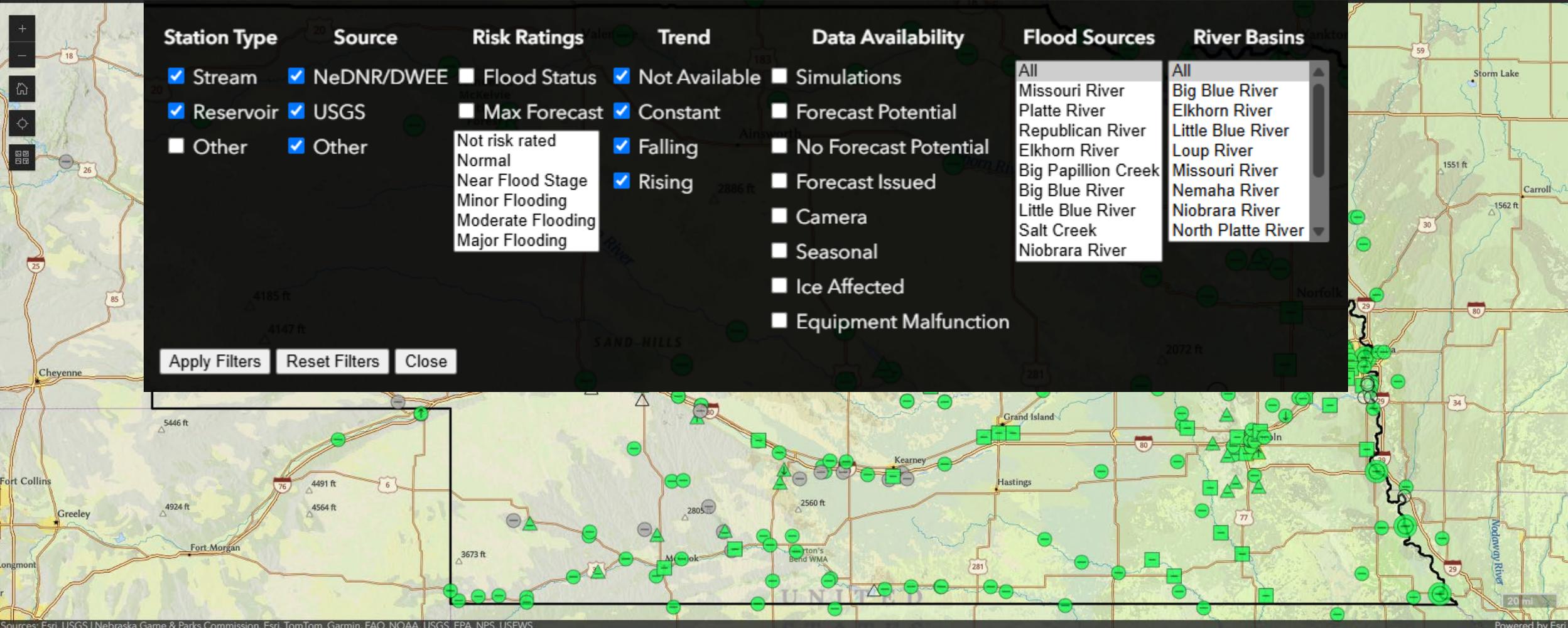


By default, all stream gages in Nebraska will be visible when you first open the page. Gages with a square icon have simulated inundation boundaries. Gages with a circle do not, but will display live data from the gage site.



Show Legend Gage Filters Show Weather Radar Additional Layers

Search for a Location or Gage

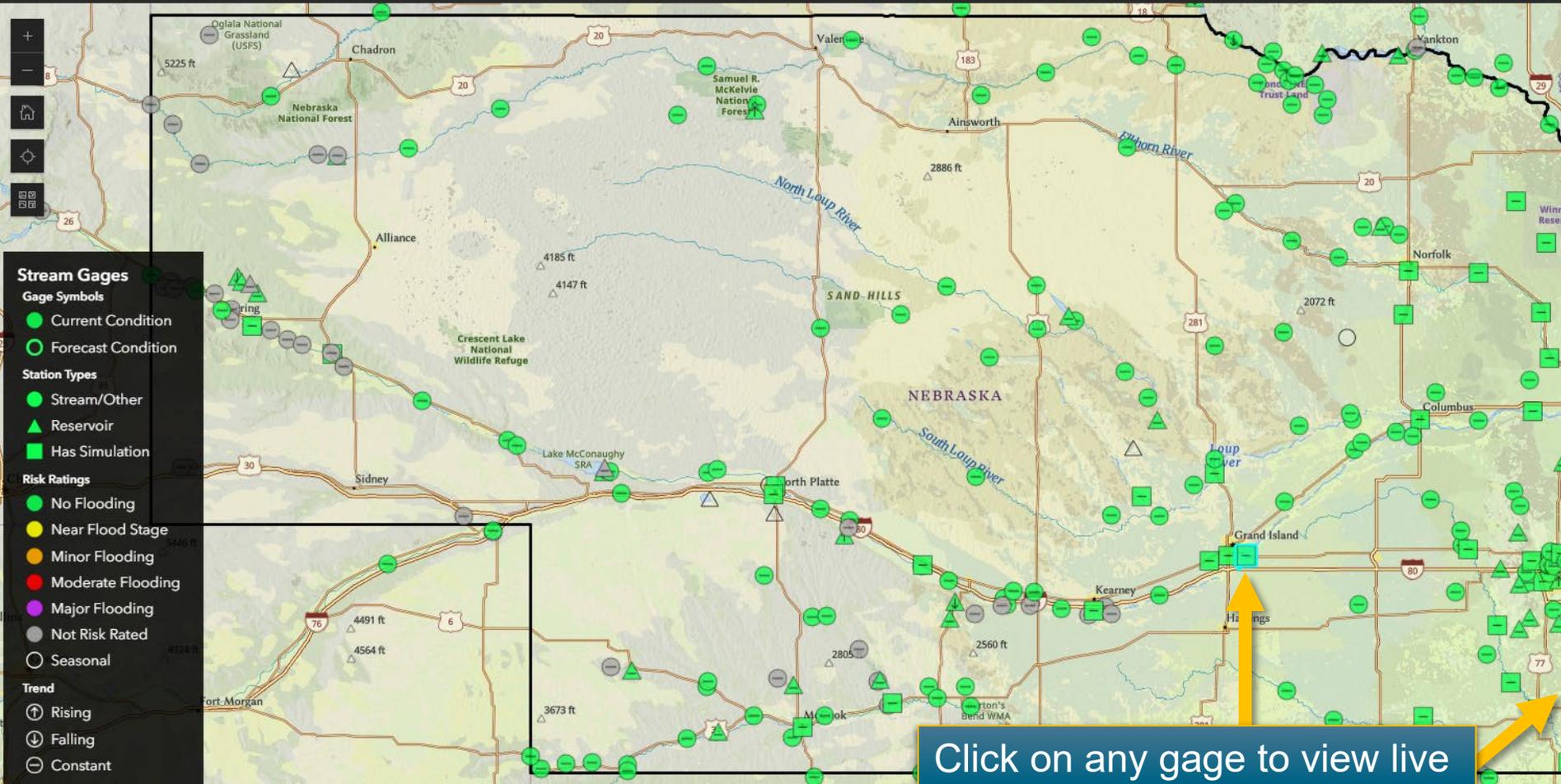


## Example:

- These filters would allow you to only see gages along the Elkhorn River that are rising and are at the moderate flood stage.

Station Type	Source	Risk Ratings	Trend	Data Availability	Flood Sources	River Basins
<input checked="" type="checkbox"/> Stream	<input checked="" type="checkbox"/> NeDNR/DWEE	<input type="checkbox"/> Flood Status	<input type="checkbox"/> Not Available	<input type="checkbox"/> Simulations	All	All
<input checked="" type="checkbox"/> Reservoir	<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Max Forecast	<input type="checkbox"/> Constant	<input type="checkbox"/> Forecast Potential	Missouri River	Big Blue River
<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Not risk rated	<input type="checkbox"/> Falling	<input checked="" type="checkbox"/> No Forecast Potential	Platte River	Elkhorn River
		Normal	<input checked="" type="checkbox"/> Rising	<input type="checkbox"/> Forecast Issued	Republican River	Little Blue River
		Near Flood Stage		<input type="checkbox"/> Forecast Issued	Elkhorn River	Loup River
		Minor Flooding		<input type="checkbox"/> Camera	Big Papillion Creek	Missouri River
		Moderate Flooding		<input type="checkbox"/> Ice Affected	Big Blue River	Nemaha River
		Major Flooding		<input type="checkbox"/> Equipment Malfunction	Little Blue River	Niobrara River
					Salt Creek	North Platte River
					Niobrara River	

Apply Filters   Reset Filters   Close



### Stream Gages

**Gage Symbols**

- Current Condition
- Forecast Condition

**Station Types**

- Stream/Other
- ▲ Reservoir
- Has Simulation

**Risk Ratings**

- No Flooding
- Near Flood Stage
- Minor Flooding
- Moderate Flooding
- Major Flooding
- Not Risk Rated
- Seasonal

**Trend**

- ⬆ Rising
- ⬇ Falling
- ⊖ Constant

### Platte River near Grand Island

Stage Height: 3.84 ft

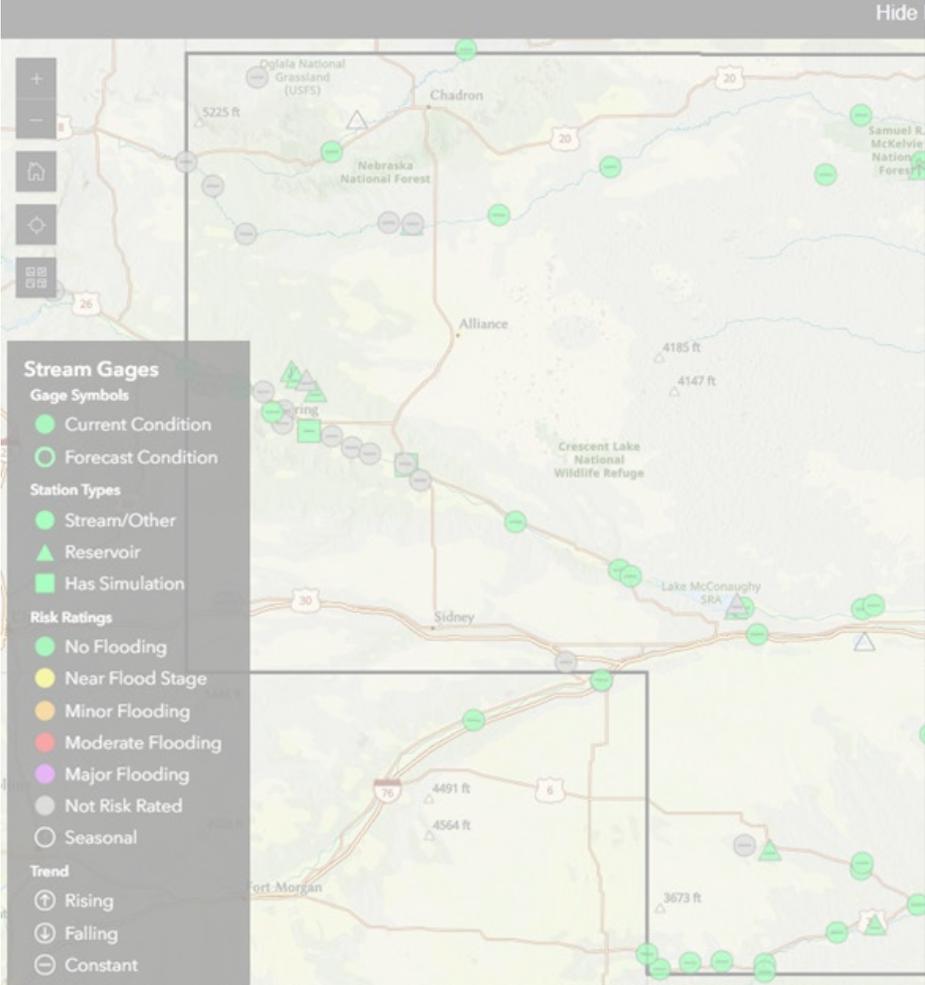
[Flood Simulator](#) [Show Watershed](#) [Zoom to](#)

Gage ID:	06770500
Owner:	USGS
Datum:	1,829.9 (NGVD29)
River Basin:	Platte River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	927
Stage Trend:	Constant
NWS Gage Site:	<a href="#">View</a>
USGS Gage Site:	<a href="#">View</a>
Sign Up for Alerts:	<a href="#">View</a>
HIVIS Camera:	<a href="#">View</a>

The graph shows the stage height in feet (ft) on the y-axis (ranging from 2 to 12) against time in Universal Time (UTC) on the x-axis (from Jul 2 to Jul 12, 2025). The stage height is currently at 3.78 ft at 7:15 AM CDT on July 5, 2025, with a flood stage of 6.5 ft. The graph shows a relatively stable stage height around 4-5 feet, with a slight increase towards the end of the period.

Time (UTC)	Stage (ft)
Jul 2 13Z	4.25
Jul 3 00Z	4.25
Jul 3 06Z	4.25
Jul 3 12Z	4.25
Jul 3 18Z	4.25
Jul 4 00Z	4.25
Jul 4 06Z	4.25
Jul 4 12Z	4.25
Jul 4 18Z	4.25
Jul 5 00Z	4.25
Jul 5 06Z	4.25
Jul 5 12Z	4.25
Jul 5 18Z	4.25
Jul 6 00Z	4.25
Jul 6 06Z	4.25
Jul 6 12Z	4.25
Jul 6 18Z	4.25
Jul 7 00Z	4.25
Jul 7 06Z	4.25
Jul 7 12Z	4.25
Jul 7 18Z	4.25
Jul 8 00Z	4.25
Jul 8 06Z	4.25
Jul 8 12Z	4.25
Jul 8 18Z	4.25
Jul 9 00Z	4.25
Jul 9 06Z	4.25
Jul 9 12Z	4.25
Jul 9 18Z	4.25
Jul 10 00Z	4.25
Jul 10 06Z	4.25
Jul 10 12Z	4.25
Jul 10 18Z	4.25
Jul 11 00Z	4.25
Jul 11 06Z	4.25
Jul 11 12Z	4.25
Jul 11 18Z	4.25
Jul 12 00Z	4.25
Jul 12 06Z	4.25
Jul 12 12Z	4.25
Jul 12 18Z	4.25

Click on any gage to view live information



Sources: Esri, USGS | Nebraska Game & Parks Commission, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

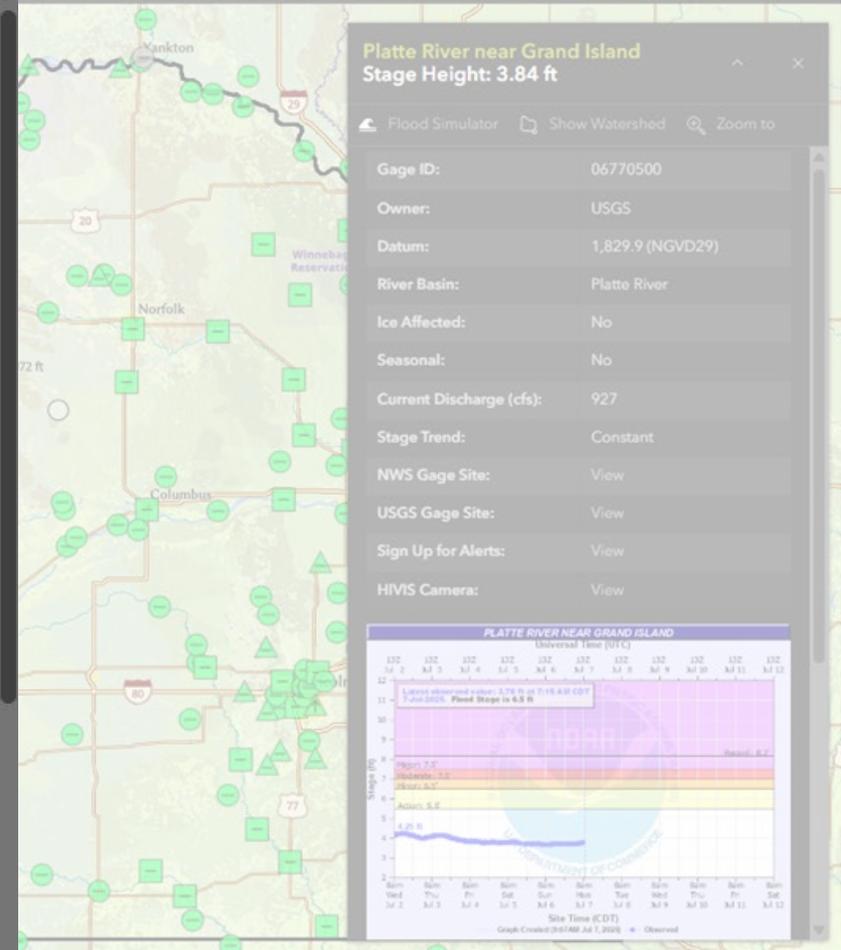
Platte River near Grand Island  
Stage Height: 3.84 ft

Flood Simulator Show Watershed Zoom to

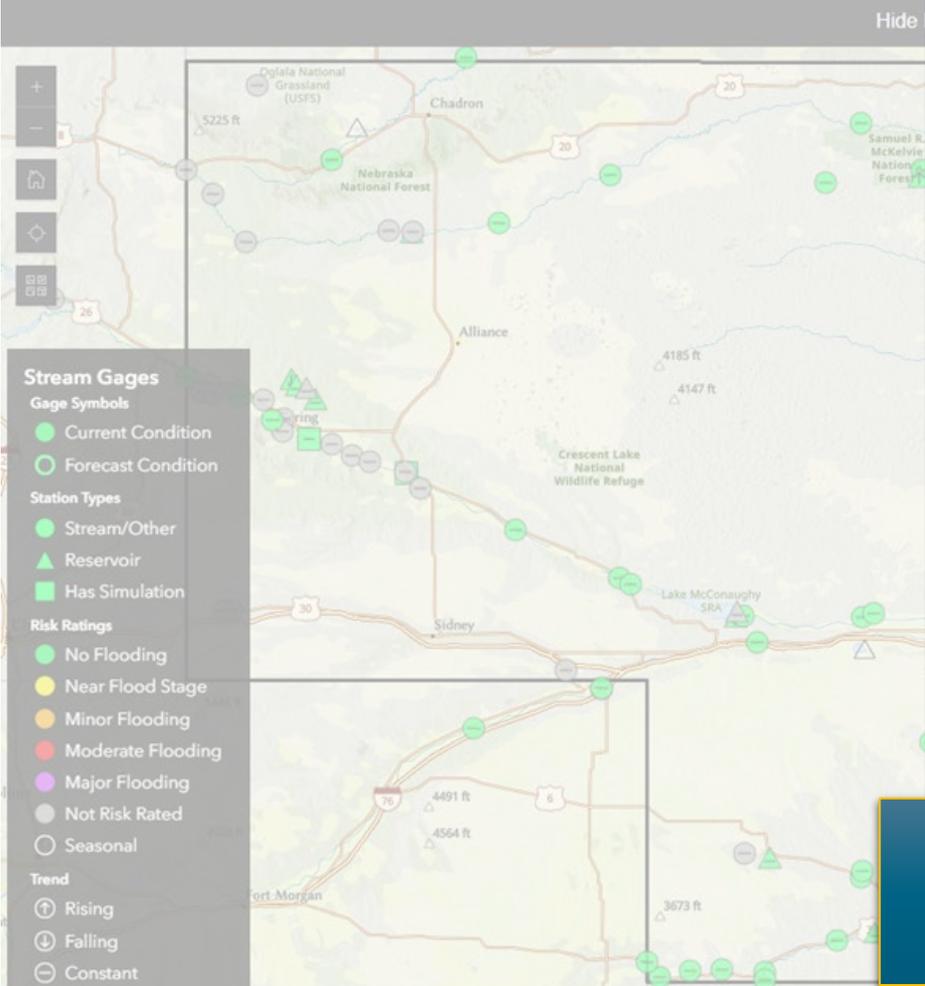
Gage ID:	06770500
Owner:	USGS
Datum:	1,829.9 (NGVD29)
River Basin:	Platte River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	927
Stage Trend:	Constant
NWS Gage Site:	View
USGS Gage Site:	View
Sign Up for Alerts:	View
HIVIS Camera:	View



Search for a Location or Gage



Powered by Esri



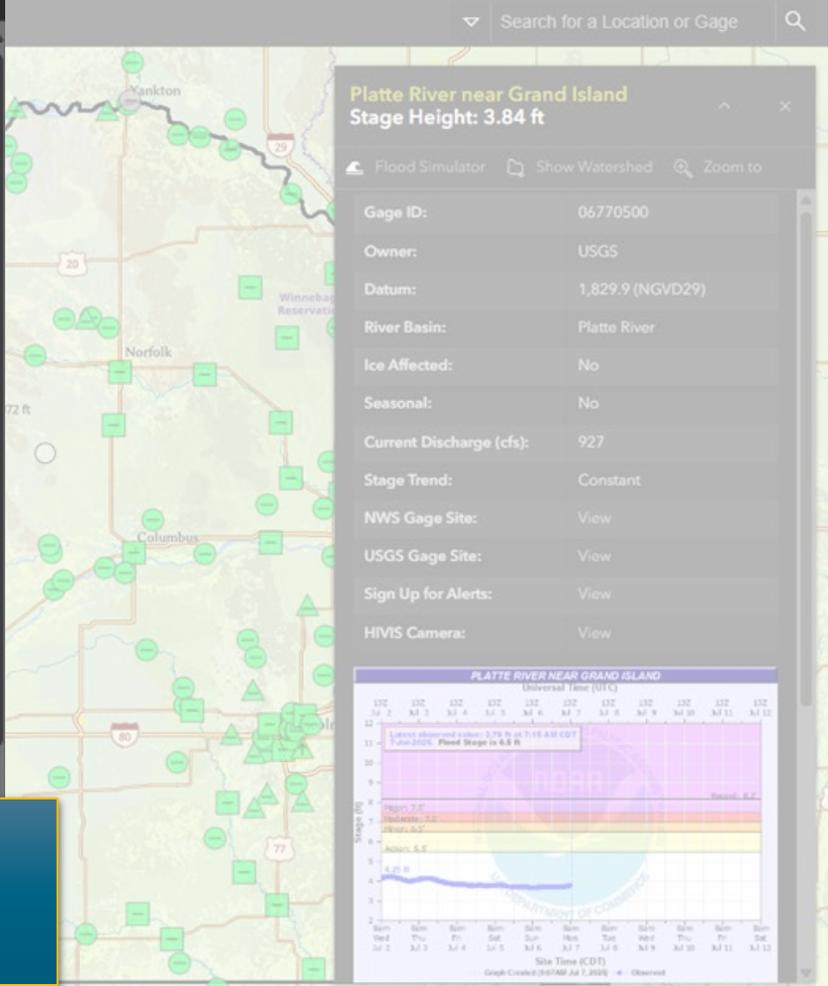
### Platte River near Grand Island Stage Height: 3.84 ft

Flood Simulator Show Watershed Zoom to

Gage ID:	06770500
Owner:	USGS
Datum:	1,829.9 (NGVD29)
River Basin:	Platte River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	927
Stage Trend:	Constant
NWS Gage Site:	<a href="#">View</a>
USGS Gage Site:	<a href="#">View</a>
Sign Up for Alerts:	<a href="#">View</a>
HIVIS Camera:	<a href="#">View</a>



Use the "View" links to see the information on the NeDNR, USGS, or NWS website



### Platte River near Grand Island Stage Height: 3.84 ft

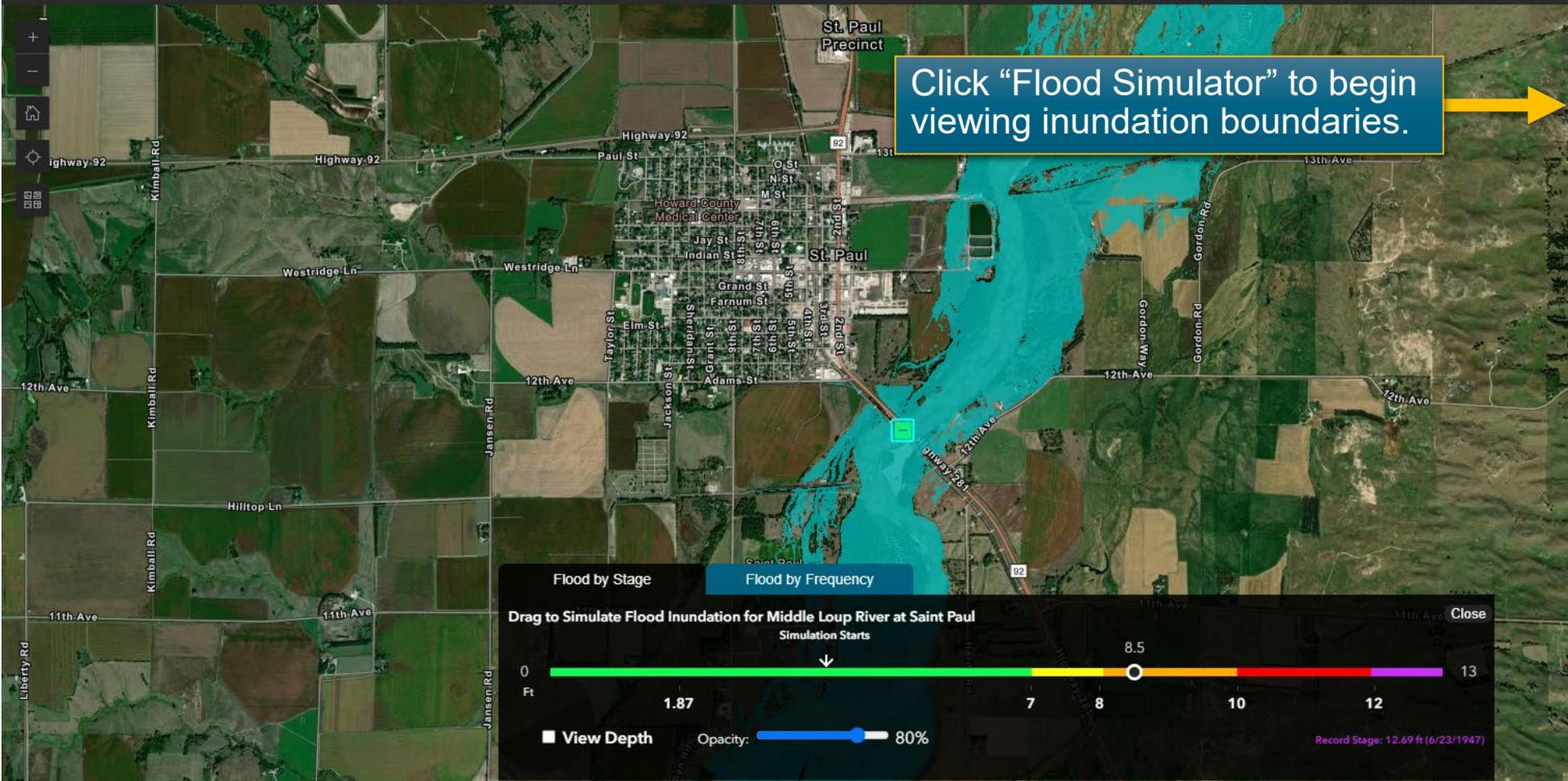
Flood Simulator Show Watershed Zoom to

Gage ID:	06770500
Owner:	USGS
Datum:	1,829.9 (NGVD29)
River Basin:	Platte River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	927
Stage Trend:	Constant
NWS Gage Site:	<a href="#">View</a>
USGS Gage Site:	<a href="#">View</a>
Sign Up for Alerts:	<a href="#">View</a>
HIVIS Camera:	<a href="#">View</a>



Show Legend Gage Filters Radar Not Available Additional Layers

Search for a Location or Gage



### Middle Loup River at Saint Paul Stage Height: 1.87 ft

[Flood Simulator](#) [Show Watershed](#) [Zoom to](#)

**Gage ID:** 06785000  
**Owner:** USGS  
**Datum:** 1,776.6 (NGVD29)  
**River Basin:** Loup River  
**Ice Affected:** No  
**Seasonal:** No  
**Current Discharge (cfs):** 2,470  
**Stage Trend:** Constant  
**NWS Gage Site:** [View](#)  
**USGS Gage Site:** [View](#)  
**Sign Up for Alerts:** [View](#)

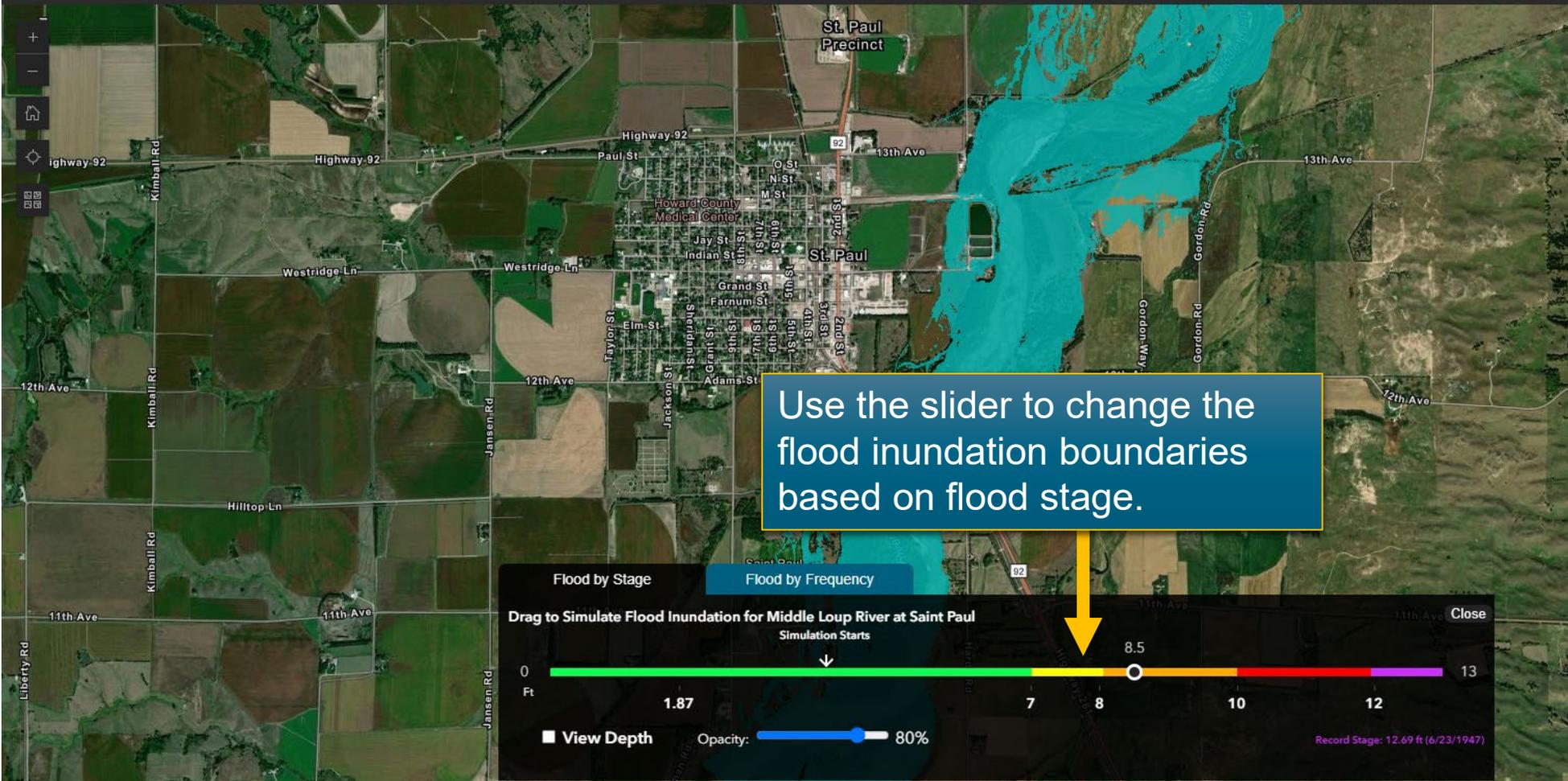
#### MIDDLE LOUP RIVER NEAR ST. PAUL

Universal Time (UTC)

13Z Jul 2	13Z Jul 3	13Z Jul 4	13Z Jul 5	13Z Jul 6	13Z Jul 7	13Z Jul 8	13Z Jul 9	13Z Jul 10	13Z Jul 11	13Z Jul 12
Latest observed value: 1.84 ft at 7:15 AM CDT 7-Jul-2025. Flood Stage is 8 ft										
Min: 6.0										
Action: 7.0										

Site Time (CDT)  
Graph Created: 25/1448 Jul 7, 2025  
Record Stage: 12.69 ft (6/23/1947)

Maxar | Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

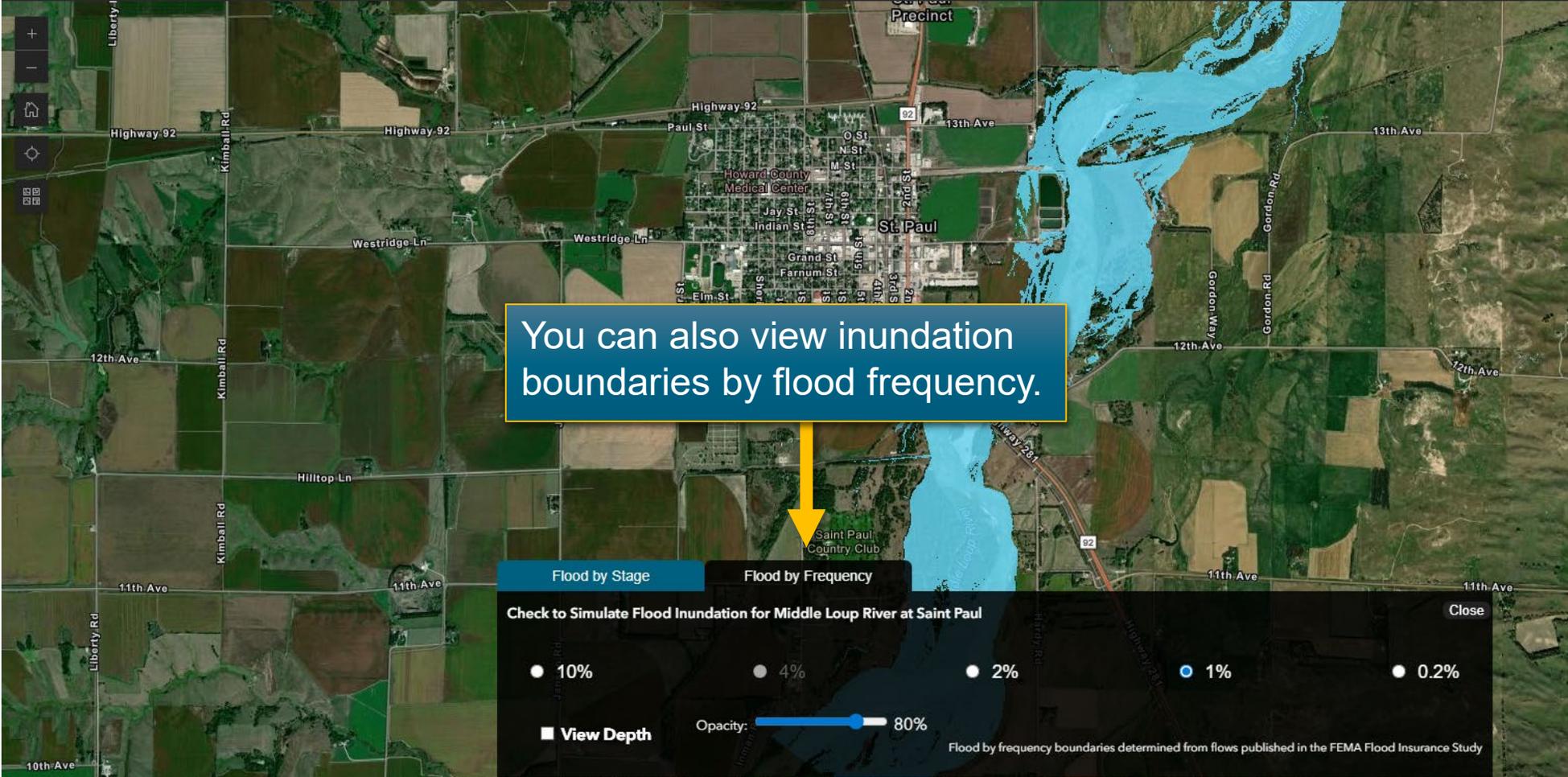


### Middle Loup River at Saint Paul Stage Height: 1.87 ft

Flood Simulator Show Watershed Zoom to

Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,470
Stage Trend:	Constant
NWS Gage Site:	View
USGS Gage Site:	View
Sign Up for Alerts:	View



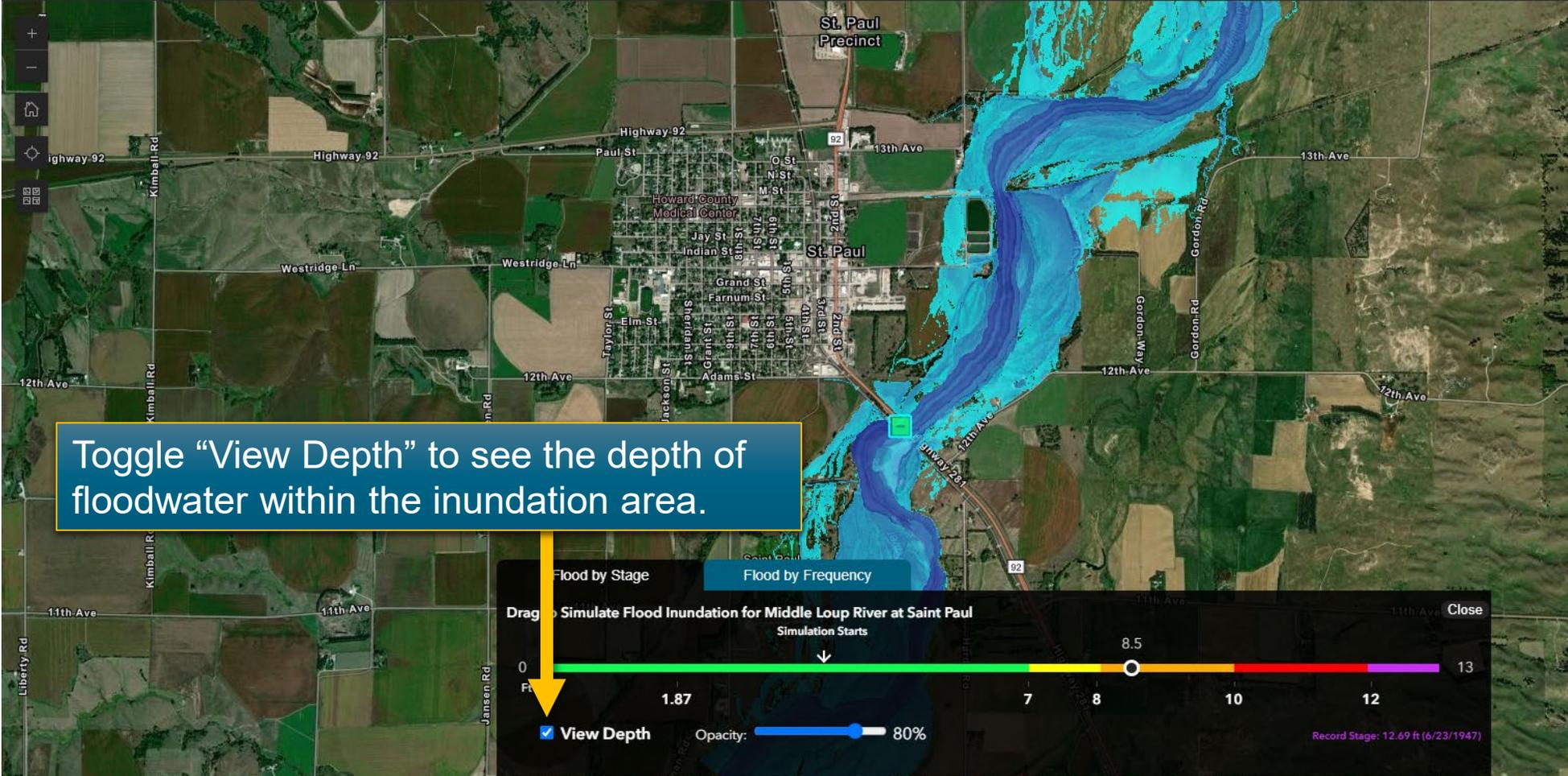


### Middle Loup River at Saint Paul Stage Height: 1.76 ft

Flood Simulator Show Watershed Zoom to

Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,280
Stage Trend:	Constant
NWS Gage Site:	<a href="#">View</a>
USGS Gage Site:	<a href="#">View</a>
Sign Up for Alerts:	<a href="#">View</a>





Toggle "View Depth" to see the depth of floodwater within the inundation area.

**Drag to Simulate Flood Inundation for Middle Loup River at Saint Paul**

Simulation Starts

0 1.87 7 8 8.5 10 12 13 Ft

View Depth    Opacity: 80%

Record Stage: 12.69 Ft (6/23/1947)

### Middle Loup River at Saint Paul Stage Height: 1.87 ft

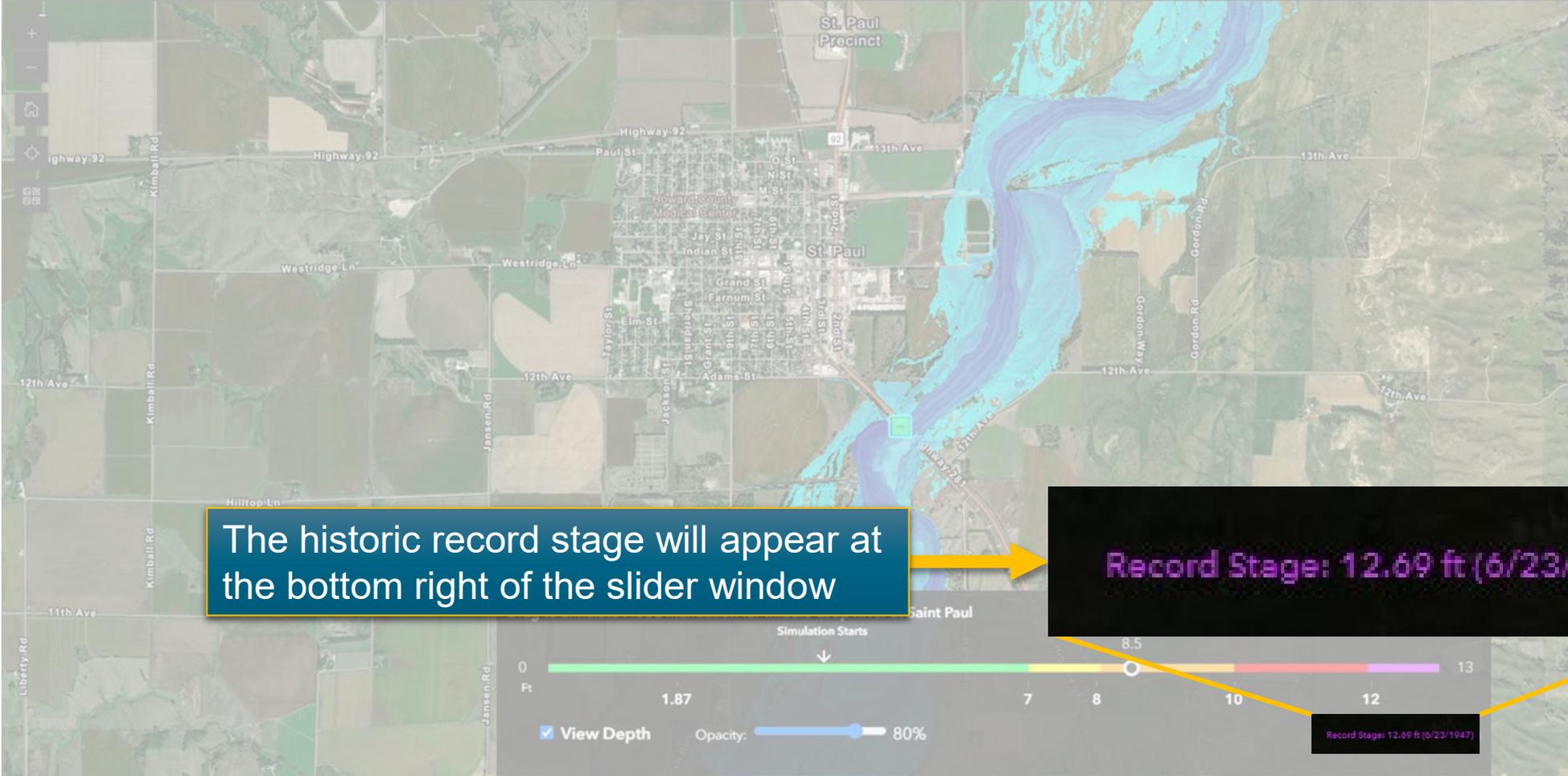
Flood Simulator Show Watershed Zoom to

Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,470
Stage Trend:	Constant
NWS Gage Site:	View
USGS Gage Site:	View
Sign Up for Alerts:	View



Show Legend Gage Filters Radar Not Available Additional Layers

Search for a Location or Gage



The historic record stage will appear at the bottom right of the slider window

Record Stage: 12.69 ft (6/23/1947)

### Middle Loup River at Saint Paul Stage Height: 1.87 ft

Flood Simulator Show Watershed Zoom to

Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,470
Stage Trend:	Constant
NWS Gage Site:	View
USGS Gage Site:	View
Sign Up for Alerts:	View

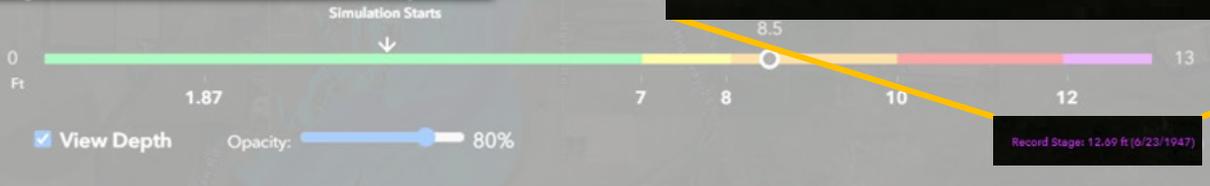
#### MIDDLE LOUP RIVER NEAR ST. PAUL

Universal Time (UTC)

Date	Stage (ft)
Jun 20 11 59 AM CDT	1.87
Jun 21 11 59 AM CDT	1.87
Jun 22 11 59 AM CDT	1.87
Jun 23 11 59 AM CDT	1.87
Jun 24 11 59 AM CDT	1.87
Jun 25 11 59 AM CDT	1.87
Jun 26 11 59 AM CDT	1.87
Jun 27 11 59 AM CDT	1.87
Jun 28 11 59 AM CDT	1.87
Jun 29 11 59 AM CDT	1.87
Jun 30 11 59 AM CDT	1.87
Jul 1 11 59 AM CDT	1.87
Jul 2 11 59 AM CDT	1.87
Jul 3 11 59 AM CDT	1.87
Jul 4 11 59 AM CDT	1.87
Jul 5 11 59 AM CDT	1.87
Jul 6 11 59 AM CDT	1.87
Jul 7 11 59 AM CDT	1.87
Jul 8 11 59 AM CDT	1.87
Jul 9 11 59 AM CDT	1.87
Jul 10 11 59 AM CDT	1.87
Jul 11 11 59 AM CDT	1.87
Jul 12 11 59 AM CDT	1.87

Site Time (CDT)  
Graph Created 6/24/18 Jul 1, 2018

NWS Hydrograph





### Middle Loup River at Saint Paul Stage Height: 1.87 ft

[Flood Simulator](#) [Show Watershed](#) [Zoom to](#)

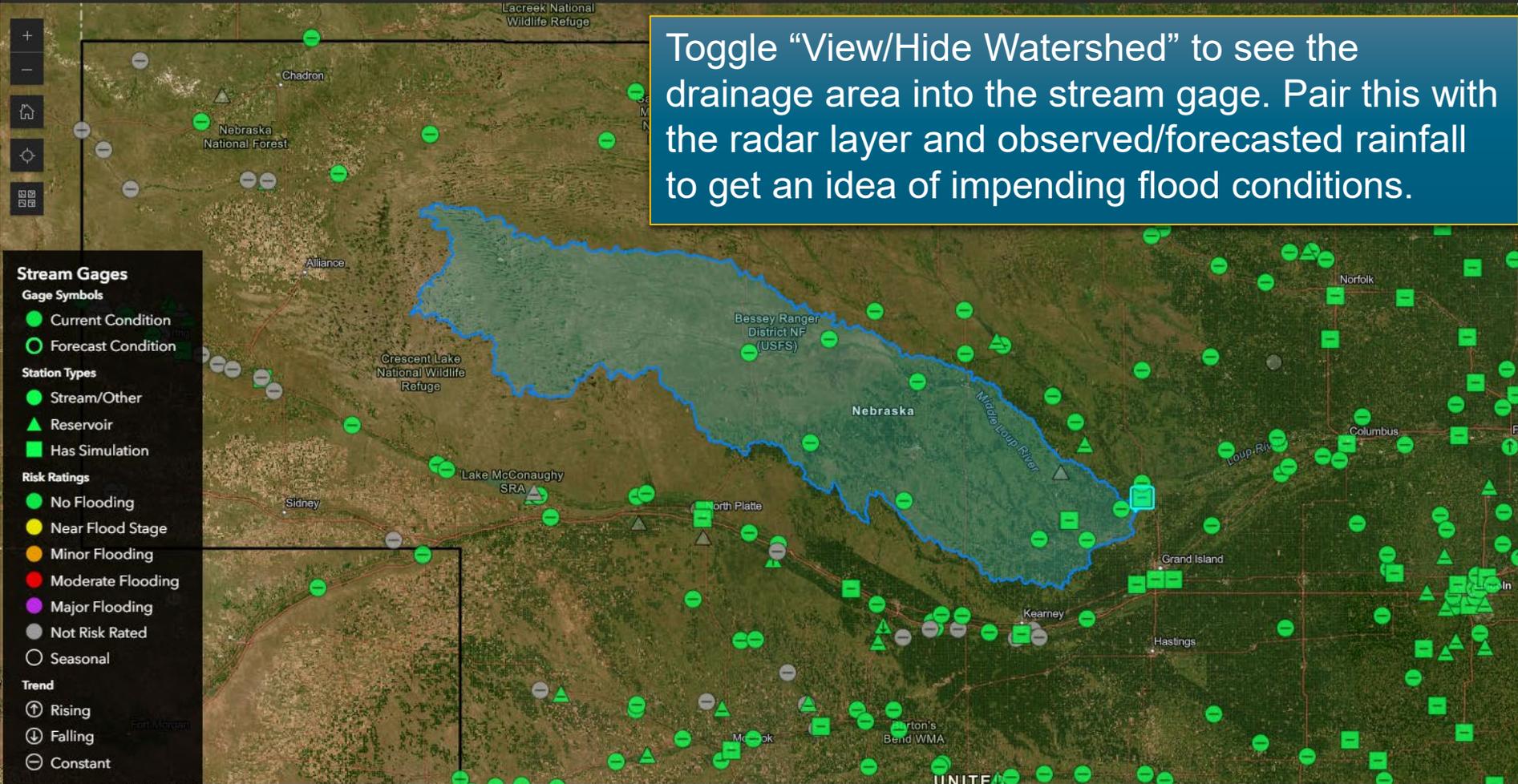
Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,470
Stage Trend:	Constant
NWS Gage Site:	<a href="#">View</a>
USGS Gage Site:	<a href="#">View</a>
Sign Up for Alerts:	<a href="#">View</a>



Click "Save/Print Map" to create a PDF or image print of the current view.



Save/Print Map



Toggle "View/Hide Watershed" to see the drainage area into the stream gage. Pair this with the radar layer and observed/forecasted rainfall to get an idea of impending flood conditions.

### Middle Loup River at Saint Paul

Stage Height: 1.76 ft

Hide Watershed Zoom to

Gage ID:	06785000
Owner:	USGS
Datum:	1,776.6 (NGVD29)
River Basin:	Loup River
Ice Affected:	No
Seasonal:	No
Current Discharge (cfs):	2,280
Stage Trend:	Constant
NWS Gage Site:	View
USGS Gage Site:	View
Sign Up for Alerts:	View

#### MIDDLE LOUP RIVER NEAR ST. PAUL

Universal Time (UTC)

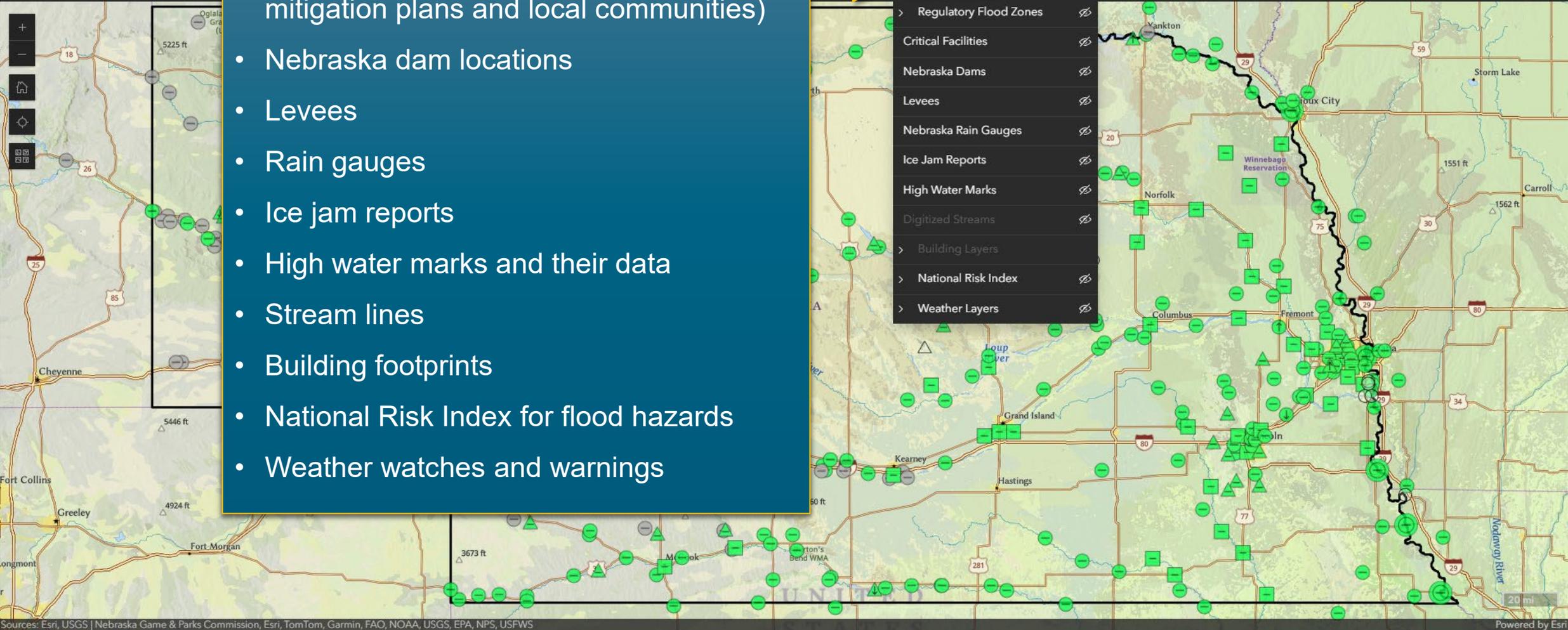
The graph shows stage height in feet over time from July 2 to July 12, 2025. The y-axis ranges from 0 to 10 feet. The x-axis shows dates from Jul 2 to Jul 12. A blue line represents the stage height, which remains relatively constant around 2 feet. A red vertical line indicates the latest observed value of 1.83 ft at 10:15 AM CDT on July 7, 2025. A yellow horizontal bar indicates the flood stage is at 8 ft. The graph is titled "MIDDLE LOUP RIVER NEAR ST. PAUL" and includes the logo of the National Water Research Institute (NWRI) and the Nebraska Department of Water, Energy, and Environment.

Site Time (CDT)

Graph Created (10:44:38 Jul 7, 2025) Observations courtesy of the USGS

## Click “Additional Layers” to view:

- Critical Facilities (data provided by hazard mitigation plans and local communities)
- Nebraska dam locations
- Levees
- Rain gauges
- Ice jam reports
- High water marks and their data
- Stream lines
- Building footprints
- National Risk Index for flood hazards
- Weather watches and warnings



Sources: Esri, USGS | Nebraska Game & Parks Commission, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

# Additional Layers

## Additional Layers

> Regulatory Flood Zones

Critical Facilities

Nebraska Dams

Levees

Nebraska Rain Gauges

Ice Jam Reports

High Water Marks

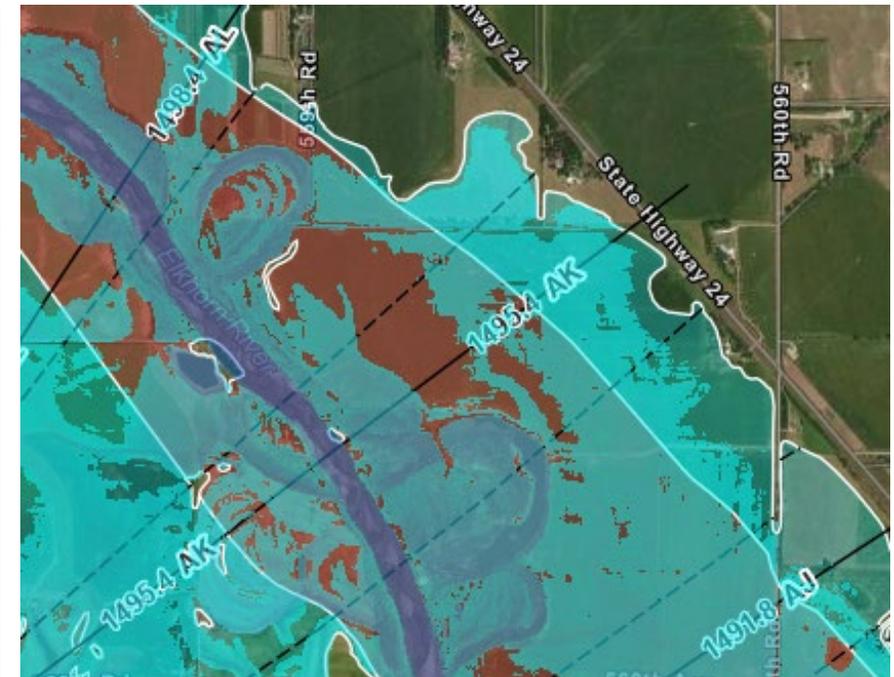
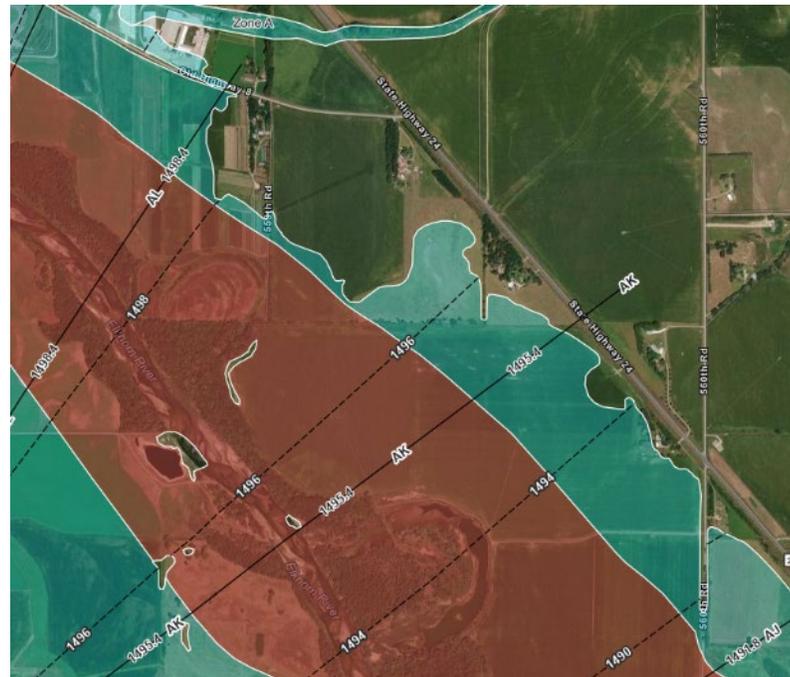
Digitized Streams

> Building Layers

> National Risk Index

> Weather Layers

Regulatory Flood Zones – View regulatory flood hazard areas, similar to the interactive floodplain map. These can be activated with inundation boundaries to compare.



# Additional Layers

## Additional Layers

> Regulatory Flood Zones

Critical Facilities

Nebraska Dams

Levees

Nebraska Rain Gauges

Ice Jam Reports

High Water Marks

Digitized Streams

> Building Layers

> National Risk Index

> Weather Layers

Critical Facilities – Displays the location of critical facilities identified in local hazard mitigation plans or by emergency management offices



# Additional Layers

- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers



Nebraska Dams – Displays Nebraska registered dams and their hazard level. Click any point to view more information. Data from the Dam Safety Division.

The screenshot shows a GIS application interface. On the left is a legend with the following sections:

- Risk Ratings**
  - No Flooding (Green circle)
  - Near Flood Stage (Yellow circle)
  - Minor Flooding (Orange circle)
  - Moderate Flooding (Red circle)
  - Major Flooding (Purple circle)
  - Not Risk Rated (Grey circle)
  - Seasonal (White circle)
- Trend**
  - Rising (Up arrow)
  - Falling (Down arrow)
  - Constant (Circle with horizontal line)
- Nebraska Dams**
  - Dam Hazard Level**
    - High (Red triangle)
    - Significant (Orange triangle)
    - Low (Green triangle)
    - Minimal (Purple triangle)
    - To Be Determined (Grey triangle)

The map shows a rural area with fields and a road labeled 'W Highway 6'. A popup window titled 'THIRTY-TWO MILE CREEK H - High Hazard' is open, displaying the following data:

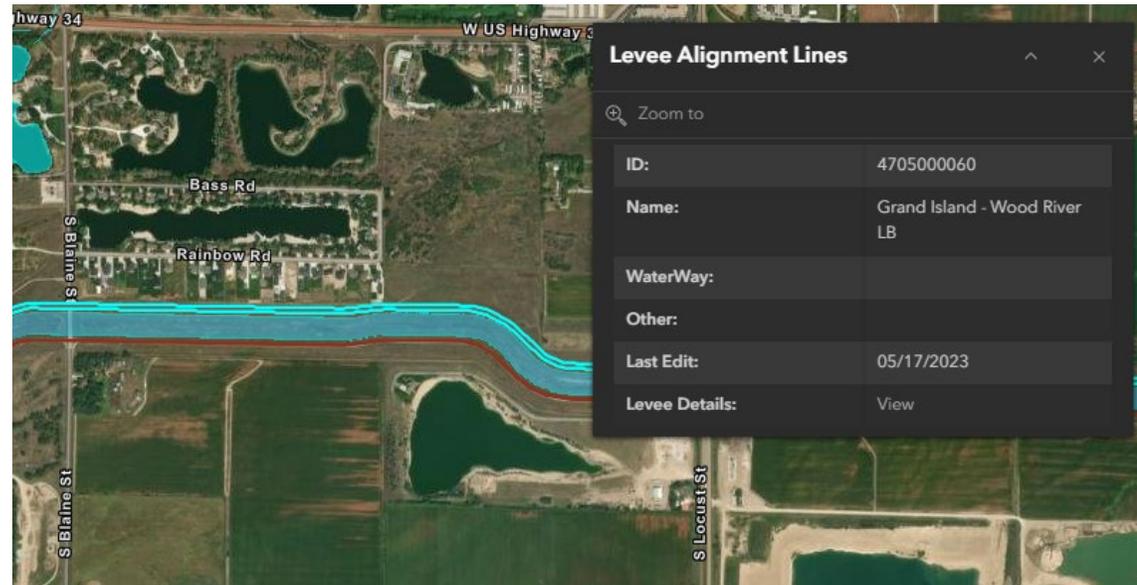
NIDID:	NE01551
Dam Name:	THIRTY-TWO MILE CREEK H
Hazard Class:	High
Plan Number:	P-11822
Longitude:	-98.48447652
Latitude:	40.53353795
County:	Adams
Stream:	THIRTY-TWO MILE CREEK
Downstream Town:	DEWEESE
Downstream Distance:	25
Designer:	USDA-NRCS

# Additional Layers

- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers



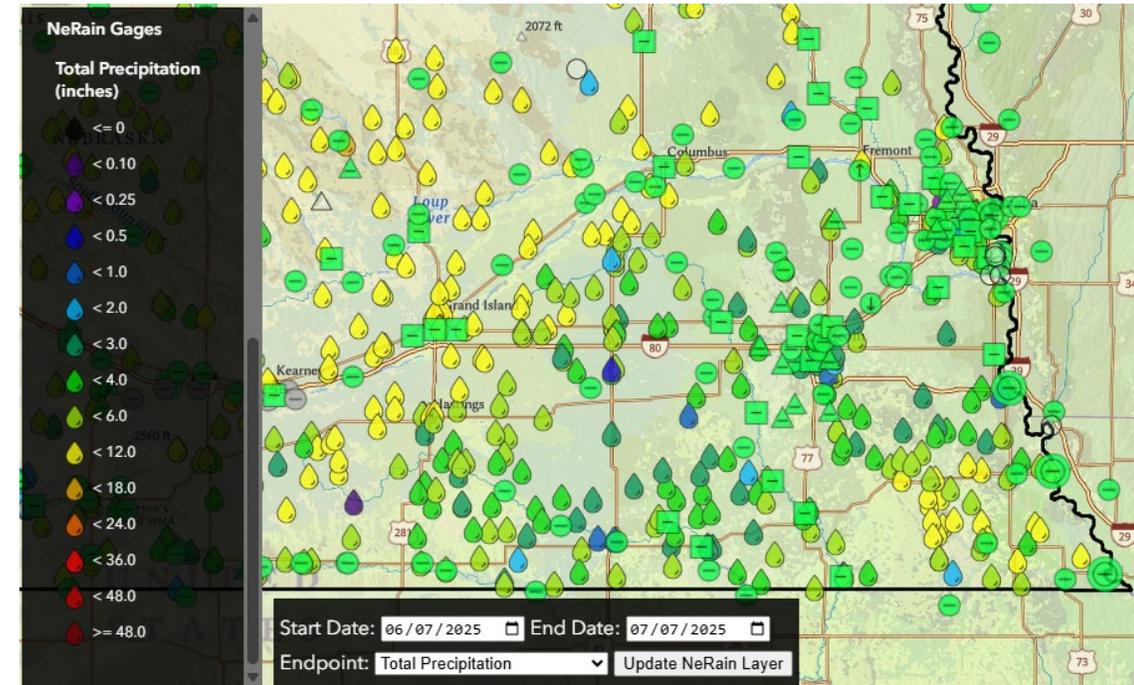
Levees – Accredited levees from the National Levee Database



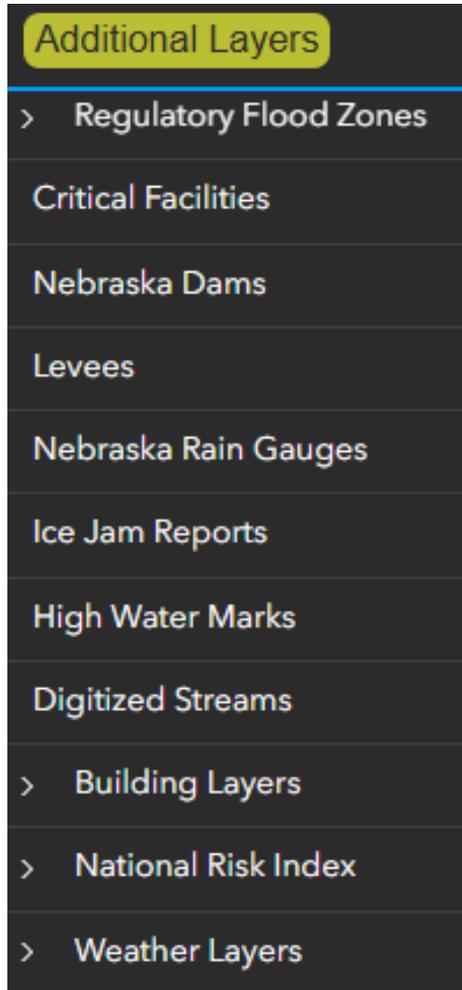
# Additional Layers

- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers

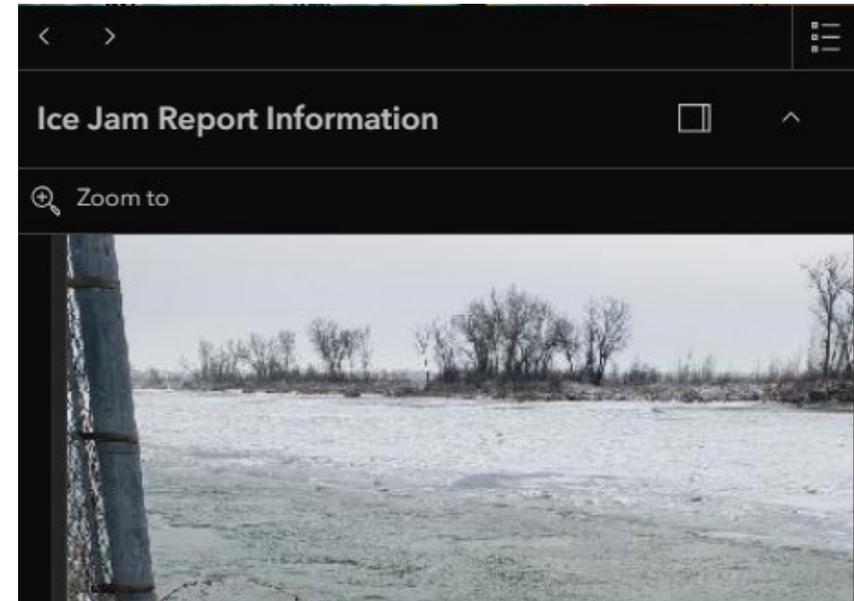
Nebraska Rain Gauges - View data from the NeRAIN rain gage system. Use the filters in the bottom left to adjust the range for data.



# Additional Layers



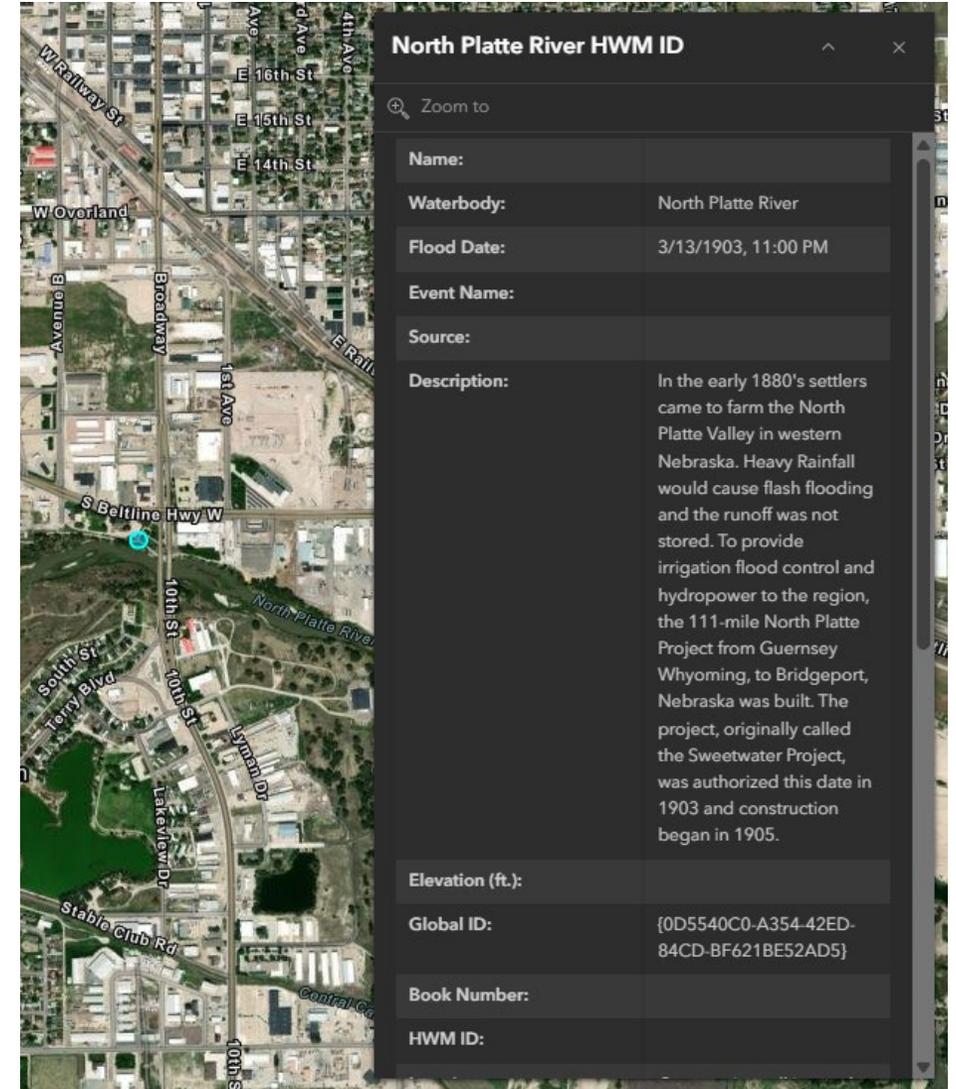
Ice Jam Reports - Use this layer to view recent reports made by certified users of our ice jam reporting page.



# Additional Layers

- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers

High Water Marks – Data from recorded and reviewed historical high water marks. Shown as clusters when there are multiple in one location.



**North Platte River HWM ID**

Zoom to

**Name:**

**Waterbody:** North Platte River

**Flood Date:** 3/13/1903, 11:00 PM

**Event Name:**

**Source:**

**Description:** In the early 1880's settlers came to farm the North Platte Valley in western Nebraska. Heavy Rainfall would cause flash flooding and the runoff was not stored. To provide irrigation flood control and hydropower to the region, the 111-mile North Platte Project from Guernsey Whyoming, to Bridgeport, Nebraska was built. The project, originally called the Sweetwater Project, was authorized this date in 1903 and construction began in 1905.

**Elevation (ft.):**

**Global ID:** {0D5540C0-A354-42ED-84CD-BF621BE52AD5}

**Book Number:**

**HWM ID:**

# Additional Layers

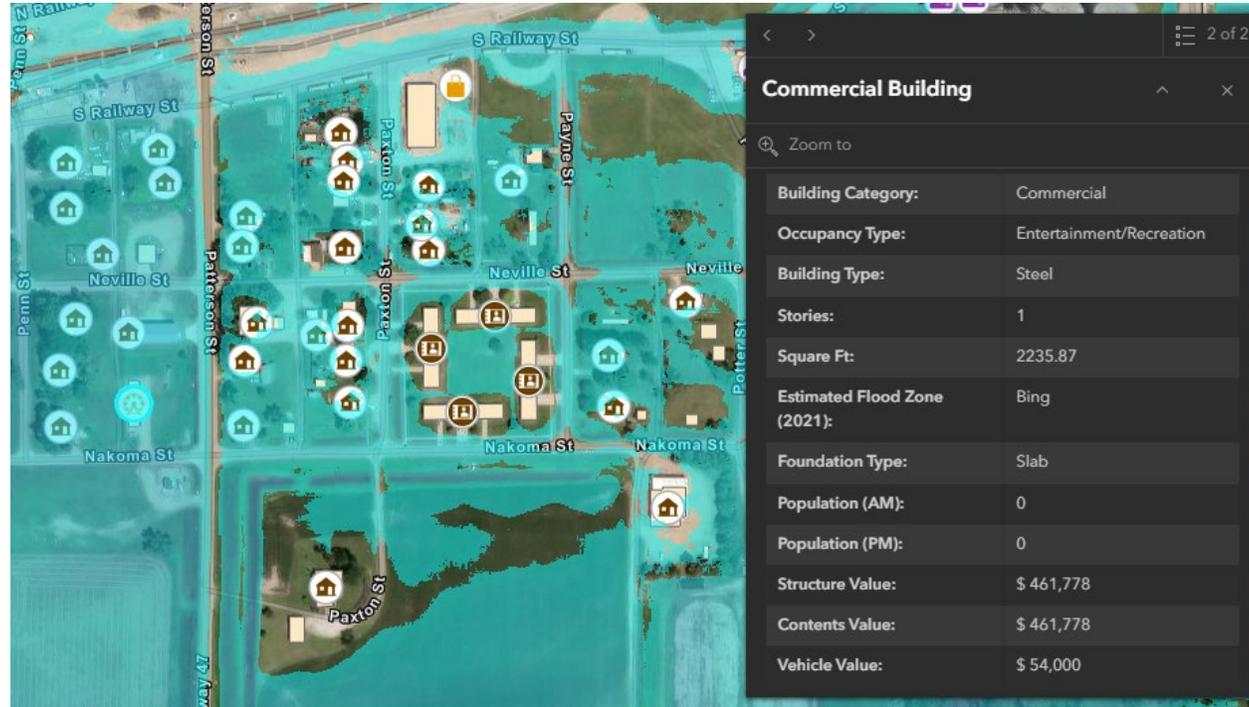
- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers



Digitized Streams – Use this layer to view streambed locations along mapped streams. Data currently under maintenance, so no screenshot.

# Additional Layers

- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers

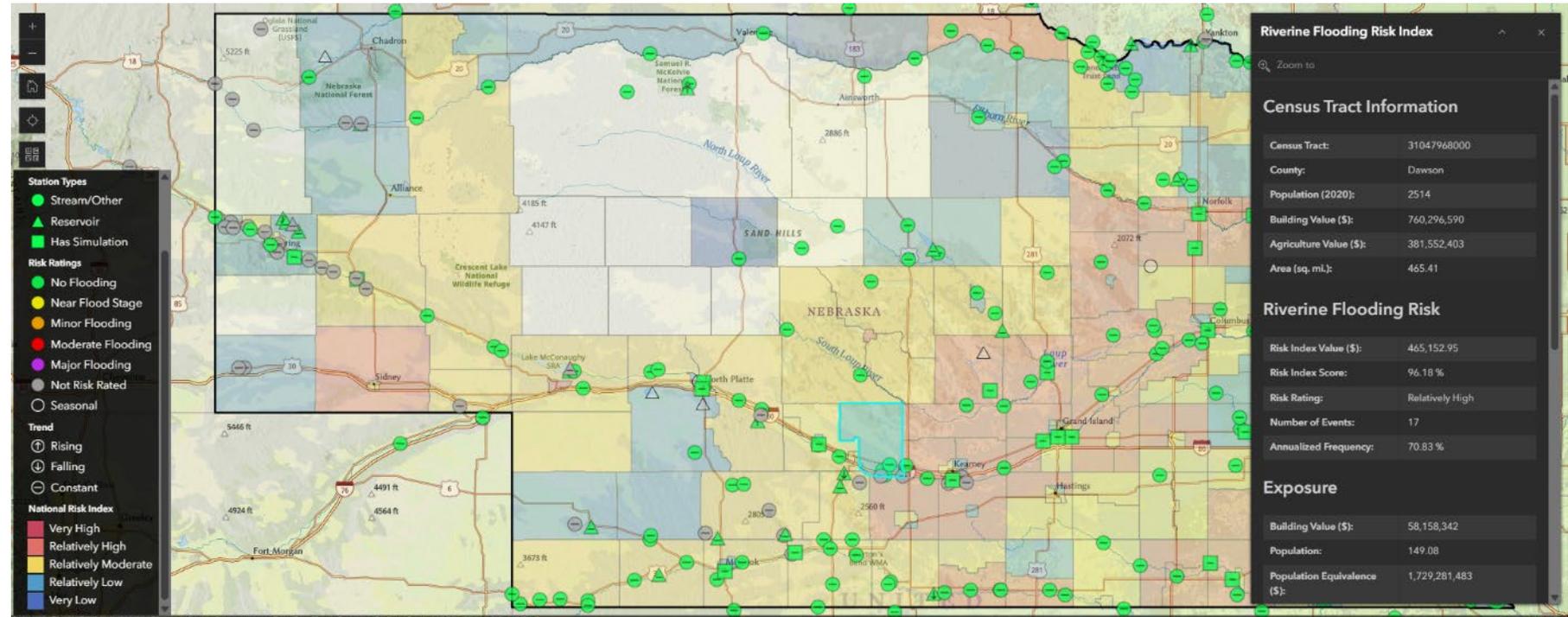


Building Layers – View building footprints and general structure information.

# Additional Layers

**Additional Layers**

- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers



National Risk Index – Dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards. NeRFF displays riverine flood risk by census tract or county level.

# Additional Layers

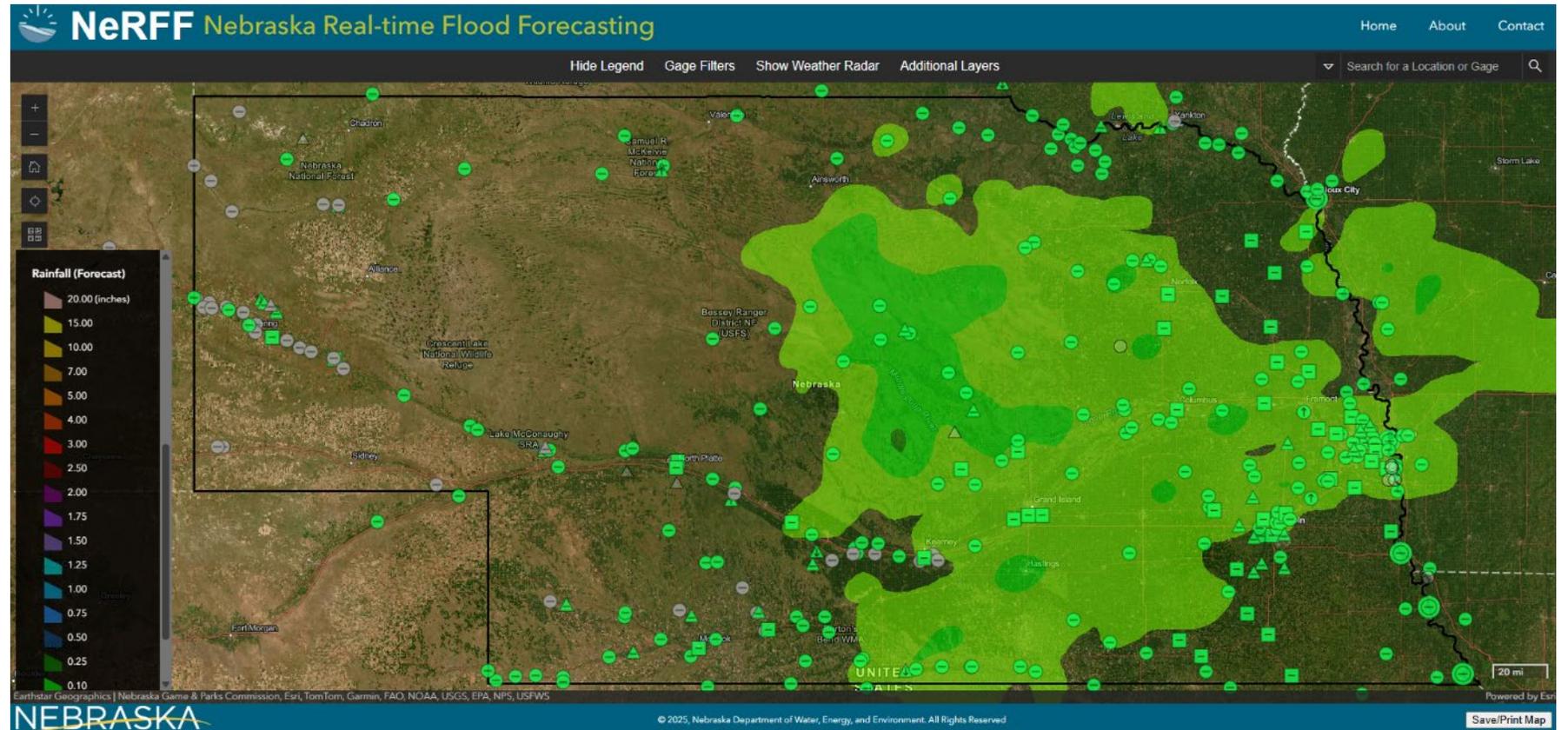
- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
- Ice Jam Reports
- High Water Marks
- Digitized Streams
- > Building Layers
- > National Risk Index
- > Weather Layers



Weather Layers – View watches and warnings, 6 hour observed rainfall, and 6 hour forecasted rainfall

# Additional Layers

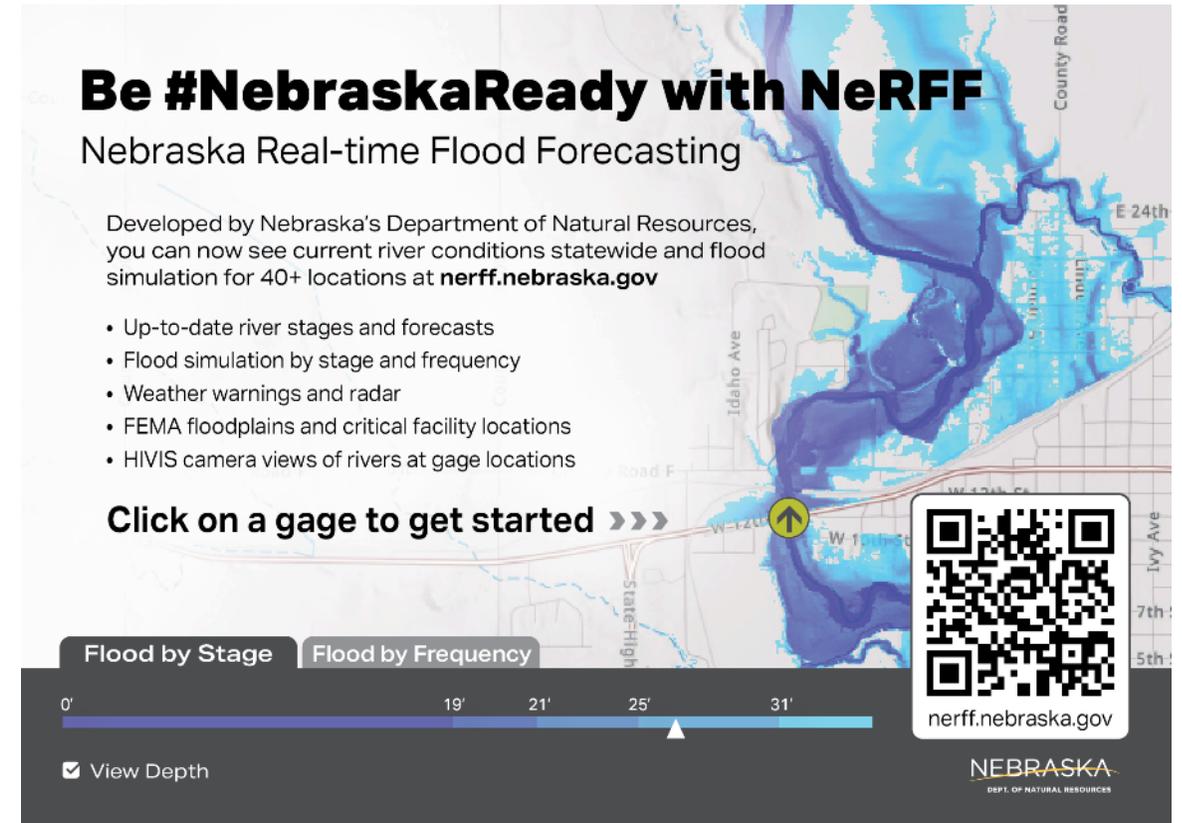
- Additional Layers
- > Regulatory Flood Zones
- Critical Facilities
- Nebraska Dams
- Levees
- Nebraska Rain Gauges
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- > Building Layers
- > National Risk Index
- > Weather Layers



Weather Layers – View watches and warnings, 6 hour observed rainfall, and 6 hour forecasted rainfall

# NeRFF Applications

- Imminent flooding
  - Evacuation zones
  - Emergency routes
  - Road closures
  - Emergency flood briefings
- Development planning
- Hazard mitigation planning
- Updated modeling for local officials
- Flood emergency tabletop exercises
- Outreach events



**Be #NebraskaReady with NeRFF**  
Nebraska Real-time Flood Forecasting

Developed by Nebraska's Department of Natural Resources, you can now see current river conditions statewide and flood simulation for 40+ locations at [nerff.nebraska.gov](http://nerff.nebraska.gov)

- Up-to-date river stages and forecasts
- Flood simulation by stage and frequency
- Weather warnings and radar
- FEMA floodplains and critical facility locations
- HIVIS camera views of rivers at gage locations

**Click on a gage to get started >>>**

Flood by Stage | Flood by Frequency

0' 19' 21' 25' 31'

View Depth

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NEBRASKA  
DEPT. OF NATURAL RESOURCES

# Future Plans for NeRFF

- Plan to add 2-3 sites per year
- Leverage the National Water Model to add ungaged sites
- Update critical facilities data
- Add damage assessment data for structures



# Questions?

**Elijah Kaufman, CFM**

elijah.kaufman@nebraska.gov  
402-471-0640

**Jamie Reinke, PE, CFM**

jamie.reinke@nebraska.gov  
402-471-3957

**Erin Wendt, CFM**

erin.wendt@nebraska.gov  
402-471-0572

**Anna Crist, CFM**

anna.crist@nebraska.gov  
402-471-0585

**Mercy Kipenda, CFM**

mercy.kipenda@nebraska.gov  
402-471-3947

**Isabella Bialas, CFM**

isabella.bialas@nebraska.gov  
402-471-3929

**Michele York**

michele.york@nebraska.gov  
402-471-1214