

Great Lakes Data Viewer User Guide

A How-to Guide to FEMA's Online GeoPlatform

The Federal Emergency Management Agency (FEMA) is releasing draft work maps for coastal communities along the Great Lakes. These products display the results of FEMA's comprehensive storm and wind study of the Great Lakes basin. The intent of this release is to help community officials understand current flood risk and potential flood insurance requirements as well as provide them with an opportunity to review the findings prior to their inclusion within Preliminary Flood Insurance Rate Maps (FIRMs).

Leveraging FEMA's GeoPlatform, this information has been organized and shared with community partners through an interactive ArcGIS online web map viewer. This document provides an overview of how to navigate, visualize, and access the data and information within this tool.

Viewing Coastal Work Maps via FEMA GeoPlatform

To open the FEMA Work Map Data Viewer for a county, follow the GeoPlatform link and your screen should appear similar to Figure 1 below.

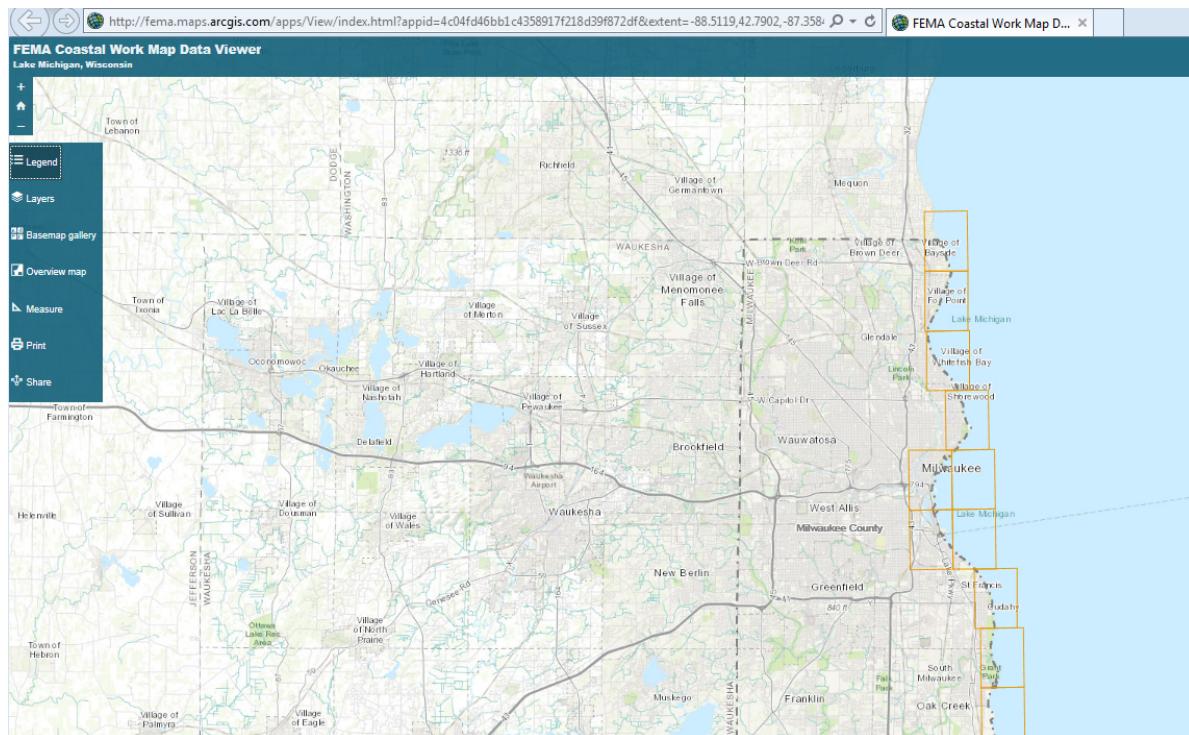


Figure 1: Overview

1. Viewing the Map Layers

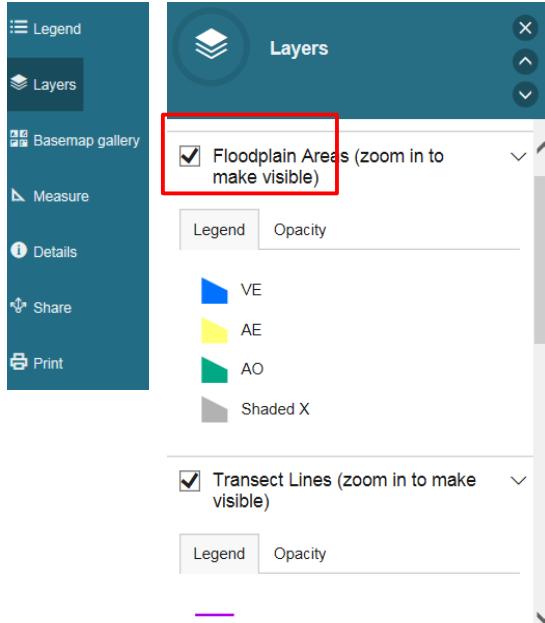


Figure 2: Layers – The available map layers are listed above

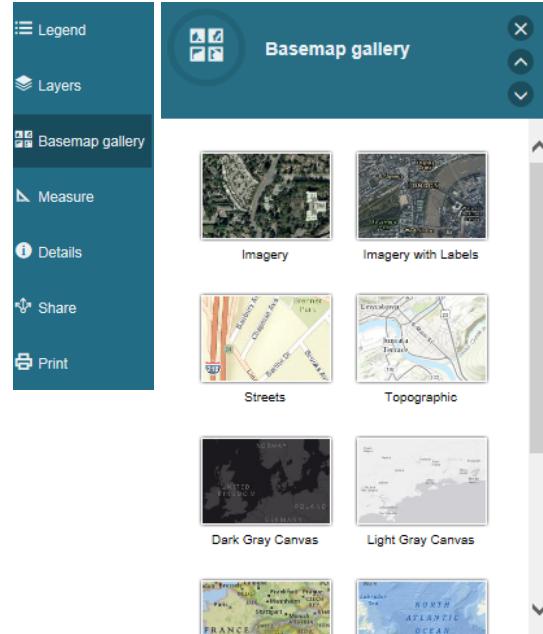


Figure 3: Basemap Gallery

To view the list of layers in the map, click on the “Layers” button (See Figure 2). Here you can turn layers on and off, adjust opacity and view layer symbology.

To toggle a layer on or off, simply check the box to the left of the layer name. Note, some layers might not turn on initially and will appear grayed out or unavailable. That is because a visible scale extent has been set which limits view in which a layer will draw/display. This capability is enabled to prevent map clutter as well as improve navigation and map performance. Once you zoom into the predefined scale, the layer will become available to you.

To view and change basemaps, click the “Basemap gallery” button. This button allows you to change the basemap or background display. There are approximately 10 different maps to choose from and they include various street, topographic, or imagery maps. (See Figure 3)

2. Viewing the Map Legend

To access the map legend click on the “Legend” button to view the active map layers (See Figure 4).

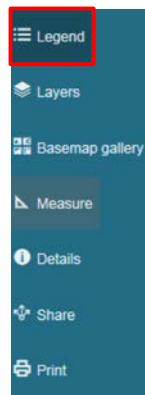


Figure 4: Legend



3. Map Navigation

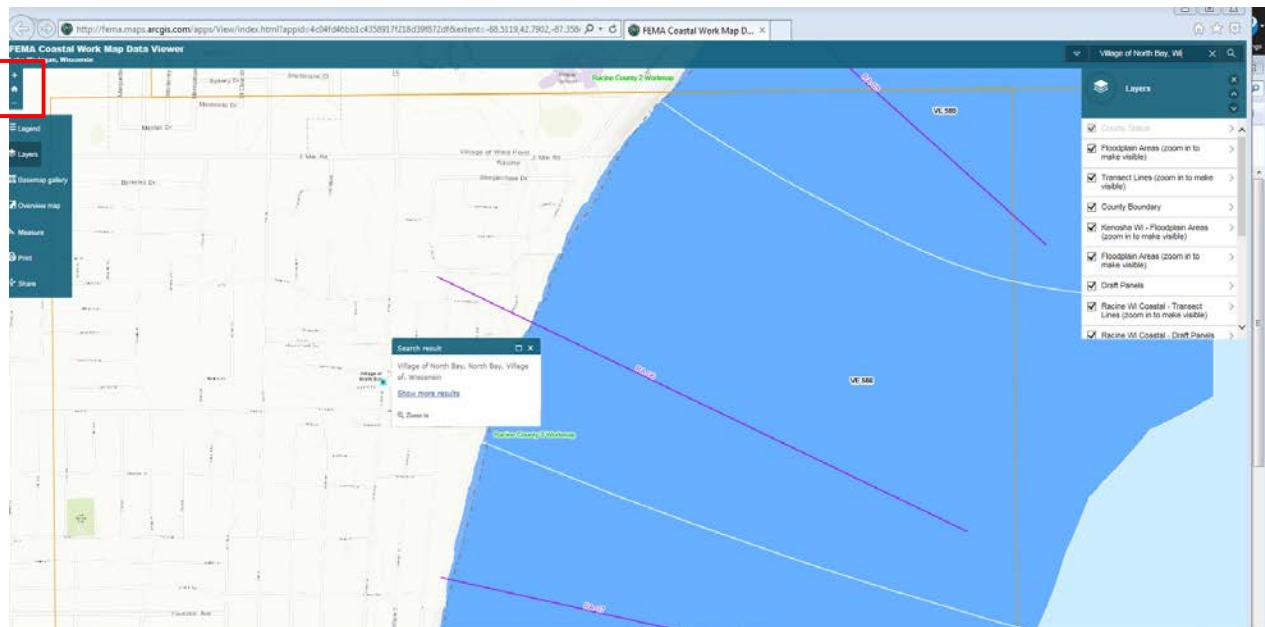


Figure 5: Legend

To zoom in or out on the map, use the zoom tools in the upper left of the map or the wheel on your mouse (forward to zoom in and backwards to zoom out).

If you want to pan directionally, you can single left click your mouse anywhere in the map view and drag with your mouse. The arrow keys on your keyboard will also provide this functionality.

If you want to search for an address or place name, you can enter that information into the “Find address or place” search box in the upper right.

4. Embedded Hyperlinks

The following map layers contain supplemental information and data that is available through built-in hyperlinks:

- Coastal Transects
 - PDFs of individual transect data available by clicking on individual transects
- Work Map Grids
 - PDFs of individual work maps available by clicking on the individual work map
- Countywide Data – available by clicking on the county dataset
 - Coastal Results Summary Sheets
 - Transect Summary Sheets
 - Complete set of Work Maps

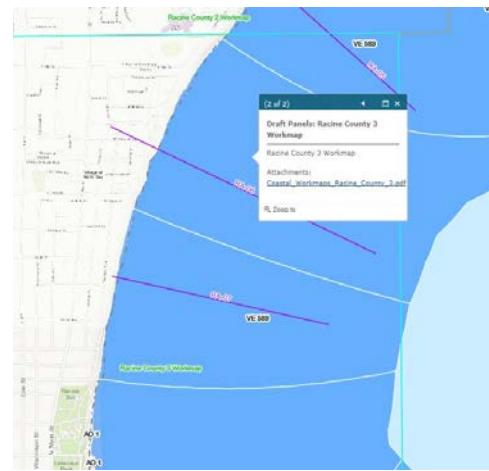


Figure 6: Popups and embedded hyperlinks

To access or download this information, verify that the layer of interest is turned on in the “Contents” as well as displayed at an appropriate map extent (i.e. not grayed out). Using your mouse, left-click on the feature within the map, the selected feature will be outlined in a light blue color, and a pop-up box containing the hyperlink will display. See the Work Map Grid example in Figure 6.

5. FEMA National Flood Hazard Layer (NFHL)

The GeoPlatform provides users the capability to overlay the revised coastal flood hazard data against the effective data using the National Flood Hazard Layer (NFHL). The NFHL is a comprehensive digital database incorporating the current effective data from FEMA’s National Flood Insurance Program (NFIP). This map data is frequently updated to reflect the most recent effective floodplains. Flood Insurance Studies are constantly ongoing throughout the country. These studies take the form of Countywide, and Physical Map Revisions (PMRs) formats and are incorporated into the NFHL. Letters of Map Change (LOMC) also are incorporated into the NFHL, specifically Letters of Map Revision or LOMRs. LOMRs revise effective flood hazard data and eventually update the NFHL. Thus, making the NFHL the definitive source and companion dataset to the effective FIRM.

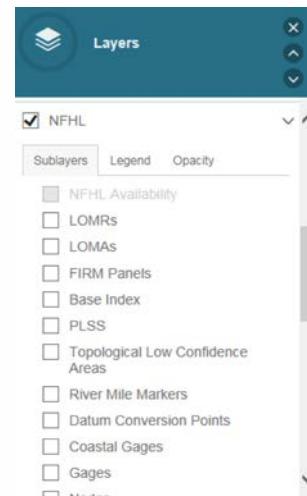


Figure 7: NFHL Layers

The NFHL is symbolized on the GeoPlatform to differentiate between where riverine and/or coastal studies are detailed and approximated. Designated detailed flood zones are labeled by the following: AE, VE, AO, AH and AR. These designated zones are modeled to determine either depths (AO) or the BFE, which is also known as the Base Flood Elevation. The BFE is the water-surface elevation of the 1-percent annual



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chance flood, otherwise known as the 100-year storm. The designated approximated zones are labeled by the following: A, V and A99. These zones are also modeled to determine 1-percent annual chance floodplain boundaries, however, since approximated and in converse to the detailed flood zones, do not contain a specific water-surface elevation of the 1-percent annual chance flood. Please be aware of this while using the NFHL on the GeoPlatform. All of these aforementioned designated areas comprise to what is known as Special Flood Hazard Areas. Non-Special Flood Hazard Areas are designated as Zone X (shaded and unshaded) and Zone D. The 0.2-percent annual chance flood, commonly referred to as Zone X shaded or the 500-year storm, are areas still at risk of inundation but are not regulated to the same standard as those zones described as part of the Special Flood Hazard Areas.

The NFHL provides users with the ability to determine the flood zone, base flood elevation and floodway status for a particular geographic location. It also has NFIP community information, map panel information, cross section and hydraulic structure information, Coastal Barrier Resource System information (if applicable) and base map information, such as road, stream and public land survey data.

Please also be aware that most of the layers consolidated within this data set are turned off. To view them, zoom in to their visible scale extent and turn them on (Figure 7).

6. Additional Capabilities

The tool bar on the left side of the map contains additional features listed below:

- The “Print” option allows you to save the map as a pdf or jpeg.
- You can measure distances or areas on the map by using the “Measure” tool.
- Options to share or embed the map into a webpage are also provided using the “Share” button.

Information contained in this user guide does not represent the full range of capabilities and functionality of this viewer. Rather it's designed to provide users with a general overview of how to use the ArcGIS web map platform to access, visualize, and display contents within the map. To learn more about ArcGIS web maps go here: <http://doc.arcgis.com/en/arcgis-online/reference/what-is-web-map.htm>