

MapView - Web

View and Print Maps and Reports from the National Flood Hazard Layer

Purpose and Appropriate Use

The *MapView - Web* application allows you to use your web browser to view maps, look up attribute information, and create custom maps and reports from FEMA's National Flood Hazard Layer (NFHL)¹. It provides access to all the NFHL data layers and complementary information about the status of NFHL data coverage, base map data, and older "Q3" flood hazard data. It also shows approximate locations of recent Letters of Map Amendment (LOMAs) and Letters of Map Revision Based on Fill (LOMR-Fs) and provides access to the determination documents for many of them.

FEMA publishes new Flood Insurance Rate Maps (FIRMs) in the form of paper maps, digital map images, and digital geospatial flood hazard data like those in the NFHL. When used appropriately, these representations are equivalent to one another and represent official FEMA designations of Special Flood Hazard Areas, Base Flood Elevations (BFEs), insurance risk zones, and other regulatory information.

If you plan to use the mapped flood information for official purposes, please ensure that imagery and other map information displayed with the flood data meet FEMA's standards for map accuracy.²

Before You Start

To use *MapView - Web* you need a web browser (such as Microsoft® Internet Explorer^{®3} or Mozilla® Firefox^{®3}) and an Internet connection.

MapView - Web prints maps and will return determination documents for LOMAs and LOMR-Fs by providing a file in Portable Document Format (PDF). You will need software (such as Adobe® Reader^{®3}) that can view and print PDF files.

The results from the map printing and "e-z Identify" functions and the display of LOMA and LOMR-F determination documents will appear in a new window on your computer. Many browsers block such pop-up

¹The National Flood Hazard Layer is a computer database that contains the digital flood hazard information from FEMA's Flood Map Modernization program. These map data include Digital Flood Insurance Rate Map databases and later changes made by Letters of Map Revision. They do not include changes identified by property description. Maps that have not been modernized are not available in the NFHL but can be viewed and ordered from FEMA's Map Service Center at <http://msc.fema.gov>.

²A base map shows the location of roads and railroads, streams and lakes, boundaries, structures, and other features. When used with flood hazard data for official purposes, base maps must have a horizontal radial accuracy (Accuracy_r) better than or equal to 38 feet (11.58 meters) as measured using the National Standard for Spatial Data Accuracy. (This measure is equal to maps of scales larger than or equal to 1:12,000 under the old National Map Accuracy Standard.)

³Names of products are provided for descriptive purposes only and do not represent an endorsement by the United States Government.

windows by default. If you use these functions frequently, consider changing the settings for your browser so that these windows open automatically.

Opening the Application

Access *MapView - Web* through FEMA's Map Service Center (MSC) at <http://msc.fema.gov>. Click on the link "View the NFHL Online using *MapView - Web*." The *MapView - Web* application will open on your browser.

The main sections of *MapView - Web* include (labeled in Figure 1):

- The *Geocoder*, which includes an *Overview Map* and *Zoom Filter*. *Zoom Filter* has a pull-down menu with options for changing the *Map View*. After you enter location information, click *Zoom Map* or *Go* to update the *Map View*.
- The *Flood Map Viewer*, which includes the *Map View*, status messages below the *Map View*, and controls above the *Map View* to change the map image, create reports, and print maps.
- The *Map Legend*, which has two tabs. The first tab, *Legend*, lets you learn the meaning of the map symbols and turn map layers on and off. Click *Refresh Map* to retain new legend settings and update the *Map View* with a new selection of map layers. The second tab, *Identify*, displays attribute data returned by the *Identify* control.

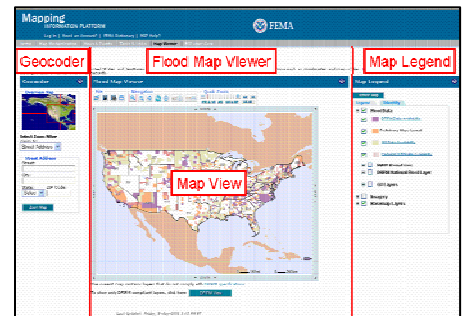


Figure 1. Opening screen of *Mapviewer - Web*. The main sections of the application, labeled in red, are the *Geocoder*, *Flood Map Viewer*, *Map View*, and *Map Legend*.

Finding the Flood Hazard for Your Location

MapView - Web has different means to change the map display, look up attribute information, and print maps and reports. These controls will be familiar to those who use web-based map viewers.

To familiarize you with *MapView - Web*, this section provides instructions for creating a map and a report of flood hazard information for a point location.

- **Goal:** Create a map and report of flood hazard information using a street address. (This exercise uses the address 2 Stanwix Street, Pittsburgh, Pennsylvania.)



■ **Step 1: Zoom to the street address.**

Use the Geocoder to zoom to the address:

1. If the street address option is not visible, use the pull-down menu under *Zoom to:* and click on *Street Address*.
2. Key-in the *Street (2 Stanwix Street)* and *City (Pittsburgh)*, and use the *State* pull-down menu to select the *State (PA)*.

3. Click on *Zoom Map* to update the *Map View*. The view is centered on the approximate location of the address (see Figure 2).

4. Check the messages below the *Map View*. If the message "There is currently no DFIRM data in the window." is displayed, stop using this tool. Go to the MSC at <http://msc.fema.gov> to see other flood hazards maps available for your location.

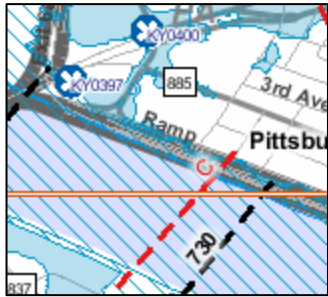


Figure 2. Center of the Map View after clicking *Zoom Map*.

■ **Step 2: Find the point location for which you want a report.**

1. If you can clearly see the location for which you want a report, go to Step 3.
2. If you cannot see the location, improve the image in the *Map View*.
 - Use the navigation controls above the *Map View* to zoom in (🔍) or out (🔍), or to pan (📏). Click on the control and then use your mouse to click and drag on the *Map View*.
 - Change the map layers displayed by clicking layers on and off in the *Map Legend*, and then clicking on *Refresh Map*. If viewing aerial photos would help, turn them on by (1) clicking on the "plus box" (+) before the *Imagery* group, (2) clicking to check the box (☑) before *OrthoPhoto*, and (3) clicking on the *Refresh Map* button to update the *Map View*. Aerial photos are available at map scales of 1:6,000 or smaller (an area larger than or equal to 30 city blocks).

■ **Step 3: Use e-z Print to create a map and report for your location.**

1. Click on the *e-z Print* control (🖨️) located above the *Map View* to activate the function. If the control is grayed out, zoom in until it is available. It becomes available at map scales of 1:32,000 and larger (an area smaller than or equal to several neighborhoods).
2. Click the point on the map image for which you would like a report.
3. *MapView - Web* tells you that it is generating the report.
4. *MapView - Web* opens a preview of the report in a new window. The multi-page report shows two maps and tabular information or a message that the report cannot be generated. If you receive the message, go to the MSC at <http://msc.fema.gov> for other flood hazards maps available for your location.
5. If you wish to save or print the report, click on the printer icon (🖨️) on the preview screen. Do not use the regular browser print function.
 - Tell the application to print "All" pages and click on "OK". The application creates a PDF version of the report that you can print.

- The application will ask if you want to *Open (view)* the report or *Save* it to your computer. If you chose open it, your computer will use your PDF software to open the file in a new window.

■ **Step 4: Review the e-z Print maps and report.**

The maps are centered on the point you selected in the *Map View*. They are at the map scale for the FIRM that contains your point. The maps show the point in green.

The information provided includes:

- The "Flood and community information map" (see Figure 3) that shows flood hazard, community, and base map information.
 - Flood insurance risk zone designations: Areas of high and medium flood hazard are shown with red and pink line patterns. Areas of low hazard are not shaded. Areas where hazards have not been mapped are covered by gray shading.
 - Cross sections: When used with the Flood Insurance Study for the community, cross sections are the basis for calculating the BFE. The identifier and path for cross sections are shown in orange.
 - Communities: The names and boundaries of communities are shown in brown text and line symbols. If only a name is visible, the entire map is within the same community.
- The "Community, Flood Insurance Rate Map (FIRM), and Letter of Map Revision (LOMR) information" map that shows:
 - FIRMs: The number and boundary of map panels are shown in light blue. If only a number is visible, the entire map is within the panel.
 - LOMRs: The case number and boundary of LOMRs are shown in dark blue. If only a number is visible, the entire map is within the LOMR.
 - Communities: See above.
- The "National Flood Hazard Layer Point Location Report" provides information for the community, flood hazard zone, Coastal Barrier Resources System (CBRS) and Otherwise Protected Area (OPA) unit, FIRM, and LOMR(s) found at the point selected.

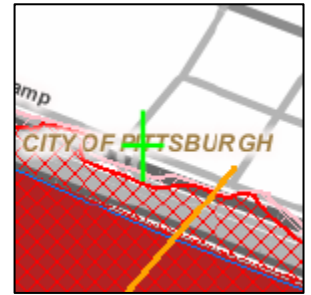


Figure 3. Center of the map created with e-z Print.

Sources of Additional Information

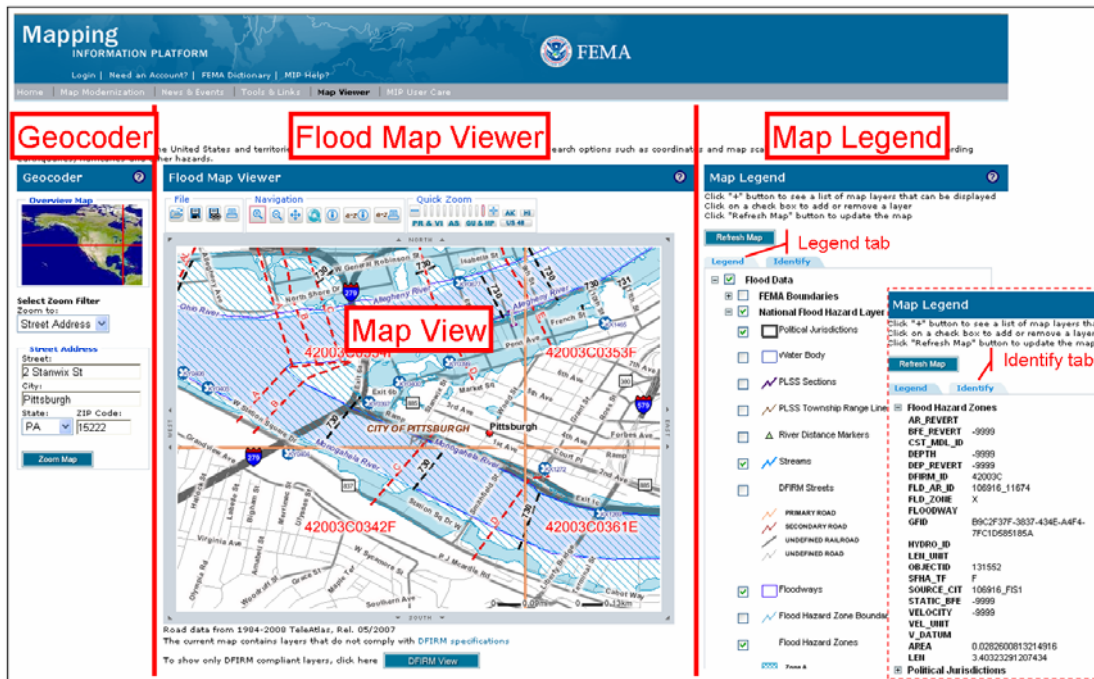
Questions or comments about the *MapView - Web*: Direct them to MIPhelp@mapmodteam.com. Please include the words "MapView - Web" in the subject of your message.

To view and buy flood maps and data: See the MSC web site at <http://msc.fema.gov>.

For information and resources associated with using or requesting changes to FEMA Flood Maps: See the Flood Hazard Mapping web site at <http://www.fema.gov/plan/prevent/fhm/index.shtm>.

For general information about flood risk, flood insurance, and the National Flood Insurance Program (NFIP): See the FloodSmart web site at <http://www.floodsmart.gov>.

MapViewer - Web “At a Glance”



Geocoder	Flood Map Viewer	Map Legend
<p>Overview Map</p> <ul style="list-style-type: none"> Shows location of the <i>Map View</i>. Click on the <i>Overview Map</i> to re-center the <i>Map View</i> on a new location. <p>Zoom Filter</p> <p>Use the pull-down menu to select your method for zooming the <i>Map View</i>:</p> <ul style="list-style-type: none"> Street Address: Enter a full street address, a State, or a ZIP code. Community: Use pull-down menus to select a community in a State. National Grid coordinate: Enter a National Grid coordinate. Coordinate: Enter a latitude and longitude coordinate. Map Scale: Enter a new map scale for the map image in the <i>Map View</i>. (Do not use commas in your entry.) Saved Location: Restore a previously saved temporary location. <p>Zoom Map or Go button: Click to update the map image based on the <i>Zoom Filter</i> entries.</p>	<p>(Above the <i>Map View</i>, from left to right)</p> <p>File controls</p> <ul style="list-style-type: none"> Load Map from File (📁) and Save Map to File (💾): Reload a view from, and save a view to, a location stored on your computer. Save Temporary Location (📍): Save a view during a session with <i>MapViewer - Web</i>. Retrieve the view using <i>Saved Location</i> on the Geocoder. Print Single Map (🖨️): Provides a PDF file of map image in the <i>Map View</i>. You can print or save the file on your computer. <p>Navigation controls</p> <ul style="list-style-type: none"> Zoom In (🔍) and Zoom Out (🔍): Click on the button, and then click and drag a box on the <i>Map View</i>. For zoom in, the map image in box will be enlarged to fit into the <i>Map View</i>; for zoom out, the map image in the <i>Map View</i> will be shrunk fit into the box. Pan (📏): Click on the button, and then click and drag on the <i>Map View</i> to re-center the map. Zoom to Initial Extent (🔄): Click on the button to reset the map image in the <i>Map View</i> to the 48 conterminous States. Identify Layers (📍): Click on the button and then click on a point on the <i>Map View</i>. The attribute data for the features at the point will be returned under the <i>Identify</i> tab in the <i>Map Legend</i>. e-z Identify (e-z📍) and e-z Print (e-z🖨️): Click on the button, and then click on a point in the <i>Map View</i>. <i>e-z Identify</i> returns a standard report of flood hazard information found at the point in a new window; <i>e-z Print</i> returns standard maps centered on the point and the report in a PDF file. The functions are available at map scales of 1:32,000 or larger. Regional Quick Zoom buttons change the <i>Map View</i> to the regions labeled on the buttons. The regions are Alaska (labeled <i>AK</i>), Hawaii (<i>HI</i>), Puerto Rico and the Virgin Islands (<i>PR & VI</i>), American Samoa (<i>AS</i>), Guam and the Northern Mariana Islands (<i>GU & MP</i>), and the 48 conterminous States (<i>US 48</i>). <p>(Below the <i>Map View</i>) The DFIRM View button removes layers from the <i>Map View</i> that may not meet FEMA’s accuracy specifications.</p>	<p>Refresh Map button</p> <ul style="list-style-type: none"> Updates the map image in <i>Map View</i> to show the map layers you select in the <i>Legend</i> tab. Updates the display of the layers and symbols you select in the <i>Legend</i> tab. <p>Legend tab</p> <ul style="list-style-type: none"> Shows the map layers and symbols displayed in the <i>Map View</i>. To reveal or hide map layers: The map layers are organized in groups. The groups are labeled in bold type. Click the “plus box” (⊕) before a group name to reveal its layers or the “minus box” (⊖) to hide its layers. To add or remove layers from the <i>Map View</i>: To add a layer, click to check the box before the layer name (☑). To remove a layer, click to uncheck the box (☐). To act on your changes: Click <i>Refresh Map</i> after you change the <i>Map Legend</i> display or make a new selection of layers for the <i>Map View</i>. <p>Identify tab</p> <ul style="list-style-type: none"> Contains results from the <i>Identify Layers</i> button. Information is provided by data layers, which are labeled in bold type. To reveal attribute information click the “plus box” (⊕) before the data layer name. To hide it click the “minus box” (⊖).

New Features

What information does e-z Identify provide?

Much of the information needed to do business with the National Flood Insurance Program is read from a flood hazard map. *e-z Identify* “reads” the flood hazard data at a point you click on the Map View and reports the information found (see Figure 4). The report provides the coordinates for the point you clicked, and information about the community, flood hazard zone, Coastal Barrier Resources System (CBRS) or Otherwise Protected Area (OPA) unit, NFIP map, and LOMRs found at the point.

What information does e-z Print provide?

e-z Print “reads” the flood hazard data at a point you click on the Map View and provides two maps (see Figure 5) and a report:

- The “Flood and community information map” shows flood hazard zone, community, and base map information.
- The “Community, Flood Insurance Rate Map (FIRM), and Letter of Map Revision (LOMR) information map” shows FIRM, LOMR, and community information.
- The report provides the information provided by *e-z Identify*.

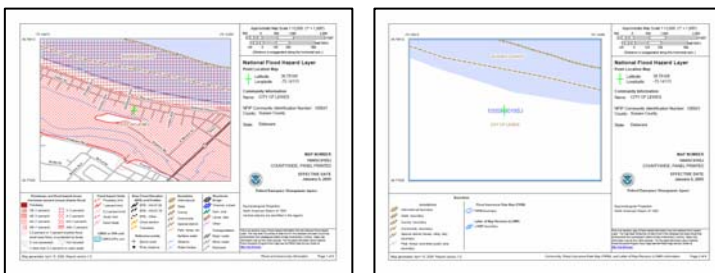


Figure 5. *e-z Print* provides a flood and community information map (left) and a community, FIRM, and LOMR map (right) for a point you click on the Map View. The maps are centered on the point you clicked and provided at the map scale of the corresponding FIRM.

How do I use the e-z Identify and e-z Print functions?

1. Zoom to the location for which you need information. The map scale must be 1:32,000 or larger (about the area of several neighborhoods or smaller).
2. Click on the *e-z Identify* (📍) or *e-z Print* (🖨️) button.
3. Click on a point in the Map View for which you want information.



Figure 4. The *e-z Identify* report provides community, flood hazard zone, CBRS and OPA unit, NFIP map, and LOMR information found at a point you click on the Map View.

4. The reports will be provided in a new window.
 - *e-z Identify*: Print or save the report using the controls on your web browser.
 - *e-z Print*: Click the printer icon (🖨️) and follow the instructions to receive the maps and report in PDF file that you can open and print, or save.

How can I view determination documents for Letters of Map Amendment (LOMAs) and Letters of Map Revision Based on Fill (LOMR-Fs) through MapViewer – Web?

(Note that *MapViewer – Web* does not have all LOMAs and LOMR-Fs, determination documents are not available for all LOMAs and LOMR-Fs, and the locations are approximate.)

1. In the Map View, zoom to the place for which you would like to view LOMAs and LOMR-Fs. The map scale must be 1:300,000 or larger (the area of a mid-sized metropolitan area or smaller). The LOMA and LOMR-F locations are symbolized with a purple-and-yellow circle-and-cross symbol (⊕).
2. Click on the *Identify Layers* (📍) button (above the Map View; see Figure 6).
3. In the Map View, click on the LOMA and LOMR-F symbol (⊕) for which you would like to see the determination document.
4. The results from the *Identify Layers* function are returned in the Map Legend panel under the Identify tab. Click the “plus box” (⊕) before the LOMA and LOMR-F heading to see the information returned.
5. If a determination document is available, the attribute PDFHYPERLINKID will show the value “Retrieve Amendment Determination Document (final)” in blue text. Click on the blue text to retrieve the determination document.
6. The determination document will be returned as a PDF document in a new window.

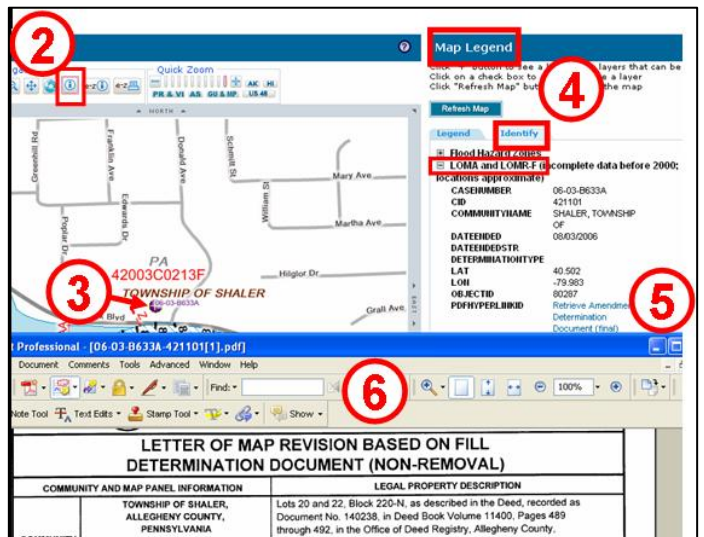


Figure 6. Portion of a *MapViewer - Web* screen showing steps 2 through 6 for retrieving a determination document for a LOMA or LOMR-F.