

# LOCALIZED FLOOD MAP SCREENING TOOL



## HOW TO USE THE LOCALIZED FLOOD MAP SCREENING TOOL

The interactive [Localized Flood Map Screening Tool](#) is intended for community use. The data is part of the regional [Climate Vulnerability Assessment](#) project for the Twin Cities metro area.

The tool gives a community the opportunity to determine what areas and assets may be subject to potential localized flood risk during short-term, extreme rain events. We hope that this tool will help cities prioritize policy and implementation strategies (for instance, targeted green infrastructure or storm water design improvements that may reduce localized flood risk).

The data is derived from the topography of the earth contained in the State of Minnesota's 3-meter digital elevation model (DEM) built from the state's LiDAR effort. In the absence of regional storm water data, potential localized flooding locations are determined based on depressions in the DEM. Given this constraint, the Council encourages use of storm water data and other relevant data, including site-specific analysis, to verify areas of potential localized flood risk.

The tool identifies localized Flood Hazards, referred to as Bluespots. These Bluespots are divided into categories based on the exposure and sensitivity of Council assets and infrastructure. Shallow Bluespots are separate, isolated low areas generally considered low risk, but this depth may still be a concern for certain types of infrastructure. Primary (0-1ft) Bluespots are the first areas to fill with water, followed by Secondary (2-4ft) and Tertiary (>4ft). Typically, areas that fill with water quickly should be considered higher risk due to an increased probability of damage or disruption to assets in these locations.

More information on the categorization methodology can be found in the [Localized Flood Risk Introduction](#). The Metropolitan Council's localized flooding analysis of the [Transportation and Transit](#) system may provide a good for assessing assets in your community.

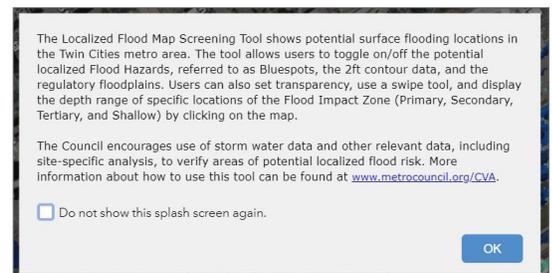
The tool also includes the following data that can assist in identifying potential risks associated with localized flooding:

1. [Localized Flood Map for Climate Vulnerability Screening](#)
2. 2ft Elevation Contours
3. 100 and 500 Year Floodplains

## TOOL FEATURES & FUNCTIONS

### Splash Page

The small text box that appears when opening the map explains the data and functions of the map and where to find more information. Click 'OK' to close the Splash Page or click 'Do not show this splash page again' and 'OK' if you want to ensure that this pop-up does not come up again when the page is refreshed.



### Zoom

The zoom-in/zoom-out buttons provide the larger/smaller view of the map based on the center point of the page.



TIP: You can also use your mouse scroll wheel (if applicable) for the same purpose.

### Default Extent

Clicking on this button brings you back to the default map extent which is a zoomed-out view of the map.

TIP: If you are analyzing a zoomed-in area, it sometimes helps to go to the default extent before zooming-in to a new area.

### My Location

Clicking this button references your location in the map with a blue dot. You may need to have your device's location services turned on to use this function.

### Find Address or Place

You can use this function to find a specific location on the map using a street address, intersection, or city name. As you type into this field, you will notice pre-populated options appear below that you may choose.

### About

By clicking this button, located below the address field, you can find out more information about the tool, its uses, and where to find more information.

### Layer List

The layer list includes a list of layers that make up The Localized Flood Map Screening Tool. All layers are clipped to the Twin Cities seven-county metropolitan area. The list includes the following:

Layer Name	Description
Municipal Boundaries	Municipal Boundaries consists of cities, townships, and unorganized territories boundaries.
2ft Elevation Contours	2ft Elevation Contour lines for use in conjunction with the Flood Hazards data layer.
Flood Hazards – Localized Flood Map for Climate Vulnerability Screening	Flood Hazards - <a href="#">Localized Flood Map for Climate Vulnerability Screening</a> consists of data derived from the State of Minnesota's 3-meter digital elevation model (DEM) built from the state's LiDAR effort (2011). Flood Hazards are broken into categories based on potential flood water depth.
Floodplains <ul style="list-style-type: none"><li>• 100 Year Floodplain</li><li>• 500 Year Floodplain</li></ul>	Floodplains consists of data derived from the FEMA Flood Insurance Rate Maps (FIRMs).

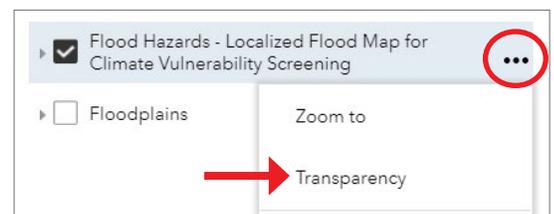
The default layers that appear when you open the tool are Municipal Boundaries and the Flood Hazards – Localized Flood Map for Climate Vulnerability Screening. This default setting allows the user to clearly see the locations of potential localized flood risk in the Twin Cities metro area.

### Legend

Layers chosen from the layer list will show in the legend.

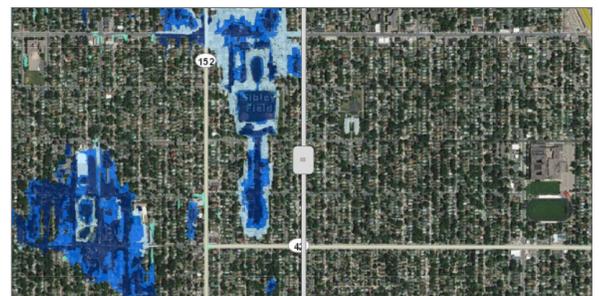
### Transparency

You can set transparency with any layer in the Layer List by clicking the three dots to the right of the layer. You can set transparency from 0% to 100%.



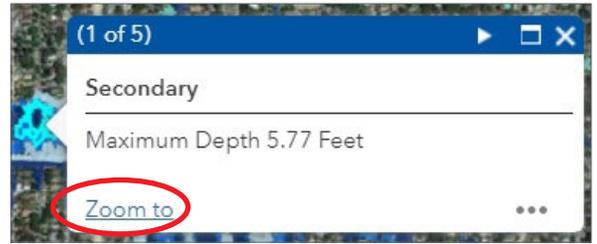
### Swipe Tool

The Swipe Tool is good for comparing layers in quick succession. To use the Swipe Tool, click on the Swipe Tool button (3rd button from the left), in the top right corner of the map. You will need to select the layer you wish to swipe across the screen, using the center swipe button.



## Flood Hazard Category and Maximum Depth by Location

To see the Flood Hazard category and maximum depth at any location, click on a Bluespot on the map. You can then click 'Zoom To' to zoom into that location. You may wish to have a look at the Imagery basemap or 2ft Elevation Contours layer to see what topographical features may be causing the potential localized flood risk.



## Basemap Gallery

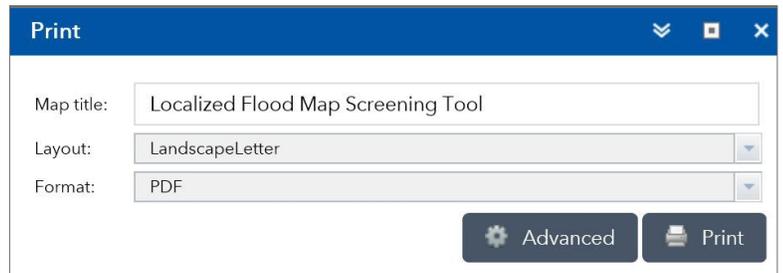
In combination with the two functions highlighted above, it is advisable to change basemaps using the Basemap Gallery button, from the Metropolitan Council basemap to the Imagery basemap. This button is found in the upper right portion of the map, to the right of the Swipe Tool.



## Print

By clicking this button, located next to the About button, the default settings appear for printing.

Click Print.



After the map is generated, click the title of the map in the list to open it (and download/save if desired).

Clear the print list when done making the maps you want.

