How to Use the FEMP Rainwater Harvesting Tool

This guide provides information on how to use the Federal Energy Management Program (FEMP) Rainwater Harvesting Tool to search for and gather the data needed to plan for potential rainwater harvesting projects. (The location of items on the screen may differ depending on the platform being used for this tool.)



Navigation:



You can **pan across the map** by clicking and dragging and **zoom in and out** with your mouse wheel or trackpad's vertical scrolling feature. The "+" and "-" buttons can also be used to zoom in and out.

Clicking on the **Home icon** resets the map to show all 50 states.

Clicking the **Target icon** zooms to your current location. (To use this, you must allow the tool permission to access your location.)

Legend, Layers, and Feature:



Legend – shows the key to the **map color scheme** for each layer that is currently visible on the screen. To turn on more layers, go to the Layer List tool described below.

Layer List – allows the user to **show or hide** layers of the map including state boundaries, ZIP code boundaries, county boundaries, and rainwater harvesting layers. Additionally, by clicking the ellipses to the right of a layer, you can change some of the basic interactivity of each of the

layers to suit your usage style. For example, each layer is set to a default of 25% transparency. Selecting **Transparency** will allow the user to adjust this value to suit their preference. Please note that when adjusting transparency of multiple layers, colors may be affected and not entirely match the legend.



Basemap Gallery – provides the user the option of changing the base map to different views such as including streets, geographic terrain, and structures. These are standard ready-to-use digital backgrounds.



Bookmark – saves a current view of the map to easily return to later. When creating a bookmark, the user will have the option to name the bookmark. If browser cookies are enabled, the bookmarks can be saved. The user may then have the option to return to

previous views upon returning to the map in a new browser tab.



Print – allows the user to save a portion of the existing map view as a PDF, JPG, GIF, PNG, or other file type to print. The portion of the map that will be saved can be adjusted in advanced settings.



About – general information about the tool.



How-To Guide – provides information on how to use the tool (this document).



Help Guide – provides information on data development, using the data, estimating rainwater available for harvesting, and implementation considerations.



Map Overview – found in the upper right corner, this feature enables a pop-up box that **provides context of the map area** when a user is zoomed in. This pop-up can also be used for navigation by dragging the box to change the map extent.

Legend Description – found on the left-hand side, this feature enables a slide out that provides the definitions of the map color schemes of the **Rainwater Regulations, Rainwater Harvest Potential** and **Rainwater Harvest Potential for Irrigation** layers. Click the arrow to open and close.

Search and Links:



The search bar allows the user to **search by ZIP code, city, state, county, or geographic features** (e.g., Yosemite National Park, CA). When searching, the tool will display a dropdown menu for the user to select the desired result, and the map will navigate to the selection. An option to see all results from the search bar can be selected to show all alternate results. You will need to click on the map to pull up the rainwater harvesting potential for that location.

Tool results provides the monthly amount of rainwater available for harvesting, called the rainwater harvesting potential (RWHP), in inches of rain per month¹. Find more information on how to use this data in the Help Guide.



The button to the right of the search bar shows links to helpful FEMP resources, including the FEMP's main website, Rainwater Harvesting Calculator, and other FEMP alternative water maps.

Data Table:



When selecting the **Data Table button,** it enables the table view of the tool results at the bottom screen. By default, the table only shows results in the current view of the map. On the top of the table is a feature called "Filter by map extent", which turns blue when selected. This

feature shows only relevant data for that area that is currently selected, rather than the entire data set for all ZIP codes. While this option is selected, the data table will actively refresh whenever the map is moved; therefore, it is a best practice to disable filtering by map extent until the area of interest is zoomed to in the map view.

There are three data sets to choose from at the top of the table view: (1) Rainwater Harvesting Regulations and Technical Resources, (2) **Rainwater Harvest Potential**, and (3) **Rainwater Harvest Potential for Irrigation**. Go to the Help Guide to learn about these data options.

After the you have accessed the desired data, the **Options button** allows you to download the table data as a CSV file. This feature can be used in conjunction with the print feature to save a map view along with the data.

¹ Inches of rainwater is a unit of measure describing an area that is one inch deep. There is 0.62 gallons of water in an area that is one inch deep, covering one square foot.

Click the data table button to remove it from the screen.

Additional data filtering options can be accessed by selecting Option at the top left of the data table and then selecting Filter from the dropdown menu.