

Community-Focused Exposure and Risk Screening Tool (C-FERST)



Maps User Guide

Office of Research and Development National Exposure Research Laboratory

C-FERST Maps User Guide

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Introduction to C-FERST Maps

C-FERST Maps allow users to learn more about their environmental issues and risks by viewing map layers specific to their community. Through the Maps, communities have access to data and information on sources of pollution, environmental concentrations, estimated exposures and risks, demographics, and community characteristics such schools and roads. The tool will be periodically refined and populated with improved and updated information based on user feedback and needs. For a full list of map layers, please refer to the document about C-FERST Map Layers.

The map layers are displayed in C-FERST using an ArcGIS Online map viewer, shown below, which offers tools to:

- view and navigate the provided map layers
- search for and add more map layers
- access metadata and links for downloading map layers
- print the maps you generate

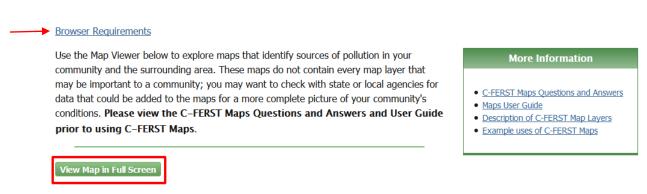
This guide will provide instructions on how to use C-FERST Maps.

How to use C-FERST Maps

Step 1: Make the map larger

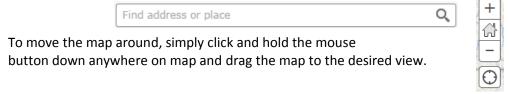
From the C-FERST Maps of Community Environmental Conditions page, click "View Map in Full Screen." Note that using the most recent version of all browsers will provide the best performance; Internet Explorer is supported but has limitations. Find out more by clicking "Brower Requirements."

C-FERST Maps of Community Environmental Conditions



Step 2: Zoom to your location

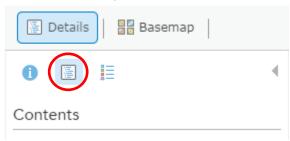
Start by zooming into your location by typing a location name (e.g., city and state) or ZIP code in the upper right search box, or by using the zoom buttons on left of map.



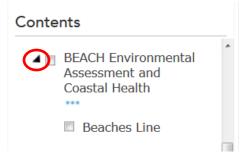
Step 3: View one or multiple map layers

View menu

To see listing of available map data layers, click the 'Show Contents' button, which is the 2nd button in the content pane on the left side of the map:



Each of these maps (or map services) contains several map layers within it. To view these layers, click the name, such as EPA Registered Facilities, or the "down arrow" and the list of layers will appear.



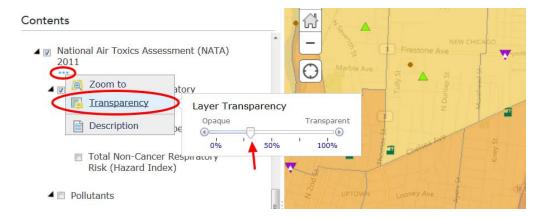
Select map layers to view

To select, or turn on, a map layer (or several layers), click the check box next to the name of the layer(s) and then click the check the box next to the name of the parent layer.



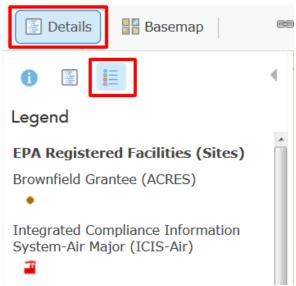
Important Notes!

- Both the map layer heading (map service) and the individual layers of the map must be checked for the individual map layers to be displayed.
- Different map services are displayed at different levels of "zoomed in" or "spatial scales." You will need to zoom in closer to view some layers.
- You can view layers independently or overlay multiple layers at a time. <u>Overlaying information on maps should not be used to establish causal relationships.</u> You may need to adjust the transparency to view layers that might be covered by color shading or patterns that are too dark or too light for your needs. Do this by hovering over a parent layer to see three blue dots. Click those and then "Transparency." A sliding scale will appear and can be adjusted to your preference.

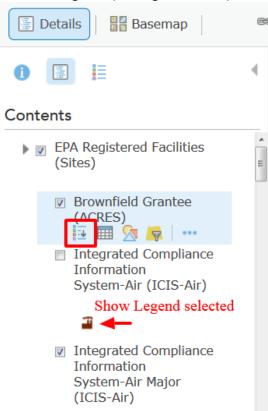


View the legend

To view the legend <u>for all layers</u> that are displayed, or turned on, click on the legend button under "Details".

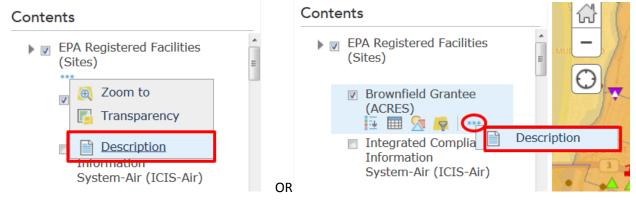


To view the symbol <u>for a single layer</u>, under "Contents" hover over on the layer and symbols will appear below. Click the first one, or "Show Legend" (click again to close).



View metadata

To view metadata, or more information about each layer, click the three blue dots that appear underneath the layer name. Click the word "Description" to be taken to the metadata. The links for saving/downloading the map layer is found in the metadata (See Below).

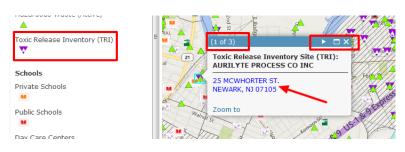


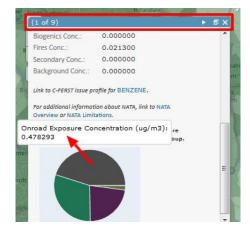
View pop-ups on the map

Some of the layers have more information that will display in a "pop-up" when you click on the map. If more than one layer is "on," then you might see multiple pop-ups for one location (i.e. "1 of 3").

Navigate among them by using the arrow on the right.

Make the pop-up full-screen with the middle icon; close the pop-up with the "X."





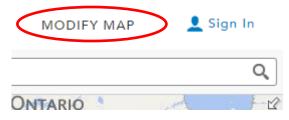
For the National Air Toxics Assessment (NATA) 2011

layers, expand the pop-up to see a pie chart of source categories including: major stationary sources, also referred to as point sources (e.g., large waste incinerators, factories); area and other smaller stationary sources, also referred to as nonpoint sources (e.g., dry cleaners, small manufacturers); onroad and nonroad mobile sources (e.g., cars, trucks, boats); fires (e.g., wildfires, prescribed burning) and biogenic (e.g., naturally-occurring emissions) sources; background emissions; and secondarily formed emissions. For more information, go to 2011 NATA: Assessment Methods.

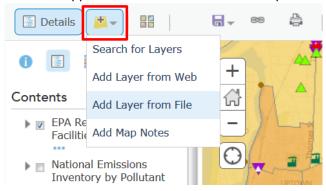
Step 4: Modify Map (Optional): add map layers, print, measure, or bookmark

Add map layers

To add map layers to C-FERST Maps, first click the **Modify Map** button in the top right corner of the map viewer.



Then, click the **Add** button that appears in the left corner of the map viewer.



A menu will drop down with several ways users can add data to the maps:

- 1) Search for maps from ArcGIS Online, the web, or a known GIS server
- 2) Add layers from the web (e.g., specific URL's)
- 3) Add files in the following formats for up to 1000 features or 250 address locations: zipped shapefile (ZIP), a CSV or TXT file (comma, semi-colon, or tab delimited), or a GPS Exchange Format (GPX) file.

See ArcGIS.com Help for more <u>detailed instructions on how to add map layers</u>. **Important Note!** Data added to the maps will not be saved to any EPA database.

Print, measure, or bookmark

Once you select "Modify Map," other special features appear.



To print what you are currently viewing on the map, click "Print." A new tab will open with a brief description of the map and the relevant data sources. Note, the legend does not print.

To find the "area, length, or location" on the map, click "Measure." Each option allows you to choose among different units, as appropriate.



To save the area, or extent, that you are currently viewing, click "Bookmarks" then "Add Bookmark." Once the bookmark appears, you can edit the names or delete it using the icons shown above.

Step 5: Save map layers (Optional)

Advanced users:

If you would like to save any of the map layers available in C-FERST maps to use later in a desktop ArcGIS or other application, you can do so by accessing the map service description from the details menu, <u>as</u> described above.

The map metadata description will open in a new window or tab. Right click on one of the viewing options at the top of the page and click "Save Link as" to save.

