



# 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 <u>C-FERST Map Layers</u>.

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**

#### Browser Requirements

Use the Map Viewer below to explore maps that identify sources of pollution in your community and the surrounding area. These maps do not contain every map layer that may be important to a community; you may want to check with state or local agencies for data that could be added to the maps for a more complete picture of your community's conditions. Please view the C-FERST Maps Questions and Answers and User Guide prior to using C-FERST Maps.

- More Information
- <u>C-FERST Maps Questions and Answers</u>
- <u>Maps User Guide</u>
- Description of C-FERST Map Layers
- Example uses of C-FERST Maps

View Map in Full Screen

# 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.

	Find address or place	Q +
To move the map button down anyv	around, simply click and hold the mouse where on map and drag the map to the desired	view.

# 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 2<sup>nd</sup> 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</u> <u>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).

Details Basemap	œ
	4
Contents	
EPA Registered Facilities (Sites)	* II
☑ Brownfield Grantee (ACRES)	
Integrated Compliance Information System-Air (ICIS-Air)	
Show Legend selected	
<ul> <li>Integrated Compliance Information System-Air Major (ICIS-Air)</li> </ul>	

### 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."

Toxic Release Inventory (TRI)		1 of 3)
¥	al 21	Toxic Release Inventory Site (TRI):
Private Schools		25 MCWHORTER ST. NEWARK, NJ 07105
Public Schools	Walnu	Zoom to
Dav Care Centers		



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.

📾 Share	🚔 Print	🔛 Measure	D Bookmarks	>
12/1	Smiths Ferr	V South F	Valley	-

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.

Measure 🖸 Bookmarks Find	Bookmarks Find address or
Find area, length, or location	Bookmarked places ×
🔛 🔃   Miles 👻	school / X home / X
Measurement Result	Add Bookmark
2.67 Miles	

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> <u>described above</u>.

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.

ArcGIS REST Services Directory			Login   Get Token
Home > services > OEI > FRS_INTERESTS (MapServer)			Help   API Reference
JSON   SOAP   WMS			
OEI/FRS_INTERESTS (MapServer)			
View In: ArcGIS JavaScript ArcGIS.com Map Google Earth ArcMap ArcC	Open link in new tab	1	
View Footprint In: ArcGIS.com Map	Open link in new window		
Service Description: Facilities regulated or of environmental interest to EPA a	Open link in incognito window	tracked in.	
Map Name: FRS Facility Interests	Save link as Copy link address		
Legend	Inspect element		
All Layers and Tables		-	
Dynamic Legend			
Dynamic All Layers			
Layers:			
• <u>ACRES</u> (0)			

• <u>AIRS AFS</u> (1)