



**US Army Corps  
of Engineers®**

# Formerly Used Defense Sites (FUDS)

## Formerly Used Defense Sites Geographic Information System (GIS) Quick Start Guide

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Version 2.1

## Table of Contents

Table of Contents.....	2
Instructions.....	3
Technical Support.....	3
Map Interface	
Layer List.....	4
Legend.....	6
Basemap Gallery.....	6
Measure Tool.....	7
Share.....	7
Print a Map.....	7
Search	
Search By Address.....	8
Search by FUDS Property Name or Number.....	10
Add a Marker to the Map.....	10
Attribute Table	
View the attribute tables.....	12
Zoom-to a location.....	12
Filter Content.....	13

## Instructions

These instructions apply only to the Formerly Used Defense Sites (FUDS) Geographic Information System (GIS).

The Department of Defense (DOD) is responsible for the environmental cleanup and restoration of Formerly Used Defense Sites (FUDS), or properties formerly owned, leased, possessed, or operated by DOD. The Formerly Used Defense Sites GIS viewer, developed by the ERDC Remote Sensing / GIS Center of Expertise, provides high quality, up-to-date, and accurate information to support environmental cleanup and restoration projects on FUDS.

## Technical Support

Please contact Amy Stender to receive technical support.

Email: [amy.stender@usace.army.mil](mailto:amy.stender@usace.army.mil)

Telephone: 603-646-4733

## Getting Started

The FUDS GIS may be found at the following locations:

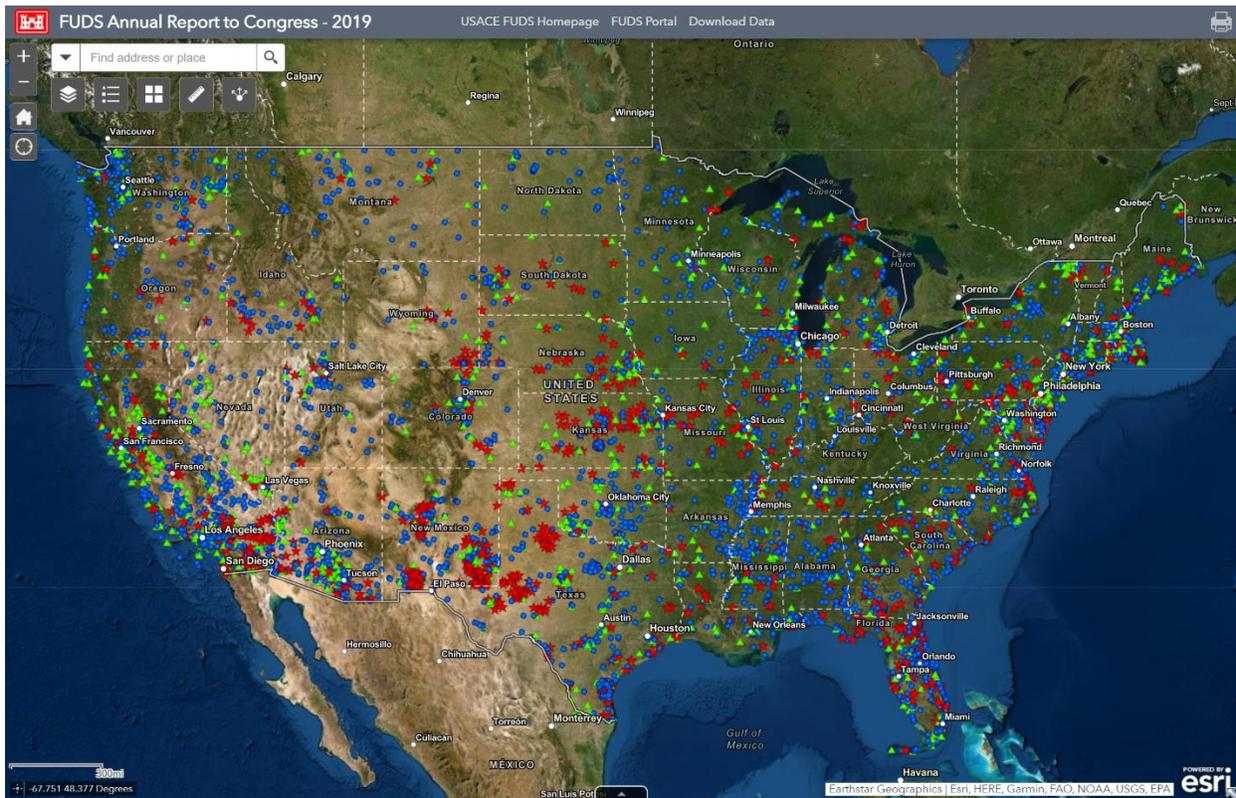
- From the USACE FUDS Homepage: <http://www.fuds.mil>

Click on "FUDS Interactive Map (Geographic Information System)" in the left side menu.

- From FUDS Portal: <https://fudsportal.usace.army.mil/>

Click on "GIS" in the top menu bar from the FUDS Portal homepage.

## Map Interface



Links to the FUDS homepage, FUDS Portal and geospatial Data Download are in the top banner.

### Layer List

You may view the map layer list by clicking the Layer List button . Turn layers on and off by checking the box next to a layer name. Use the scroll bar to view more layers.

The GIS contains the following layers to view and query:

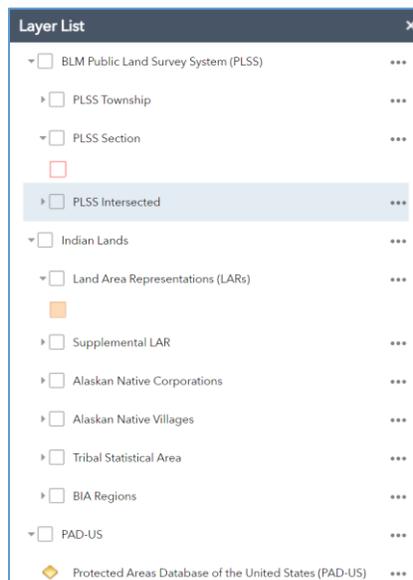
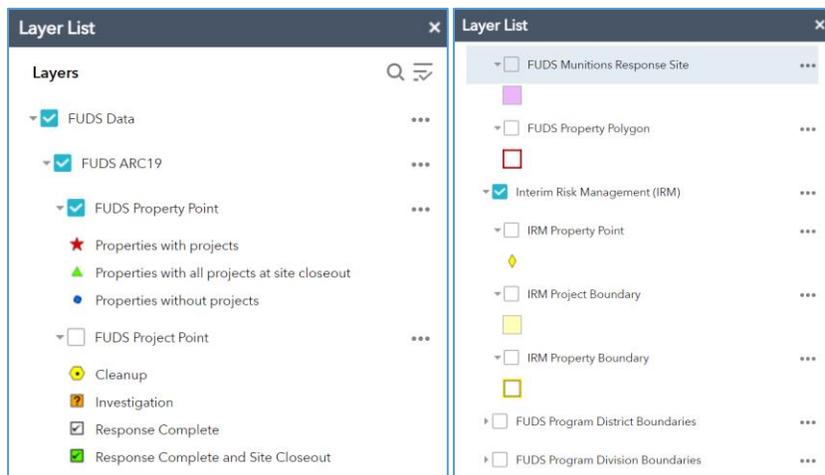
#### USACE Data

- Annual Report to Congress (ARC19)
  - FUDS Property Point
  - FUDS Project Point
  - FUDS Munitions Response Site
  - FUDS Property Polygon
- Interim Risk Management
  - IRM Property Point
  - IRM Project Boundary
  - IRM Property Boundary
- FUDS Program District Boundaries
- FUDS Program Division Boundaries

# FUDS GIS Quick Start Guide

## Data from other federal and state agencies

- BLM Public Land Survey System (PLSS)
  - PLSS Township
  - PLSS Section
  - PLSS Intersected
- Indian Lands
  - Land Area Representation (LARs)
    - Supplemental LAR
    - Alaskan Native Corporations
    - Alaskan Native Villages
    - Tribal Statistical Area
    - BIA Regions
- Protected Areas of the US
  - Protected Areas Database of the United States (PAD-US)



## FUDS GIS Quick Start Guide

At the top right of the Layer List window, you may use the Search and All Layers buttons



to search for a layer by keyword or quickly turn all layers on/off.

## Legend

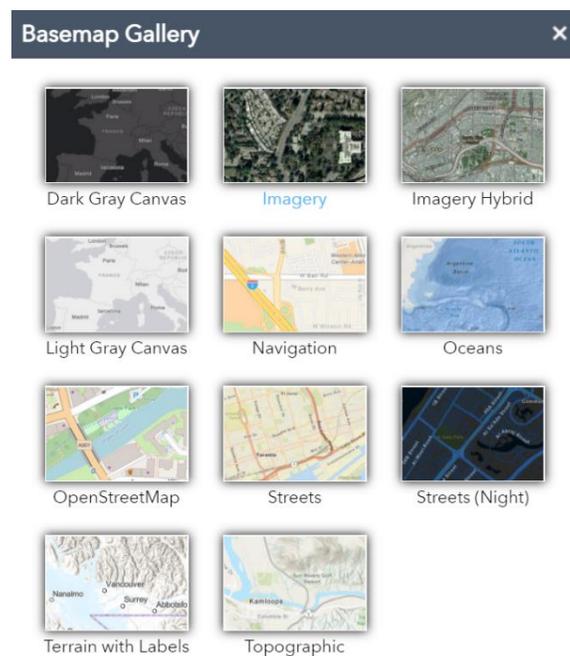
To view the map legend, click on the Legend button



More layers will appear in the legend as you turn them on.

## Basemap Gallery

Choose a different basemap from the Basemap Gallery



## Measure

Use the Measurement tool  to measure areas and distances on the map.

 **Area:** Click on the Area button and click on the map, creating a bounding box around your area of interest. Double-click your mouse to close the area. Choose different units of area from the pull-down menu.

 **Distance:** Click on the Distance button and click on the map to create a line. Double-click your mouse to end the line. Choose different units of distance from the pull-down menu.

 **Location:** Click on the Location button to find the latitude and longitude coordinate from a click on the map. Choose from decimal degrees or degrees minutes seconds (DMS).

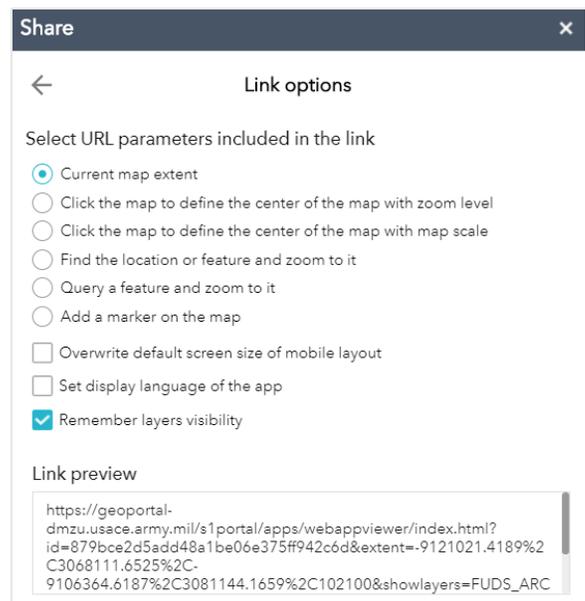
## Share

To share the map, click the Share button



Copy and paste the url to send or html code to embed the map into another application.

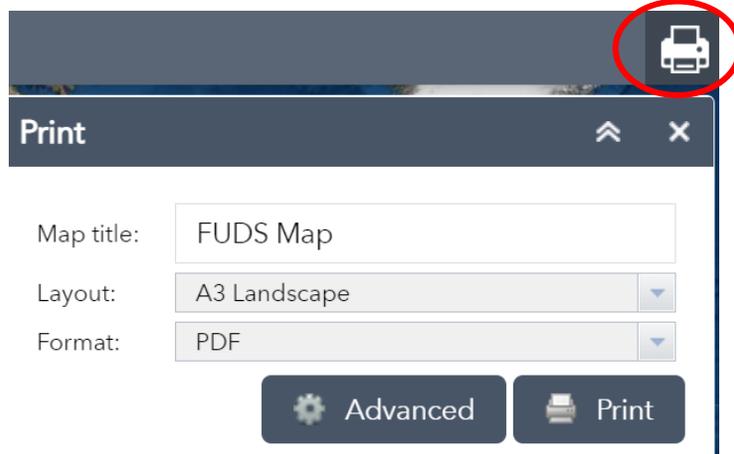
To send a url that contains the layers and extent that you are currently viewing, click on "Link Options" until the url textbox. Ensure that the "current map extent" button is selected and that "Remember layers visibility" is checked.





## Print

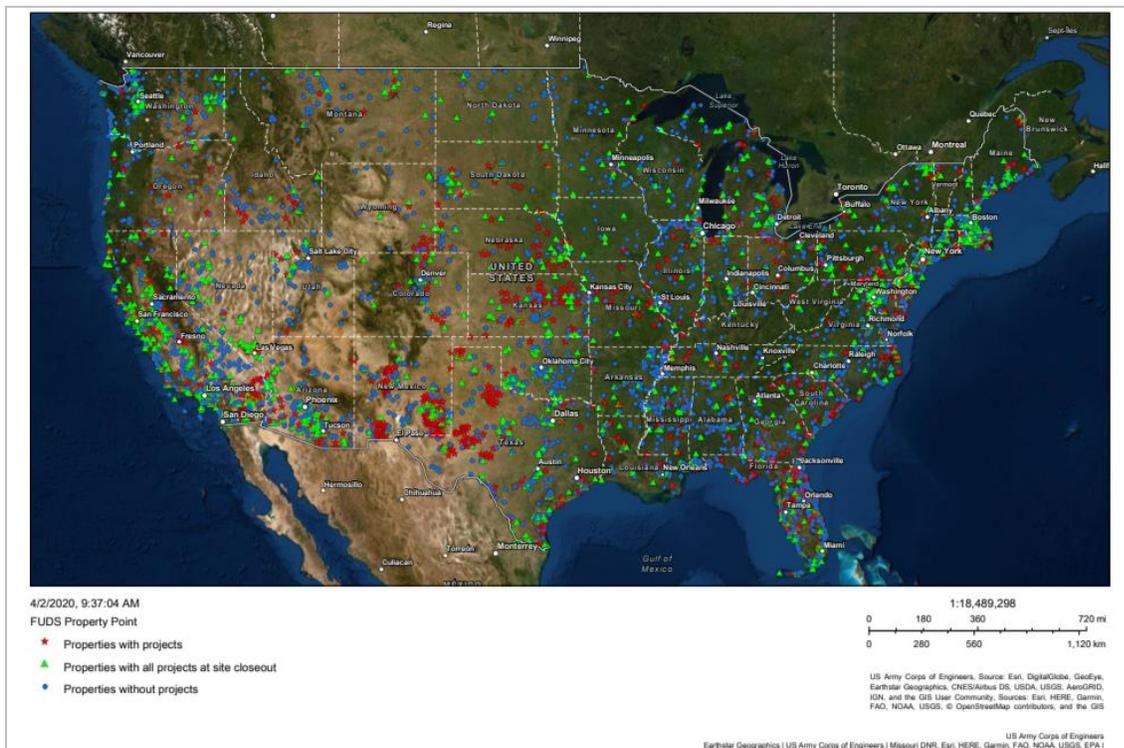
The Print tool is located at the end of the title banner.



Users may modify the Map title, page layout and export format.

Click the Advanced button to modify additional cartographic elements.

Click the Print button to generate a final map:

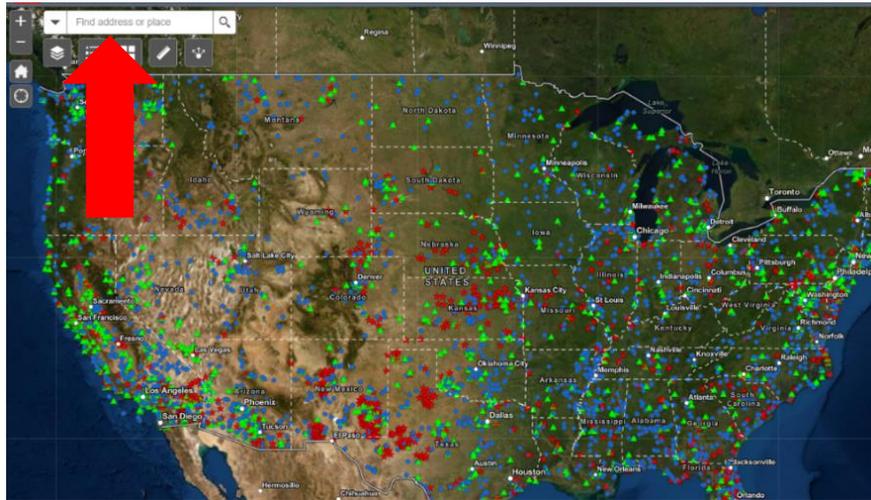




## Search

### Search by Address

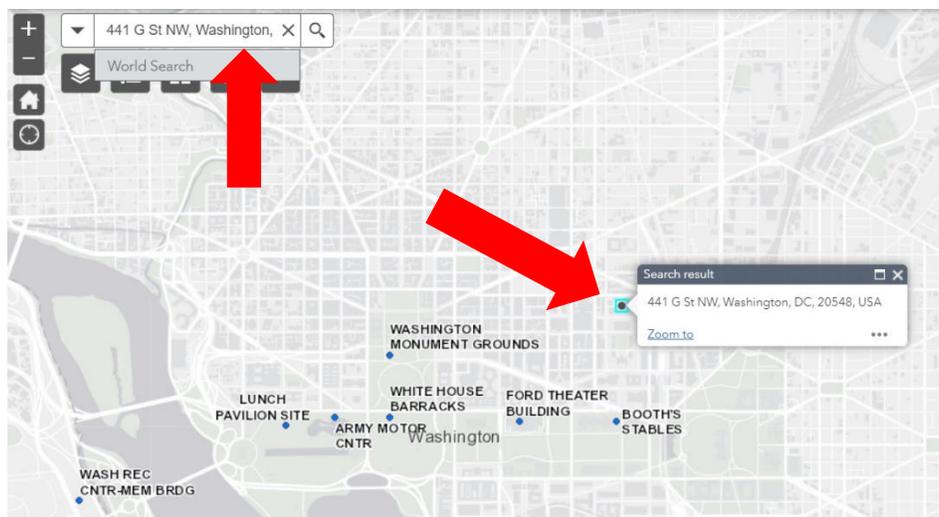
To begin an address search, enter a street address or a place name in the search box.



After typing an address or place name, press enter or click the magnifying glass next to the search text box. Select from the results and zoom to that location.

Example: Search for *441 G St NW, Washington, DC, 20548*

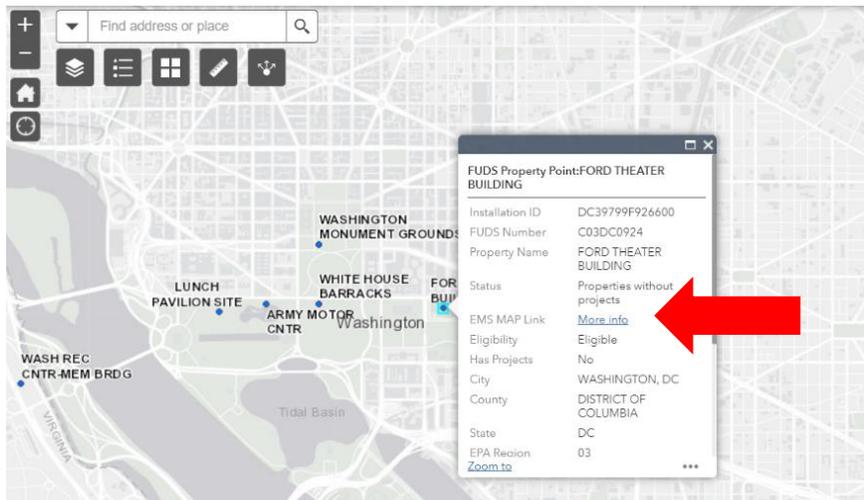
(Note: The basemap has been changed from Imagery to Light Gray Canvas for clarity.)





- To zoom-in, double-click or roll your mouse wheel forward. Alternatively, you may hold down the Shift button on your keyboard and “drag a box” (click and hold down your left mouse button) around a specific area of interest.
- To zoom-out, roll your mouse wheel to you.

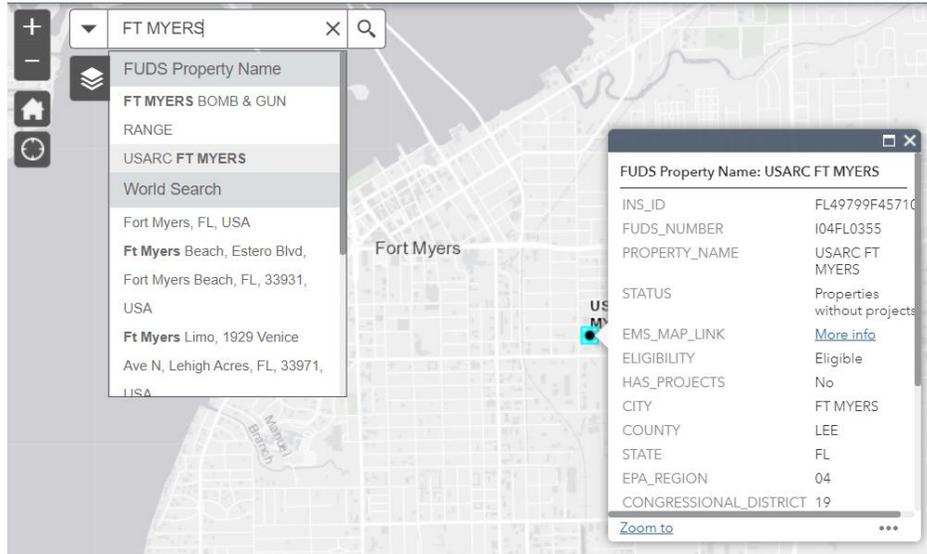
Click a colored dot, which is a FUDS property point, to get detailed information about the FUDS property in a pop-up query box. See image below.



The information in the query pop-up box provides specific details about the FUDS property such as the property name, installation ID, FUDS number and link to the Management Action Plan (MAP) pdf in the FUD Portal Executive Management System (EMS). Use the scroll bar on the right side of the pop-up box to view all of the information.

### Search by Property Name or Number

If you know the FUDS Property Name, you can enter that into the search box.

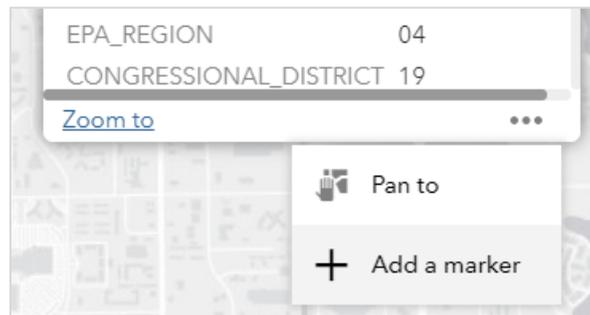


Enter all or part of a property name. If there is more than one match, choose from of list of suggestions.

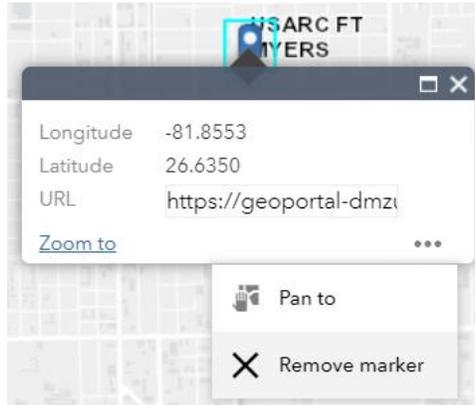
To search by FUDS Property Number, enter it into the search box and choose from the drop-down menu to zoom to the location:

### Add a Marker to the Map

To add a marker for a location of interest, click the "..." menu at the bottom of the query pop-up window and choose "+ Add a marker".



A new marker will be placed on the map. When you click this marker, you will see the latitude and longitude coordinates for this point, as well as a url that can be highlighted and copied. This url contains the layers and scale that you are currently viewing in the map; you can send this url to someone else if you would like them to see this location.

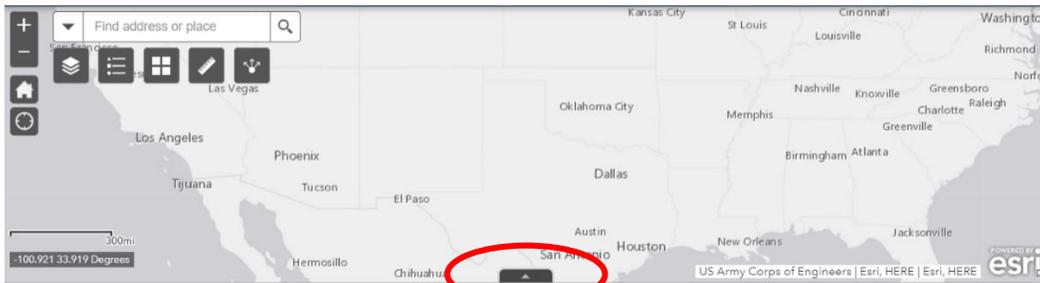


Click on "... " and "X Remove marker" to remove this maker from your map.

## Attribute Table

### View the tables

To view or collapse the attribute information for the layer(s), click on the "Open Attribute Table" tab at the bottom of the screen.



A tab for each layer that is currently visible in the map will appear. By default, the records shown are filtered by the map extent. To view all records, unclick "Filter by map extent."

FUDS Property Point											
Installation ID	FUDS Number	Property Name	Status	FMS MAPS Link	Eligibility	Has Projects	City	County	State	EPA Region	CD
MS49799F81420	A04MS0308	13TH STREET WAREHOUSE	Properties without projects	<a href="https://fudsportal.id=58156">https://fudsportal.id=58156</a>	Ineligible	No	GULFPORT	HARRISON	MS	04	04
MS49799F81330	A04MS0300	36TH SUB-DEPOT	Properties without projects	<a href="https://fudsportal.id=58199">https://fudsportal.id=58199</a>	Ineligible	No	GREENVILLE	WASHINGTON	MS	04	02
MS49799F81590	A04MS0325	7TH STREET USO	Properties without projects	<a href="https://fudsportal.id=58164">https://fudsportal.id=58164</a>	Categorical Exclusion	No	MERIDIAN	LAUDERDALE	MS	04	03
LA69799F016800	A06LA0061	A RES-MICHOUD A PLANT	Properties without projects	<a href="https://fudsportal.id=56069">https://fudsportal.id=56069</a>	Eligible	No	NEW ORLEANS	ORLEANS	LA	06	02

1139 features 0 selected

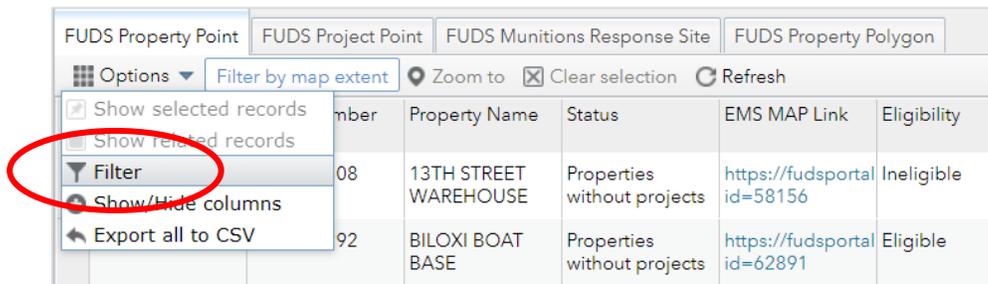
Highlight a record to enable the "Zoom to" button.



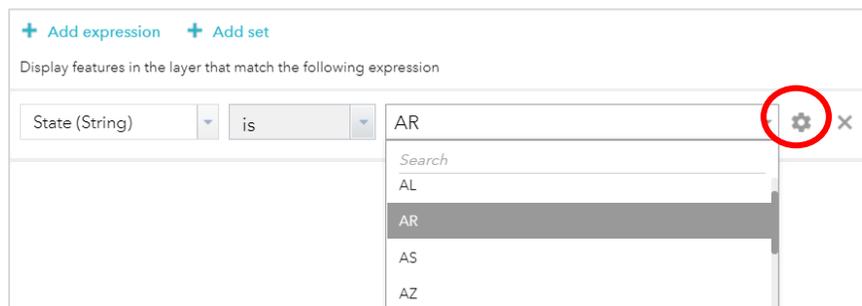
Under the Options menu, you can export all or selected rows to a CSV file for use in Excel.

## Filtering

You can filter the layer based on specific criteria in the table. For example, if you are looking for *All FUDS Properties in Arkansas*, you can click the Options pull-down menu and select Filter.



In the Filter pop-up window, click "Add an expression" to build a query. The first pull-down menu will be a list of all the column names from the attribute table. Choose "State (String)". Leave the middle pull-down menu as "is". For the last pull down menu, click the Gear symbol and choose 'Unique' from the list. This will populate the pull-down menu with a list of unique names from the State column. Choose "AR" from this list.



Click the OK button and now the map will only show Properties in Arkansas. At this point, you may export this filtered list of locations as a CSV file.



# FUDS GIS Quick Start Guide

The screenshot shows the FUDS GIS application interface. At the top, there is a search bar and navigation tools. The map displays several colored markers (red, green, blue, yellow) across the central United States. Below the map is a data table titled 'FUDS Property Point'.

Installation ID	FUDS Number	Property Name	Status	EMS MAP Link	Eligibility	Has Projects	City	County	State	EPA Region	Co. Dist.
AR69799F60690C K06AR0088		BONO AUX AIRFIELD NO 4	Properties without projects	<a href="https://fudsportal.id=61405">https://fudsportal.id=61405</a>	Eligible	No	BONO	CRAIGHEAD	AR	06	01
AR69799F61210C K06AR0689		CAMDEN AUXILIARY AIRFIELD	Properties with all projects at site closeout	<a href="https://fudsportal.id=57771">https://fudsportal.id=57771</a>	Eligible	Yes	CAMDEN	OUACHITA	AR	06	04
AR69799F97670C K06AR0004		CAMP CHAFFEE	Properties with projects	<a href="https://fudsportal.id=54615">https://fudsportal.id=54615</a>	Eligible	Yes	FORT SMITH	SEBASTIAN	AR	06	03

You may utilize more than one filter. If you were looking for *All FUDS Properties in Arkansas and the Status is 'Properties with all projects at site closeout'*, you would simply add another expression:

The screenshot shows the filter configuration interface. It includes a search bar with the text 'Display features in the layer that match all of the following expressions'. Below this, there are two filter expressions:

- State (String) is AR
- Status (String) is Properties with all projects at site closeout

There is also a checkbox for 'Case sensitive' which is currently unchecked.