

Superfund Redevelopment Mapper User Guide

2022 (v4)

Superfund Redevelopment Mapper – User Guide

Contents

A.	Superfund Redevelopment Mapper	4
B.	Finding a Superfund Site for Redevelopment	4
1.	Using the Search Tools	5
1.1.	Start Your Search.....	5
1.2.	View Search Result Table.....	5
2.	About the Search Parameters	5
2.1.	Site Redevelopment Characteristics	5
2.2.	Site Name	6
2.3.	Site Location	6
2.4.	Site Size	6
2.5.	Site Status.....	6
C.	Examining Superfund Site Details.....	8
1.	Superfund Site Points.....	8
2.	Superfund Site Features	8
2.1.	Superfund Site Boundaries	8
2.2.	Superfund Institutional Control Boundaries.....	8
2.3.	Superfund Operable Unit Boundaries	8
2.4.	EPA Regions.....	8
D.	Exploring Superfund Site Context.....	9
1.	Redevelopment Potential	10
1.1.	Wind Resource.....	10
1.2.	Solar Resource	10
1.3.	Geothermal Resource	10
1.4.	Biomass Resource	10
1.5.	Qualified Opportunity Zones	10
2.	Community Context.....	10
2.1.	Public Schools.....	10
2.2.	Private Schools	11
2.3.	Census Populated Places Boundaries.....	11
2.4.	USA Census Counties	11
3.	Infrastructure	11
3.1.	Electric Power Transmission Lines	11
3.2.	Railroads	11
3.3.	Highways.....	11

Superfund Redevelopment Mapper – User Guide

4.	Demographics	11
4.1.	ACS Median Household Income	11
4.2.	USA Population Density	11
4.3.	Climate and Economic Justice Screening Tool (CEJST) Data	11
5.	Environment	12
5.1.	USA Flood Hazard Areas	12
5.2.	Hydrography	12
E.	Using Additional Map Tools	13
F.	EPA Superfund Redevelopment Program Contact Information	14
G.	Providing Map Feedback	14
H.	Change Log	14
I.	GIS Data Disclaimer	14

Superfund Redevelopment Mapper – User Guide

A. Superfund Redevelopment Mapper

EPA's Superfund program cleans up some of the nation's most contaminated lands and responds to environmental emergencies, oil spills and natural disasters. To protect public health and the environment, the Superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places.

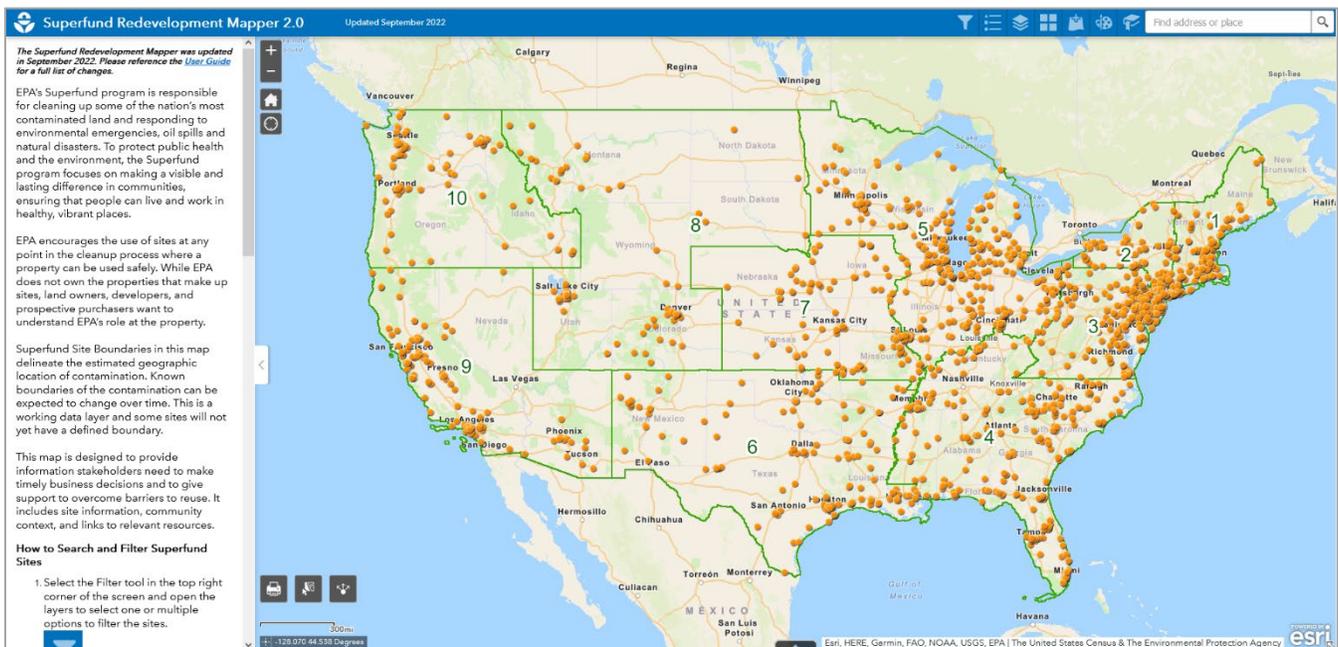
EPA encourages the use of sites at any point in the cleanup process where a property can be used safely. While EPA does not own site properties, the Agency plays an important regulatory role at these sites by selecting and overseeing cleanup efforts to address contamination. Understandably, landowners, developers and prospective purchasers are interested in EPA's role at site properties.

EPA's Superfund Redevelopment Mapper (the "app") provides the key information for stakeholders and land managers to help them make timely business decisions, address reuse barriers and plan for the future use of these areas. It includes site information, community context and links to relevant resources. This User Guide includes instructions for navigating the app as well as links to more resources.

To access the app, please visit <https://arcg.is/08eKXP>. It is available in the following internet browsers:

- Google Chrome
- Mozilla Firefox
- Safari 3 and later
- Microsoft Edge
- Chrome for Android
- iOS Safari

The app is not recommended for use in Internet Explorer. The website that hosts the app is not guaranteed to support that browser.



B. Finding a Superfund Site for Redevelopment

The app's map includes all proposed, current and deleted National Priorities List (NPL) Superfund sites and Superfund Alternative Approach (SAA) Agreement sites. These sites can be searched and filtered

Superfund Redevelopment Mapper – User Guide

using several parameters, including redevelopment context (e.g., proximity to transportation and energy infrastructure), location, size, site status and site name.

Please note: The app does not yet include Superfund removal response sites. These areas can also be redeveloped.

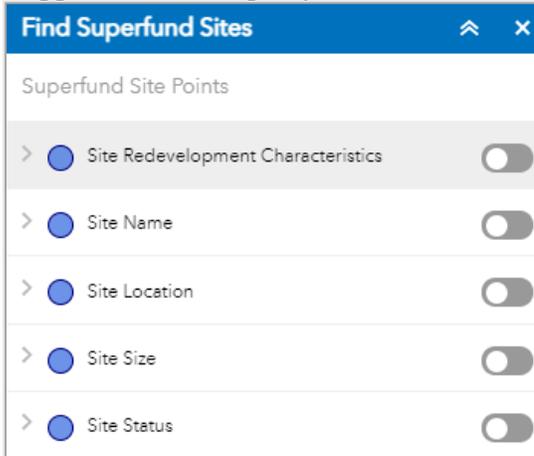
1. Using the Search Tools

1.1. Start Your Search

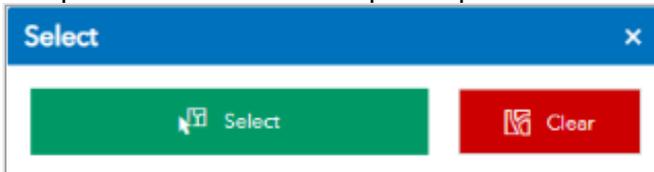
- a. Select the Filter tool in the top right corner of the screen.



- b. Toggle the search group on and off. Enter your search parameters in each field.



- c. Select a point in the map to view a pop-up box with more information or select multiple points using the Select tool in the bottom left corner of the map. You must de-select the item manually, by clicking the Clear button.
- d. The points shown on the map will update and the map will re-center as the filter changes.



1.2. View Search Result Table

- a. Select the up arrow in the center of the bottom of the map.
- b. Export the search results to a text file by selecting Options in the top left corner of the table and selecting Export to CSV.

2. About the Search Parameters

2.1. Site Redevelopment Characteristics

- a. **In Opportunity Zone:** Under certain conditions, new investments in these zones may be eligible for preferential tax treatment. First designated in 2018, the zones are designed to attract private investment and strengthen the financial viability of redevelopment projects. They cover parts of all 50 states, the District of Columbia and five U.S. territories. To learn more, visit the [Superfund Redevelopment Opportunity Zones webpage](#).

Superfund Redevelopment Mapper – User Guide

- b. **Near Interstate:** Filter sites using this parameter if highway access is important for your project. Interstate data come from [Esri's USA Freeway System layer](#), a part of the National Highway Planning Network, published by the Federal Highway Administration.
- c. **Near Railroad:** Filter sites using this parameter if your project requires rail access. Railroad data come from [Esri's USA Railroads layer](#).
- d. **Near Electrical Power Transmission Lines:** Use this filter if you are interested in energy sector-related projects. Power transmission line data come from [ArcGIS Online](#) and are provided by the [Homeland Infrastructure Foundation Level Database](#).
- e. **Urban/Rural:** The app categorizes sites using the [U.S. Census Bureau's 2010 urban-rural classification system](#) (urbanized areas of 50,000 or more people, urban clusters of at least 2,500 and less than 50,000 people, and rural areas that include all other areas not included in an urban area).

2.2. Site Name

Select Name from the dropdown menu or type a word in the search bar to filter the list. Many sites are known by multiple names – if searching by site name does not identify your site of interest, search by site alias instead, or trying panning and zooming the map to the area of interest. Please note that some sites include multiple property parcels.

2.3. Site Location¹

Search by state, city or [EPA Region](#). You can also enter address information into the search bar to zoom in on the map to a location of interest.

2.4. Site Size

Search for sites within a certain acreage range. Please note that some sites contain multiple properties, or portions of properties, and site acreage is not necessarily equivalent to developable acreage. In addition, some sites have incomplete acreage data, so the filter returns sites that have no acreage data in addition to sites with acreage values in your specified range.

2.5. Site Status

- a. **NPL Status:** The [NPL](#) is EPA's list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants or contaminants throughout the United States and its territories. The NPL helps EPA identify sites that warrant further investigation. In the app, a site's NPL status will be denoted with the following abbreviations:
 - D = Deleted from the NPL
 - F = Final NPL
 - N = Not on the NPL
 - P = Proposed for the NPL
 - R = Removed from the NPL
- b. **Construction Complete:** [Construction Completion](#) is a sitewide EPA cleanup performance measure. It documents the completion of physical construction of all cleanup actions, including actions to address all immediate threats and to bring all long-term threats under control.
- c. **In Reuse or Continued Use:** A site identified as being **in reuse** refers to a site or a portion of a site where a new use, or uses, are occurring such that there has been a change in the type

¹ Each site's location is delineated by its EPA public boundary for the purposes of identifying sites in Opportunity Zones and measuring proximity to infrastructure. If a public boundary is not available, a single latitude/longitude coordinate is used. As a result, this is a rough estimate that may not reflect the size and geographic extent of each site. While the site point might not be located near a highway or in an Opportunity Zone, part of the site might be in or near these areas.

Superfund Redevelopment Mapper – User Guide

of use (e.g., from industrial use to commercial use), or a previously unused property now supports a specific use. This means that customers, visitors, employees and residents (or animals and plants, in the case of ecological reuse) use the site or portion of the site for its intended purpose. A site identified as being **in continued use** refers to a site or a portion of the site being used in the same general way as when it was first subject to Superfund review.

- d. **Superfund Alternative Approach (SAA) Sites:** The [SAA](#) uses the same investigation and cleanup process and standards that are used for sites listed on the NPL. The SAA approach is an alternative to listing a site on the NPL; it is not an alternative to Superfund or the Superfund process.

C. Examining Superfund Site Details

Once you have identified sites of interest, you can find more details and links to more information in the features in the Superfund site data layers. Access the site data layers by selecting the View Site Context icon in the top right-hand corner of the map.



To turn each layer on and off, check and uncheck the box to the left of the layer name. The feature layers include:

1. Superfund Site Points

Each site's location is represented by an orange circle marking a single latitude/longitude coordinate. Click on the point feature to learn more and find a link to the site profile page with information on site history, cleanup and redevelopment (if applicable) as well as site documents.

Please note: *The site point features do not reflect sites' size or geographic extent.*

2. Superfund Site Features

For selected sites, more map data are available. These layers are not visible until the map is zoomed into an appropriate level for their display – they will be grayed out until the zoom level activates them. If you zoom into a site point, the layers are activated and you do not see more features, there are no additional layers available for your site of interest.

2.1. [Superfund Site Boundaries](#)

These boundaries delineate the estimated geographic location of contamination related to a site. Known boundaries of the contamination can change over time. This layer is updated annually. Click on the boundary feature to learn more, including a link to the documentation for the site boundary (available for some sites). *Sources: EPA Office of Land and Emergency Management (OLEM), EPA Office of Mission Support.*

2.2. [Superfund Institutional Control Boundaries](#)

These administrative or legal property use restrictions can play an important role in cleanups because they reduce exposure to contamination by limiting land or resource use. They also guide human behavior. For instance, declarations of restrictive covenants prevent land uses that are not consistent with the level of cleanup. Click on the feature to learn more, including a link to more information about the limitation and the source of the information (available for some sites). *Source: EPA OLEM.*

2.3. [Superfund Operable Unit Boundaries](#)

These areas are parts of a site that may be divided into several distinct areas, depending on the complexity of site conditions. [Review disclaimer](#). Click on the feature to learn more, including a link to more information about the limitation and the source of the information (available for some sites). *Source: EPA OLEM.*

2.4. [EPA Regions](#)

This reference layer shows regional administrative EPA boundaries, developed by EPA using U.S. Bureau of the Census (2019) data to meet Agency needs and use cases. *Sources: EPA Office of Mission Support*

D. Exploring Superfund Site Context

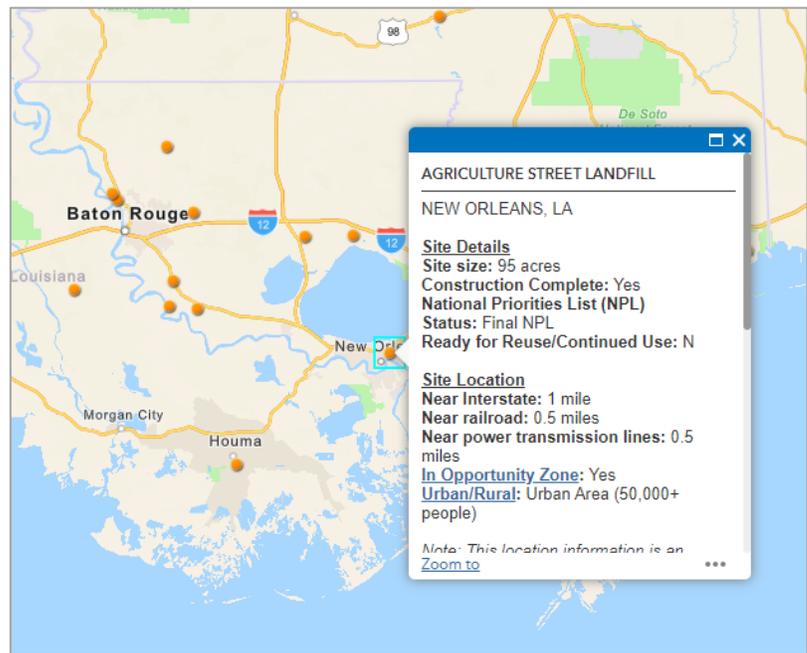
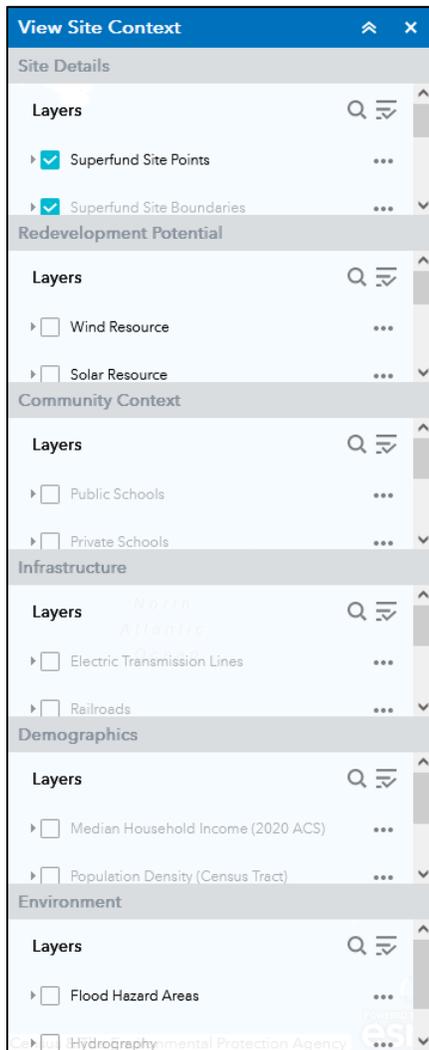
To learn more about the area surrounding each site, explore the additional site context layers. Select the View Site Context icon in the top right-hand corner of the map.



To turn each layer on and off, check and uncheck the box to the left of the layer name. To learn more about each layer, select the ellipses to the right of the layer name and select *Show item details*, or click the links below. Some layers may only be visible at specific scale ranges. If the layer of interest is in light gray text, try zooming in or out until it becomes visible.

Map layers are grouped into categories indicated by a gray heading. Clicking the gray heading collapses the layer group.

To bring up a pop-up box with a summary of relevant information and links to more content, click on any site feature.



1. Redevelopment Potential

1.1. [Wind Resource](#)

From the Wind-RE-Powering America's Land Mapper. Contaminated lands, landfills and mine sites that have pre-screened favorably for wind resource potential. It includes data that cover the United States and U.S. territories. The site data come from EPA program offices and 16 states. *Sources: EPA OLEM, EPA's RE-Powering America's Land Initiative.*

1.2. [Solar Resource](#)

From the Solar-RE-Powering America's Land Mapper. Contaminated lands, landfills and mine sites that have pre-screened favorably for solar (photovoltaic) resource potential. It includes data that cover the United States and U.S. territories. The site data come from EPA program offices and 16 states. *Sources: EPA OLEM, EPA's RE-Powering America's Land Initiative.*

1.3. [Geothermal Resource](#)

From the Geothermal-RE-Powering America's Land Mapper. Contaminated lands, landfills and mine sites that have pre-screened favorably for geothermal heat pump potential. It includes data that cover the United States and U.S. territories. The site data come from EPA program offices and 16 states. *Sources: EPA OLEM, EPA's RE-Powering America's Land Initiative.*

1.4. [Biomass Resource](#)

From the Biomass-RE-Powering America's Land Mapper. Contaminated lands, landfills and mine sites that have pre-screened favorably for biopower and biofuel potential. It includes data that cover the United States and U.S. territories. The site data come from EPA program offices and 16 states. *Sources: EPA OLEM, EPA's RE-Powering America's Land Initiative.*

For more information about renewable energy, please visit [EPA's RE-Powering Mapper](#), an online interactive web application. It enables users to visualize EPA's information about renewable energy potential on contaminated lands, landfills and mine sites.

1.5 [Qualified Opportunity Zones](#)

Opportunity Zones are areas where new investments, under certain conditions, may be eligible for preferential tax treatment. First designated in 2018, the zones are designed to attract private investment and strengthen the financial viability of redevelopment projects. They cover parts of all 50 states, the District of Columbia and five U.S. territories. To learn more, visit the [Superfund Redevelopment Opportunity Zones webpage](#). *Feature layer by EPA. Source: U.S. Department of the Treasury, Community Development Financial Institutions Fund.*

2. Community Context

2.1. [Public Schools](#)

Public schools, as defined by the Common Core Data (CCD) for the [Homeland Infrastructure Foundation-Level Data \(HIFLD\) database](#). *Sources: Oak Ridge National Laboratory (ORNL) Geographic Information Science and Technology (GIST) Group, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team.*

Superfund Redevelopment Mapper – User Guide

2.2. [Private Schools](#)

Private schools, as defined by the Private School Survey (PSS) for the [Homeland Infrastructure Foundation-Level Data \(HIFLD\) database](#). Source: Oak Ridge National Laboratory (ORNL) Geographic Information Science and Technology (GIST) Group, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team.

2.3. [Census Populated Places Boundaries](#)

Populated place areas that include designated places, consolidated cities and incorporated places in the United States identified by the U.S. Census Bureau. Sources: Esri, TomTom.

2.4. [USA Census Counties](#)

County/parish boundaries in all 50 states, the District of Columbia and Puerto Rico. Sources: U.S. Census Bureau, Esri.

3. Infrastructure

3.1. [Electric Power Transmission Lines](#)

Lines operated at relatively high voltages varying from 69 kilovolts (kV) up to 765 kV and capable of transmitting large quantities of electricity over long distances. Sources: Homeland Infrastructure Foundation-level data, Esri Living Atlas curated content.

3.2. [Railroads](#)

A comprehensive database of the nation's railway system. Sources: Federal Railroad Administration (FRA), Esri.

3.3. [Highways](#)

Rural and urban interstate highways, part of the National Highway Planning Network, published by the Federal Highway Administration as part of the National Transportation Atlas Databases for the United States. Sources: Esri, Bureau of Transportation Statistics, GeoSystems Global Corporation in association with National Geographic Maps and Melcher Media, Inc.

4. Demographics

4.1. [ACS Median Household Income](#)

2020 American Community Survey (ACS) summary data of median household incomes in the United States. Feature layer by Esri. Source: U.S. Census Bureau's ACS 2016-2020 5-year estimates, tables B19013B, B19013C, B19013D, B19013E, B19013F, B19013G, B19013H, B19013I, B19049 and B19053.

4.2. [USA Population Density](#)

Esri's 2022 updated demographic estimates, which use Census 2020 geographies. Population density in the United States. Feature layer by Esri. Sources: Esri, U.S. Census Bureau, Infogroup.

4.3. [Climate and Economic Justice Screening Tool \(CEJST\) Data](#)

Communities are identified as disadvantaged for the purposes of the Justice40 Initiative, by considering environmental, climate and socioeconomic indicators. Feature layer by Esri. Sources: [Climate and Economic Justice Screening Tool](#), White House Council on Environmental Quality.

5. Environment

5.1. [USA Flood Hazard Areas](#)

Flood zones from the Flood Insurance Rate Map created by the Federal Emergency Management Agency (FEMA). *Sources: FEMA, Esri.*

5.2. [Hydrography](#)

Rivers, streams, lakes, waterfalls, gauging stations, wells and other water-related features in the continental United States, Alaska, Hawaii and Puerto Rico. *Source: EPA.*

E. Using Additional Map Tools

Access the tools below using the menu bar at the top right.



View a legend for active map layers.



Change the basemap. Choose from a range of background maps.



Add more geospatial data by searching for an online source. Add them from a URL or upload a file.



Draw features on the map. Add temporary points, symbols or text boxes to customize the look of the map.



Create a bookmark. The bookmark allows you to return to a view of the map after zooming in to an area of interest.

The following tools are available in the top left corner.



Reset the map to the default extent.



Zoom in to your location on the map. To use this feature, allow your browser or network to detect your physical location.

The tools below are available in the bottom left-hand corner.



Print the map on the current screen. You can change the map title, layout and export format.



Select one or more features on the map. Choose which layers to select from by checking and unchecking boxes next to the layer names.



Share a link through email or social media, or by copying a link or access code to embed the app in a website.

Superfund Redevelopment Mapper – User Guide

F. EPA Superfund Redevelopment Program Contact Information

Contact information for EPA Headquarters and Regional Superfund Redevelopment Coordinators: www.epa.gov/superfund-redevelopment/forms/contact-us-about-superfund-redevelopment-program

EPA Superfund Redevelopment Program website: <https://www.epa.gov/superfund-redevelopment>

G. Providing Map Feedback

To provide feedback on the map or for any technical questions, please contact srptools@epa.gov.

H. Change Log

September 2022

- Version 2.0 update, changes include:
 - o Layer grouping.
 - o Data source updates for demographics layers.
 - o RE-Powering America's Land Initiative layer updates.
 - o Replacement of deprecated USA Counties layer.
 - o Adding of EPA Regions layer.
 - o Adding of coordinates to pop-up boxes.

September 2021

- Initial app publication.

I. GIS Data Disclaimer

EPA provides this geospatial information as a public service. EPA does not vouch for the accuracy, completeness or currency of the data. Data provided by external parties are not independently verified by EPA. These data are made available to the public strictly for informational purposes. Data do not represent EPA's official position, viewpoint or opinion, express or implied. This information is not intended for use in establishing liability or calculating cost recovery statutes of limitations and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the U.S. or third parties. EPA reserves the right to change these data at any time without public notice.