

# PFAS Analytic Tools User Guide

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## Introduction to the PFAS Analytic Tools

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The PFAS Analytic Tools make nationwide data on PFAS testing, reporting, and occurrences accessible to the public. Maintained by EPA, this resource integrates multiple sources of data and creates summaries and visualizations.

### The PFAS Analytic Tools can be used to explore information on:

- Quantities and locations of PFAS production and imports
- Environmental releases and waste management
- Detections of PFAS in different environmental media (air, water, land, tissue)

### Basic functions within the PFAS Analytic Tools include:

- Interactive maps
- Interactive charts and data tables
- Filters to create targeted searches
- Downloadable data and chart images

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## Data Sources Included in the PFAS Analytic Tools

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The following data sources are labeled as separate tabs at the top of the page. The first tab is the Integrated Map which includes all data sources overlaid on the map. The other tabs display a single data source. Refer to the “Metadata for Data Sources within PFAS Analytic Tools” document (available at <https://echo.epa.gov/trends/pfas-tools#data>) for further information on each data source and its variables.

- **Drinking Water (UCMR):** PFAS monitoring data submitted by public water systems for Unregulated Contaminant Monitoring Rules.
- **Drinking Water (State):** PFAS drinking water monitoring data submitted by various state initiatives.

- **Production:** Production and import data submitted by manufacturing facilities, including importers, in compliance with the Chemical Data Reporting (CDR) Rule issued under the Toxic Substances Control Act (TSCA).
- **Environmental Media:** Water, tissue, soil, and sediment sampling data from multiple data sources and collected in the Water Quality Portal.
- **Discharge Monitoring:** Contaminant concentration, flow, and other monitoring parameters submitted by industrial facilities and wastewater treatment facilities under the National Pollutant Discharge Elimination System (NPDES) program.
- **Superfund Sites with PFAS Detections:** Sites and facilities where PFAS has been detected and where one or more EPA programs is involved with site investigation, remediation, or oversight.
- **Federal Sites:** Facilities identified by at least one of several federal agencies to address potential contamination or known detections of PFAS.
- **Industry Sectors:** Facilities that belong to industrial sectors that may handle, use, or release PFAS chemicals and are subject to Clean Air Act, Clean Water Act or Resource Conservation and Recovery Act regulations.
- **Transfers:** Shipments of hazardous waste in the U.S. that likely contain PFAS.
- **Spills:** Incidents of potential PFAS spills and releases that were reported to the National Response Center (NRC), available from 1990 to the most recent complete calendar year.
- **Toxic Releases:** Data reported on PFAS releases and waste management to the Toxics Release Inventory (TRI) by facilities that meet the reporting requirements.
- **Greenhouse Gases:** Greenhouse Gas (GHG) emissions data reported under the Greenhouse Gas Reporting Program (GHGRP) by facilities that emit 25,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year of chemicals identified as PFAS.

The locational filters can be edited or reset from any of the data source tabs. When switching between data tabs, the user may notice that locational filters (e.g., selecting a certain state or region) will apply to each data tab opened. Other filters will not transfer between tabs in this way.

## Quick Start

The screenshot shows the EPA UCMR PFAS Public Water Supply Monitoring Data tool interface. The top navigation bar includes links for Integrated Map, Drinking Water (UCMR), Drinking Water (State), Production, Environmental Media, Discharge Monitoring, and Superfund Sites. The main content area displays the following statistics:

- Total Public Water Systems (PWS): 4,920
- Total Samples: 221,831
- Total Reportable Detections: 1,152
- PWS in Selection: 4,920
- Samples in Selection: 51,100

The interface includes a map of the United States with a legend, a bar chart titled "Number of Public Water Systems by State/Territory/Tribe", and a data table at the bottom. Callouts point to various features:




- View different data tabs
- Show/hide filters
- View FAQs/User Guide
- View disclaimer
- Selected filters appear here
- Data summary
- View information about the data layer
- Map legend
- View different charts
- Filters
- Data table

PWS ID	PWS Name	Size	Facility ID	Facility Name	Facility Water Type
Totals					
010106001	Mashantucket Pequot Water System	Large	00006	MPTN WTP	GU-Groundwater Under Influence of Surf Water
010106001	Mashantucket Pequot Water System	Large	00006	MPTN WTP	GU-Groundwater Under Influence of Surf Water


### To get started using the tool:


1. Navigate to a **data tab** of interest
2. Click on different **filters** to select options and click  to apply the selection
3. Look at the **data summary** statistics for the selected data
4. Explore using the **map** and **map legend**
5. Click the drop-down menu to view the different **charts** available
6. Explore or export the **data table**

### Key actions:


	Export image of map		View in full screen		Download as Excel file
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

## Using Filters

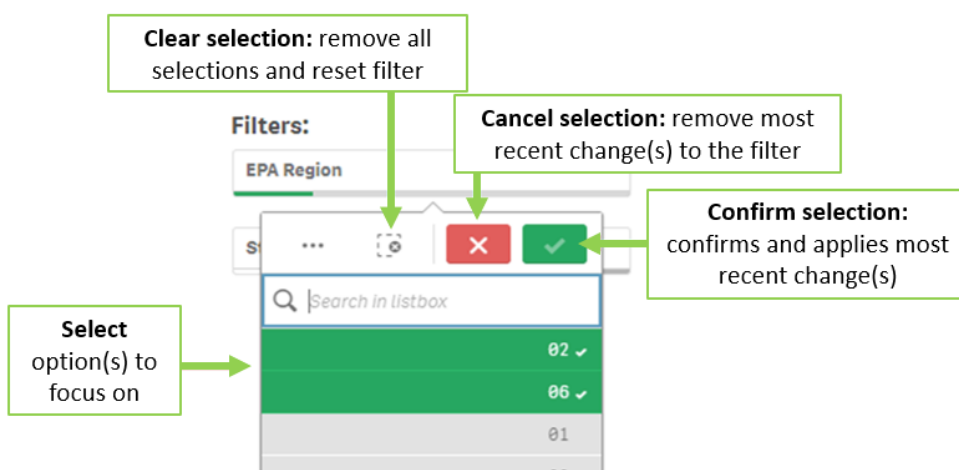
 Filters allow the user to focus their search on certain location(s), PFAS chemical(s), and/or other sampling information. The filter selections can be set in any of the data layer tabs.

**To set a filter:** Choose the filter category (e.g., “EPA Region”, “PFAS Chemical Name”) and select the options in the Filter Pane to include in the filter. Click  “Confirm Selection” to apply the chosen filters to the data.

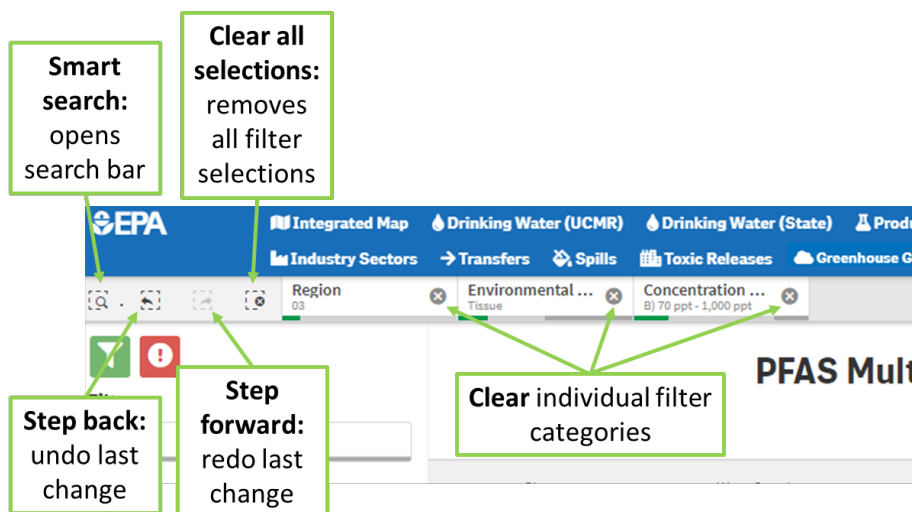
Users may select multiple options under multiple filter categories.

**To cancel unconfirmed changes in the current filter:** Click  “Cancel Selection” and the filter category will revert to the previously confirmed filter settings.

**To clear the filter:** Choose “Clear Selection”  and then click “Confirm Selection”  and all filter selections in the category will be removed.



Additionally, filters can be removed in the selections bar at the top of the page.

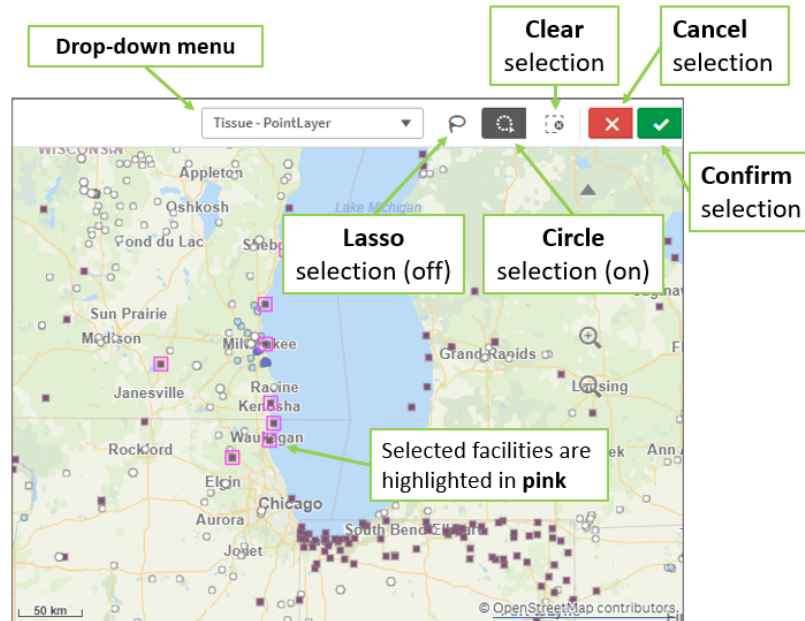


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## Additional Functions


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**Map selection tools:** The **lasso** and **circle** selection tools on the map can select subsets of the currently displayed data.





- Clicking on the map reveals the lasso and circle selection tools (see above).
- Click the lasso or the circle tool to use the tool to outline an area of interest on the map.
- Selected icons will be shown highlighted by a pink box.
- For maps showing more than one type of icon within the lassoed or circled area, use the drop-down menu above the map to switch which icon type you are selecting.

**Charts:** Each data source tab has its own set of charts available for users to explore.

- The most common type of chart presented is a bar graph. Some data tabs contain other types of charts as well (e.g., line charts, treemap charts).
- Users can filter data by selecting an element within a chart and then clicking  to apply the filter.

**Data table tools:** The data table on the bottom of the screen can be used to sort, filter, and select data entries.




- Any column can be sorted by value (descending or ascending order) by clicking on its header.

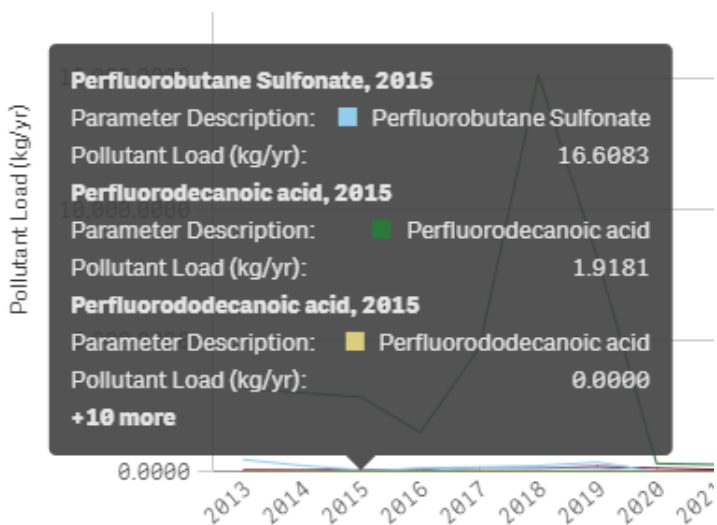
- Searching and selecting can be done within any of the columns of the table by clicking on the magnifying glass icon: 
- Clicking on one data cell or clicking and dragging to select multiple cells in a column will select only those data entries. The selection will be immediately shown on the map and in the data summary statistics.
- Users can click the Download button  to export the current data records in the table to Excel.

## Troubleshooting

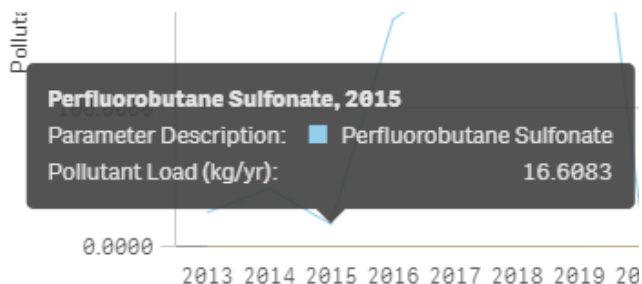
### Display and Text Wrapping

It may be difficult to view all parts and displays of the tool depending on the user's computer screen resolution (e.g., when viewing the tool on a smaller laptop screen) or other computer settings. Users should use a larger desktop computer screen when possible to optimize useability. To reduce wrapping and increase the viewable area of the PFAS Analytic Tools, users can try any/all of the following:


- Change their browser's zoom level. For example, if using Chrome, select the three-dot icon  at the top right of the browser window and then click the minus sign next to "zoom out." This change should fit more content into your display.
- Expand the browser window to full screen and expand the section of interest – map, chart, or data table – to full screen using the Full screen button .
- Use the show/hide Filters button  to toggle the Filter Pane display. Hiding the Filter Pane will widen the map, chart, and data table area.
- If the pop-up tooltip contains more text than can be displayed, for example where it indicates "+10 more" at the bottom of the pop-up:



users can filter to individual selections of interest (e.g., selection of a specific group of analytes or a single analyte of interest) to reduce crowding in the tooltip pop-up.



### **Application Time Out**

When launching the tool or when changing filters, it may take more than 30 seconds for the tool to render the map and charts, especially if there are many other users accessing the tool. Be patient – in most instances the tool is just working to retrieve the selected data and render all the visualizations. If the change takes longer than a one minute to display, the user may need to refresh their browser window and try again. To refresh your browser, hold down the [Ctrl] button on the keyboard and select the refresh icon  at the top of the browser window with your mouse.

In addition, the tool session will time out after 30 minutes of inactivity. If this occurs, the user will need to refresh the browser or reopen the tool to proceed.

### **Supported Internet Browsers**

Users need to be connected to the internet in order to access and use the tool. The tool is supported by all major web browsers (Chrome, Edge, Safari, etc.). If you still have problems accessing the tool after refreshing the browser and have other browsers installed on your computer, try viewing the tool in a different internet browser.