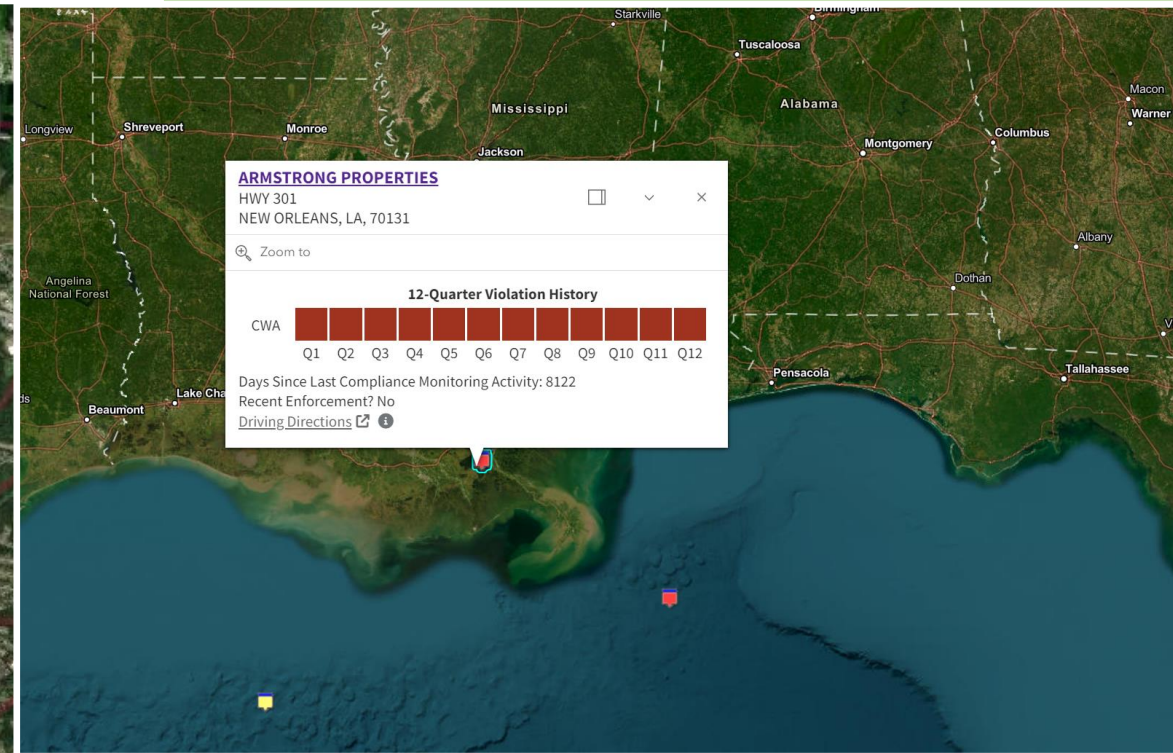
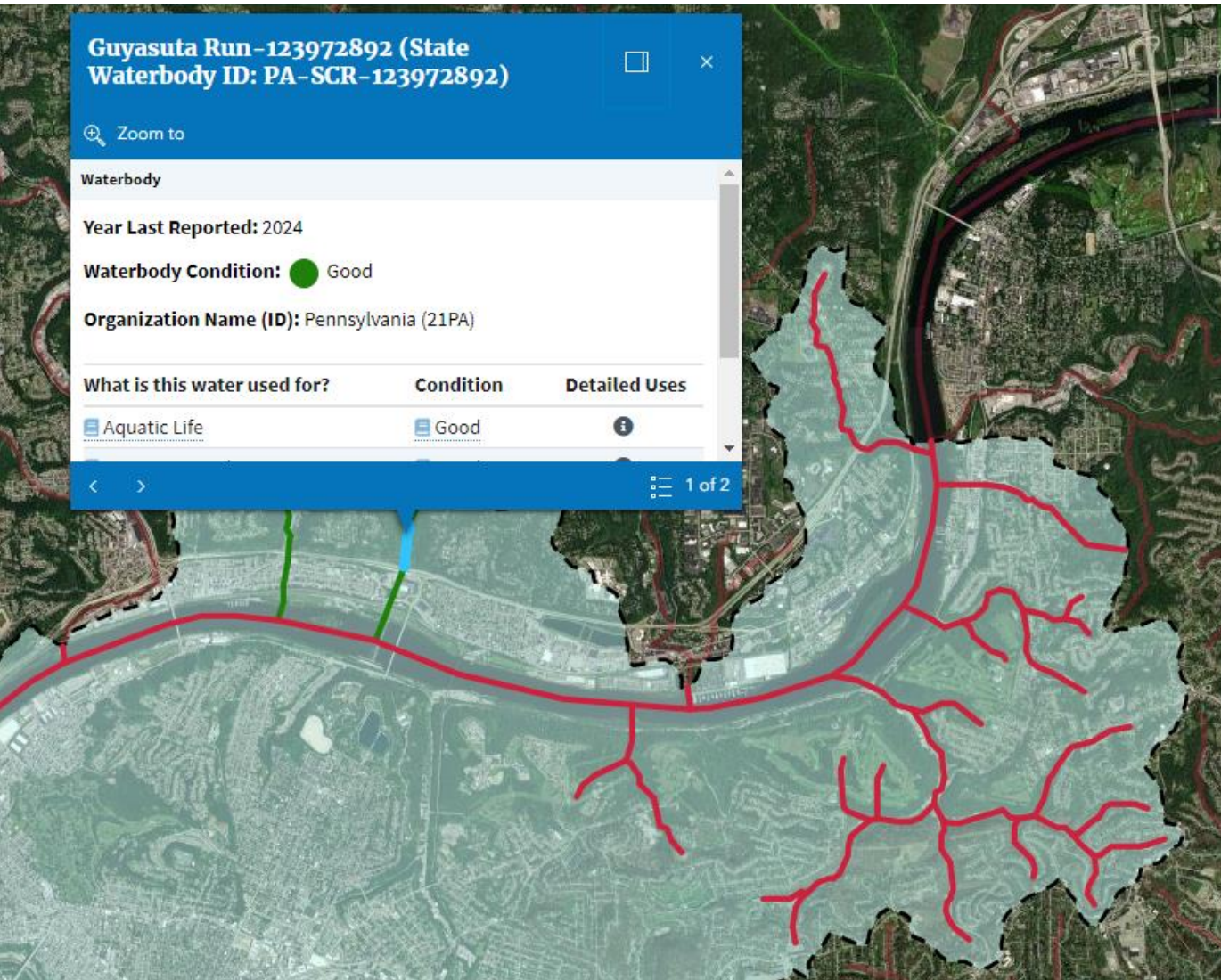


Cross Program Coordination, OW & OECA



Kiki Schneider, US EPA Office of Compliance, OECA

How's My Waterway and ECHO

What is How's My Waterway?

- A map-centric tool that allows anyone to learn about their water quality
- Gives an overall picture of water quality on 3 levels: National, State & Tribal and Community
- Contains water data from over 12 different databases at EPA and other government agencies pulled in through APIs.
- Inspires others to take action to restore and protect their waterways
- Communicates progress the states, territories, tribes and EPA are making towards restoring or protecting water quality

What is ECHO?

Enforcement and Compliance History

<https://echo.epa.gov>

ECHO is EPA's public website that provides compliance information about regulated facilities including:

- How they are regulated
- When they were inspected
- Whether violations of environmental regulations were found
- Whether enforcement action was taken

The site also provides dashboards with views of overall enforcement and compliance status trends and some bulk datasets for download. The ECHO website integrates data from major EPA information systems for public use.



How's My Waterway and ECHO

Customer and Stakeholders

ECHO is used by:

- Citizen groups
- Non-governmental organizations
- Reporters
- Regulated entities
- Academic researchers
- EPA and state/local/tribal environmental agencies
- Other federal government agencies

And more!

How's My Waterway is used by: Everyone, including all of the above.

ECHO Content

Compliance history for more than 1,000,000 EPA-regulated facilities

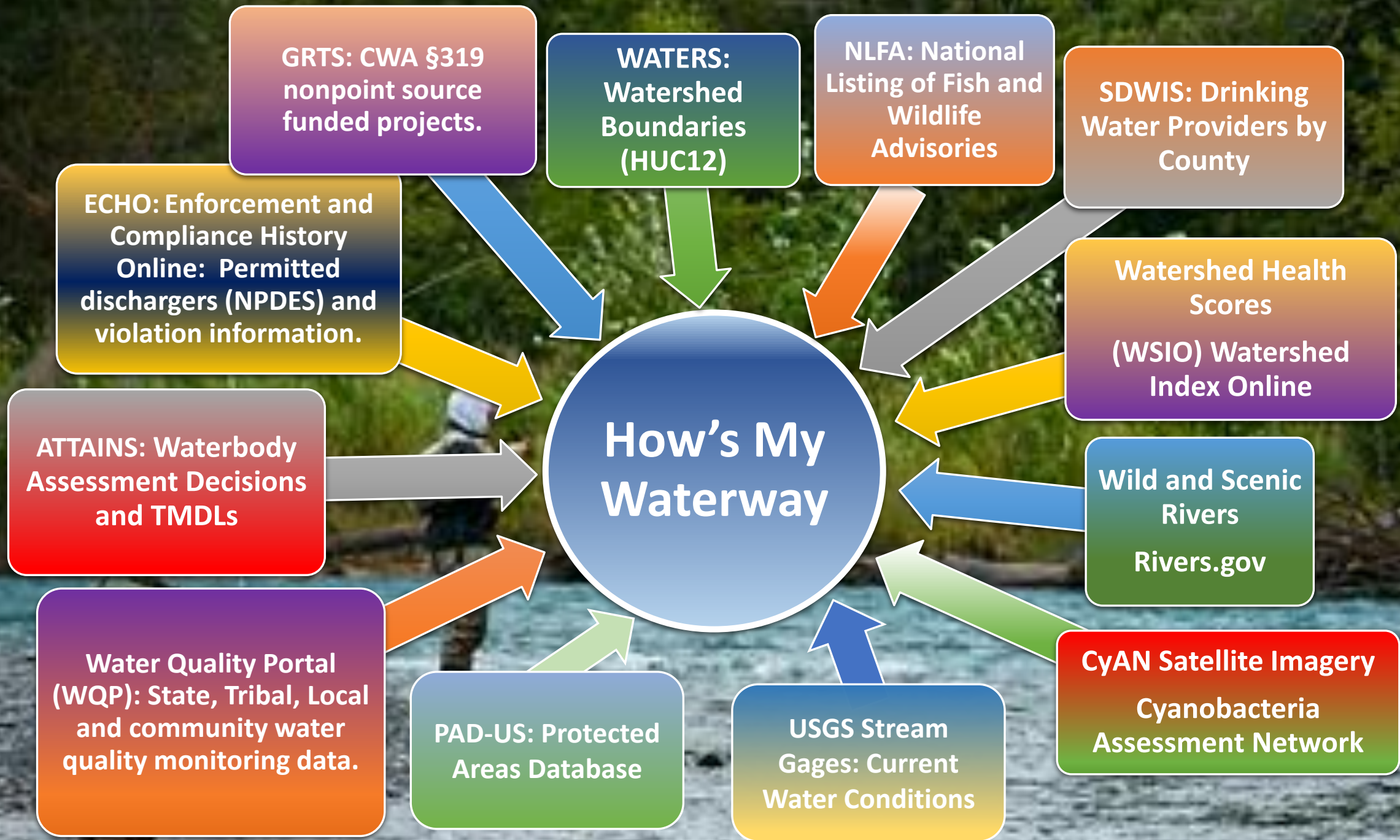
Three-year compliance status and five-year inspection and enforcement history

EPA and state, local, and tribal environmental agency data for:

- Clean Air Act stationary sources
- Clean Water Act permitted dischargers
- Resource Conservation and Recovery Act hazardous waste handlers
- Safe Drinking Water Act public water systems

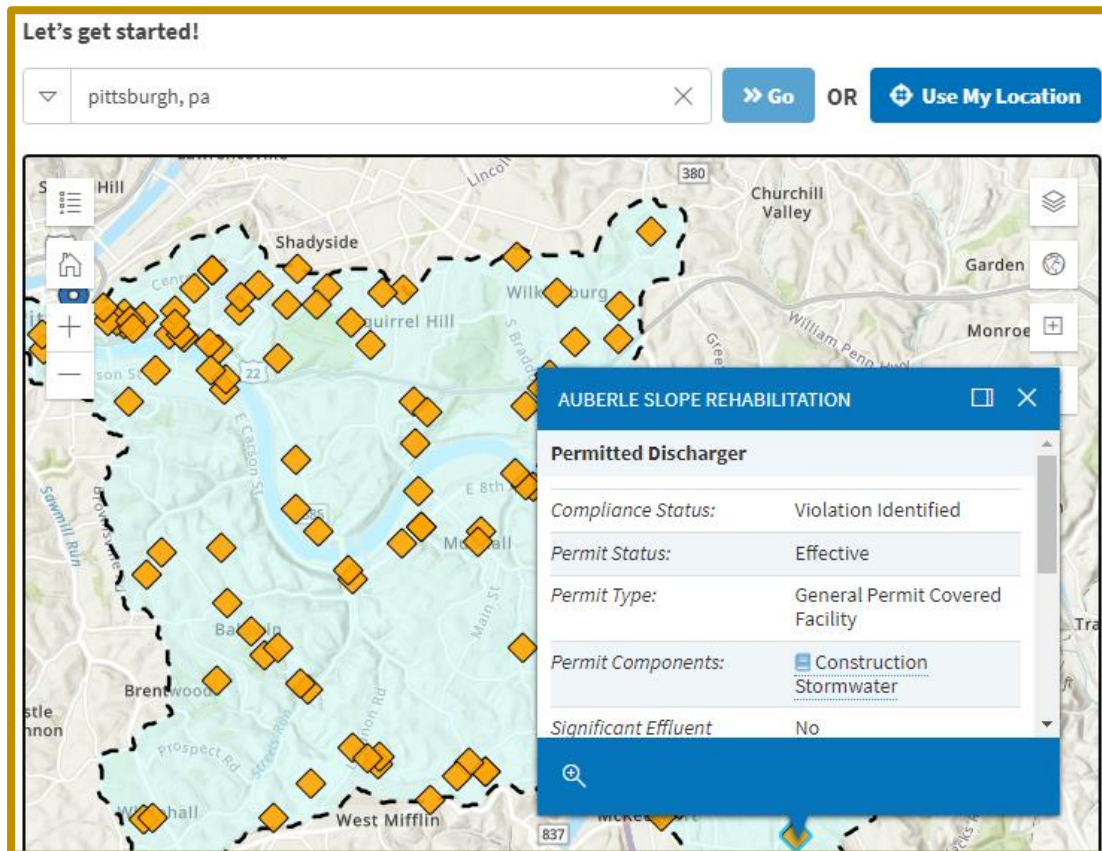
EPA data for other statutes like Emergency Planning and Community Right-to-Know Act (EPCRA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and Toxic Substances Control Act (TSCA):

Inspections and Enforcement Action Details



Permitted Dischargers

- Permitted dischargers are viewable in a list on the Community Overview Page.
- Ability to filter the permitted dischargers by permit type (component).



Waterbodies	Monitoring Locations	Permitted Dischargers
◆ Permitted Dischargers		
<input checked="" type="checkbox"/> All Permit Components		Count
<input checked="" type="checkbox"/> CSO		1
<input checked="" type="checkbox"/> Construction Stormwater		78
<input checked="" type="checkbox"/> Industrial Stormwater		5
<input checked="" type="checkbox"/> POTW		2
132 of 132 permitted dischargers in the <i>Streets Run-Monongahela River</i> watershed.		
KEYWELL METALS NPDES ID: PAG036124 Compliance Status: Significant/Category I Noncompliance Permit Components: Not Specified		
1050 TALBOT AVENUE NPDES ID: PAC020372 Compliance Status: Violation Identified Permit Components: Construction Stormwater		
AUBERLE SLOPE REHABILITATION NPDES ID: PAC020327 Compliance Status: Violation Identified Permit Components: Construction Stormwater		

General Permits from ECHO in How's My Waterway

Permitted Dischargers

Continued....

- Ability to sort the list by discharger name, NPDES ID, Compliance Status and Permit Components



Let's get started!

pittsburgh, pa OR

Permitted Discharger	
Compliance Status:	Violation Identified
Permit Status:	Effective
Permit Type:	General Permit Covered Facility
Permit Components:	Construction Stormwater
Significant Effluent	No

91 of 91 permitted dischargers in the Pogues Run-White River watershed.

Sort By: Discharger Name

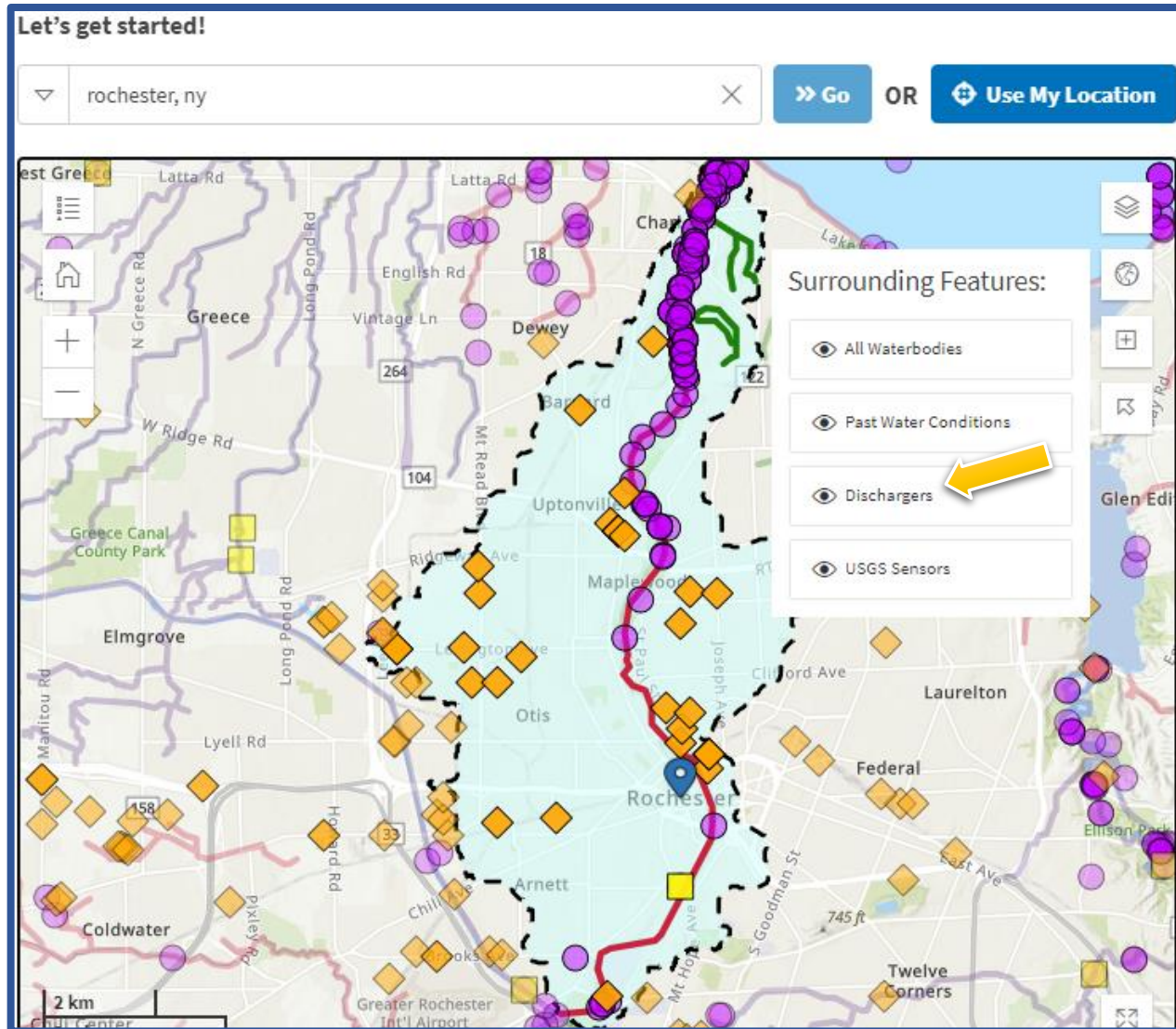
- Discharger Name
- NPDES ID
- Compliance Status
- Permit Components

132 of 132 permitted dischargers in the Streets Run-Monongahela River watershed.

- KEYWELL METALS**
NPDES ID: PAG036124
Compliance Status: Significant/Category I Noncompliance
Permit Components: Not Specified
- 1050 TALBOT AVENUE**
NPDES ID: PAC020372
Compliance Status: Violation Identified
Permit Components: Construction Stormwater
- AUBERLE SLOPE REHABILITATION**
NPDES ID: PAC020327
Compliance Status: Violation Identified
Permit Components: Construction Stormwater

Viewing Data on the Map Extent

Surrounding Features Widget



The surrounding features widget, located on the map provides the ability to turn on several layers outside of your selected watershed and view on the map extent.

This includes:

- USGS Stream Gages
- Permitted Dischargers
- Assessed Waterbodies
- Monitoring Locations from the Water Quality Portal

Exporting Data with the Portable Map Widget

Portable Map Widget

The screenshot displays the Portable Map Widget interface. On the left, a 'Layers' panel lists various data layers including 'Search Location', 'Dischargers', 'USGS Sensors', 'Past Water Conditions', 'Waterbodies', 'Boundaries', and 'All Waterbodies'. The main map area shows a geographic view of Potomac, DC, with red lines representing waterbodies and purple circles representing dischargers. A pop-up window titled 'All Waterbodies Areas: POTOMAC DC (ID: DCPMS00E_02)' is open, displaying the following metadata:

Organization Name	District of Columbia
Reporting Cycle	2020
Assessment Unit Identifier	DCPMS00E_02
Assessment JoinKey	{F986C4B4-1F65-0D95-E053-BCE44386BA2A}
Assessment Unit Name	POTOMAC DC
Waterbody Report Link	View


At the bottom right, the 'Add & Save Data' menu is open, showing a 'Save' button highlighted with a red circle. Below the menu, a 'Filter' panel lists several layers with their respective visibility and styling options:

- All Waterbodies (checked)
- Boundaries (checked)
- Congressional Districts (unchecked)
- County (unchecked)
- CyAN Waterbodies (checked)
- Demographic Indicators (unchecked)
- Dischargers (checked)

Save and export your map:

The portal map widget provides the ability to export selected layers from How's My Waterway to your ArcGIS Online account, where you can create your own web map and add your own data.

ATTAINS in ECHO

Zoom To: 

colorado springs, co



Resync map and table

D & J PALLET INC

3675 S HWY 85/87
COLORADO SPRINGS, CO, 80906

 Zoom to

12-Quarter Violation History

CWA



Days Since Last Compliance Monitoring Activity: --

Recent Enforcement? Yes

[Driving Directions](#)  

Current Zoom: 56%

▶ EJScreen Maps

▶ Air Maps


▼ Water Maps

▼ ATTAINS Assessment (EPA) (Includes Impairment)

- ATTAINS Assessment Points (EPA)
- ATTAINS Assessment Lines (EPA)
- ATTAINS Assessment Areas (EPA)
- ATTAINS Assessment Unit Catchments (EPA)

▼ ATTAINS Total Maximum Daily Load (EPA)

- ATTAINS Total Maximum Daily Load Points (EPA)
- ATTAINS Total Maximum Daily Load Lines (EPA)
- ATTAINS Total Maximum Daily Load Areas (EPA)
- ATTAINS Total Maximum Daily Load Catchments (EPA)

[Private Domestic Wells](#) 

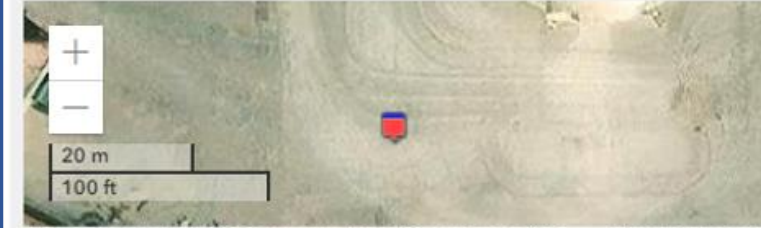
▶ Places

▶ Boundaries

▶ Endangered Species Act Critical Habitat

Facility Summary

D & J PALLET INC
3675 S HWY 85/87



Maxar, Microsoft | Esri Community Maps Contributors, © O... Powered by Esri

CAA

CWA

RCRA

SDWA

Failure to Report DMR - Not Received

Days Since Last Compliance Monitoring Activity: --

Date of Last Formal Enforcement Action: 08/28/2023

Last Penalty Amount: \$6,500

[More Facility Details](#)

ATTAINS in ECHO

The screenshot displays the ECHO web application interface. At the top, there is a search bar containing "colorado springs, co" and a "Zoom To:" label. Below the search bar, the map shows a network of streams in green, red, and blue, with labels for "Colorado Springs", "Stratmoor", "Fountain", and "El Paso". A "Resync map and table" button is visible in the top right corner of the map area. The bottom of the interface features a dark blue navigation bar with buttons for "Customize Columns", "Download Data", and "Quick CSV Download". On the right side of this bar are icons for "Source Data", "Results Guide", and "Reports Legend".

Map Legend

EJScreen Add EJ Summary Map Supplemental Indexes (US) ⓘ

Zoom To: colorado springs, co

Basemap Options

Resync map and table

Customize Columns Download Data Quick CSV Download














Source Data Results Guide Reports Legend

Esri, TomTom, Garmin, SafeGraph, MET/NASA, USGS, EPA, NPS, USDA, USFWS Powered by Esri

ATTAINS in ECHO – Detailed Facility Report

Link to Detailed Facility Report in ECHO:

- <https://echo.epa.gov/detailed-facility-report?fid=110000796167>

Environmental Conditions						
Watersheds 						
12-Digit WBD HUC (RAD) 	WBD Subwatershed Name (RAD) 	State Water Body Name (ICIS) 	Beach Closures Within Last Year 	Beach Closures Within Last Two Years 		
020600031203	Northwest Harbor-Patapsco River	MID.BR.PATAPSCO, PATAPSCO RIVER, SYSTEM WIDE RECEIVING STREAMS	No	No		
Assessed Waters From Latest State Submission (ATTAINS)						
State 	Report Cycle 	Assessment Unit ID 	Assessment Unit Name 	Water Condition 	Cause Groups Impaired 	Drinking Water Use 
MD	2022	MD-PATMH-MiddleBranch_NorthwestHarbor	All tidal waters upstream of the Harbor Tunnel	Impaired - 303(d) Listed - With Restoration Plan	PATHOGENS	--
MD	2022	MD-PATMH-SWSAV	PATMH - Patapsco River Mesohaline	Impaired - With Restoration Plan	TURBIDITY	--
MD	2022	MD-PATMH-Middle-NorthwestHarbor-littoral	Part of Middle Branch and Northwest Harbor	Impaired - With Restoration Plan	TRASH	--



ECHO Data Visualization Gallery

The screenshot displays the ECHO (Enforcement and Compliance History Online) website. The top left features the ECHO logo, and the top right has links for 'Login' and 'Contact Us'. A sidebar on the left contains several navigation buttons: 'Quick Search', 'Search Options', 'Analyze Trends' (highlighted with a red circle), 'Find EPA Cases', 'Data Services', 'Help', and 'News'. The main content area is titled 'Quick Search' and includes a search interface with two radio buttons for 'Location' and 'Facility Name/ID'. Below these is a text input field with the placeholder 'Enter city, state, and/or zip code' and a 'Search' button. A link for 'More Search Options' is positioned below the search field. A descriptive paragraph explains the website's purpose, followed by a list of capabilities and three icons with links: 'Read the Quick Start Guide', 'Watch a Video Tutorial', and 'Explore the Tool Guide'.

ECHO Enforcement and Compliance History Online

[Login](#) [Contact Us](#)

Quick Search

Search Options

Analyze Trends

Find EPA Cases

Data Services

Help

News

Quick Search

Search By

Location Facility Name/ID

Enter city, state, and/or zip code **Search**


[More Search Options](#)

Use EPA's Enforcement and Compliance History Online website to search for facilities in your community to assess their compliance with environmental regulations. You can use ECHO to:

- Search for Facilities
- Investigate Pollution Sources
- Search for EPA Enforcement Cases
- Examine and Create Enforcement-Related Maps
- Analyze Trends in Compliance & Enforcement Data

[Read the Quick Start Guide](#) [Watch a Video Tutorial](#) [Explore the Tool Guide](#)

DataViz Gallery



Enforcement and Compliance History Online

[Login](#) [Contact Us](#)

- Quick Search
- Search Options
- Analyze Trends**
- Find EPA Cases
- Data Services
- Help
- News

Analyze Trends

ECHO provides many features to a variety to explore compliance and enforcement data. Use the links below to display trends through dashboards, maps, and charts.

Track Performance

- EPA/State Dashboards
 - Air [Dashboard](#) / [Comparative Map](#)
 - Wastewater [Dashboard](#) / [Comparative Map](#)
 - Hazardous Waste [Dashboard](#) / [Comparative Map](#)
 - [Drinking Water Dashboard](#)
 - [Pesticides Dashboard](#)
- [NPDES DMR Non-Receipt Status Search](#)
- [State Review Framework \(SRF\)](#)
- [SRF Recommendations](#)
- [Archived Tools](#)

Data Visualization

- [Data Visualization Gallery](#) ★
- [PFAS Analytic Tools](#)
- [NPDES eRule Dashboards](#)
- [Benzene Fenceline Monitoring](#)

Pollution Analysis

- [Water Pollutant Loading Tool](#) ★
- [ECHO Clean Air Tracking Tool \(ECATT\)](#) ★

★ Popular Feature

Enforcement Tools and Dashboards

★ Featured ECHO Gov EPA



RCRA Compliance Data Quality Dashboard

The RCRA Compliance Data Quality Dashboard displays RCRA facilities in significant noncompliance or noncompliance. It is designed to flag possible QA ... [Read more detail](#)

Provide Feedback

Media: Hazardous Waste

Owner Affiliation: Headquarters

Keywords: RCRA, Hazardous Waste, CM&E, C...



Coal Combustion Residual Site Mapper

The Coal Combustion Residual Site Mapper is a web mapping application on EPA's Geoplatform built to support compliance investigations. The application... [Read more detail](#)

Provide Feedback

Media: Cross-Media

Owner Affiliation: Headquarters

Keywords: CCR, Coal ash



Benzene Fenceline Monitoring Dashboard

In 2015, the EPA issued regulations requiring refineries to measure benzene concentrations in the ambient air through a network of monitors installed ... [Read more detail](#)

Provide Feedback

Media: Air

Owner Affiliation: Headquarters

Keywords: CAA, benzene, monitoring, fenc...



NPDES eRule Readiness and Reporting Dashboard

This dashboard shows the progress that states and permittees are making in the adoption of electronic reporting and the subsequent sharing of wastewat... [Read more detail](#)

Provide Feedback

Media: Water

Owner Affiliation: Headquarters

Keywords: ICIS-NPDES, NPDES, eRule, eRep...



PFAS Analytic Tools and Data Navigation Center (Version 3)

The PFAS Data Navigation Center is a directory of data resources related to per- and polyfluoroalkyl substances (PFAS) occurrence and potential source... [Read more detail](#)

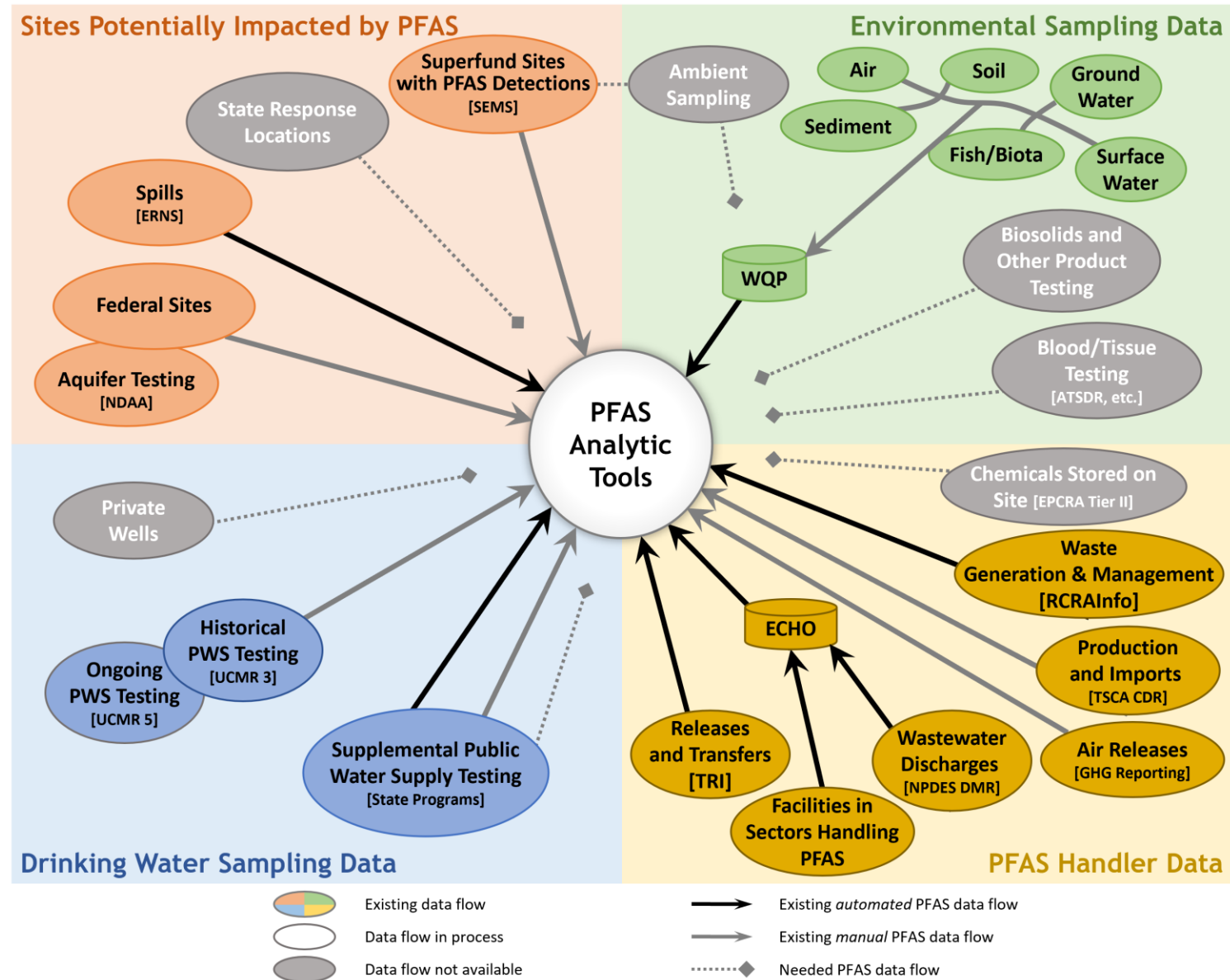
Provide Feedback

Media: Cross-Media

Owner Affiliation: Headquarters

Keywords: per- and polyfluoroalkyl subst...

PFAS Analytical Tools



Goals of the PFAS Analytic Tools

- Develop an integrated resource to understand where PFAS detections are being identified across a wide set of databases.
- Compile as much nationally available data on PFAS as possible into an easy-to-use, automatically refreshed tool.
- Develop standard methods to extract PFAS chemical data from national data systems and develop best practices for regulatory partners that would like to contribute information.
- Support EPA investigations into PFAS contamination and further the collaboration with federal/state/local/tribal partners as noted in the [EPA PFAS Strategic Roadmap \(Link to 2022 Progress Report\)](#) – see p.8).

PFAS Analytical Tools Integrated Dashboard

State IN

PFAS Analytic Tools Home

Scope of Drinking Water Samples for Public Water Systems (PWSs):

Most Recent Sample at PWS
All Samples at PWS

Filters:
EPA Region
State Territory or Tribe

Include Non-Detects:
No

PFAS Analytic Tools

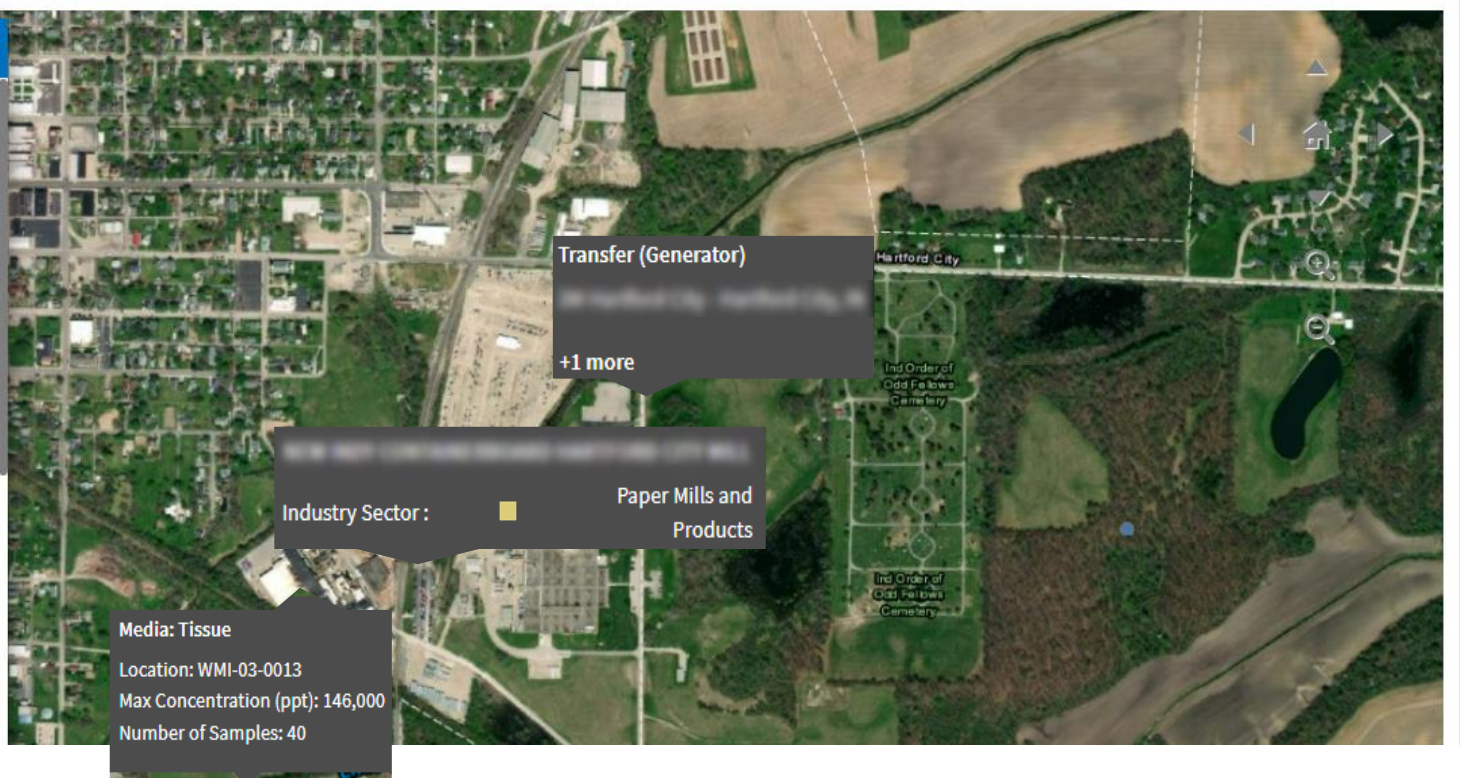
More Information

Legend and Layers

Map Legend and Layers

- Satellite Layer
 - BIA Tribal Boundaries & Areas
- Data Available from Water Quality Portal:
- | | Above Median | Below Median | Non-Detect |
|--|--------------|--------------|------------|
| <input checked="" type="checkbox"/> Water | ● | ● | ○ |
| <input checked="" type="checkbox"/> Tissue | ■ | ■ | □ |
| <input checked="" type="checkbox"/> Air | ▲ | ▲ | △ |
| <input checked="" type="checkbox"/> Soil | ◆ | ◆ | ◇ |
| <input checked="" type="checkbox"/> Sediment | ● | ● | ○ |
| <input checked="" type="checkbox"/> Other | ■ | ■ | □ |

- Drinking Water - UCMR and State Data:
- UCMR Drinking Water Detects
 - Detection above the Health Advisory Level
 - Detection above the Minimum Reporting Level
 - No Detections above the Minimum Reporting Level

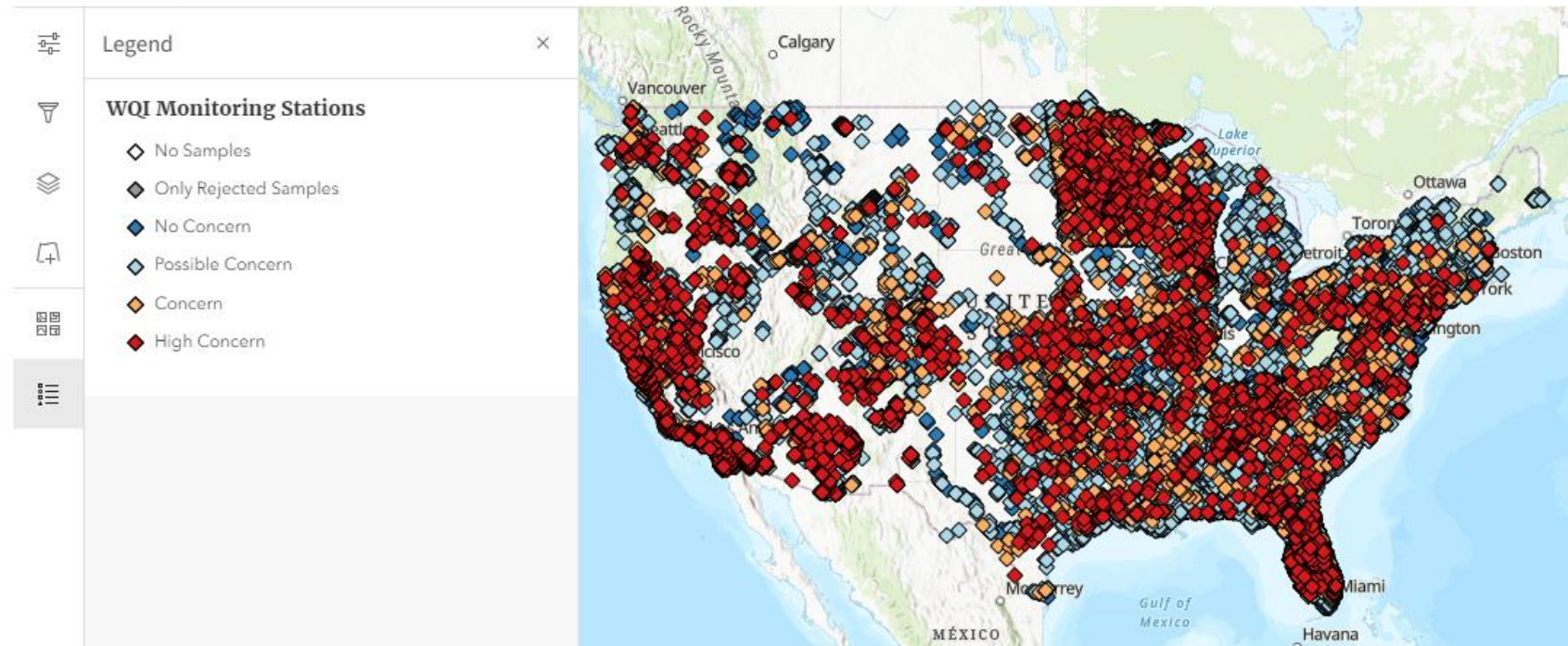


Water Quality Indicators Tool



Water Quality Indicators Key Features and Functionality

Water Quality Indicators Map

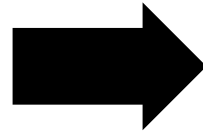


Water Quality Indicators Tool

- Visualizes surface water monitoring data with facility and land cover data.
- The Water Quality Indicators (WQI) is both an algorithm that produces a dataset and a GIS interface to visualize the dataset.

Gather Publicly Available Monitoring Data

- US Water Quality Portal Last 10 years of nutrient and pathogen data



WQI Algorithm Normalizes Monitoring Data to Create WQI Dataset

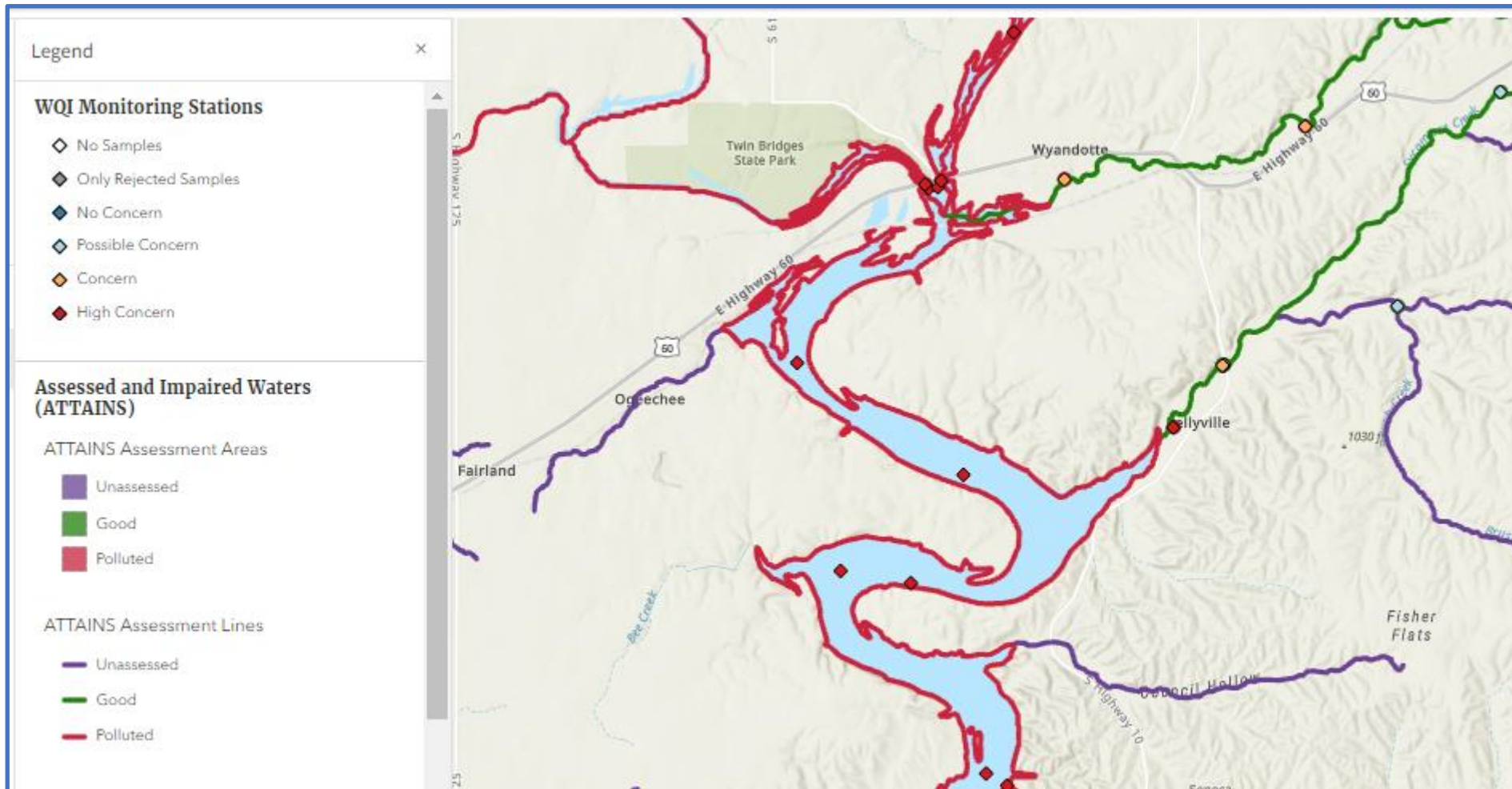
- QA/QC data
- Combine subspecies of nitrogen
- Calculate representative statistics for each monitoring station



Visualize WQI Dataset in a GIS Interface

- Compare to water quality criteria
- Add data layers for additional context (e.g. ECHO Facility Data, Impaired Waters Data, EJScreen, and USGS Land Use Data)
- Further process data to find stream segments where water quality is changing.

Water Quality Indicators Tool

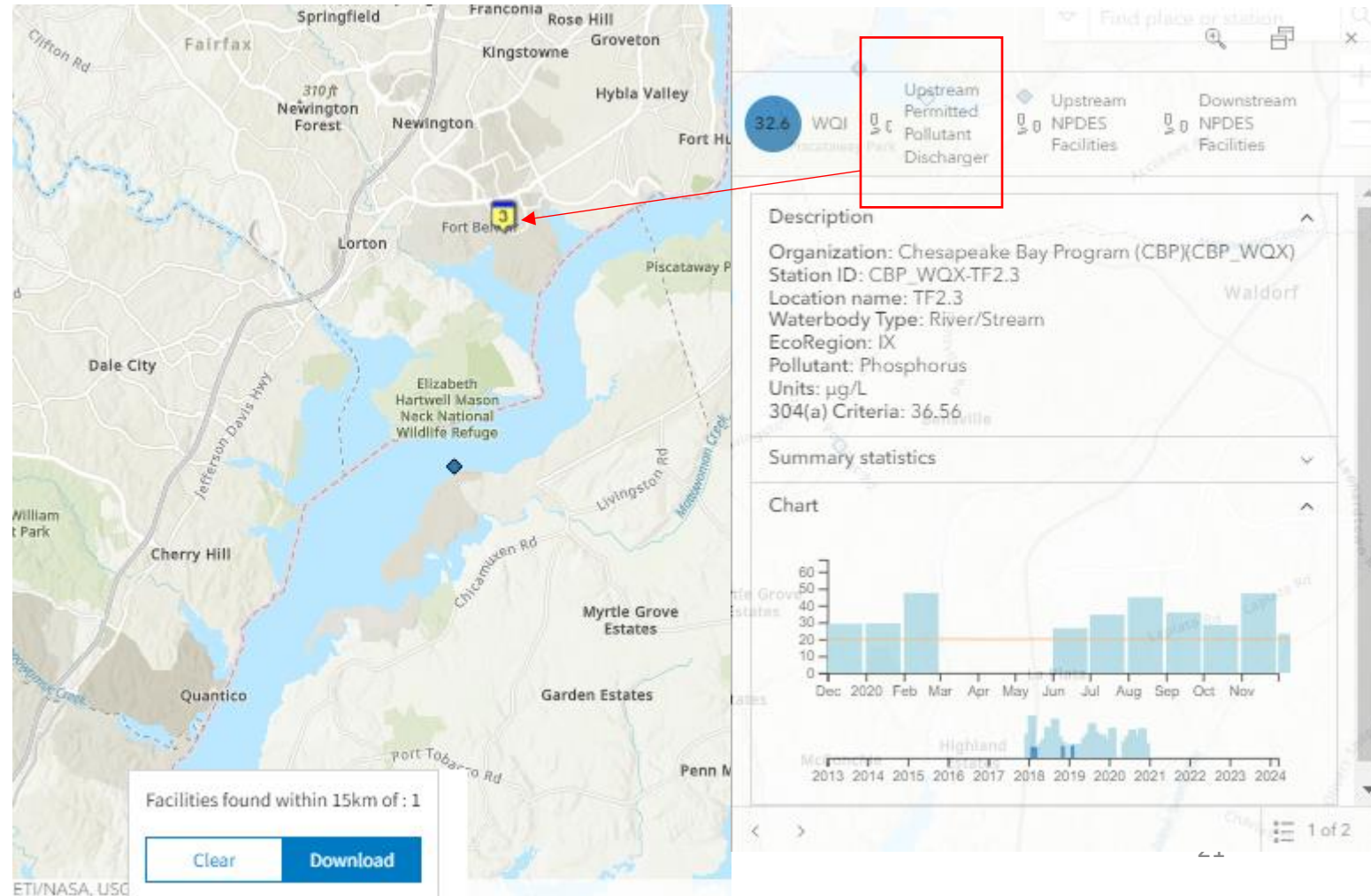


- State water standards and assessment frequency vary
- State water assessments are a snapshot in time
- Most water bodies not assessed
- Impairment data doesn't qualify severity

Water Quality Indicators Tool

Key Feature: Find Facilities Upstream or Downstream a Monitoring Location

- Find Permitted Upstream Facilities
 - Find all permitted facilities upstream.
 - Limit by only those facilities permitted to discharge the displayed pollutant (e.g. only view dischargers permitted for a nitrogen parameter when viewing total nitrogen data)



ECHO.gov and ECHO Notify

ECHO.gov



Employees and contractors of U.S. state, local, tribal, and Federal government agencies can have access to government-only content in ECHO.

To apply:

<https://echo.epa.gov/help/login-and-access#echogov>

ECHO Notify



ECHO Notify provides weekly email notifications of changes to enforcement and compliance data in ECHO.

Notifications are tailored to the geographic locations, facility IDs, and notification options that you select.

More information:

<https://echo.epa.gov/tools/echo-notify>

Future ECHO Integrations

- Methane Data from New Super Emitter Program
- HABs Data
- Climate/Weather Data
- **Contact:** Kiki Schneider, schneider.kiki@epa.gov