

How to Answer Common Questions with Available Data Tools

June 22, 2023

Shepherdstown, WV

Available Data Tools

	Easy to Use	Need ATTAINS Login	Available Snapshots	Refresh Frequency	Available Scales
How's My Waterway	Yes	No	Org Final and Later	Approximately Monthly with the Geospatial Service	HUC12, State, and Tribe
ATTAINS Reports	Yes	Yes	All (If State/Tribal User) Org Public Comment and Later (If EPA User)	Instantaneous (If State/Tribal User) Instantaneous Upon Promotion (If EPA User)	State and Tribe
ATTAINS Services	Depends on Comfort with REST Services	No	Org Public Comment and Later	Instantaneous Upon Promotion	State and Tribe
ATTAINS Geospatial Service	Depends on Comfort with GIS Software	No	Org Final and Later	Approximately Monthly	National






How many stream miles in Oregon
are impaired for swimming use?

Use How's My Waterway State Page

State Water Quality Overview Advanced Search

Oregon Water Quality

Choose a Topic:

-  Swimming
-  Eating Fish
-  Aquatic Life
-  Drinking Water
-  Other

Pick your Water Type and Use:

Water Type: Rivers and Streams

Use: Water Contact Recreation

Assessed *Rivers and Streams* that support *Water Contact Recreation*

Targeted monitoring provides information on water quality problems for the subset of those waters that were assessed.

Category	Miles
Good	8,735 miles
Impaired	17,455 miles
Insufficient Info	4,237 miles

Year Last Reported: 2020

[Top Reasons for Impairment for Oregon *Rivers and Streams* assessed for *Water Contact Recreation*](#) >

Where are the waters in Oregon that
are impaired for recreation use due
to pathogens?

Use How's My Waterway State Advanced Search

Use this page to find the condition of waterbodies in your state and whether there are plans in place to restore them. The filters below are to help narrow down your search. There are no required fields.

Parameter Groups:

Bacteria and Other Microbes x

Use Groups:

Recreation x

Watershed Names (HUC12):

Select...

Waterbody Names (IDs):

Select...

Integrated Reporting (IR) Category:

- All Waters
- 303(d) Listed Impaired Waters (Category 5)
- Impaired (Category 4 and 5)

Additional Filters:

- Has TMDL

Search

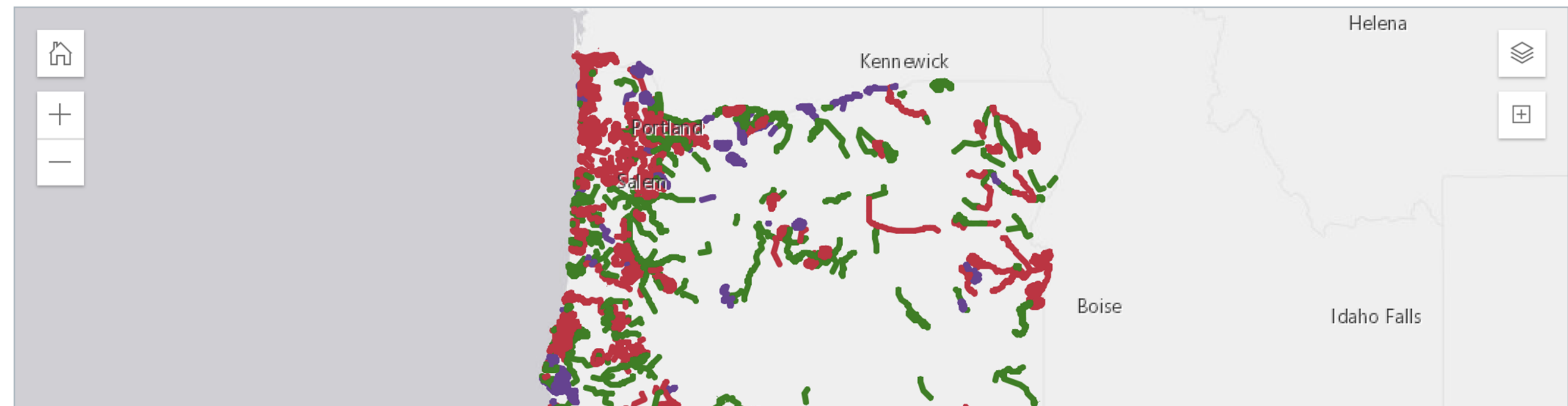
Results: 657 items

Display Waterbodies by:

Bacteria and Other Microbes

Map

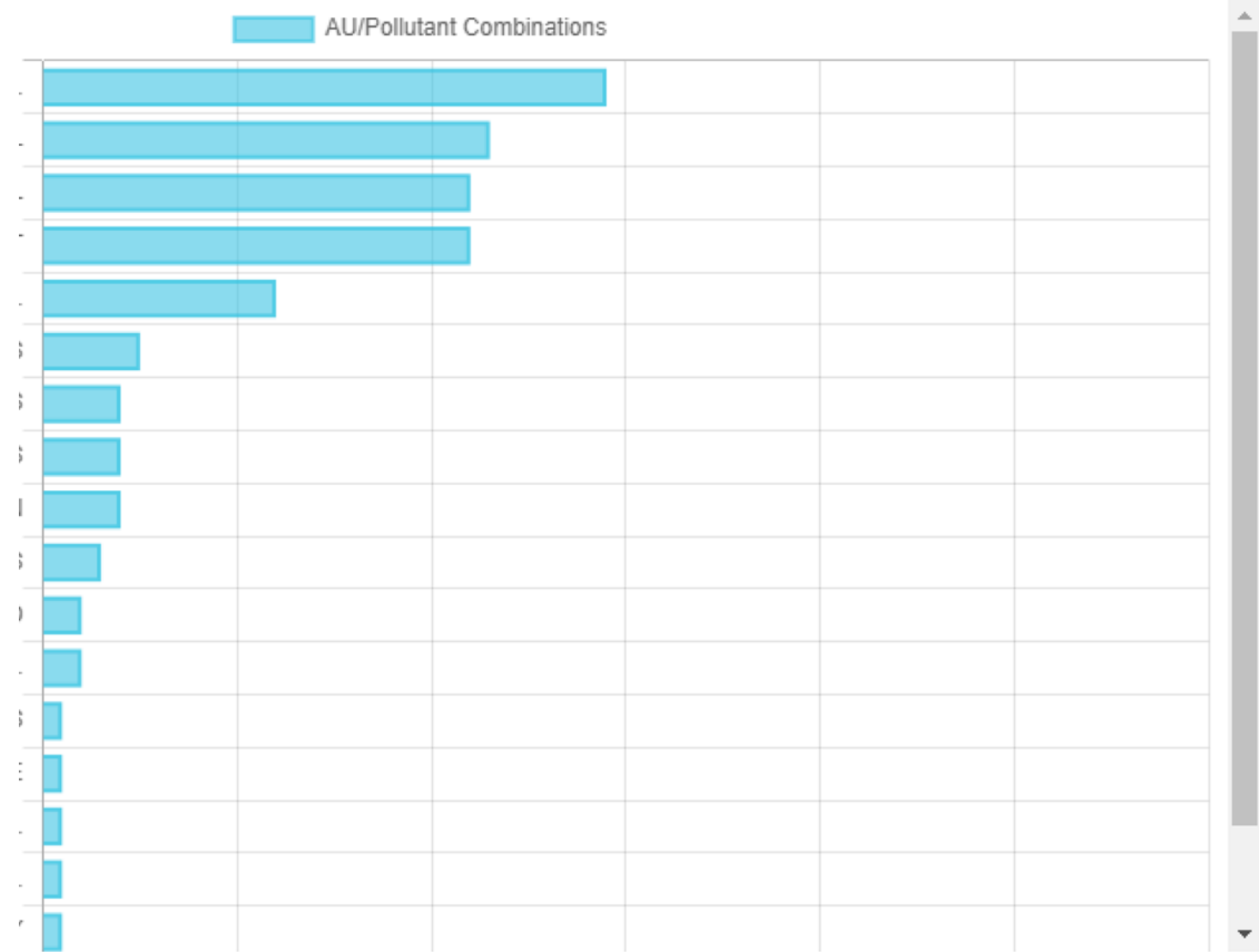
List



What are all the TMDLs in Maine?

Use the Actions Report in ATTAINS

Pollutants for Approved TMDLs



Pollutants for Approved TMDLs Summary

Pollutant	AU/Pollutants	AU/Addressed Parameters
POLLUTANTS IN URBAN STORMWATER	29	57
PHOSPHORUS, TOTAL	23	28
NITROGEN, TOTAL	22	27
SEDIMENT	22	27
ESCHERICHIA COLI (E. COLI)	12	12

« 1 2 3 4 »

17 Records

Segment Unit Name	Action ID	Action Name	Action TMDL Date	Action Status	EPA FY	Pollutant	Source Type
1779	31577	TRAFTON LAKE	Oct 26, 2006	EPA Final Action	2007	ALGAL BLOOMS	Nonpoint source
1820	31665	MONSON POND	Nov 28, 2006	EPA Final Action	2007	ALGAL BLOOMS	Nonpoint source
1674	30679	CROSS LAKE	Sep 28, 2006	EPA Final Action	2006	ALGAL BLOOMS	Nonpoint source
1776	32030	ECHO LAKE	Feb 05, 2007	EPA Final Action	2007	ALGAL BLOOMS	Nonpoint source

Which waters are new to category 5
this cycle in Montana?






Use the Cycle Comparison Report in ATTAINS

Comparison

Parameters

Category = [5], Previous EPA IR Category = [1, 2, 3, , 4A, 4C]

 Clear Selection 

	Assessment Unit Name 	Previous Assessment Unit Name 	EPA IR Category 	Previous EPA IR Category 	EPA IR
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Little Sheep Creek		5		ADDED
	Selway Creek	Selway Creek	5	3	CHANG
	Sage Creek		5		ADDED
	Trail Creek		5		ADDED
	Nicholia Creek		5		ADDED
	Cabin Creek		5		ADDED
	Metzel Creek		5		ADDED

7 Records

How many TMDL Projects were approved so far in
FY 2023 in Region 7?

Use ATTAINS Services

Base URL for Actions service

State code indicator

Indicates that a number
should be returned
instead of a list of
TMDLs

<https://attains.epa.gov/attains-public/api/actions?actionTypeCode=tmdl&stateCode=KS&tmdlDateLaterThan=2022-10-1&returnCountOnly=Y>

Action type code indicator

Indicates TMDL was approved in FY 2023

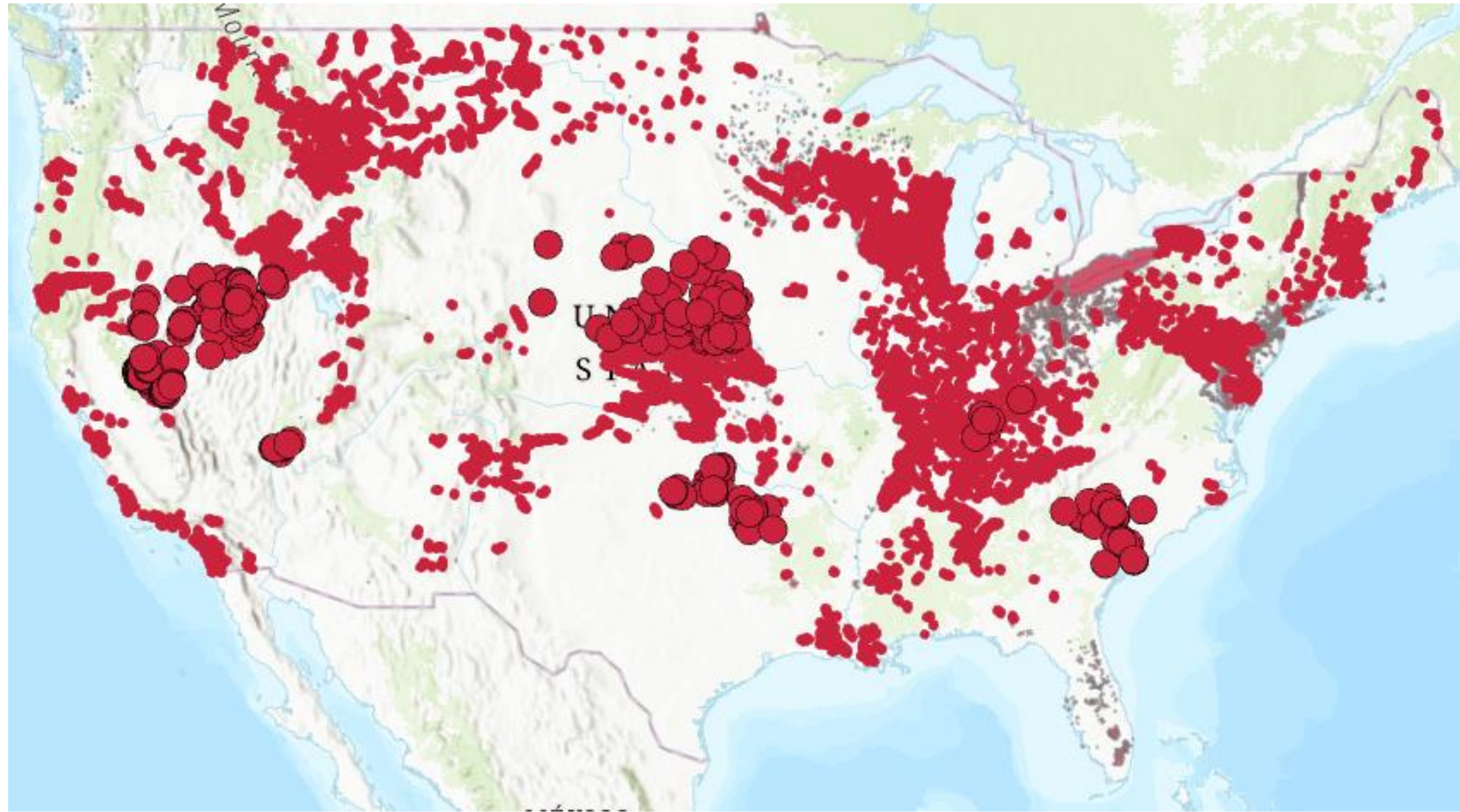
```
{  
  "items": [],  
  "count": 1  
}
```

What is the most commonly reported
impairment nationally?

OBJECTID *	ParameterName	FREQUENCY	COUNT_parametername
299	PATHOGENS	26142	26142
347	SILTATION	24691	24691
188	ESCHERICHIA COLI (E...	16089	16089
250	MERCURY	14756	14756
256	METALS	11754	11754
311	PH	11199	11199
176	DISSOLVED OXYGEN	8712	8712
208	FLOW REGIME MODIFI...	8477	8477
197	FECAL COLIFORM	8016	8016
280	NUTRIENTS	7747	7747

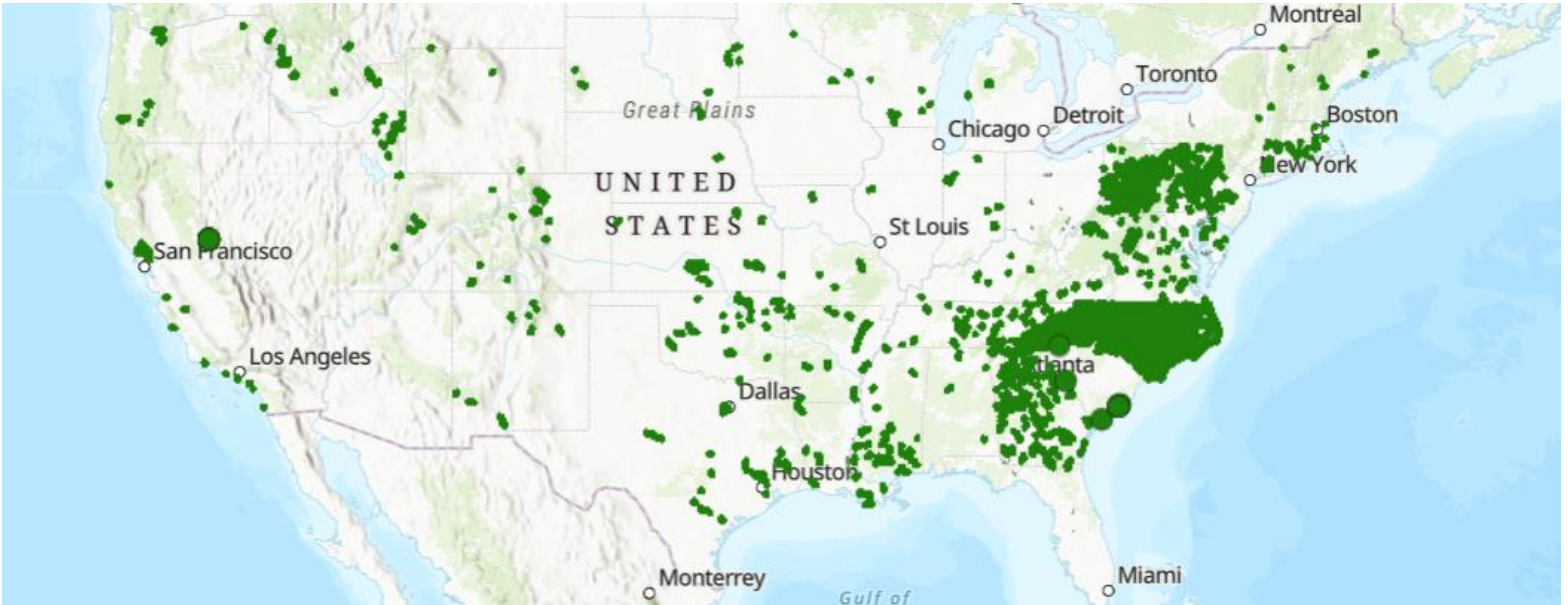
Use the ATTAINS Geospatial Service

Where are the waters impaired for
nutrients nationally?



Use the ATTAINS Geospatial Service

Which waters have a TMDL and are
fully supporting nationally?



Use the ATTAINS Geospatial
Service

Expert Query

- Upcoming way to query public ATTAINS data
- Replaces old Expert Query
- Allows for cross-organization queries
- Uses a copy of the ATTAINS data
- Contains new set of services



Query ATTAINS Data

1 of 3 Pick a Data Profile

Data are grouped into profiles according to the type of data they describe. Select a data profile to determine the set of filterable elements.

Assessments	<i>Refresh date: 5/26/2023, 11:20:12 PM</i>
Contains detailed information on waters assessed under Section 305(b) of the Clean Water Act and waters list...	

[Clear Search](#)

2 of 3 Apply Filters

Select options from the fields below to apply filters to the query. The options of some fields are filtered by previous selections.

[Search for an Area of Interest](#)

On this page

1 Pick a Data Profile

2 Apply Filters

[Search for an Area of Interest](#)

[Search by Reporting Cycle](#)

[Search for a specific Assessment Unit](#)

[Search by Overall Status](#)

[Search by Use](#)

[Search by Parameter](#)

[Search by Associated Action](#)

3 Download the Data

Expert Query Demo

What are all the TMDLs in Maine?

Use Expert Query

1 of 3 Pick a Data Profile

Data are grouped into profiles according to the type of data they describe. Select a data profile to determine the set of filterable elements.

Total Maximum Daily Load *Refresh date: 5/19/2023, 8:19:02 PM*

Contains detailed information on Total Maximum Daily Load (TMDL) plans.

▼

Clear Search

2 of 3 Apply Filters

Select options from the fields below to apply filters to the query. The options of some fields are filtered by previous selections.

Search for an Area of Interest

Region

 ▼

State

 x ▼

Organization ID (Organization Name)

 ▼

Water Type

 ▼

On this page

1 Pick a Data Profile

2 Apply Filters

Search for an Area of Interest

Search by Pollutant or Parameter

Search by Permit ID

Search for a specific TMDL

Search by Time Frame

Search for Actions containing a specific Assessment Unit

3 Download the Data

How many TMDL Projects were approved so far in
FY 2023 in Region 7?

Search for an Area of Interest

Region

State

Organization ID (Organization Name)

Water Type

Search by Pollutant or Parameter

Pollutant

Addressed Parameter

Source Type

- Nonpoint source
- Point / Nonpoint source
- Point source

Search by Permit ID

NPDES ID

Other Identifier

Search for a specific TMDL

Action ID (Action Name)

Action Agency

- EPA
- State
- Tribal

In Indian Country

- No
- Yes

On this page

1 Pick a Data Profile

2 Apply Filters

Search for an Area of Interest

Search by Pollutant or Parameter

Search by Permit ID

Search for a specific TMDL

Search by Time Frame

Search for Actions containing a specific Assessment Unit

3 Download the Data

Use Expert Query

~~Where~~ What are the waters impaired
for nutrients nationally?

Parameter Group
 NUTRIENTS x

Parameter Name
 Select a Parameter Name...

Parameter Status
 Cause
 Insufficient Information
 Meeting Criteria
 Observed effect
 Removed

Parameter Attainment
 Select a Parameter Attainment...

Parameter IR Category
 Select a Parameter IR Category...

Parameter State IR Category
 Select a Parameter State IR Category...

Delisted
 No
 Yes

Delisted Reason
 Select a Delisted Reason...

Pollutant Indicator
 No
 Yes

Cycle First Listed
 from: yyyy
 to: yyyy

Alternate Listing ID
 Select an Alternate Listing ID...

Vision 303d Priority
 No
 Yes

CWA 303d Priority Ranking
 High
 Low
 Medium

Cycle Scheduled for TMDL
 from: yyyy
 to: yyyy

Cycle Expected to Attain
 from: yyyy
 to: yyyy

Consent Decree Cycle

Season Start Date

Season End Date

On this page

1 **Pick a Data Profile**

2 **Apply Filters**

[Search for an Area of Interest](#)

[Search by Reporting Cycle](#)

[Search for a specific Assessment Unit](#)

[Search by Overall Status](#)

[Search by Use](#)

[Search by Parameter](#)

[Search by Associated Action](#)

3 **Download the Data**

Use Expert Query

Which waters have a TMDL and are
fully supporting nationally?

Search by Overall Status

Overall Status

 x | v

EPA IR Category

 | v

State IR Category

 | v

Search by Associated Action

Associated Action ID (Associated Action Name)

 | v

Associated Action Type

 x | v

Use Expert Query

Summary of Suggested Tools

Different Tools work better for different types of questions

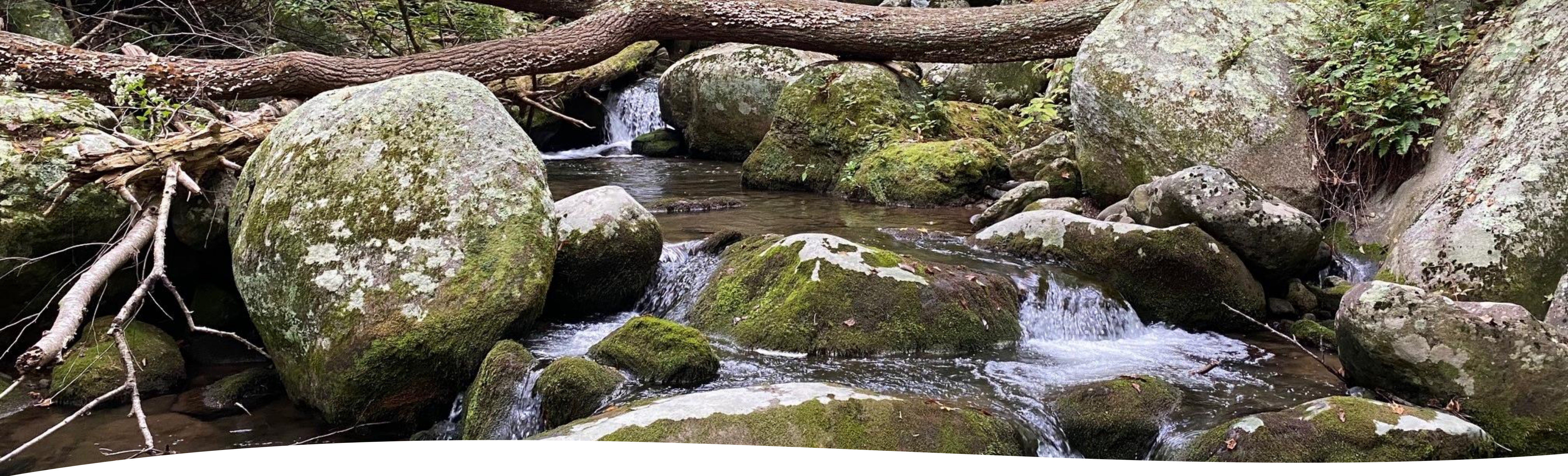
Question	How's My Waterway	ATTAINS Geospatial Service	ATTAINS Reports (Requires Login)	ATTAINS Services	Expert Query	Comment
Where?	Yes, within a state/Org or local area	Yes, at the national or state/Org level	No	No	No	"Where" questions--or questions that involve maps--require geospatial data
Summary	Yes, within a state or local area	Yes, at the Parameter Group or Use Group level	Yes, within an Organization	Depends on the question to be summarized	No	Several tools will provide limited summaries. Expert Query provides rows of data but no summaries.
Query	State Advanced tab allows limited filtering	Yes, at the Parameter Group or Use Group level, at the national or state level. Returns one record per AU	Yes, within an Organization	Limited filtering, and must be included in web service call	Yes	If you want to search or filter for rows of specific data, Expert Query may be your best option, if it is public data. (For non-public data, use Reports module within ATTAINS.) Expert Query allows querying across multiple Organizations or States but may result in very large tabular datasets.

For Further Reference

- How's My Waterway: <https://mywaterway.epa.gov/>
- Public ATTAINS Website: <https://www.epa.gov/waterdata/attains>
- Using ATTAINS Web Services: <https://www.epa.gov/waterdata/get-data-access-public-attains-data#WebServices>
- ATTAINS Geospatial Services: <https://www.epa.gov/waterdata/get-data-access-public-attains-data#AttainsGeo>
- ATTAINS Reports Module: <https://www.epa.gov/waterdata/upload-data-resources-registered-attains-users#reports-module>

Expert Query Hands-On

- <https://owapps-stage.app.cloud.gov/expertquery/attains/>
- Username: expert
- Password: eq12!
- **Data in this system is has not been vetted by EPA and is for testing purposes only. Please report any errors you discover to attains@epa.gov.**



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Questions?