

The Aquatic eDNA Atlas Project: Lab Results ArcGIS Online Map Guide



USDA Forest Service
Research & Development
Rocky Mountain Research Station
Air, Water, & Aquatic Environments Program and the
National Genomics Center for Wildlife and Conservation

Sharon (Parke) Payne
July 31, 2020

General map notes:

- A Splash Screen appears each time the [results map](#) opens, with a link to this user guide.
- In some instances, more than one sample was collected in the area and assigned to the same unique eDNA_ID. This online map will only show one of those results. If you are interested in more results, please [download the entire File Geodatabase](#) from the website.
- These procedures predominately show the [western U.S. results map](#), but can be used for the [eastern U.S. results map](#).

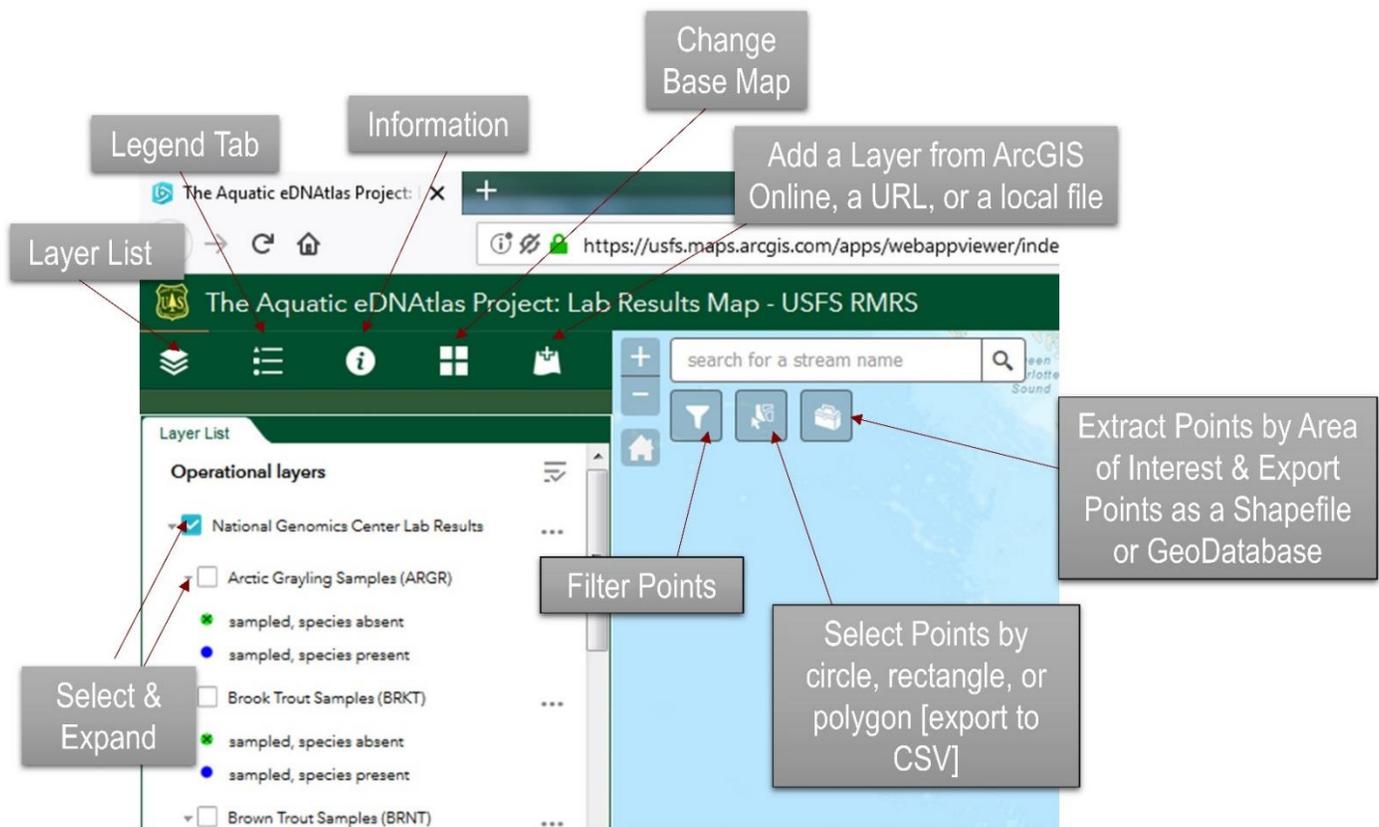
Overview

There are tabs available along the left under the map name and tools available in the upper left-hand corner of the map under the search bar.

[Navigating the Map](#)

[Layer List](#) | [Legend Panel](#) | [Information](#) | [Change Base Map](#) | [Add Data Layer from ArcGIS Online, a URL, or a File](#)

[Filter Points](#) | [Select Points by circle, rectangle, or polygon](#) | [Geoprocessing - Extract Points by Area of Interest](#) | [Search Bar](#)



The [Attribute Table](#) is available by selecting the arrow at the bottom of the map. Occasionally, AGOL will not show the table. You can access it by opening the table from [the Layer List Panel](#).

You can filter by attributes using the table. Note that the [Filter Points](#) button also allows you to create custom filters for species layers.



Navigating the Map – general tips

To zoom in and out, use the + or – buttons in the upper-left hand corner of the map  or use the scroll on your mouse.

To immediately zoom out to the initial extent, click the “home” button in the upper-left hand corner of the map 

To see the attributes of specific points on the map, use your mouse to click that point. A box will pop up with those available attributes. If more than one point is selected, you can use the navigation to see the next attribute.

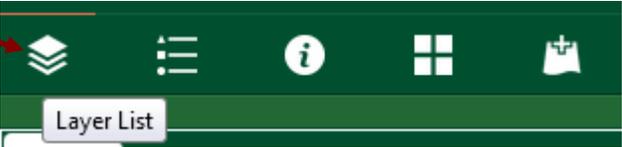
eDNAAtlas sites sampled (sampled, results being processed) at the bottom of the map will be different from the pop-ups for individual species. That layer offers more fields in the pop-up and includes data from all species.

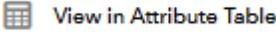
Species of the sampled point and its GNIS_NAME field of the underlying NHD v2 stream layer.

Zoom in to the selected point

Bull Trout Samples (BULL) : Lost Man Creek	
eDNA_ID	17050111-46-1
PublicLand	Forest Service
MS_Hist	1.98
eDNA_Slope	3.12
Elev_m	1,596.92
Date_Collected	8/17/2016
BULL	2

FIELD 4-character species
 2 = sampled, absent
 3 = sampled, present
 ONLY IN eDNATLAS SITES SAMPLED
 4 = sampled, being processed

Layer List 

[View in Attribute Table](#) 

[View in Attribute Table](#)

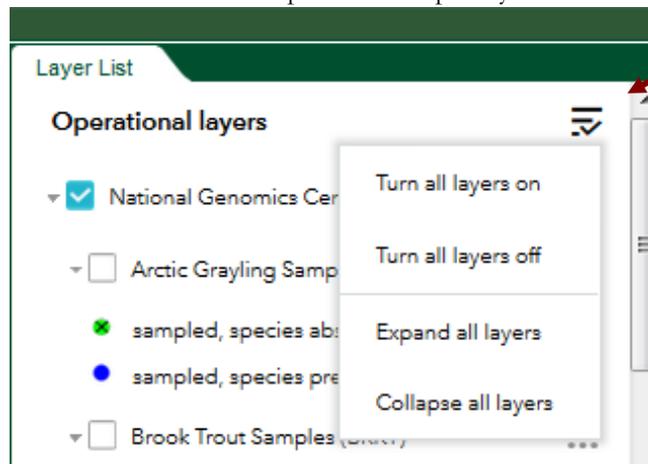
[\(ESRI help document for this tool\)](#)

The Layer List tab loads with the map as the default first tab. To minimize this (or any) tab, click the arrow in the bottom right section of the tab. Users can see the current Operational Layers (Table of Contents) and turn those layers on and off and work individually with those layers.

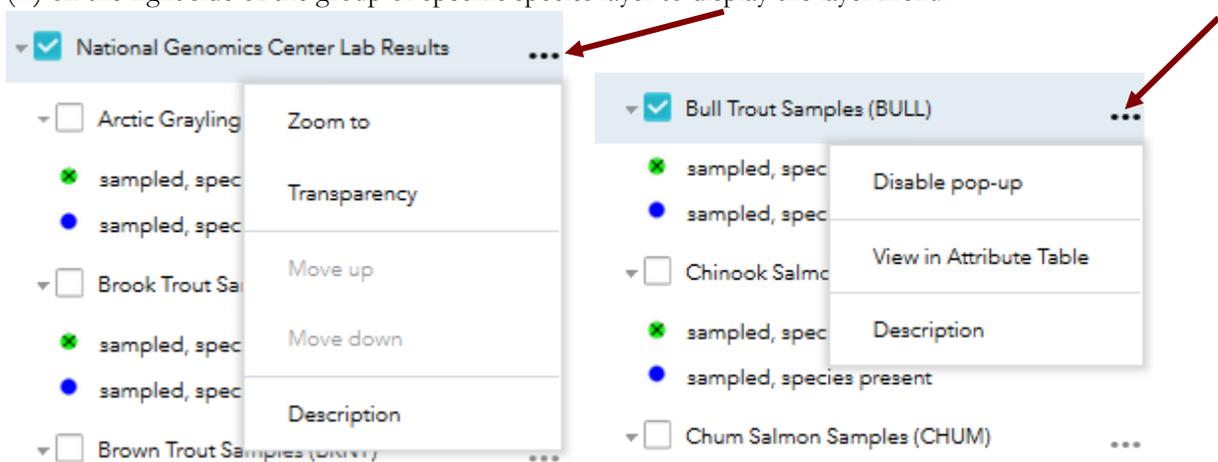
There are layers for all species that have been or are being processed. Some species currently do not have results and those layers will not have points until the database is updated with those results.

The “Control All Layers” button in the upper-right corner of the Layer List tab  controls the behavior of all of the layers in the list. Click the icon to open the menu that allows you to turn on or off all the layers, or expand or collapse all the layers.

Alternatively, you can use keyboard shortcuts to do so. Press Ctrl and click the check box of the layer to turn on or off the layers in the same level. Press Ctrl and click the arrow to expand or collapse layers in the same level.



Use Ellipses (...) on the right side of the group or specific species layer to display the layer menu.



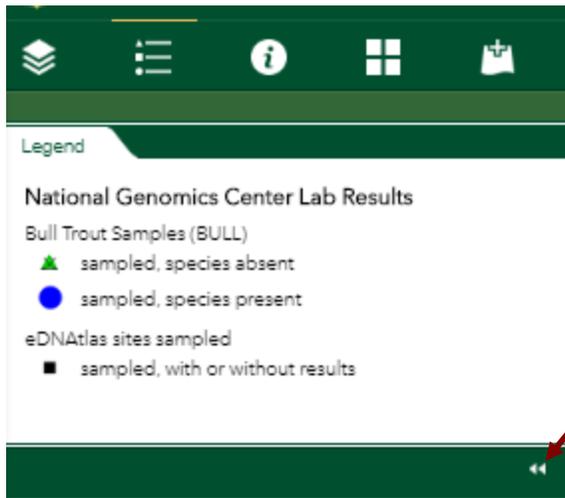
- **Zoom To**—Sets the map extent to the extent of the layer.
- **Transparency**—Sets the transparency for the layer.
- **Move up/down**—Moves the layer one level up or down for this viewing session.
- **Enable Pop-up / Remove Pop-up**—Enables or disables the pop-up for the feature layer.
- **View in Attribute Table**—Opens the attribute table for the feature layer.
- **Show item details**—Opens the service description or the item details page for the service or the item associated with the layer, if available.



[\(ESRI help document for this tool\)](#)

The Legend panel shows the visible map layers and their symbols. Please note that the map initially only has the 1) Bull Trout Samples (green triangles and blue circles) and 2) eDNAAtlas sites sampled (black squares) turned on. These black squares represent all submitted samples, including those with results and those samples that are still being processed.

Any other layers you have chosen in the [Layer List](#) will also be available here. If you would like to add your own layers to the map, use the [Add Layer](#) tool.



Click arrows to minimize the Legend or any tab

Information about the eDNAAtlas Project

The Information panel contains links to the project website, field sampling grid map, other documents, and includes the citation for this database.



Basemap Gallery



[\(ESRI help document for this tool\)](#)

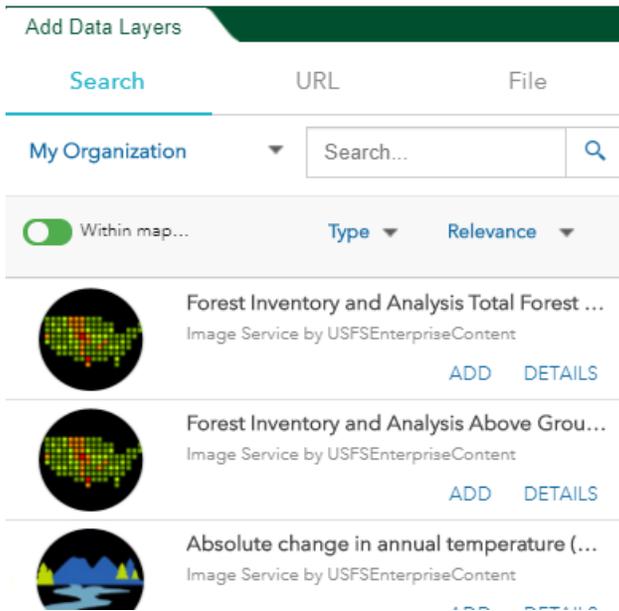
Activating the Basemap Gallery panel allows you to choose a different basemap or background layer. This may be helpful as you zoom into your specific area of interest.

Please note the sample points may not line up with the chosen basemap. The points are aligned with the NHD Plus version 2 NHDFlowline streams.

Add Data Layer from a URL or ArcGIS Online



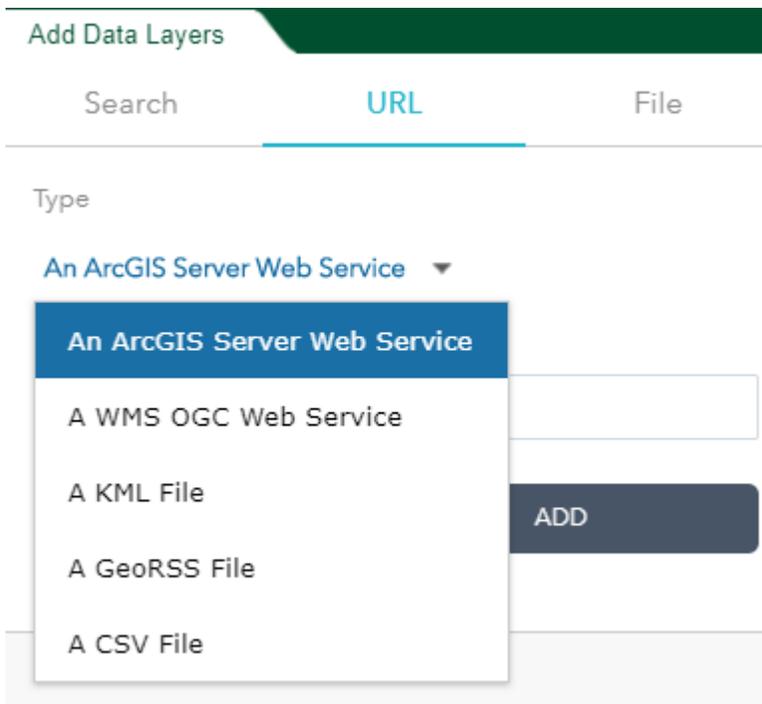
Choosing the Add Data Layer button allows you to add other online layers to this map. You can 1) search the available data in ArcGIS online, or 2) enter a specific URL if you already have a web service link or a KML file, GeoRSS File or CSV file URL, or 3) upload a file from your computer. It supports shapefiles in Zip format, and CSV, GPX and GeoJSON files.



Click the icon  to only search layers within the map area. Clicking it turns the icon red so you can search all layers in the scope.

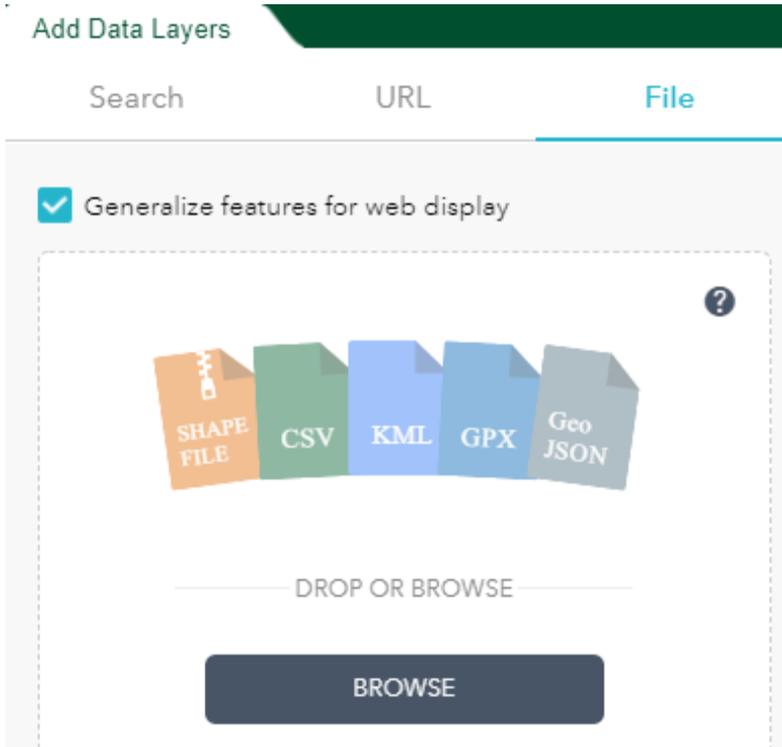
Click the sort icon  to refine the type of search layer and sort the items.

- Click the Type drop-down list to search layers based on map service, feature service, image service, vector tile service, KML, or WMS.
- Click the Sort By drop-down list to sort items by relevance, title, owner, rating, view, or date.



To add layers by URL, click the URL tab next to the Search tab. Choose a type and enter the URL. Click Add to add the data to the map. The added layer will appear in the Layer List widget as well. The following types are supported through the URL:

- ArcGIS Server web service
- WMS OGC web service
- KML
- GeoRSS
- CSV



Click the File tab to upload files locally. You can either drag and drop the file or browse to it. It supports shapefiles in Zip format, and CSV, KML, GPX and GeoJSON files.

To remove layers added click LAYERS in the lower right corner of the Add Data window. In the Layers panel, click the trash can icon next to the layer to remove it.

Click BACK in the lower right corner to return to the main Add Data panel.

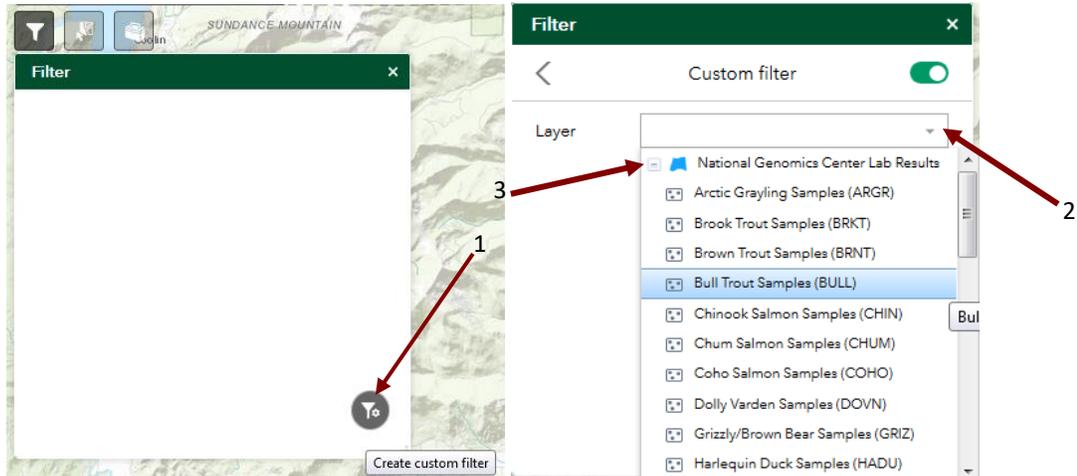
Note that you can't remove the added layer without refreshing the map, but you can turn that layer off in the [Layer List tab](#).



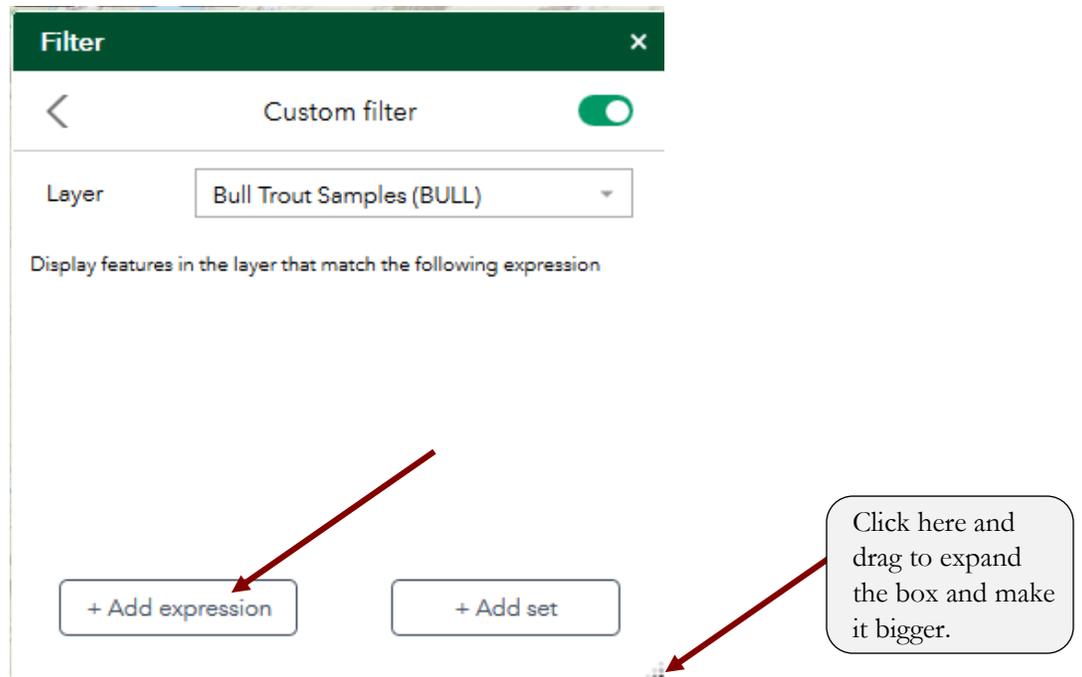
Filter Points

The Filter Points button allows you to filter the points on the map and in the attribute table by any attribute(s) you choose. The example below will create a filter for a specific species in a specific HUC 8 watershed.

After clicking the filter button, click the “Create Custom Filter” button in the lower right-hand corner of the Filter window.

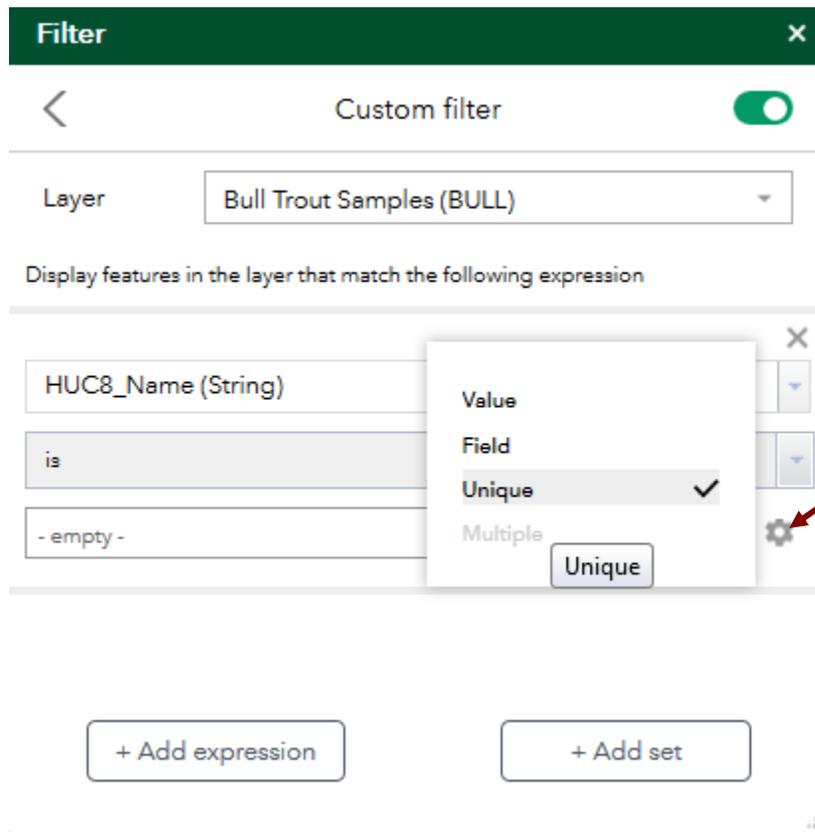


Click the Layer drop-down and expand the National Genomics Center Lab Results by clicking the +. Once expanded, select the species layer you are interested in.



Click the Add expression button.

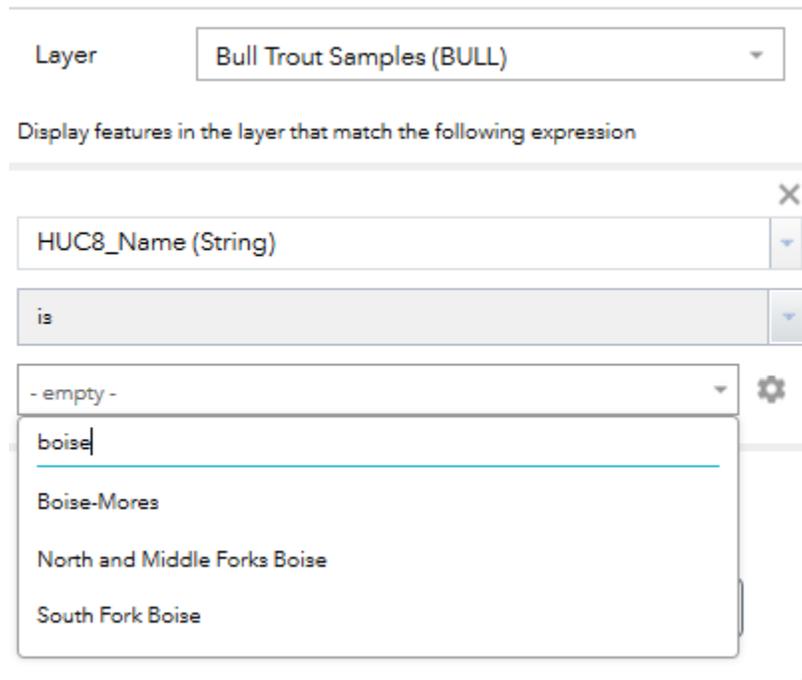
Use the dropdown to choose HUC8_Name (String) from the attribute list. The default is the OBJECTID.



Leave the operator as the default “is”.

Click the Settings gear and choose “Unique”.

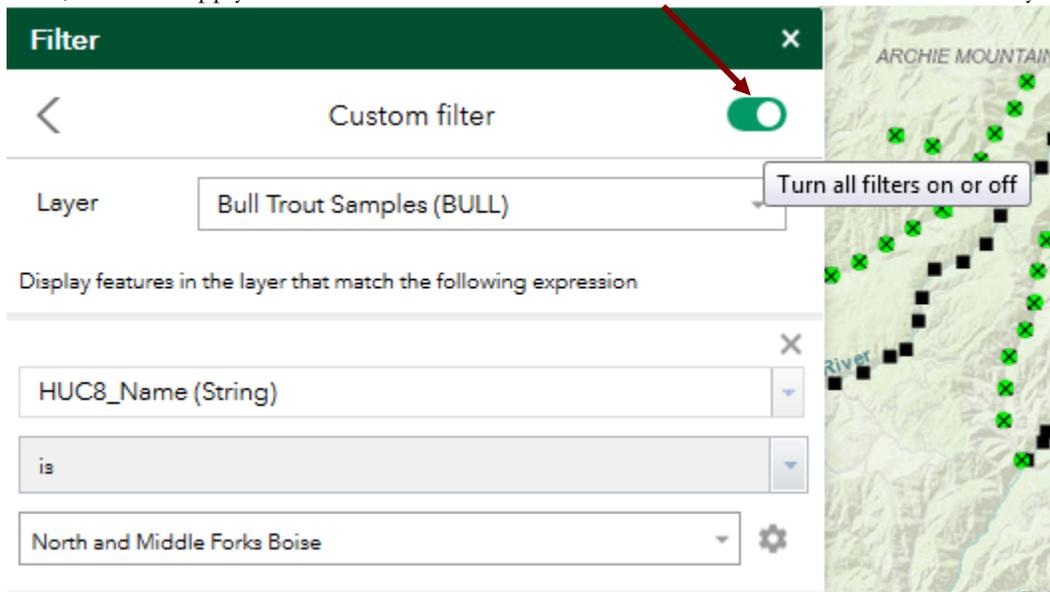
Use the dropdown box to select a HUC name or start typing part of the name to find a specific watershed.



Note that only those watersheds that have sampled points for the chosen species will be available for selection.

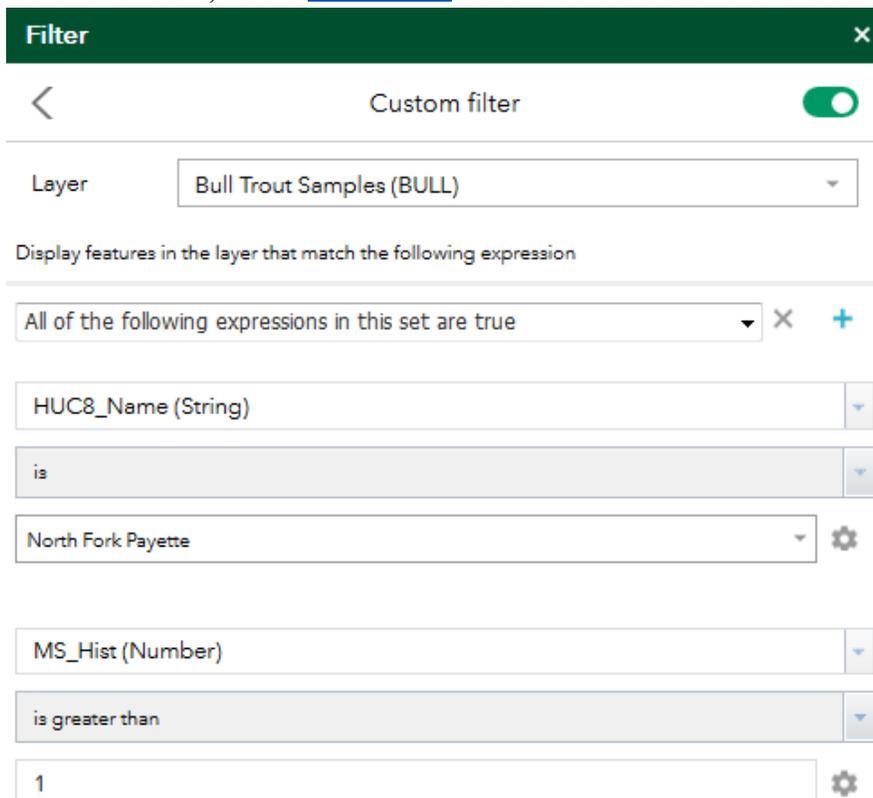
Once you select a watershed, the map will zoom to that location.

To turn off your filter, click the Apply button. Filters that are “on” are Green. Those that are “off” are Gray.

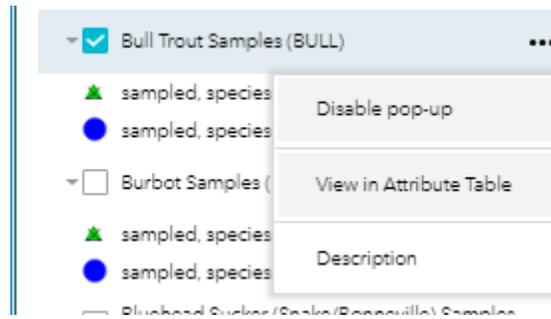


If you would like to have 2 filters for a species, you can click the “Add set” button and following a similar procedure. For example, the filter below shows points within the North Fork Payette watershed with a MS_Hist greater than 1.

For a list of attributes and their definitions, see the [Field Names](#) section at the end of this User Guide.



To view your filtered points in their attribute table, click on the ellipses (...) to the right of your species layer in the Layer List and choose “View in Attribute Table”. The attribute table will pop-up at the bottom of the map.



You can use the [Attribute Table](#) to export points.



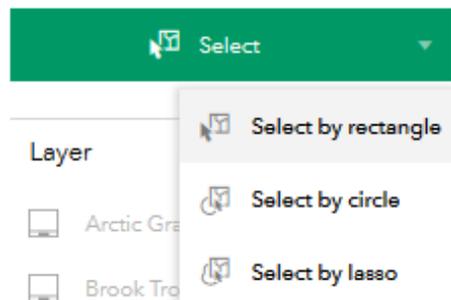
[\(ESRI help document for this tool\)](#)

Select Points

Clicking this button and using the Select Points tool allows you to choose up to 1000 specific points on the map. The default is to select up to 1000 points in those layers turned on in the [Layer List](#), but you can use the check boxes to turn on additional layers or turn off others after the Select window is open.

This button allows you to select the points from the active layers on the map by a rectangle, or a circle, or a lasso/polygon. You can use it in conjunction with the [Filter tool](#) or you can zoom in and select points in a general area. You can view the selected points in the attribute table, and even [export to a CSV file from there](#).

Please note that this selection tool doesn't allow export to a shapefile or geodatabase. It also does not allow for you to select more than one area. For those options, please see the [Geoprocessing - Extract Points by Area of Interest button](#).



Select by Rectangle and Select by Circle draw those shapes for you. Select by lasso requires that you draw your polygon boundary and you will need to click the map to start that polygon and drag to create the area.

Select up to 1000 records [X]

Select [v] Clear

Layer	Count	Options
<input checked="" type="checkbox"/> Arctic Grayling Samples (ARGR)	1	...
<input checked="" type="checkbox"/> Brook Trout Samples (BRKT)	17	...
<input checked="" type="checkbox"/> Brown Trout Samples (BRNT)	0	...
<input checked="" type="checkbox"/> Bull Trout Samples (BULL)	402	...
<input checked="" type="checkbox"/> Chinook Salmon Samples (CHIN)	0	...
<input checked="" type="checkbox"/> Chum Salmon Samples (CHUM)	0	...
<input checked="" type="checkbox"/> Coho Salmon Samples (COHO)	0	...

Context Menu Options:

- Make all layers selectable
- Make all layers unselectable
- Toggle selectability for all layers

Annotations:

- Click in the upper-right to universally change which layers are selectable.
- Click here and drag to expand the box and make it bigger.

You can clear your selection by clicking the “Clear” button in the upper right-hand corner of the Select window. If you have already closed the window, you can click the Select button again to open the window and clear the selection.

After a moment, the points of each species or layer turned on in the [Layer List](#) tool are selected. Once they are available, click the ellipsis (...) to see your options.

Brook Trout Samples (BRKT) 17 ...

Selection actions [X]

- Export to CSV file
- Statistics...
- View in Attribute Table
- Clear selection

Clicking “View in Attribute Table” will open the species attribute table at the bottom of the map with those points selected. You can [export from the table](#), or directly from the selection tool if more than 1 point is selected.



Geoprocessing - Extract and Download Points by Area of Interest

([ESRI help document for this tool](#))

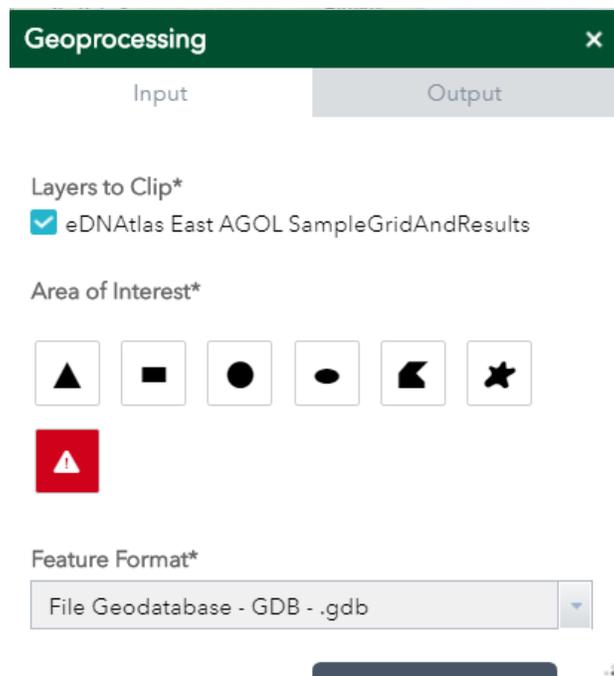
Clicking the Extract Points by Area of Interest button brings up a geoprocessing tool that allows you to select an area of interest in the map. Once you've made your selection, you can export the points within those area(s) of interest as a geodatabase or shapefile. If you would like to download the entire GeoDatabase you can do that here -

<https://www.fs.fed.us/rm/boise/AWAE/projects/eDNAtlas/the-edna-atlas-results.html>

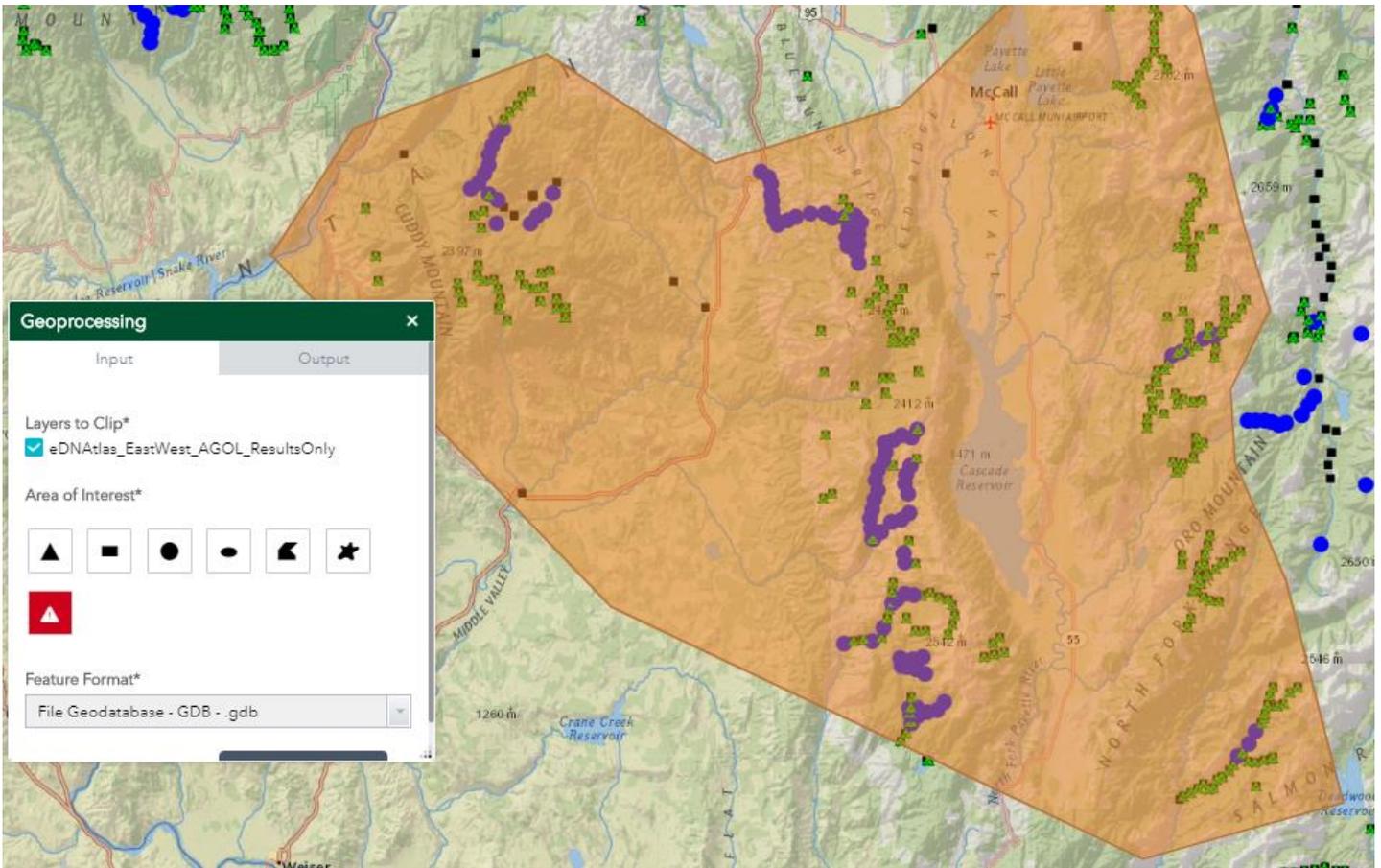
Notes:

- You can create more than one polygon to select different areas. You can select a box around one stream and a polygon around another.
- You can select using multiple area of interest types (freehand polygons, circles, rectangles, etc.)
- This tool does not select points in the attribute table. Rather, it allows the points within your area(s) of interest to be exported to a shapefile or geodatabase. To [select](#) or [filter](#) points for use in the attribute table, see those tools.
- An extracted Geodatabase will contain all points from the GeoDatabase within the selected area of interest, and not just those that have been filtered or queried.
- An extracted Geodatabase will be in a zip file called “_ags_output.zip”. Inside the zipfolder in that zip file, the geodatabase is called eDNAtlas_West_AGOL_SampleGridAndResults.gdb (or eDNAtlas_East_AGOL_SampleGridAndResults.gdb) with a point feature class of the same name, as would a shapefile. Although, note that some field names will be truncated in the attribute table if you choose to download a shapefile. The geodatabase feature classes and shapefiles each include ArcGIS metadata.

Once you've selected your area(s), click the “Run” button. Depending on the size of your browser window, you may need to scroll down to see the button. After a few moments, the Output tab will have a link to an output zip file containing a shapefile with your selected features. A File Geodatabase is recommended so the field names that are exported will not be truncated, as will occur with shapefile format. A gdb file will also keep null values instead of creating zeros.



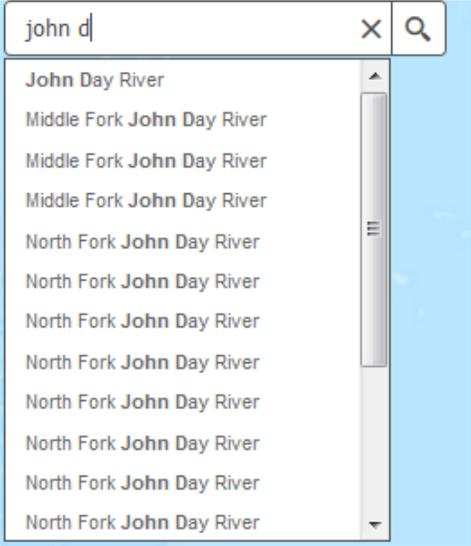
Scroll or expand the window for the Run button



Search Bar

Search for a stream by NHD Plus version 2 GNIS_NAME. Type your search and hit 'enter', or click the magnifying glass.

Searches take a moment and return up to 500 results. Once a name is selected, it will automatically zoom to that result, but the search bar will have a slider to search for other results. Click another result and the map will zoom or pan to that location.

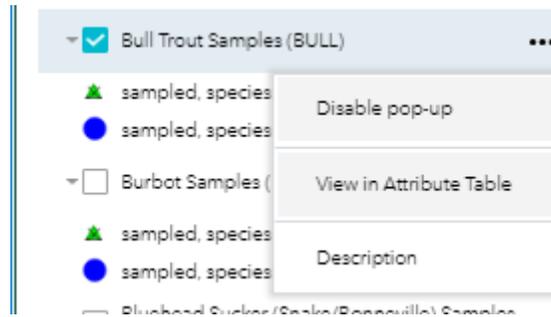


Tip: If you [filter](#) the available points to a specific HUC, the search results will be only those GNIS names within that specific HUC.

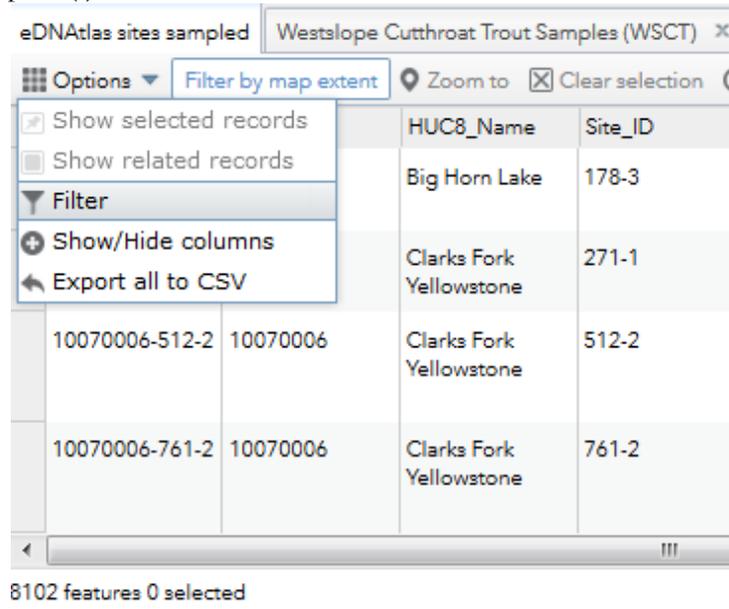
Attribute Table



The attribute tables can be opened and closed by clicking the arrow located at the bottom of the map. Originally, the only table available is the eDNAAtlas sites sampled attribute table. This table contains a lot of points and may take a few moments to load. To add a species-specific table to the map, click on the ellipses (...) to the right of the desired species layer in the Layer List and choose “View in Attribute Table”. The attribute table will pop-up at the bottom of the map.



You can click the Options button in the upper left-hand corner of the table to [create a filter](#) or to show different columns. As you zoom in on the map, the default is to filter the attribute table based on what is in the map extent. Click that option to turn it off. You can filter and select point(s) and then zoom to that location.

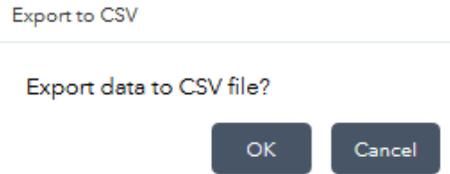


If there are no points selected, there is an option to export all points in the attribute table to a CSV file. If points are selected, the option is to export only those points. You can use the [filter](#) and [select](#) tools together to narrow down and select points. Or you can select by simply clicking to the left of the point in the table.

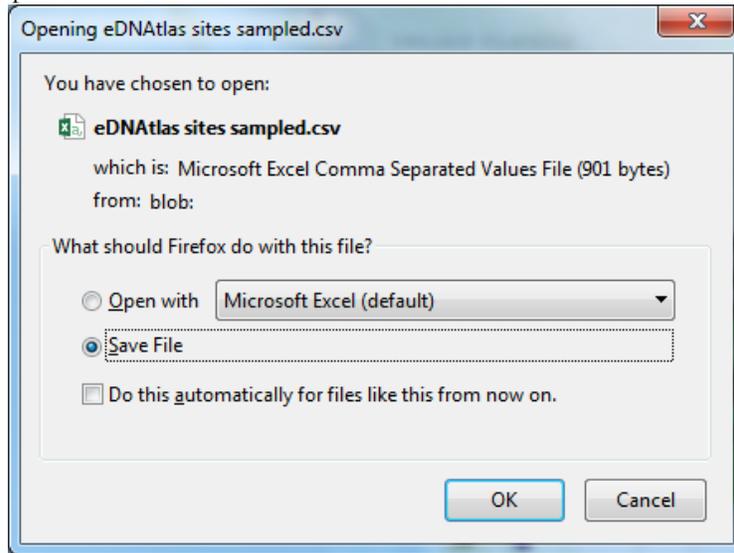
To select more than one point, use your shift key. Note that your mouse will change from an arrow to a pointing hand when selecting.

Once you have selected all the points you wish to export, Click the Options tab in the upper left-hand corner of the table and choose the “Export Selected to CSV” option.

You will be prompted to confirm that you want to export to a CSV file. Click OK.



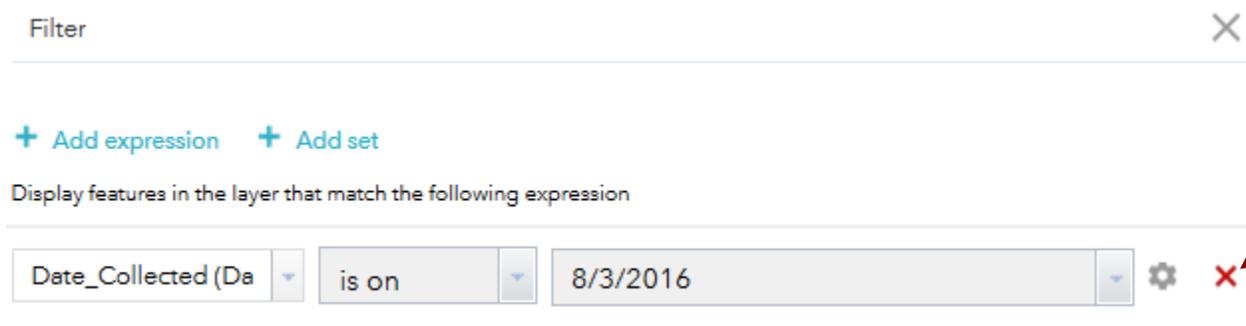
You then have the option to Open or Save the file. Click OK.



The csv file will include an X and Y coordinate added to the table by ArcGIS Online and in the original coordinate system (Albers, NAD 83). There is a 1000 record limit for downloading a CSV. If you would like more points, please download the entire geodatabase and use GIS.

Please note that there is no automatic download of the metadata with the table as there is when you download using the [Extract points by Area of Interest](#) selection tool and export as a shapefile. You can find [a general metadata document](#) on the [eDNAAtlas website](#).

To remove the filter, click the X to the right of the filter expression and click OK.



Field names and descriptions

Note that more detailed metadata can be found in the GeoDatabase itself or on the [eDNAAtlas website](#).

FIELD eDNA_ID ►

Primary key. A unique ID for each eDNA sample point. The ID takes the form AAAAAAAAA-BBB-CC, where A is the 8-digit Watershed Boundary Dataset (WBD) hydrologic unit code (HUC), B is a unique number assigned to each stream reach in the HUC, and C is a unique point on the stream reach. **If you collect samples in the field, this is the number that needs to be associated with that sample site location.**

FIELD [HUC8](#) ▶

8 digit unique code for each HUC from the Watershed Boundary Dataset (WBD).

FIELD [HUC8_Name](#) ▶

HUC name from the WBD

FIELD [Site_ID](#) ▶

The unique site within each 8-digit HUC. The site ID takes the form BBB-CC, where B is a unique number assigned to each stream reach in the HUC, and C is a unique point on the stream reach.

FIELD [COMID](#) ▶

Common identifier of an NHDFlowline feature (COMID code from the NHDPlus V2 dataset)

FIELD [GNIS_NAME](#) ▶

Feature name from Geographic Names Information System (stream name from the NHDPlus V2 dataset)

FIELD [REACHCODE](#) ▶

Reach code assigned to feature (REACHCODE from the NHDPlus V2 dataset)

FIELD [TotDASqKM](#) ▶

Total upstream cumulative drainage area, in square kilometers, at the downstream end of the NHDFlowline feature.

FIELD [DD_X](#) ▶

Geographic coordinate X in decimal degrees

FIELD [DD_Y](#) ▶

Geographic coordinate Y in decimal degrees

FIELD [UTM_Zone](#) ▶

UTM Zone of the sample grid point

FIELD [UTM_X](#) ▶

UTM X coordinate of the sample grid point, unique by eDNA_ID

FIELD [UTM_Y](#) ▶

UTM Y coordinate of the sample grid point, unique by eDNA_ID

FIELD [FCODE](#) ▶

Numeric codes for various feature attributes in the NHD Plus version 2 FCODE lookup table.

FIELD [PublicLand](#) ▶

These data are from PAD-US, Protected Areas Database of the US. <https://gapanalysis.usgs.gov/padus/>

Own_Name - Land owner or holding agency (e.g. USFS, State Fish and Game, City Land, TNC) standardized for the US. See PAD-US Data Standard or geodatabase look up table for "Agency Name" for full domain descriptions. Use "Manager Name" for the best depiction of federal lands as many overlapping designations (i.e. "Designation") and ownership related data gaps (i.e. "Unknown") occur in the federal theme.

FIELD [MS_Hist](#) ▶

Mean summer historical flow [Mean summer flow is the average of daily flow between June 1 and September 30; Units: cubic feet per second] from Variable Infiltration Capacity (VIC) flow model.

FIELD [eDNA_Slope](#) ▶

Stream gradient of the reach above the sample point up to the next sample point, stream confluence, or headwater initiation point. Units: percent. Generated internally using NHDPlusV2 National Elevation Dataset data.

FIELD [Elev_m](#) ▶

The underlying elevation data used is from the National Elevation Dataset (NED) at 30 m resolution.

FIELD [Date_Collected](#) ▶

The date a previously collected sample was collected in the field as noted by the contributor. Null indicates no previous sample taken and assigned to the unique eDNA_ID.

FIELD Field_UTM_Zone ▶

UTM Zone of the collected sample as noted by the contributor. Null indicates either field coordinates are not in UTM or that no previous sample taken and assigned to the unique eDNA_ID.

FIELD Field_UTM_Easting ▶

Field X coordinate of the collected sample as noted by the contributor. Null indicates no previous sample taken and assigned to the unique eDNA_ID.

FIELD Field_UTM_Northing ▶

Field Y coordinate of the collected sample as noted by the contributor. Null indicates no previous sample taken and assigned to the unique eDNA_ID.

FIELD Agency ▶

Name of agency or group that collected the field sample.

FIELD Species Code listed in the table below below ▶

Note that the fields below are available in their respective layer in the layer list and that all fields are in the “eDNAAtlas sites sampled” layer.

LIST OF VALUES

VALUE 1

DESCRIPTION not sampled

VALUE 2

DESCRIPTION sampled, absent

VALUE 3

DESCRIPTION sampled, present

VALUE 4

DESCRIPTION sampled, being processed

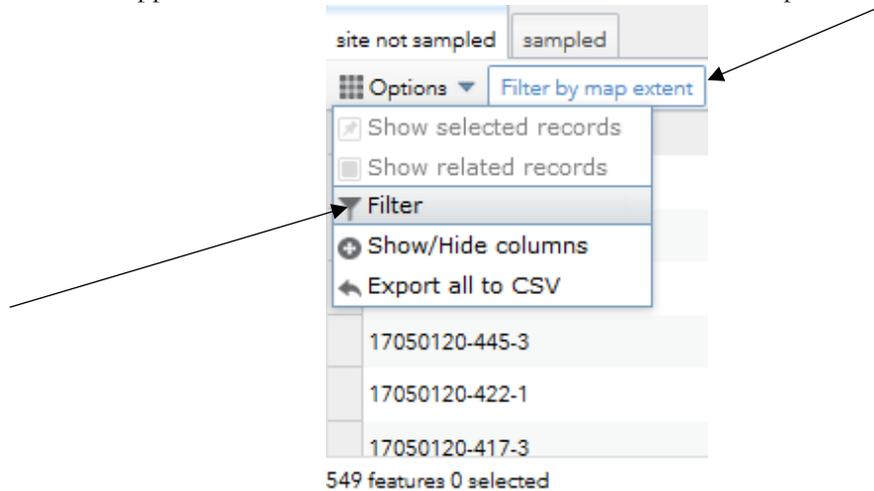
Species Code Field Name	Common Name	Genus	Species	subspecies
AEEL	American eel	Anguilla	rostrata	
ANCA	California floater	Anodonta	californiensis/nuttaliana	
ANOR	Oregon floater	Anodonta	oregonensis/kennerlyi	
BOTO	Western toad	Anaxyrus	boreas	
BRKT	Brook trout	salvelinus	fontinalis	
BRNT	Brown trout	salmo	trutta	
BULL	Bull trout	salvelinus	confluentus	
BURB	Burbot	Lota	lota	
CAVI	Bluehead sucker (Snake/Bonneville)	Catostomus	virescens	
CCAT	Channel catfish	Ictalurus	punctatus	
CHIN	Chinook salmon	Oncorhynchus	tshawytscha	
CHUM	chum salmon	Oncorhynchus	keta	
CMCP	Common carp	Cyprinus	carpio	
COHO	Coho salmon	Oncorhynchus	kisutch	
COTF	Coastal Tailed Frog	Ascaphus	truei	
DOVN	Dolly Varden	salvelinus	malma	
DRES	Zebra/Quagga Mussel	Dreissena	spp.	
GRIZ	Grizzly/Brown bear	Ursus	arctos	
GSUN	Green sunfish	Lepomis	cyanellus	

LAKT	Lake trout	salvelinus	namaycush	
LAMP	Lampetra spp.	Lampetra		
LHCT	Lahontan cutthroat trout	Oncorhynchus	clarkii	henshawi
LISY	Wood Frog	Lithobates [Rana]	sylvaticus	
LOMW	Loach minnow	Rhinichthys	cobitis	
MTSU	Mountain sucker	Catostomus	jordani	
MYSS	Opposum shrimp	Mysis	diluviana	
NOLS	Northern leatherside chub	Lepidomeda	copei	
NOPI	Northern pike	Esox	lucius	
NZMS	New Zealand mudsnail	Potamopyrgus	antipodarum	
OMMW	Olympic mudminnow	Novumbra	hubbsi	
PALA	Pacific lamprey	Entosphenus	tridentatus	
RGCH	Rio Grande chub	Gila	pandora	
RGSU	Rio Grande sucker	Catostomus	plebeius	
RHVA	Southern torrent salamander	Rhyacotriton	variegatus	
RMSC	Rocky Mountain sculpin	Cottus	sp.	
RMTF	Rocky Mountain tailed frog	Ascaphus	montanus	
RNBT	Rainbow trout/Steelhead/Redband trout	Oncorhynchus	mykiss	
RTCH	Roundtail chub	Gila	robusta	
RVOT	North American river otter	Lontra	canadensis	
SAGR	Sauger	Sander	canadensis	
SAPI	Sacramento pikeminnow	Ptychocheilus	grandis	
SCUL	Any sculpin	Cottus	spp.	
SLMD	Any salmonid			
SLSC	Slimy sculpin	Cottus	cognatus	
SMBA	Smallmouth bass	Micropterus	dolomieu	
SNAP	Snapping turtle	Chelydra	serpentina	
SPKD	Spikedace	Meda	fulgida	
STGC	Sturgeon chub	Macrhybopsis	gelida	
UMQC	Umpqua chub	Oregonichthys	kalawaseti	
WALL	Walleye	Sander	vitreus	
WEPS	Western pearlshell	Margaritifera	falcata	
WPTL	Western Pond Turtle	Actinemys	marmorata	
WRMS	Western ridged mussel	Gonidea	angulata	
WSCT	Westslope cutthroat trout	Oncorhynchus	clarkii	lewisii
WSFT	Western spadefoot toad	Spea	hammondii	
YSCT	Yellowstone cutthroat trout	Oncorhynchus	clarkii	bouvieri

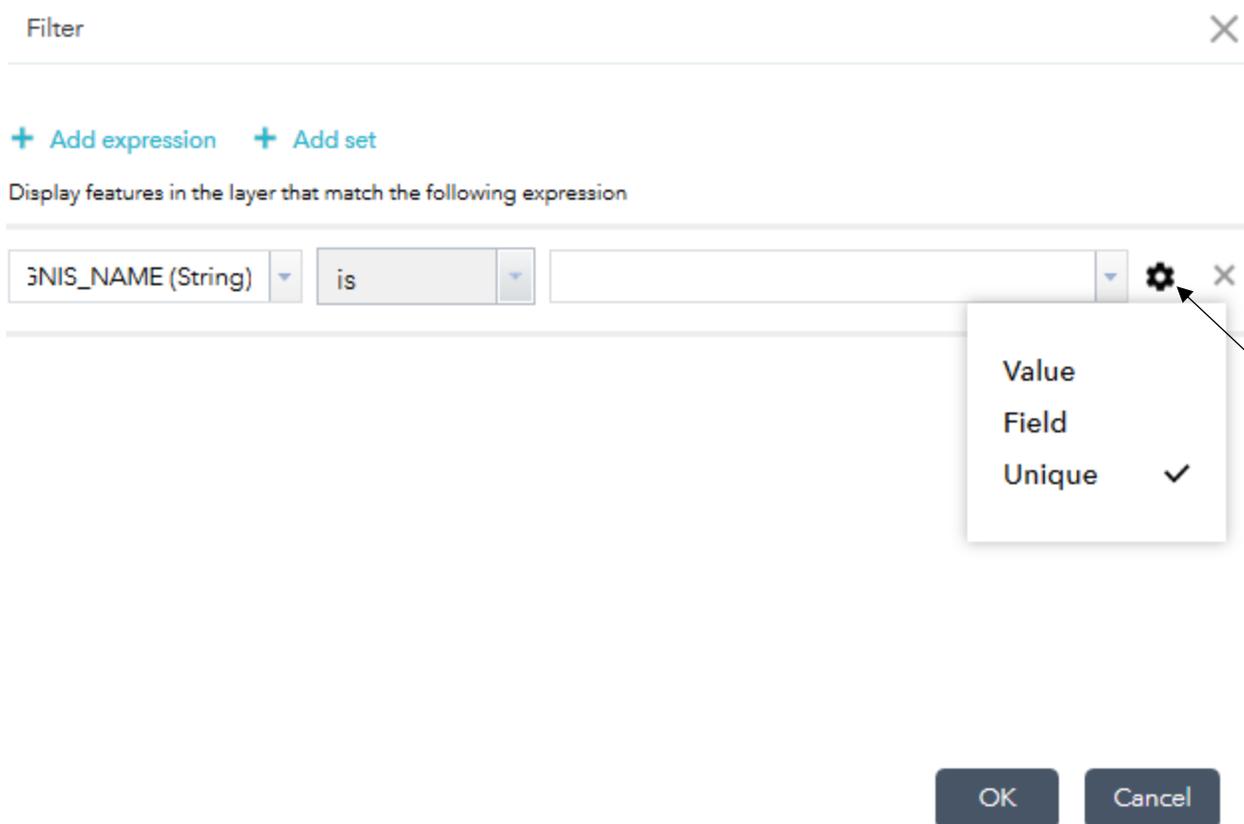
Filter Attribute Table by Stream Name example

Click on the arrow at the bottom of the map to open the attribute table. Note that the default is to only show those points that are within the current map extent. Unselect that option if you would like to filter all points.

Click the Options tab in the upper left-hand corner of the table and choose the Filter option.



In the Filter window, click “Add expression” and then use the field dropdown to choose GNIS_Name (String). Click the settings  button and choose the Unique option to allow a drop-down of all unique values in the attribute table for that field.

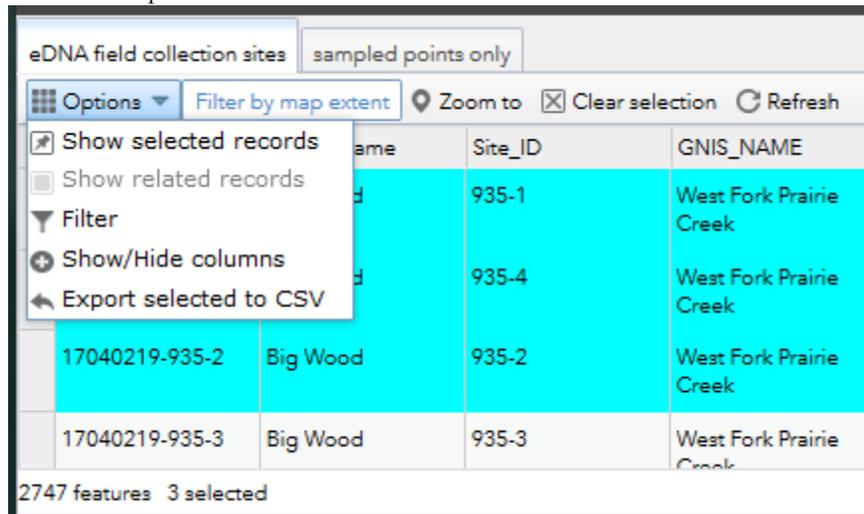


After a moment, click the dropdown. It will be populated with the available GNIS stream names. Choose your desired Stream and click “OK”.

Both the map and the attribute table will show only the points with that GNIS name. You can click to the left of the first record in the table, move the slider bar along the right all the way to the bottom of the filtered attributes, and then **click the shift key** and select the last record. This will select all the points you have filtered.

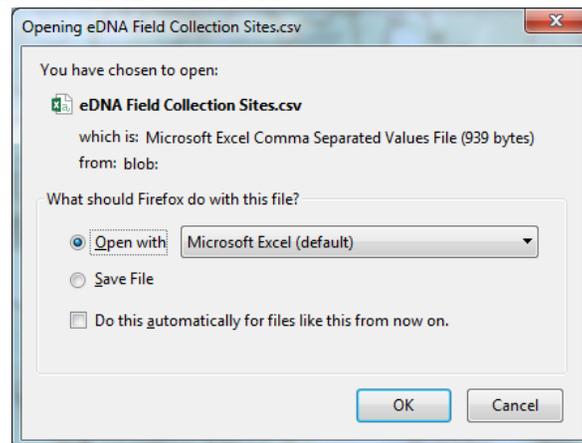
Note that your mouse will change from an arrow to a pointing hand when selecting.

Once you have selected all the points you wish to export, Click the Options tab in the upper left-hand corner of the table and choose the Export Selected to CSV option.



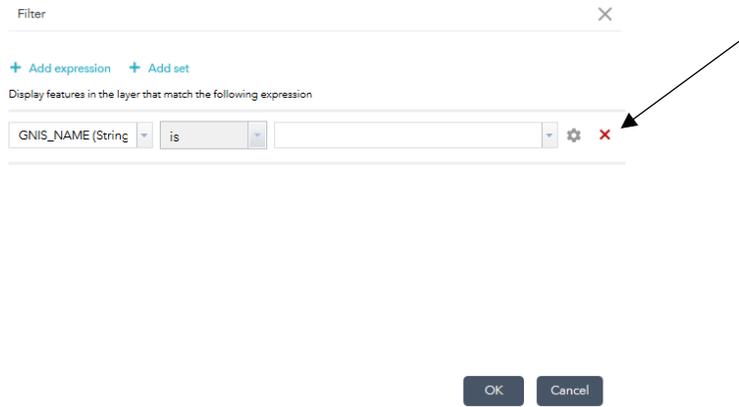
You will be prompted to confirm that you want to export to a CSV file. Click OK.

You then have the option to Open or Save the file. Click OK.



Please note that there is no automatic download of the metadata with the table as there is when you download using the [Extract Points by Area of Interest](#) tool and export as a shapefile. You can find [a general metadata document](#) on the [eDNAAtlas website](#).

To remove the filter, click the X to the right of the filter expression.



If you have more questions about using the filter tool, see the [ESRI help document for this tool](#).

Please cite downloaded data as:

Young, Michael K.; Isaak, Daniel J.; Schwartz, Michael K.; McKelvey, Kevin S.; Nagel, David E.; Franklin, Thomas W.; Greaves, Samuel E.; Dysthe, J. Caleb; Pilgrim, Kristine L.; Chandler, Gwynne L.; Wollrab, Sherry P.; Carim, Kellie J.; Wilcox, Taylor M.; Parkes-Payne, Sharon L.; Horan, Dona L. 2018. Species occurrence data from the aquatic eDNAAtlas database. Fort Collins, CO: Forest Service Research Data Archive. Updated 31 July 2020. <https://doi.org/10.2737/RDS-2018-0010>.

eDNAAtlas interactive maps -

[Link to eDNAAtlas western Sampling Grid ArcGIS Online Map](#)

[Link to the eDNAAtlas eastern Sampling Grid ArcGIS Online Map](#)

[Link to the eDNAAtlas Results ArcGIS Online Map for the western US](#)

[Link to the eDNAAtlas Results ArcGIS Online Map for the eastern US](#)

For use with ArcGIS Online –

Western results https://apps.fs.usda.gov/fsgisx02/rest/services/rmrs/RMRSAWAE_Aquatic_eDNAAtlas_01/MapServer

Western grid

https://apps.fs.usda.gov/fsgisx02/rest/services/rmrs/RMRSAWAE_Aquatic_eDNAAtlas_SiteLocations_01/MapServer

Eastern results https://apps.fs.usda.gov/fsgisx02/rest/services/rmrs/RMRSAWAE_Aquatic_eDNAAtlas_East/MapServer

Eastern grid

https://apps.fs.usda.gov/fsgisx02/rest/services/rmrs/RMRSAWAE_Aquatic_eDNAAtlas_East_SiteLocations_01/MapServer

Questions about this User Guide, or need trouble-shooting ideas? Please contact [Sharon \(Parkes\) Payne](#)