

Introduction to Aquarius WebPortal v.2020.1

[How to Find, View, Export, and Chart Data in the WebPortal](#)

The NPS' Aquarius WebPortal (<https://irma.nps.gov/aqwebportal>) provides read-only access to 'published' Aquarius data to support data viewing, charting, and dissemination. For NPS and other Department of Interior (DOI) agency users, the WebPortal requires active-directory Windows Authentication login. Authenticated users can customize the WebPortal and access all data within 'published' time series and field visits. For public (anonymous) users, there is no login or site customization and access is limited to only the approved portions of data within 'published' time series and field visits. The NPS' Aquarius WebPortal license supports an unlimited number of users¹.



If you access the WebPortal from the DOI network or via DOI's VPN, either as an NPS employee or member of another DOI agency, you must have an active directory based login created for you first in order to authenticate (by clicking the 'Windows Authentication' button) at the 'Sign In' screen. To obtain an authenticated WebPortal login, email your active directory login ID to the [NPS Aquarius WebPortal Administrator](#). To use the WebPortal without authentication, access it as a public (anonymous) user from a computer that is not on the DOI network.

This document provides step-by-step instructions on how users (both authenticated and anonymous/public) can navigate the NPS' Aquarius WebPortal ('Portal' for short) to find, view, export, and chart data.

How to Find, View, Export, and Chart Data

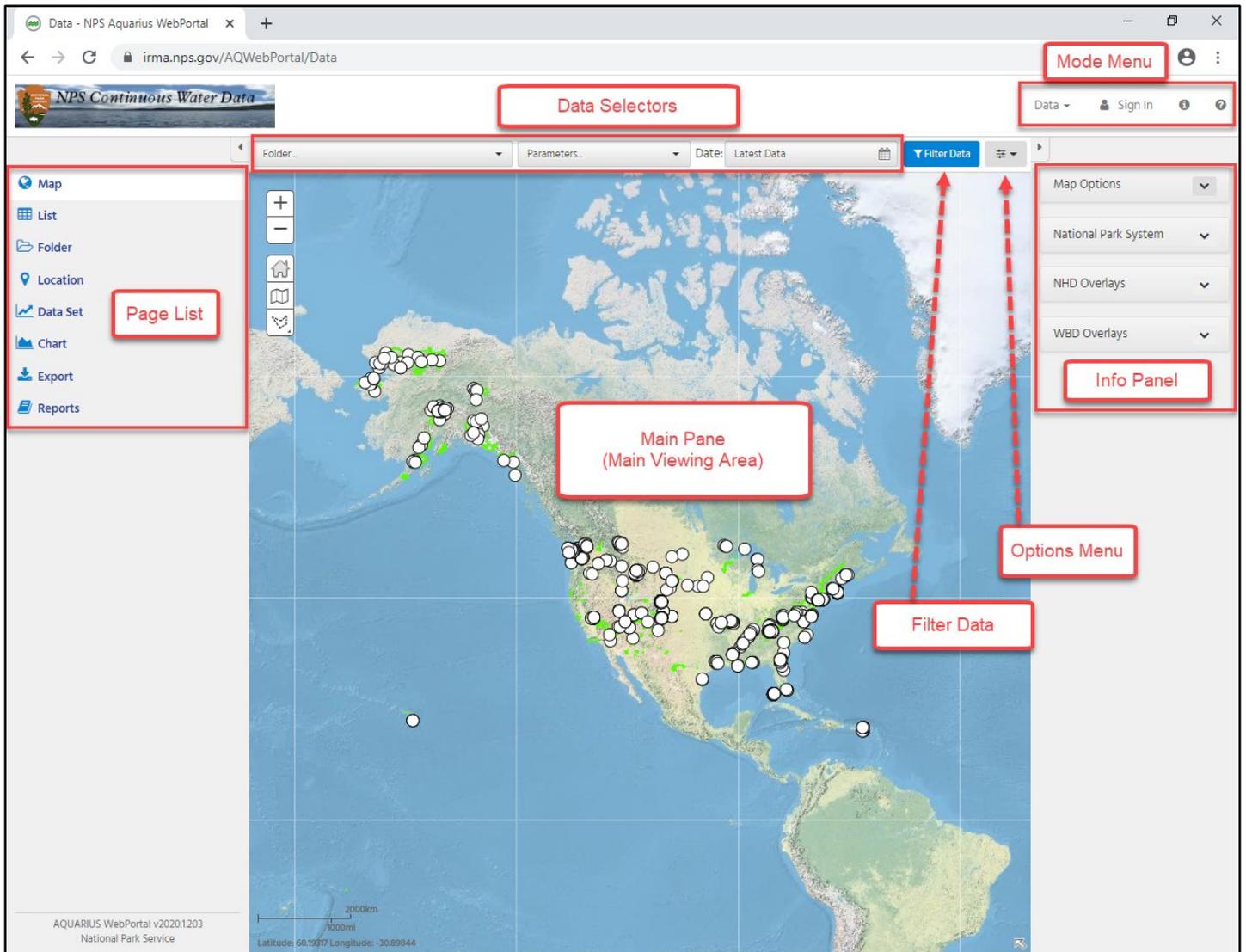
The NPS Aquarius WebPortal (Portal) is a website (<https://irma.nps.gov/aqwebportal>) within IRMA that provides access to designated (see this document and/or video for more information on publishing data to the Portal) continuous time-series and discrete field visit data entered into the NPS' Aquarius Database.



Note: There are actually two versions of the Portal – internal and external – that are accessed by the same URL (<https://irma.nps.gov/aqwebportal>). You will automatically be routed to the proper Portal based on whether you are on the DOI network, either at the office or via VPN (internal), or not (external). Both Portals look and behave similarly, except that the internal Portal allows users to access unapproved data and save charts and settings. Consequently, the internal Portal requires an authenticated login. The external Portal has no login.

The Portal provides many ways to discover data you can retrieve. The panel on the left contains the Page List which dictates what is displayed in the Main Pane. The panel on the right is the Info Panel that provides additional information and/or settings relevant to the selected Page displayed in the Main Pane. Since 'Map' is the default selected Page below, the Info Panel displays various map-related options. At the center top are Data Selectors that allow you to select (by folder, parameter, and/or date) what locations and datasets to display. The 'Filter Data' button allows you to further filter (by location attributes, map selection, or dataset attributes (must select a parameter first)) what is displayed in the Main Pane. The Options Menu button (☰) enables you to get a permalink (URL) for what's currently displayed in the Main Pane, export data, perform a bulk data set action, refresh the screen, or open Aquatic Informatics' Aquarius WebPortal User Manual (i.e. the online Help Manual). Aquatic Informatics' Aquarius WebPortal User/Help Manual is also accessible in the Mode Menu by clicking on the (?). Note: Some of the functionality portrayed in the User/Help Manual is not implemented in the NPS' Aquarius WebPortal due to additional cost or its focus on data collected in the last 24 hours. The Mode Menu also provides a Getting Started Guide (📖) – which is this document – and a 'Data' drop-down for selecting which Page to view in the Main Pane (mimics the Page List).

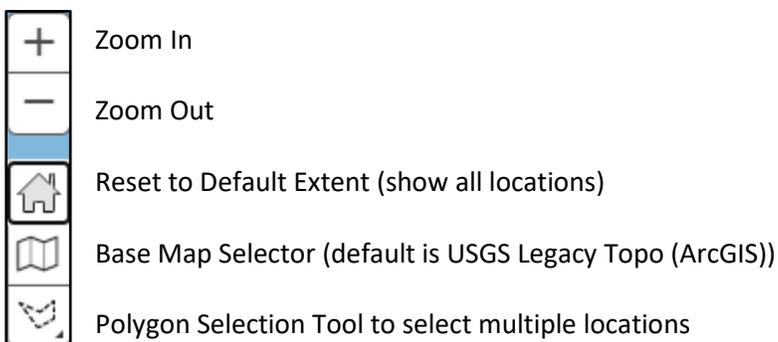
¹ While the NPS can have an unlimited number of logins to the Aquarius WebPortal, some Portal functionality is licensed separately, including Dashboards, Alerting, and Scripting. As the NPS hasn't purchased that extended functionality, we are limited to a total of two Dashboards, five Alerts, and five Scripts while using the WebPortal.



The first step to interacting (i.e. charting, exporting, etc.) with data in the Portal is finding the desired location and datasets. You can use the following Pages, Data Selectors, and Filters to find the data you seek.

Map Page

You can click and hold on the map to drag and center it as desired. You can zoom in or out, reset to the default extent, or change the base map using the Map Tool Option icons in the upper left corner of the map.





Only locations with valid latitude and longitude coordinates will appear on the map. Locations entered without latitude and longitude coordinates can still be accessed in the Portal using the List or Location Pages shown in the left panel.

The Info Panel selections for the Map Page allow you to toggle on/off the point location symbols, National Park System boundaries, and National Hydrography Dataset (NHD) and National Watershed Boundary Dataset (WBD) boundaries. To display the NHD, select the desired overlay(s) and be sure to zoom in to a large scale (e.g. 1:24,000 – the map would be too cluttered to show the NHD at smaller scales). The map below shows the NHD flowlines superimposed over the satellite image (use the Base Map Selector option to change this) centered on Little Cottonwood Creek in Craters of the Moon National Monument and Preserve. Hovering the mouse over the little white location indicator for Little Cottonwood Creek (CRMO_L-Cotton_001) causes the Portal to display a pop-up message with information about the location and its number of published/available datasets.

The screenshot shows the NPS Aquarius WebPortal interface. The main map area displays a satellite view with blue flowlines representing the National Hydrography Dataset (NHD) and green outlines representing National Park System boundaries. A pop-up window is open over a location marker, displaying the following information:

| Little Cottonwood Creek 001 (CRMO_L-Cotton_001) | |
|---|---|
| Identifier | CRMO_L-Cotton_001 |
| Location Name | Little Cottonwood Creek 001 |
| Location Type | River/Stream |
| Folder | National Park Service.Upper Columbia Basin Network:CRMO |
| Latitude | 43.48794 |
| Longitude | -113.59348 |
| Elevation | 6400 ft |
| Data Sets | 5 |
| | Location |

On the right side of the map, the 'Map Options' panel is visible, with several checkboxes checked and highlighted by red boxes:

- Indicators: Display
- National Park System: Park Boundaries
- NHD Overlays: Flowlines
- Waterbodies
- Areas
- WBD Overlays: HUC-8 (Subbasin), HUC-10 (Watershed), HUC-12 (Subwatershed), HUC-14

The bottom left corner of the portal displays the text: 'AQUARIUS WebPortal v2020.1.203 National Park Service'.

Click on the 'Location' hyperlink at the bottom of the pop-up message and the map will be replaced by 'Summary' information about the selected location and its published/available datasets.

The screenshot displays the 'NPS Continuous Water Data' web portal. The left sidebar contains navigation options: Map, List, Folder, Location, Data Set, Chart, Export, and Reports. The top navigation bar includes 'Data', 'Sign In', and user information. The main content area is titled 'Summary' and shows details for location 'CRMO_L-Cotton_001'. A 'Go To Map' button is visible in the top right of the summary section. Below the summary is a table of 'Data Sets' with columns for Data Set Id, Parameter, Start of Rec., End of Rec., Last Updated, Active status, and a 'Go To' button for each row.

| Location: CRMO_L-Cotton_001 | |
|-----------------------------|---|
| Location Name | Little Cottonwood Creek 001 |
| Location Type | River/Stream |
| Folder | National Park Service.Upper Columbia Basin Network.CRMO |
| Latitude / Longitude | 43.48794, -113.59348 (WGS 84) |
| Elevation | 6400 ft |
| Time Zone | UTC-07:00 |
| Description | UCBN Integrated Water Quality Monitoring Station 001. Monitoring began in 2010 and occurs every 3 years. |
| Active | ✓ |
| Date Established | 06/22/2010 |
| Gage Number | |
| Park Name | Craters of the Moon National Monument |
| Sensitivity | Public |
| Status | Active |
| Travel Directions | The water chemistry monitoring station 001 is approximately 800 m downstream from the headwaters and 580 meters upstream from where the 2-track road crosses the creek. |
| Waterbody Code | |
| Waterbody Name | Little Cottonwood Creek |
| Tags | No tags are associated with this Location. |

| Data Set Id... | Parameter | Start of Re... | End of Rec... | Last Updated | Active | Go To |
|----------------------|-----------------------|---------------------|---------------------|---------------------|--------|-------|
| O2 (Dis)mg/l@CR... | Dissolved Oxygen... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:53 | ✓ | Go To |
| pH.pH@CRMO_L-... | pH | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:52 | ✓ | Go To |
| Sp CondµS/cm@... | Specific Conducta... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:52 | ✓ | Go To |
| Turbidity, Nephel... | Turbidity, water, ... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:53 | ✓ | Go To |

List Page

Let's see how you can get to this same 'Summary' information screen for Little Cottonwood Creek (CRMO_L-Cotton_001) without using the Map Page. First, in the left panel Page List, click on 'Map' to return to the map view (alternatively, you could have clicked on [Go To Map](#) in the 'Summary' information screen) and then click on the home () button to return the zoom to the default map extent. To get back to that 'Summary' information screen for Little Cottonwood Creek without using the Map Page, click on the 'List' Page in the left panel. The Portal will provide a list of all the published locations in the database. Click on the filter icon () to the right of 'Identifier' and enter 'CRMO' in the first box and click the 'Filter' button.

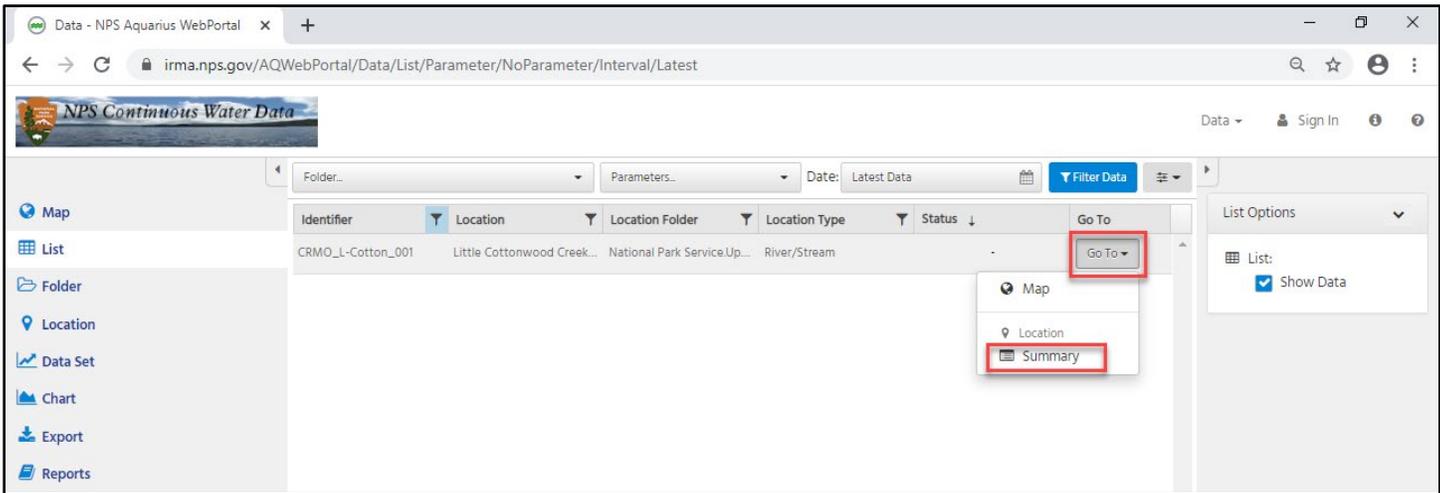
The screenshot shows the NPS Aquarius WebPortal interface. The browser address bar displays the URL: `irma.nps.gov/AQWebPortal/Data/List/Parameter/NoParameter/Interval/Latest`. The page title is "NPS Continuous Water Data".

The main content area features a table with the following columns: Identifier, Location, Location Folder, Location Type, Status, and Go To. A filter dropdown menu is open over the "Location" column, showing "Show items with value that:" followed by "Contains" and the text "CRMO" entered in the search field. The "Filter" button is highlighted with a red box.

The table lists various locations, including NOAT_KUGA2, NOAT_HOWA2, NOAT_KAUWA2, KOVA_SRWA2, GAAR_CHMA2, GAAR_KLIA2, GAAR_PAMA2, GAAR_RAMMA2, CAKR_MNOA2, CAKR_TAHA2, BELA_DVLA2, BELA_ELLA2, BELA_MITA2, BELA_SRTA2, NOAT_SSEA2, NOAT_ASIA2, NOAT_IMYA2, KOVA-085, KOVA-086, DENA-161, and DENA-018. Each row has a "Go To" button.

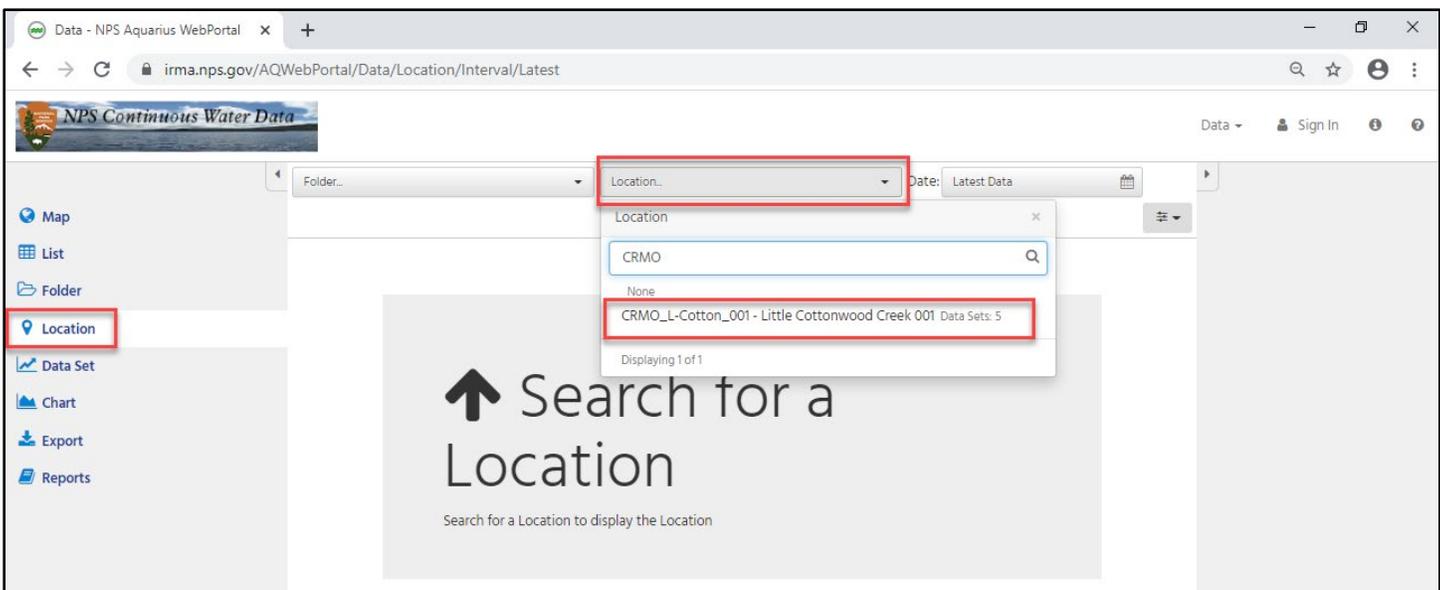
On the right side, there is a "List Options" panel with a "Show Data" checkbox checked. At the bottom right, it indicates "Items Displayed: 889".

This will show the only location currently in the database that contains CRMO in its Location_ID (Identifier). At this point, click the 'Go To' button next to 'CRMO_L-Cotton_001' and select the 'Summary' option to arrive at the same 'Summary' information screen we reached via Map Page navigation above.



Location Page

Now let's see how you can get to this same 'Summary' information screen for Little Cottonwood Creek (CRMO_L-Cotton_001) without using the Map or List Pages. As per above, let's reset everything to the default view as if we just started the Portal. In the left panel Page List, click on 'Map' to return to the map view (alternatively, you could have clicked on [Go To Map](#) in the 'Summary' information screen) and then click on the home () button to return the zoom to the default map extent. To get back to that 'Summary' information screen for Little Cottonwood Creek without using the Map or List Pages, click on the 'Location' Page in the left panel. The Portal will clear the Main Pane. In the 'Data Selectors' at the top of the Main Pane, you'll notice a drop-down labelled 'Location...'. Note: If you had already selected a location following along above, that location will appear by default in both the 'Location' drop-down box and the Location 'Summary' screen. You can click on 'None' to clear the 'Location' drop-down for a fresh search. Click the 'Location' drop-down and underneath 'Location' begin typing 'CRMO'. The Portal will propose locations that contain 'CRMO'. When you see 'CRMO_L-Cotton_001 – Little Cottonwood Creek 001' appear, go ahead and select it.



You'll be back at the Location Page's 'Summary' information for 'CRMO_L-Cotton_001' showing in the Main Pane.

The screenshot displays the NPS Aquarius WebPortal interface. The browser address bar shows the URL: `irma.nps.gov/AQWebPortal/Data/Location/Summary/Location/CRMO_L-Cotton_001/Interval/Latest`. The page title is "Data - NPS Aquarius WebPortal".

The main content area is titled "Summary" and provides details for the location "CRMO_L-Cotton_001". The details are as follows:

- Location Name: Little Cottonwood Creek 001
- Location Type: River/Stream
- Folder: National Park Service.Upper Columbia Basin Network.CRMO
- Latitude / Longitude: 43.48794, -113.59348 (WGS 84)
- Elevation: 6400 ft
- Time Zone: UTC-07:00
- Description: UCBN Integrated Water Quality Monitoring Station 001. Monitoring began in 2010 and occurs every 3 years.
- Active:
- Date Established: 06/22/2010
- Gage Number: (blank)
- Park Name: Craters of the Moon National Monument
- Sensitivity: Public
- Status: Active
- Travel Directions: The water chemistry monitoring station 001 is approximately 800 m downstream from the headwaters and 580 meters upstream from where the 2-track road crosses the creek.
- Waterbody Code: (blank)
- Waterbody Name: Little Cottonwood Creek
- Tags: No tags are associated with this Location.

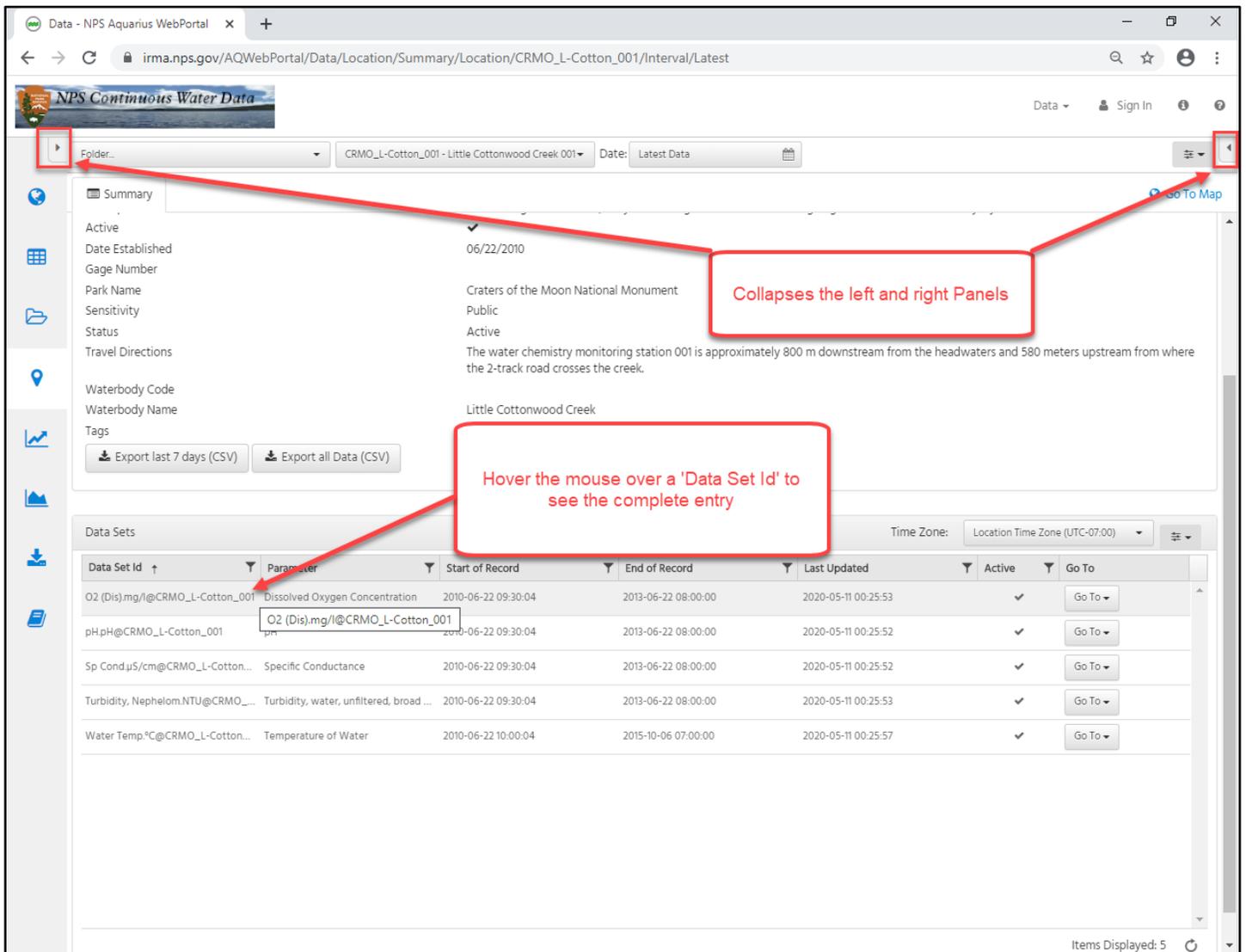
At the bottom of the summary section, there are two buttons: "Export last 7 days (CSV)" and "Export all Data (CSV)".

Below the summary is a "Data Sets" table. The table has the following columns: "Data Set Id...", "Parameter", "Start of Re...", "End of Rec...", "Last Updated", "Active", and "Go To". The table contains four rows of data:

| Data Set Id... | Parameter | Start of Re... | End of Rec... | Last Updated | Active | Go To |
|----------------------|-----------------------|---------------------|---------------------|---------------------|-------------------------------------|-------|
| O2 (Dis).mg/l@CR... | Dissolved Oxygen... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:53 | <input checked="" type="checkbox"/> | Go To |
| pH.pH@CRMO_L-... | pH | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:52 | <input checked="" type="checkbox"/> | Go To |
| Sp Cond.µS/cm@... | Specific Conducta... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:52 | <input checked="" type="checkbox"/> | Go To |
| Turbidity, Nephel... | Turbidity, water, ... | 2010-06-22 09:30:04 | 2013-06-22 08:00:00 | 2020-05-11 00:25:53 | <input checked="" type="checkbox"/> | Go To |

The footer of the page reads: "AQUARIUS WebPortal v2020.1203 National Park Service".

Notice under the 'Data Sets' listing it is difficult to read the 'Data Set Ids' and other columns due to limited screen space. You can collapse both the left and right panels as needed using the  and  buttons. While it is still difficult to read the complete content in particular columns, you can hover the mouse over an entry to see the complete entry in a little pop-up. Use the  and  buttons to enlarge the left and right panels as desired.



Folder Searches

You can also find locations and their datasets by using the Folder Page or 'Folder...' Data Selector. This can be useful when you want to select many related locations simultaneously. Click on the Folder Page in the left panel and then click on the 'Folder...' drop-down data selector and type 'Yellowstone National Park' below 'Folder'. The Portal will propose folder names that contain 'Yellowstone National Park'. Just select the 'National Park Service.Yellowstone National Park'. Note: 'National Park Service' is the top-level folder name for every folder.

The Portal will display all the locations in the selected folder and the folder's 'Child Folders'. In the Locations grid in the Main Pane you can click on a Location's 'Go To' button and select 'Map' to switch the Main Pane to map view and zoom to the selected location or click 'Summary' to go to the selected location's 'Summary' information as was done above (for the Map, List, and Location Pages).

Browser: Data - NPS Aquarius WebPortal | URL: irma.nps.gov/AQWebPortal/Data/Folder/Interval/Latest

NPS Continuous Water Data

Map | List | Folder | Location | Data Set | Chart | Export | Reports

Folder: [Dropdown] | Date: Latest Data

Folder Search Results:

- Yellowstone National Park
- None
- National Park Service.Greater Yellowstone Network
- National Park Service.Greater Yellowstone Network.BICA
- National Park Service.Yellowstone National Park
- National Park Service.Yellowstone National Park.Climate Elevational Transects
- National Park Service.Yellowstone National Park.Groundwater
- National Park Service.Yellowstone National Park.Rivers/Streams
- National Park Service.Yellowstone National Park.Thermal
- National Park Service.Yellowstone National Park.USGS Streamgage Stations

Displaying 8 of 8

Folder

Browser: Data - NPS Aquarius WebPortal | URL: irma.nps.gov/AQWebPortal/Data/Folder/Summary/Folder/National%20Park%20Service.Yellowstone%20National%20Park/Interval/Latest

NPS Continuous Water Data

Map | List | Folder | Location | Data Set | Chart | Export | Reports

National Park Service.Yellowstone National Park | Date: Latest Data

Summary

Folder: Yellowstone National Park

Folder Name: Yellowstone National Park

Path: National Park Service.Yellowstone National Park

Folder Type: Folder

Parent Folder: National Park Service

Child Folders: 5

Child Folders:

- Climate Elevational Transects
- Groundwater
- Rivers/Streams
- Thermal
- USGS Streamgage Stations

Yellowstone National Park

Folder Name: Yellowstone National Park

Path: National Park Service.Yellowstone National Park

Folder Type: Folder

Parent Folder: National Park Service

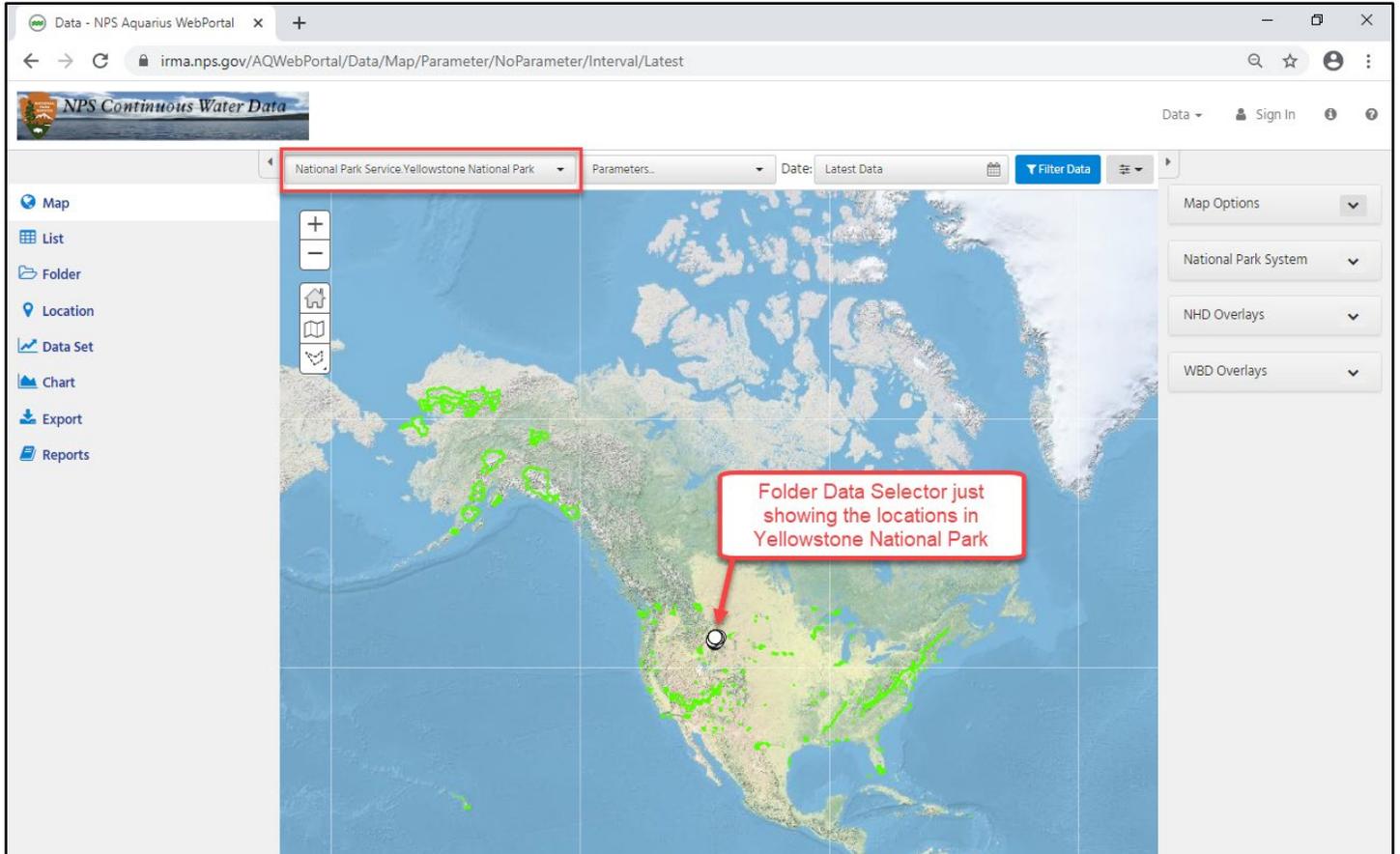
Locations

| Identifier | Location | Location Folder | Location Type | Direct Child | Go To |
|--------------------------|--------------------------|--------------------------|------------------------|--------------|-------|
| YELL_Gardiner | Gardiner | National Park Service... | Meteorological Station | x | Go To |
| YELL_Lewis | Lewis Lake Outlet | National Park Service... | River/Stream | Map | Go To |
| YELL_Mammoth | Mammoth | National Park Service... | Meteorological Station | Location | Go To |
| YELL_oldfaithful_a_te... | Upper Geyser Basin OL... | National Park Service... | Other-Surface Water | Summary | Go To |
| YELL_oldfaithful_b_t... | Upper Geyser Basin OL... | National Park Service... | Other-Surface Water | x | Go To |
| YELL_RiversStreams... | Reese Creek | National Park Service... | River/Stream | x | Go To |
| YELL_SH_UnnamedTrib | Unnamed Tributary to... | National Park Service... | River/Stream | ✓ | Go To |
| YELL_SHCr_Unnamed... | Unnamed Tributary to... | National Park Service... | River/Stream | ✓ | Go To |
| YELL_ShoshoneCreek | Shoshone Creek | National Park Service... | River/Stream | ✓ | Go To |
| YELL_ShoshoneOutlet | Shoshone Lake Outlet | National Park Service... | River/Stream | ✓ | Go To |

Items Displayed: 28

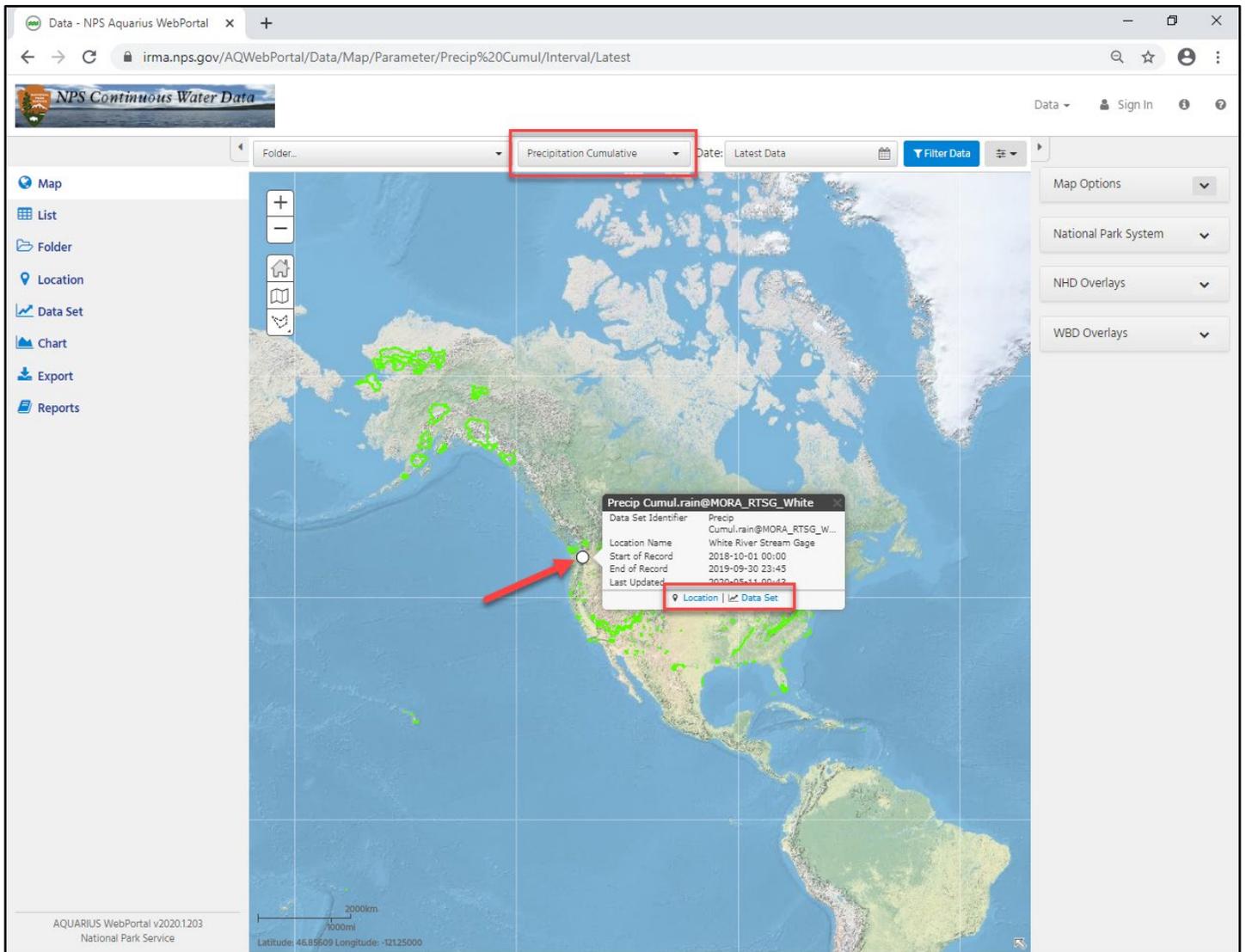
AQUARIUS WebPortal v2020.1203
National Park Service

Note: The 'Folder...' drop-down is a Data Selector that is available when you are using the Map, List, Location, and Data Set Pages. For example, if you click on the Map Page in the left panel with the 'Yellowstone National Park' folder selected in the 'Folder...' drop-down, the map will only show the locations in Yellowstone National Park.

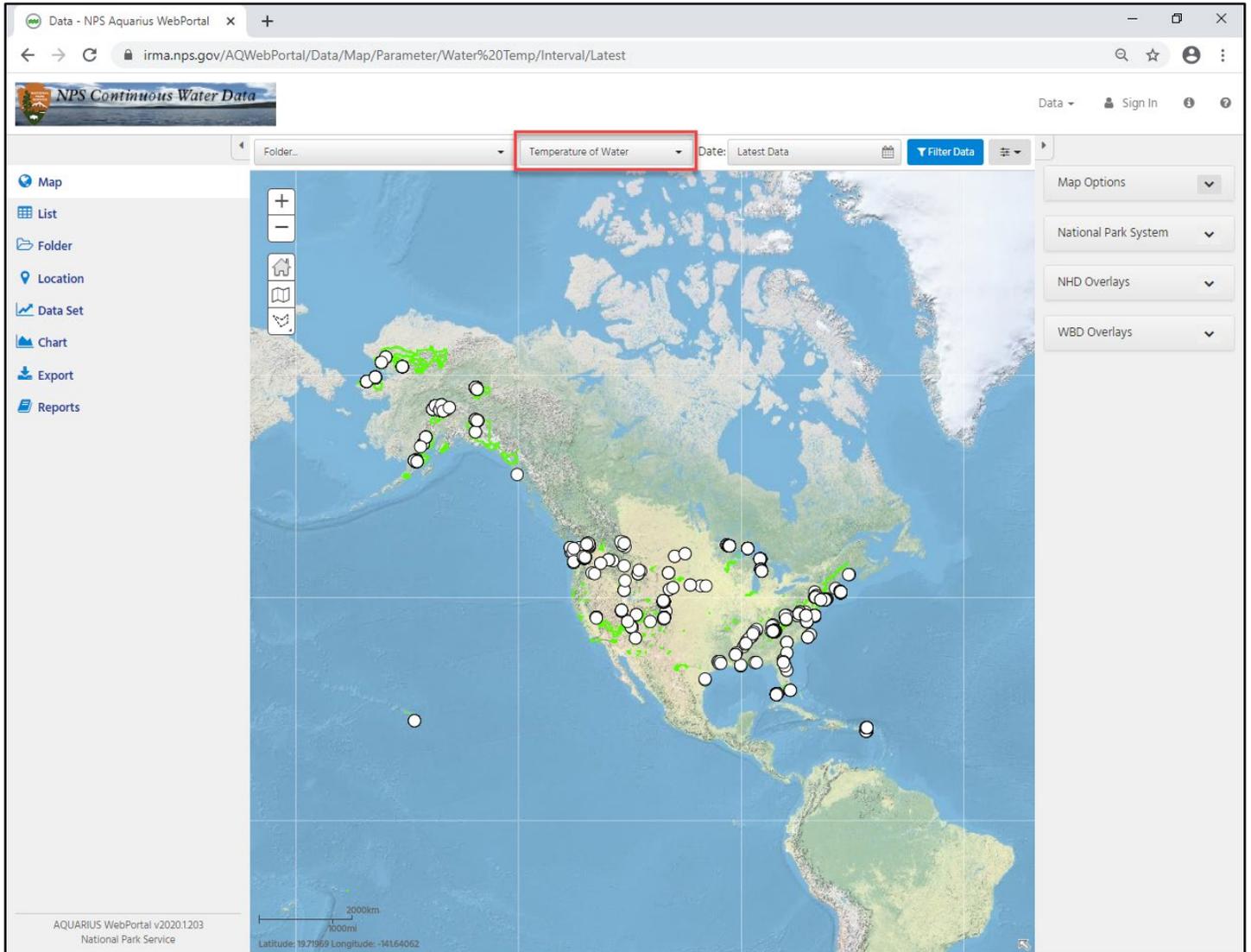


Parameter Search

You can search for data for a particular parameter in the Portal using the 'Parameters...' Data Selector. The 'Parameters...' Data Selector works much like the 'Folder...' Data Selector shown above in that it will limit the locations displayed on the Map and List Pages to those locations that have data for the selected parameter. To see how this works, let's reset everything to the default view as if we just started the Portal. In the left panel Page List, click on 'Map' to return to the map view and then click on the home (🏠) button to return the zoom to the default map extent. In both the 'Folder...' and 'Parameters...' drop-down Data Selectors, enter/select 'None'. This shows all published locations on the map. Drop down the 'Parameters...' Data Selector and enter 'Precip Cumul' to select Precipitation Cumulative. The Portal will display the one location, MORA_RTSG_White, that has Precipitation Cumulative data. Hovering the mouse over the monitoring location provides a summary pop-up that contains hyperlinks that will take you to the 'Location' (MORA_RTSG_White) summary information or to the Precipitation Cumulative 'Data Set'.



To change the display to locations having a different parameter, for example, water temperature, drop down the 'Parameters...' Data Selector and enter 'water temp' to select 'Temperature of Water'. The map will update to show only those locations that have water temperature data.



Data Set Page

The Data Set Page provides another means to access a specific dataset at a location. It uses 'Folder...', 'Location...', and 'Data Set...' Data Selectors to locate desired data sets. In the 'Location...' drop-down Data Selector, under 'Location', enter 'CRMO', pause, and then select 'CRMO_L-Cotton_001 – Little Cottonwood Creek 001'. The Portal will automatically select the first data set at that location 'O2 (Dis)' and provide its 'Summary' information. To select a different data set at that location, click the 'Data Set...' drop-down Data Selector. The Portal will show the five time series at the location. Select the 'Water Temp' time series from the list. The Portal will update to show the 'Summary' information for the water temperature time series and the functions you can do with the selected dataset.

The screenshot displays the NPS Aquarius WebPortal interface. The browser address bar shows the URL: `irma.nps.gov/AQWebPortal/Data/DataSet/Summary/Location/CRMO_L-Cotton_001/DataSet/Water%20Temp%°C/Interval/AllData`. The page title is "NPS Continuous Water Data".

The main content area shows a data set summary for "Water Temp.°C@CRMO_L-Cotton_001". The summary table is as follows:

| | |
|---------------------|-------------------------------------|
| Location Identifier | CRMO_L-Cotton_001 |
| Location Name | Little Cottonwood Creek 001 |
| Parameter | Temperature of Water |
| Unit | Celsius |
| Start of Record | 2010-06-22 10:00 (UTC-07:00) |
| End of Record | 2015-10-06 07:00 (UTC-07:00) |
| Last Updated | 2020-05-11 00:25 (UTC-07:00) |
| Description | |
| Comments | |
| Active | <input checked="" type="checkbox"/> |

Below the table are two buttons: "Export last 7 days (CSV)" and "Export all Data (CSV)".

The right-hand panel shows a detailed view of the parameter "Water Temp.°C@CRMO_L-Cotton_001" with the following details:

| | |
|-----------------|-----------------------------------|
| Location Name | Little Cottonwood Creek 001 (Map) |
| Parameter | Temperature of Water |
| Unit | Celsius |
| Start of Record | 2010-06-22 10:00 (UTC-07:00) |
| End of Record | 2015-10-06 07:00 (UTC-07:00) |
| Last Updated | 2020-05-11 00:25 (UTC-07:00) |

The footer of the page reads: "AQUARIUS WebPortal v2020.1203 National Park Service".

Filter Data

You can use the **Filter Data** button on the Map and List Pages to filter the data by Location Attribute or Map Selection. Suppose you wanted to just see lake monitoring stations. Click **Filter Data** and select 'Location Attributes' from the list of Filters. The Portal will display a list of Location Attributes that you can filter against. Click on 'Type' and then click the drop down labelled 'Locations whose Type:' and select 'Lake'. Click **+ Add Filter** to add this lake filter and you will be taken back to the Location Attributes list. You can add additional Location Attribute filters (for example if you wanted lakes with a particular string in their Description attribute, or lakes that are higher than a specified elevation, etc.). When you are done specifying your Location Attribute filters, scroll to the bottom of the list. The Portal will indicate how many locations meet the filter condition (34 locations are lakes). Click **Filter** to apply the filter and return back to the Map or List Page to see the 34 locations.

NPS Continuous Water Data

Map | List | Folder | Location | Data Set | Chart | Export | Reports

Filter Data

Use the properties of the Location and/or the Data Set to filter which data will be included in your view

Filters > Location Attributes

| | |
|--|---|
| Name | > |
| Identifier | > |
| <input checked="" type="checkbox"/> Type is equal to Lake | > |
| Folder | > |
| Latitude | > |
| Longitude | > |
| Elevation | > |
| Time Zone | > |
| Description | > |
| Location State | > |
| Park Name | > |
| Sensitivity | > |
| Status | > |
| Waterbody Code | > |
| Waterbody Name | > |
| Gage Number | > |
| Date Established | > |

Location Type:
Select a Location Type to see Location Attributes specific to that type. By selecting a Type, the Locations will be filtered to that Type.

Lake

No Attributes are available for the Lake Location Type

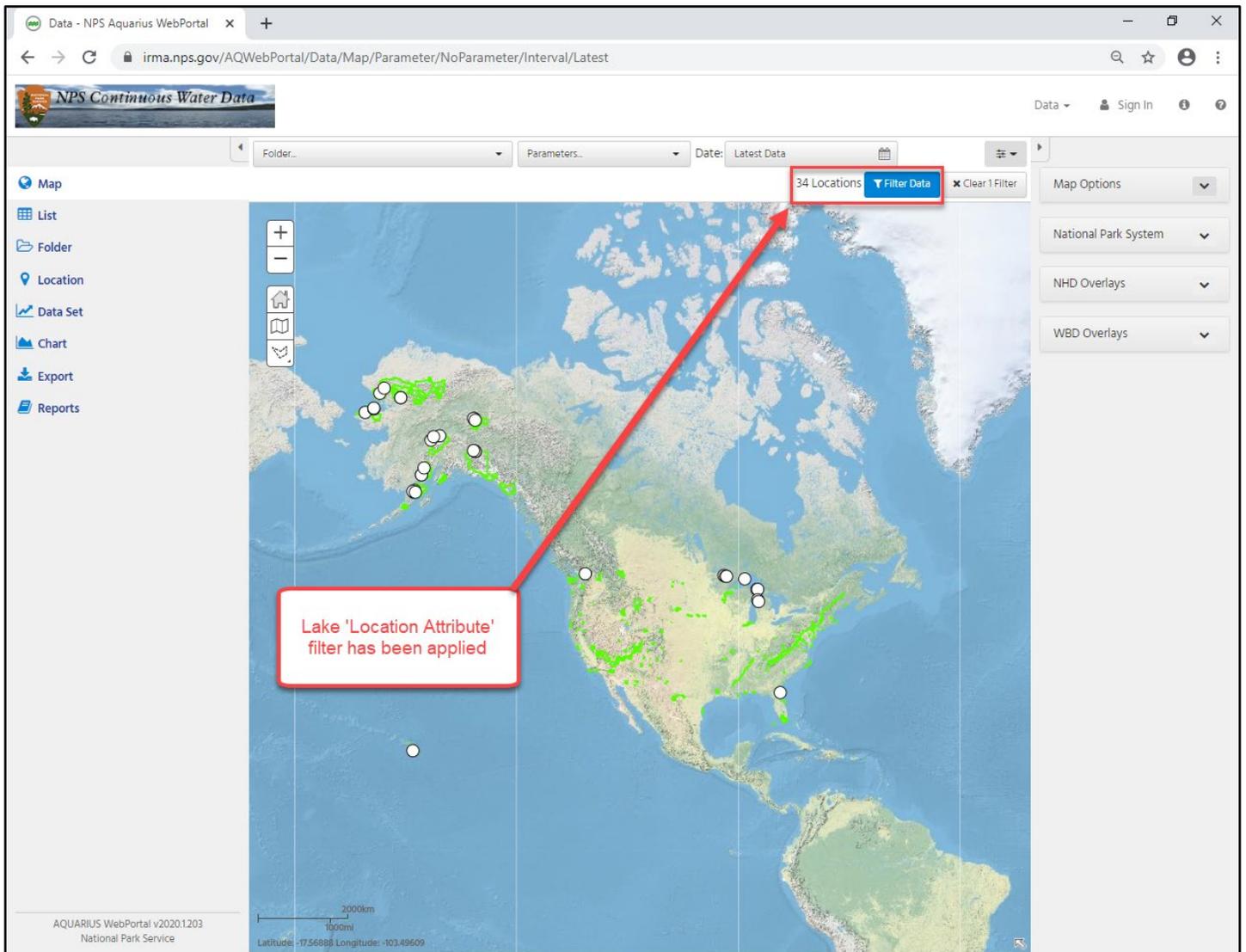
Clear All Location Attributes

Clear 1 Filter

34 Locations **Filter**

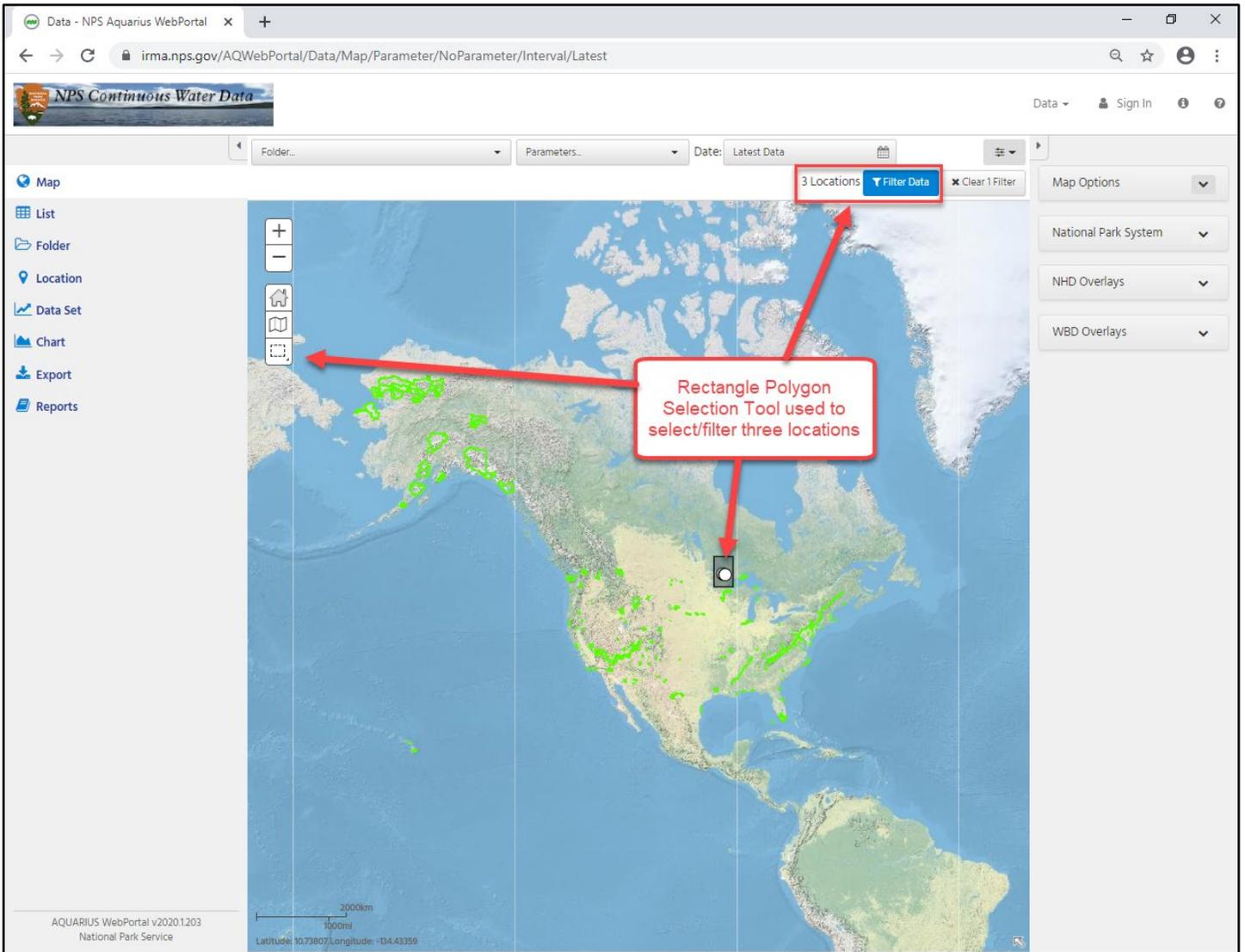
AQUARIUS WebPortal v2020.1203
National Park Service

Latitude: 78.4780 Longitude: -40.2984

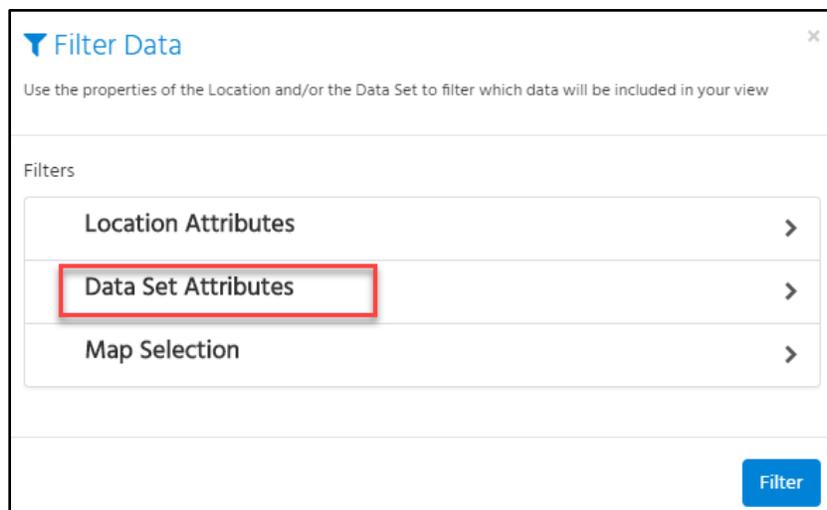


You can use the 'Parameters...' Data Selector to choose 'Water Temp' to only show lakes with water temperature data. To remove the Location Attribute filter, just click the **✕ Clear 1 Filter** button.

The Map Selection filter is applied by using the Polygon, Rectangle, or Circle Selection Tools () to select one or more locations by drawing the specified shape on the map. Below, the Rectangle Selection Tool was used to select three locations. You can remove the Map Selection to bring back all locations by clicking the **✕ Clear 1 Filter** button.



On the Map and List Pages, if you use the 'Parameters...' Data Selector to choose a parameter, for example water temperature, you then can filter against the 'Data Set Attributes' for each water temperature dataset.



For example, this filter is set to find locations with water temperature datasets that have the word 'Instantaneous' in their dataset label.

Filter Data

Use the properties of the Location and/or the Data Set to filter which data will be included in your view

Filters > Data Set Attributes

- Label**
contains Instantaneous
- Blacklisted Status
- Primary
- Time-Series/Field Visits
- Start of Record
- End of Record
- Description
- Comment
- Data Set State

Clear All Data Set Attributes

Clear 1 Filter

11 Data Sets **Filter**

Data - NPS Aquarius WebPortal

irma.nps.gov/AQWebPortal/Data/Map/Parameter/Water%20Temp/Interval/Latest

NPS Continuous Water Data

Folder... Temperature of Water Date: Latest Data

11 Data Sets Filter Data Clear 1 Filter

Map Options

- National Park System
- NHD Overlays
- WBD Overlays

Map

- List
- Folder
- Location
- Data Set
- Chart
- Export
- Reports

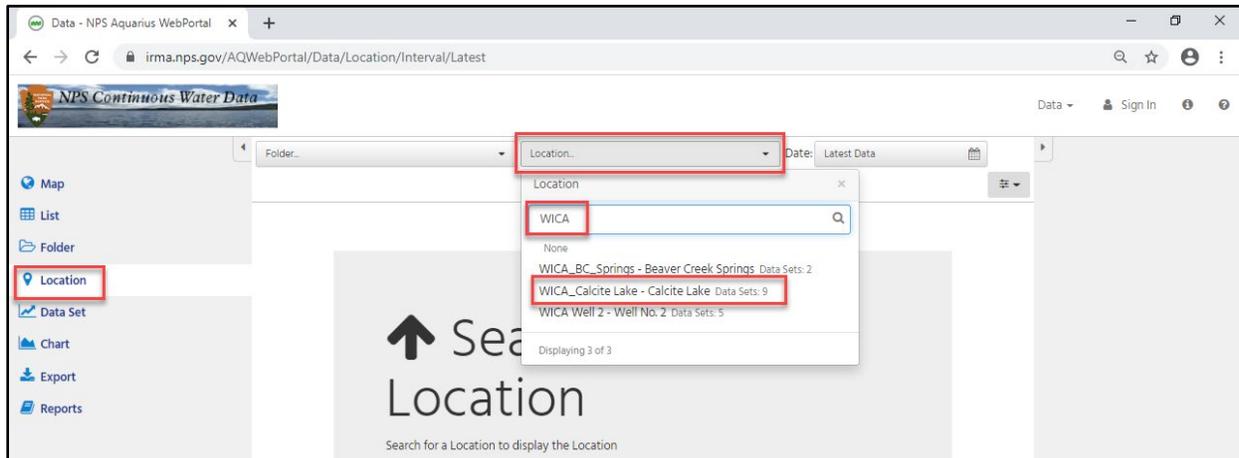
Locations having water temperature datasets with the word 'instantaneous' in their dataset Label.

AQUARIUS WebPortal v2020.1203
National Park Service

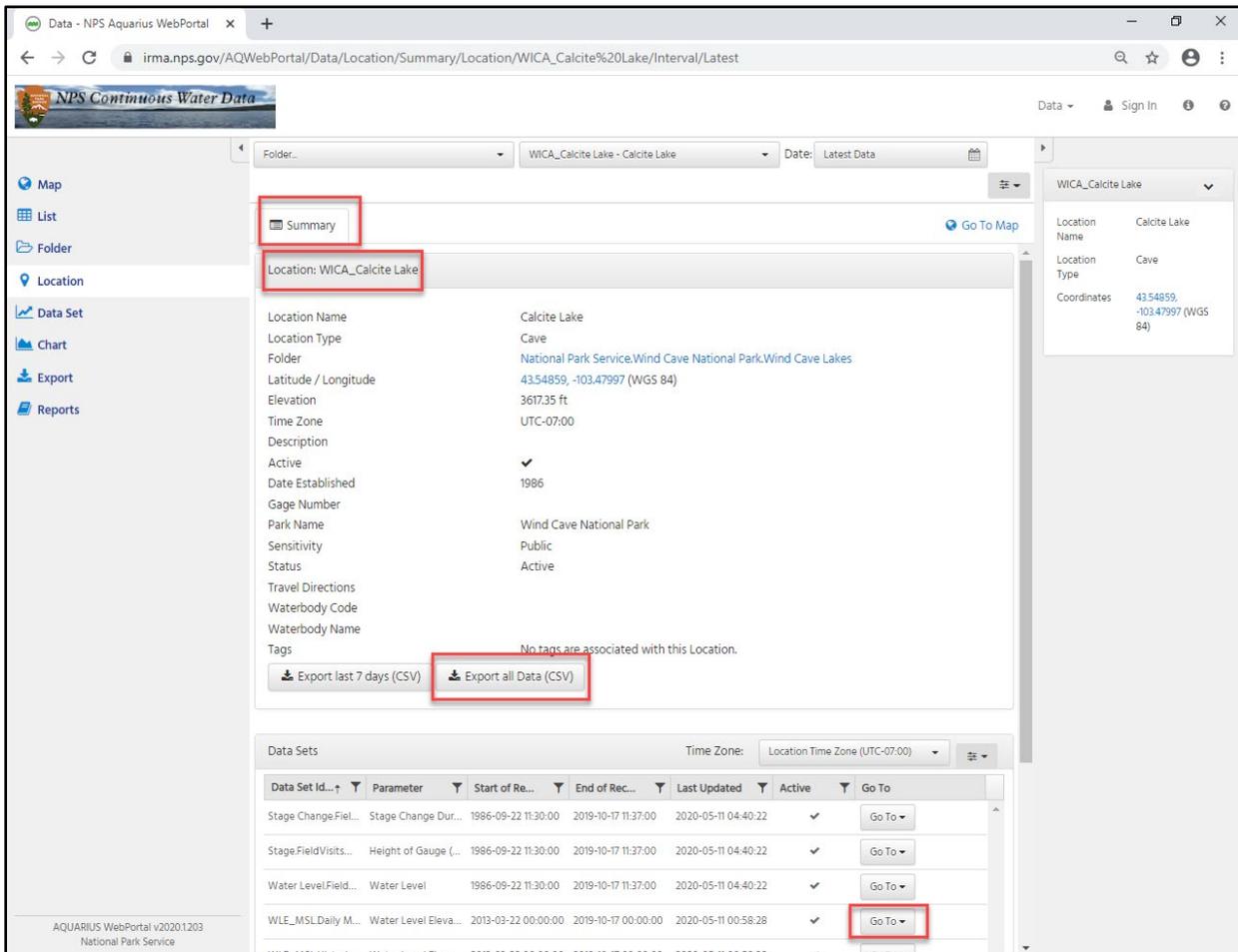
2000m
1000m
Latitude: 7.9323 Longitude: -107.53856

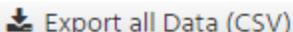
Exporting Data

Now that we've seen how to use the Map, List, Folder, Location, and Data Set Pages along with Data Selectors and Filters to find locations and datasets, let's find the data at Calcite Lake in Wind Cave National Park (Location Identifier: 'WICA_Calcite Lake') and explore the options for exporting its data. Since we know the Location Identifier, use the Location Page, Location Data Selector and just type in WICA and then select 'WICA_Calcite Lake' from the list to get access to its nine published datasets.



The Portal will take you to the 'WICA_Calcite Lake' Summary page.

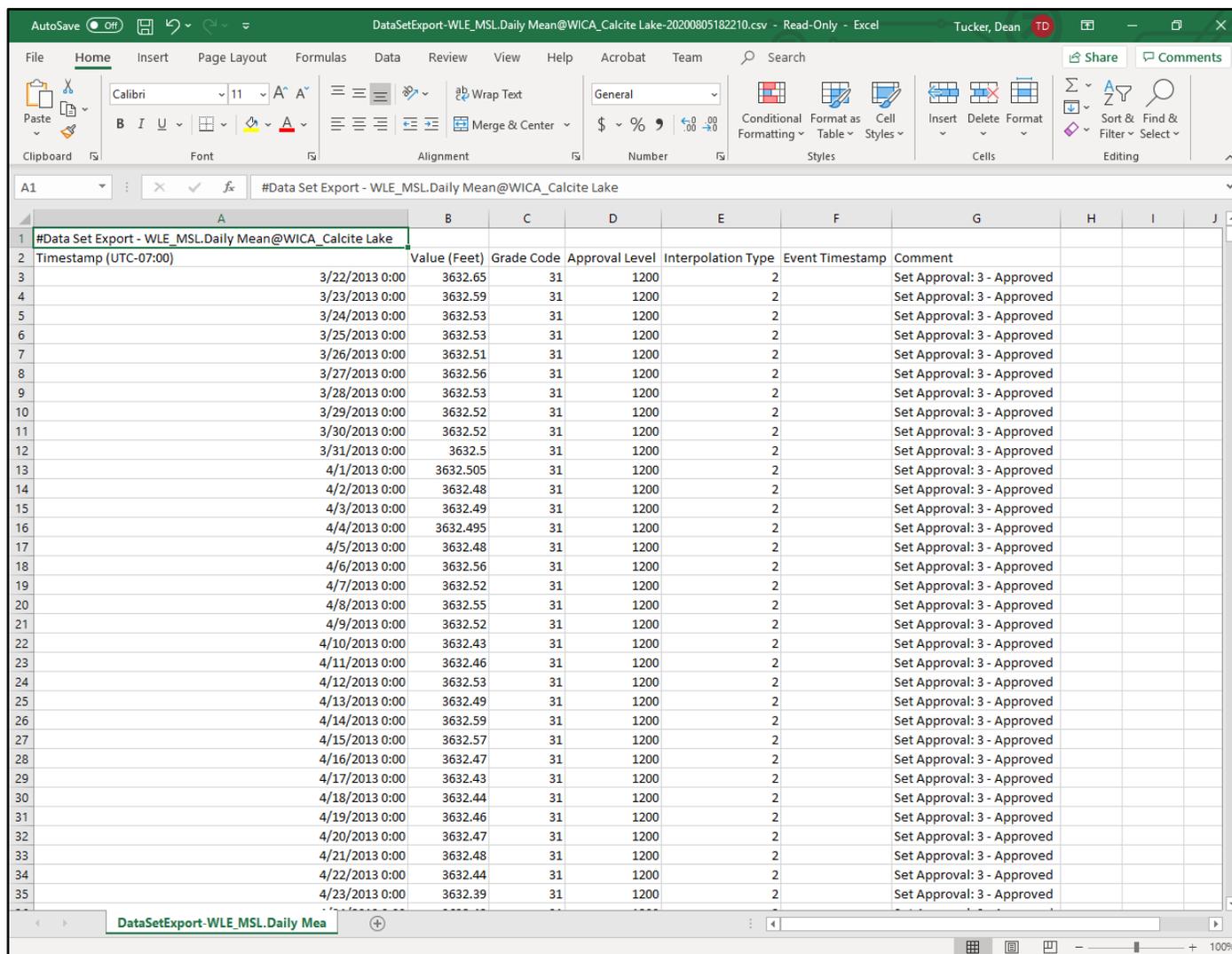


Underneath the Location summary information are two buttons:  . These will export to CSV format either the last 7 days-worth of data (if you are only interested in the most recent data) or all the data for the nine published datasets at 'WICA_Calcite Lake'. Click on . The Portal will extract all the approved data from the nine published time series into nine separate CSV files and propose a default zip file name: 'LocationExport-WICA_Calcite Lake-Date/Time.zip' and default folder. Change the folder and/or edit the zip file name as desired and then click the 'Save' button.

After the Portal saves the zip file to your computer, open it to browse its contents. You'll see nine separate CSV dataset export files named following this pattern: 'DataSetExport-Parameter.Label@LocationID-Date/Time.CSV' as per below:

| Name | Type | Compressed size | Password ... |
|--|---------------------|-----------------|--------------|
|  DataSetExport-Stage Change.FieldVisits@WICA_Calcite Lake-20200923130526.csv | Microsoft Excel ... | 1 KB | No |
|  DataSetExport-Stage.FieldVisits@WICA_Calcite Lake-20200923130526.csv | Microsoft Excel ... | 2 KB | No |
|  DataSetExport-Water Level.FieldVisits@WICA_Calcite Lake-20200923130526.csv | Microsoft Excel ... | 2 KB | No |
|  DataSetExport-WLE_MSL.Daily Mean@WICA_Calcite Lake-20200923130527.csv | Microsoft Excel ... | 14 KB | No |
|  DataSetExport-WLE_MSL.Historical.Daily Mean@WICA_Calcite Lake-20200923130527.csv | Microsoft Excel ... | 14 KB | No |
|  DataSetExport-WLE_MSL.Historical.Water Level Elevation Field Visits@WICA_Calcite Lake-20200923130535.csv | Microsoft Excel ... | 2 KB | No |
|  DataSetExport-WLE_MSL.Historical.Water Level Elevation@WICA_Calcite Lake-20200923130531.csv | Microsoft Excel ... | 277 KB | No |
|  DataSetExport-WLE_MSL.Water Level Elevation Field Visits@WICA_Calcite Lake-20200923130540.csv | Microsoft Excel ... | 1 KB | No |
|  DataSetExport-WLE_MSL.Water Level Elevation@WICA_Calcite Lake-20200923130537.csv | Microsoft Excel ... | 277 KB | No |

Double-click on one of the CSV files. It should open in Excel.



| #Data Set Export - WLE_MSL.Daily Mean@WICA_Calcite Lake | Value (Feet) | Grade Code | Approval Level | Interpolation Type | Event Timestamp | Comment |
|---|--------------|------------|----------------|--------------------|-----------------|----------------------------|
| Timestamp (UTC-07:00) | | | | | | |
| 3/22/2013 0:00 | 3632.65 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/23/2013 0:00 | 3632.59 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/24/2013 0:00 | 3632.53 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/25/2013 0:00 | 3632.53 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/26/2013 0:00 | 3632.51 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/27/2013 0:00 | 3632.56 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/28/2013 0:00 | 3632.53 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/29/2013 0:00 | 3632.52 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/30/2013 0:00 | 3632.52 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 3/31/2013 0:00 | 3632.5 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/1/2013 0:00 | 3632.505 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/2/2013 0:00 | 3632.48 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/3/2013 0:00 | 3632.49 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/4/2013 0:00 | 3632.495 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/5/2013 0:00 | 3632.48 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/6/2013 0:00 | 3632.56 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/7/2013 0:00 | 3632.52 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/8/2013 0:00 | 3632.55 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/9/2013 0:00 | 3632.52 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/10/2013 0:00 | 3632.43 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/11/2013 0:00 | 3632.46 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/12/2013 0:00 | 3632.53 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/13/2013 0:00 | 3632.49 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/14/2013 0:00 | 3632.59 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/15/2013 0:00 | 3632.57 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/16/2013 0:00 | 3632.47 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/17/2013 0:00 | 3632.43 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/18/2013 0:00 | 3632.44 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/19/2013 0:00 | 3632.46 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/20/2013 0:00 | 3632.47 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/21/2013 0:00 | 3632.48 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/22/2013 0:00 | 3632.44 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |
| 4/23/2013 0:00 | 3632.39 | 31 | 1200 | 2 | | Set Approval: 3 - Approved |

The first row/cell contains the time series data set ID. Row two has the column headers for the date/time stamp, value, grade, approval, interpolation type, event timestamp, and comment. Subsequent rows contain the results. In the example below, the results are mean daily water levels. Notice that the Approval Levels are all '1200'; that's because 1200 means 'Approved' data which is the only data anonymous users can access in the Portal. Unfortunately, the Portal doesn't currently translate the grade, approval, and interpolation values to something more meaningful during the export.

If you only want to download one dataset from the location, below the Location Attribute summary is the Location 'Data Sets' summary. Click the 'Go To' button located to the right of the desired dataset and select the 'Export' option.

The screenshot shows the NPS Aquarius WebPortal interface. The main content area displays a 'Location Attribute Summary' for 'WICA_Calcite Lake' and a 'Data Sets' table. The 'Data Sets' table has the following columns: Data Set Id, Parameter, Start of Rec..., End of Rec..., Las..., Active, and Go To. The 'Go To' button for the 'WLE_MSLDaily Mean@...' dataset is highlighted with a red box. A dropdown menu is open for this button, with the 'Export' option also highlighted with a red box.

| Data Set Id | Parameter | Start of Rec... | End of Rec... | Las... | Active | Go To |
|----------------------------|------------------------------------|---------------------|---------------------|------------------|--------|-------|
| Stage Change.FieldVisit... | Stage Change During Location VL... | 1986-09-22 11:30:00 | 2019-10-17 11:37:00 | 2020-05-11 04... | ✓ | Go To |
| Stage.FieldVisits@WICA... | Height of Gauge (River Stage) | 1986-09-22 11:30:00 | 2019-10-17 11:37:00 | 2020-05-11 04... | ✓ | Go To |
| Water Level.FieldVisits... | Water Level | 1986-09-22 11:30:00 | 2019-10-17 11:37:00 | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLDaily Mean@... | Water Level Elevation (MSL) | 2013-03-22 00:00:00 | 2019-10-17 00:00:00 | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLHistoricalDail... | Water Level Elevation (MSL) | 2013-03-22 00:00:00 | 2019-10-17 00:00:00 | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLHistoricalWa... | Water Level Elevation (MSL) | 1986-09-22 11:30:00 | 2019-10-17 11:37:00 | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLHistoricalWa... | Water Level Elevation (MSL) | 2006-09-26 21:00:00 | 2019-10-17 12:00:00 | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLWater Level ... | Water Level Elevation (MSL) | null | null | 2020-05-11 04... | ✓ | Go To |
| WLE_MSLWater Level ... | Water Level Elevation (MSL) | 2006-09-26 21:00:00 | 2019-10-17 12:00:00 | 2020-05-11 04... | ✓ | Go To |

This pops up Data Set 'Export' options in the Main Pane which allow you to customize the export by selecting a date range; changing the file output format; converting the unit of measure (e.g. from feet to meters) or time zone (e.g. to UTC); or pre-processing (e.g. entering: "Aggregate(Monthly)" would output calculated time-weighted monthly average values rather than the actual water level measurements). Click 'Download' to export the single dataset or play around with the various export options and then click [Download](#).

Export
Select Data and Period of Record, then press download.

Data Type: Data Set

Date Range: Entire Period of Record

Export Format: CSV

Compressed: Export File will be compressed into a zip archive

Unit: Feet

Time Zone: Location Time Zone (UTC-07:00)

Pre-processing:

[Download](#)

As per above during the export of all nine published datasets for 'WICA_Calcite Lake', the Portal will extract the approved data from selected time series into a CSV file and propose a default zip file name: 'DataSetExport-Parameter.Label@Location-Date/Time.zip' and default folder. Change the folder and/or edit the zip file name as desired and then click the 'Save' button. Once downloaded, you can open the CSV file inside the zip and the structure will be the same as the CSV file opened above.

Did you notice that the left panel Page changed to [Data Set](#) when you selected the 'Export' option for the dataset under the [Go To](#) button on the Location Page 'Data Sets' Summary? This means the Portal is now in Dataset view mode and you have access to these options:



Note: these same options are also available for each of the datasets listed on the Location Page 'Data Sets' Summary under the [Go To](#) button.

Data Sets Time Zone: Location Time Zone (UTC-07:00)

| Data S... | Param... | Start ... | End of... | Last U... | Active | Go To |
|---------------|-----------------|------------------|--------------------|------------------|-------------------------------------|----------------------------|
| WLE_MSLD... | Water Level ... | 2013-03-22 00:0 | 2019-10-17 00:00 | 2020-05-11 00:5 | <input checked="" type="checkbox"/> | Go To |
| WLE_MSL.Hi... | Water Level ... | 2013-03-22 00:0 | 2019-10-17 00:00 | 2020-05-11 00:5 | <input type="checkbox"/> | Map |
| WLE_MSL.Hi... | Water Level ... | 1986-09-22 11:30 | 2019-10-17 11:37:(| 2020-05-11 00:13 | <input type="checkbox"/> | Data Set |
| WLE_MSL.Hi... | Water Level ... | 2006-09-26 21:0 | 2019-10-17 12:00: | 2020-05-11 00:5 | <input type="checkbox"/> | Summary |
| WLE_MSL.W... | Water Level ... | null | null | 2020-05-11 01:04 | <input type="checkbox"/> | Chart |
| WLE_MSL.W... | Water Level ... | 2006-09-26 21:0 | 2019-10-17 12:00: | 2020-05-11 00:5 | <input type="checkbox"/> | Grid |
| | | | | | | Statistics |
| | | | | | | Export |

Export Page

Click  in the Portal's left panel Page List to access more sophisticated export options. The Export Page allows you to bulk export multiple datasets into a time-aligned file with data aggregated to a common interval. The multiple datasets can be from multiple locations. The Export Page is divided into two sections: (1) 'Export Data' where you specify options and (2) 'Data Sets' where you pick which locations and datasets to include. In the 'Data Sets' section, click and start typing 'WICA' and then select 'WICA_Calcite Lake' from the possible locations that contain the string 'WICA'. Click . The Portal will show the nine available/published datasets. Select 'WLE_MSL.Water Level Elevation@WICA_Calcite Lake'. Click to add an empty row to the 'Data Sets' section and repeat the process to add the location 'WICA Well 2' and select its 'WLE_MSL.Groundwater Elevation@WICA Well 2' dataset. Note: The  icon to the left of each dataset can be clicked and dragged to change the dataset order and the  icon to the right can be clicked to remove a dataset. For the 'Export Data' section, set the options as shown below. When the desired export options are set and datasets selected, click to create the 'Single Time-Aligned File'.

Export Data

The Export tab is used for bulk exporting many Data Sets as a time-aligned file with data aggregated to a common interval. For exporting a single Data Set, the Data Set > Export tab can be used.

Prefill from Template

Date Range

Time Zone

Interval/Points

Export Format

Single/Multi File Single Time-Aligned File One File Per Data Set

Include Grade Codes? Yes No Include Approval Levels? Yes No Include Interpolation Types? Yes No

Data Sets

The Export tab is used for bulk exporting many Data Sets as a time-aligned file with data aggregated to a common interval. For exporting a single Data Set, the Data Set > Export tab can be used.

Entire Period of Record: 2006-09-26 21:00 (UTC-07:00) - 2020-06-23 12:00 (UTC-07:00)

Overlapping Period of Record: 2013-02-27 09:00 (UTC-07:00) - 2019-10-17 12:00 (UTC-07:00)

| Location | Data Set | Conversion Option | |
|---|---|-------------------|--------------------------------------|
| ↑ WICA_Calcite Lake - Calcite Lake | WLE_MSL.Water Level Elevation@WICA_Calcit | Value in Feet | <input type="button" value="Trash"/> |
| Period of Record: 2006-09-26 21:00 - 2019-10-17 12:00 (UTC-07:00) | | | |
| ↑ WICA Well 2 - Well No. 2 | WLE_MSL.Groundwater Elevation@WICA Well | Value in Feet | <input type="button" value="Trash"/> |
| Period of Record: 2013-02-27 09:00 - 2020-06-23 12:00 (UTC-07:00) | | | |

Export URL

This URL can be copied and used to download the data directly for easier automatic exporting.

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National Park Service

The Portal will extract all the approved data from the two location's datasets into a time-aligned CSV file and propose a default CSV file name: 'BulkExport-Location1,Location2-Date/Time.csv' and default folder. Change the folder and/or edit the CSV file name as desired and then click the 'Save' button. Once downloaded, open the CSV file in Excel.

Beginning on 9/26/2006 (left image) there is only 'Water Level Elevation' data at WICA_Calcite Lake, but in 2013, (right image) both locations have data for their parameters at the same dates/times.

| | A | B | C |
|----|-----------------------------------|-------------------------------|-------------------------------|
| 1 | #Bulk Export - Points as recorded | | |
| 2 | | WICA_Calcite Lake | WICA Well 2 |
| 3 | | Calcite Lake | Well No. 2 |
| 4 | | WLE_MSL.Water Level Elevation | WLE_MSL.Groundwater Elevation |
| 5 | Timestamp (UTC-07:00) | Value (ft) | Value (ft) |
| 6 | 9/26/2006 21:00 | 3630.58 | |
| 7 | 9/27/2006 9:00 | 3630.57957 | |
| 8 | 9/27/2006 21:00 | 3630.53915 | |
| 9 | 9/28/2006 9:00 | 3630.57872 | |
| 10 | 9/28/2006 21:00 | 3630.6183 | |
| 11 | 9/29/2006 9:00 | 3630.59787 | |
| 12 | 9/29/2006 21:00 | 3630.59745 | |
| 13 | 9/30/2006 9:00 | 3630.58702 | |
| 14 | 9/30/2006 21:00 | 3630.6066 | |
| 15 | 10/1/2006 9:00 | 3630.59617 | |
| 16 | 10/1/2006 21:00 | 3630.58574 | |
| 17 | 10/2/2006 9:00 | 3630.56532 | |
| 18 | 10/2/2006 21:00 | 3630.56489 | |
| 19 | 10/3/2006 9:00 | 3630.55447 | |
| 20 | 10/3/2006 21:00 | 3630.49404 | |
| 21 | 10/4/2006 9:00 | 3630.46362 | |
| 22 | 10/4/2006 21:00 | 3630.50319 | |
| 23 | 10/5/2006 9:00 | 3630.53277 | |
| 24 | 10/5/2006 21:00 | 3630.54234 | |
| 25 | 10/6/2006 9:00 | 3630.56191 | |
| 26 | 10/6/2006 21:00 | 3630.57149 | |
| 27 | 10/7/2006 9:00 | 3630.57106 | |
| 28 | 10/7/2006 21:00 | 3630.51064 | |
| 29 | 10/8/2006 9:00 | 3630.45021 | |
| 30 | 10/8/2006 21:00 | 3630.46979 | |
| 31 | 10/9/2006 9:00 | 3630.44936 | |
| 32 | 10/9/2006 21:00 | 3630.46894 | |
| 33 | 10/10/2006 9:00 | 3630.52851 | |
| 34 | 10/10/2006 21:00 | 3630.58809 | |
| 35 | 10/11/2006 9:00 | 3630.52766 | |

| | A | B | C |
|------|-----------------------------------|-------------------------------|-------------------------------|
| 1 | #Bulk Export - Points as recorded | | |
| 2 | | WICA_Calcite Lake | WICA Well 2 |
| 3 | | Calcite Lake | Well No. 2 |
| 4 | | WLE_MSL.Water Level Elevation | WLE_MSL.Groundwater Elevation |
| 5 | Timestamp (UTC-07:00) | Value (ft) | Value (ft) |
| 4648 | 3/20/2013 14:00 | 3632.59 | 3653.06 |
| 4649 | 3/20/2013 15:00 | 3632.6 | 3653.07 |
| 4650 | 3/20/2013 16:00 | 3632.61 | 3653.07 |
| 4651 | 3/20/2013 17:00 | 3632.62 | 3653.06 |
| 4652 | 3/20/2013 18:00 | 3632.62 | 3653.06 |
| 4653 | 3/20/2013 19:00 | 3632.62 | 3653.05 |
| 4654 | 3/20/2013 20:00 | 3632.63 | 3653.05 |
| 4655 | 3/20/2013 21:00 | 3632.63 | 3653.04 |
| 4656 | 3/20/2013 22:00 | 3632.63 | 3653.05 |
| 4657 | 3/20/2013 23:00 | 3632.64 | 3653.03 |
| 4658 | 3/21/2013 0:00 | 3632.64 | 3653.05 |
| 4659 | 3/21/2013 1:00 | 3632.64 | 3653.05 |
| 4660 | 3/21/2013 2:00 | 3632.65 | 3653.05 |
| 4661 | 3/21/2013 3:00 | 3632.65 | 3653.07 |
| 4662 | 3/21/2013 4:00 | 3632.66 | 3653.06 |
| 4663 | 3/21/2013 5:00 | 3632.66 | 3653.05 |
| 4664 | 3/21/2013 6:00 | 3632.66 | 3653.04 |
| 4665 | 3/21/2013 7:00 | 3632.66 | 3653.03 |
| 4666 | 3/21/2013 8:00 | 3632.66 | 3653.04 |
| 4667 | 3/21/2013 9:00 | 3632.66 | 3653.04 |
| 4668 | 3/21/2013 10:00 | 3632.66 | 3653.02 |
| 4669 | 3/21/2013 11:00 | 3632.66 | 3653.02 |
| 4670 | 3/21/2013 12:00 | 3632.66 | 3653.02 |
| 4671 | 3/21/2013 13:00 | 3632.66 | 3653.02 |
| 4672 | 3/21/2013 14:00 | 3632.66 | 3653.01 |
| 4673 | 3/21/2013 15:00 | 3632.65 | 3653 |
| 4674 | 3/21/2013 16:00 | 3632.64 | 3652.98 |
| 4675 | 3/21/2013 17:00 | 3632.63 | 3652.99 |
| 4676 | 3/21/2013 18:00 | 3632.63 | 3652.96 |
| 4677 | 3/21/2013 19:00 | 3632.62 | 3652.95 |

Note: The Export URL at the bottom of the Export Data form in the Main Pane can be copied to the Clipboard and provided to non-Portal users who can automatically export the data by simply pasting the URL into a browser.

Export URL

Copy to Clipboard

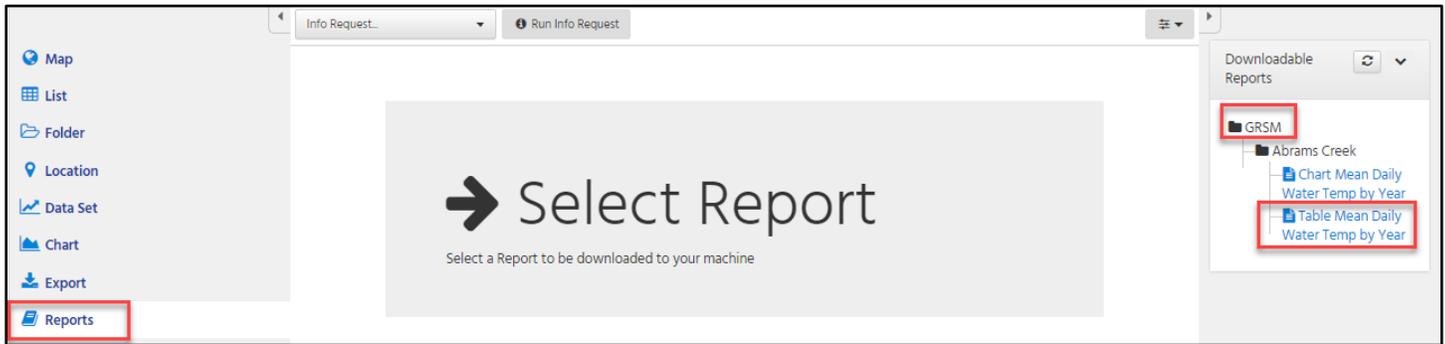
This URL can be copied and used to download the data directly for easier automatic exporting.

Note: Authenticated users can create complex exports (multiple locations, datasets, etc.) and save the settings as a template for re-load/re-use () by their Account or View Group.

Report Page

Reports generated in Aquarius Time Series by licensed/authenticated users can be made available to others in the Portal. Click on the 'Reports' Page in the left panel. The Portal will clear the Main Pane. If any Reports have been

published to the Portal, they will appear in the Info Panel on the right side of the screen in a folder-based hierarchy. Drill down in the folder hierarchy and click the hyperlink for the desired published Report.



The Portal will open the Report. You can download or print the Report as desired. When done viewing the Report, click the 'X' on the Report's Data tab ().

Since you must be a licensed/authenticated Aquarius Time Series user to publish a Report to the Portal, that topic is covered in the "Additional Functionality Granted to Authenticated Portal Users" section below.

|  National Park Service Natural Resource Stewardship and Science | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|---|------|
| Daily Statistic by Year - Mean GRSM.Abrams Creek.Table Mean Daily Water Temp by Year - Abrams Creek Mean Daily Water Temperature | | | | | | | | | | | Aug 13, 2020 2 of 7 Period Selected: Entire Record | |
| Source Data: Water Temp.WaterTemp_F@GRSM_ABC_8_60, Abrams Creek UTC Offset: -05:00, Start Time: 2013-10-31 12:00:00, End Time: 2019-06-07 13:00:00 | | | | | | | | | | | Units: °F Data Coverage Threshold: 80% | |
| Year: 2014 | | | | | | | | | | | Max: 79.5 Min: 31.8 Mean: 56.5 | |
| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1 | 41.0 | 35.7 | 42.5 | 51.6 | 61.5 | 70.6 | 70.2 | 68.9 | 72.9 | 63.9 | 45.1 | 48.0 |
| 2 | 42.0 | 37.7 | 47.1 | 53.7 | 58.0 | 68.9 | 74.0 | 70.8 | 74.4 | 63.4 | 43.3 | 51.0 |
| 3 | 38.2 | 42.1 | 47.9 | 57.6 | 58.5 | 68.7 | 74.3 | 71.5 | 70.6 | 64.3 | 43.1 | 52.2 |
| 4 | 36.4 | 44.1 | 41.9 | 57.5 | 59.9 | 68.6 | 71.4 | 71.5 | 71.5 | 62.1 | 45.0 | 52.3 |
| 5 | 41.2 | 47.2 | 43.1 | 55.7 | 62.5 | 69.5 | 69.9 | 71.8 | 71.6 | 56.5 | 47.5 | 52.2 |
| 6 | 40.7 | 40.9 | 44.3 | 53.3 | 64.3 | 69.7 | 71.2 | 71.4 | 71.6 | 55.2 | 51.5 | 53.0 |
| 7 | 32.2 | 39.4 | 46.8 | 53.5 | 64.8 | 71.7 | 71.8 | 73.1 | 71.0 | 57.1 | 50.3 | 49.6 |
| 8 | 32.1 | 40.5 | 47.4 | 52.3 | 65.2 | 71.6 | 72.1 | 72.0 | 71.3 | 59.5 | 46.7 | 45.5 |
| 9 | 35.6 | 41.2 | 48.2 | 52.1 | 64.7 | 70.0 | 71.0 | 70.5 | 71.0 | 60.7 | 47.4 | 44.6 |
| 10 | 40.7 | 41.9 | 48.1 | 51.8 | 62.5 | 70.2 | 71.2 | 72.7 | 70.6 | 61.2 | 46.6 | 43.8 |
| 11 | 46.3 | 40.2 | 49.4 | 54.5 | 64.2 | 68.9 | 72.9 | 73.8 | 70.3 | 63.0 | 47.0 | 41.6 |
| 12 | 46.4 | 38.7 | 51.6 | 57.3 | 66.7 | 69.3 | 73.8 | 72.3 | 70.3 | 64.5 | 49.1 | 38.8 |
| 13 | 44.8 | 35.9 | 46.4 | 59.7 | 67.2 | 69.0 | 74.5 | 70.3 | 70.0 | 64.8 | 46.6 | 38.0 |
| 14 | 47.1 | 37.6 | 44.2 | 60.3 | 68.2 | 69.6 | 76.2 | 69.0 | 67.4 | 64.2 | 41.7 | 37.9 |
| 15 | 44.4 | 39.6 | 48.7 | 55.4 | 64.1 | 70.3 | 74.9 | 69.3 | 67.4 | 59.3 | 38.1 | 38.6 |
| 16 | 40.7 | 39.9 | 49.6 | 49.2 | 57.7 | 71.4 | 71.8 | 69.6 | 68.7 | 57.1 | 39.8 | 42.4 |
| 17 | 41.0 | 41.3 | 49.0 | 51.4 | 54.4 | 73.3 | 70.1 | 70.4 | 68.3 | 55.8 | 44.2 | 44.8 |
| 18 | 38.8 | 44.0 | 48.3 | 52.4 | 55.6 | 73.9 | 69.1 | 71.4 | 66.2 | 57.5 | 40.7 | 43.0 |
| 19 | 40.0 | 47.4 | 49.7 | 52.6 | 57.8 | 72.7 | 66.5 | 70.4 | 65.9 | 56.2 | 36.5 | 42.6 |
| 20 | 39.7 | 49.8 | 51.7 | 54.8 | 61.0 | 73.1 | 68.3 | 71.0 | 66.1 | 54.5 | 39.7 | 42.5 |
| 21 | 40.7 | 50.6 | 48.9 | 56.9 | 63.4 | 72.2 | 68.8 | 71.1 | 66.4 | 55.8 | 40.3 | 44.0 |
| 22 | 35.4 | 46.0 | 49.9 | 56.8 | 66.2 | 72.0 | 69.8 | 72.7 | 65.6 | 53.8 | 40.2 | 44.8 |
| 23 | 33.9 | 47.1 | 50.2 | 56.8 | 67.2 | 72.8 | 70.5 | 73.8 | 63.0 | 51.5 | 44.7 | 47.7 |
| 24 | 32.0 | 47.5 | 46.9 | 56.4 | 67.4 | 72.8 | 71.3 | 73.9 | 62.4 | 51.6 | 50.8 | 50.7 |
| 25 | 31.9 | 44.9 | 45.7 | 58.7 | 64.6 | 71.7 | 71.3 | 73.0 | 62.7 | 51.6 | 49.0 | 48.3 |
| 26 | 34.6 | 42.9 | 42.1 | 58.9 | 64.3 | 71.9 | 71.5 | 71.4 | 64.0 | 54.8 | 46.5 | 43.8 |
| 27 | 37.7 | 39.2 | 43.8 | 60.5 | 67.4 | 73.4 | 73.1 | 71.4 | 65.0 | 55.8 | 44.4 | 44.5 |
| 28 | 34.5 | 38.7 | 49.1 | 63.5 | 69.0 | 72.3 | 73.3 | 71.8 | 65.2 | 57.0 | 41.0 | 47.9 |
| 29 | 31.9 | | 51.3 | 64.8 | 68.6 | 71.3 | 71.0 | 72.9 | 65.7 | 57.1 | 39.8 | 49.7 |
| 30 | 31.9 | | 49.1 | 64.0 | 68.6 | 68.3 | 68.3 | 72.0 | 64.8 | 52.5 | 44.9 | 47.3 |
| 31 | 32.2 | | 48.1 | | 70.3 | | 67.3 | 72.1 | | 49.6 | | 43.6 |
| Max | 48.8 | 52.8 | 54.5 | 66.3 | 74.6 | 77.5 | 79.5 | 77.1 | 76.8 | 65.6 | 53.7 | 53.5 |
| Min | 31.8 | 33.9 | 39.2 | 45.4 | 53.1 | 65.4 | 64.9 | 65.7 | 60.6 | 48.3 | 34.8 | 36.9 |
| Mean | 38.3 | 42.2 | 47.5 | 56.1 | 63.7 | 71.0 | 71.3 | 71.5 | 68.1 | 57.8 | 44.4 | 45.6 |

DISCLAIMER: The NPS makes no claims, promises or guarantees about the accuracy, reliability, completeness, or adequacy of the data in this report and expressly disclaims liability for errors and omissions in the data. No warranty of any kind, implied, expressed, or statutory, is given with respect to the accuracy, reliability, completeness, relevance, or adequacy of the data for any purpose. It is the responsibility of the user to establish the suitability of the data provided in this report for any purpose.

Visualizing Data in the Portal

You can interact with data in the Portal using the 'Grid' and 'Chart' 'Data Set' options. The first step, as with exporting the data, is to use the Map, List, Folder, Location, or Data Set Pages in the left panel along with Data Selectors and Filters at the top to find the location and dataset you want to examine. Let's find the 'Water Level Elevation' dataset at Calcite Lake in Wind Cave National Park (Location Identifier: 'WICA_Calcite Lake') and then view (grid) and chart its data. Since we know the Location Identifier and dataset, use the 'Data Set' Page in the left panel and in the Location Data Selector type in WICA and then select 'WICA_Calcite Lake' from the list to access its nine published datasets. By default, the Portal will select the first dataset at 'WICA_Calcite Lake' and make options for it visible in the Main Pane. Use the 'Data Set' Selector to drop-down a list of the datasets at 'WICA_Calcite Lake' and select 'WLE_MSL.Water Level Elevation@WICA_Calcite Lake'. Below the Data Selectors in the Main Pane, a series five tabs, Summary, Chart, Grid, Statistics, and Export appear. The Summary tab is selected by default, so the Main Pane summarizes the selected dataset's ('WLE_MSL.Water Level Elevation@WICA_Calcite Lake') attributes such as unit of measure, start of record, end of record, description, and comments.

| Location Identifier | WICA_Calcite Lake |
|---------------------|---|
| Location Name | Calcite Lake |
| Parameter | Water Level Elevation (MSL) |
| Unit | Feet |
| Start of Record | 2006-09-26 21:00 (UTC-07:00) |
| End of Record | 2019-10-17 12:00 (UTC-07:00) |
| Last Updated | 2020-05-11 00:58 (UTC-07:00) |
| Description | Datalogger Data |
| Comments | The Water Level Elevation is CALCULATED by adding the Lake Level to the Gage Datum Elevation. |
| Active | <input checked="" type="checkbox"/> |

| Location Name | Calcite Lake (Map) |
|-----------------|------------------------------|
| Parameter | Water Level Elevation (MSL) |
| Unit | Feet |
| Start of Record | 2006-09-26 21:00 (UTC-07:00) |
| End of Record | 2019-10-17 12:00 (UTC-07:00) |
| Last Updated | 2020-05-11 00:58 (UTC-07:00) |

Click the  **Grid** tab to display a table containing all the time series results along with grade, approval, and interpolation type. You can sort each column in ascending/descending order by clicking on the column header or use the filter icon () to display a filtered subset of the data. The right panel provides legends for the grades and approvals.

Folder: WICA_Calcite Lake - Calcite Lake

WLE_MSL Water Level Elevation@WICA_Calcite Lake Date: All Data

Summary Chart Grid Statistics Export Go To Map

| Timestamp | Water Level Elev... | Grade Code | Approval Level | Interpolation Type |
|---------------------|---------------------|------------|-----------------|--------------------|
| 2019-10-17 12:00:00 | 3640.43 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 11:00:00 | 3640.44932 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 10:00:00 | 3640.46865 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 09:00:00 | 3640.48797 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 08:00:00 | 3640.4973 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 07:00:00 | 3640.50662 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 06:00:00 | 3640.52595 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 05:00:00 | 3640.52527 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 04:00:00 | 3640.55459 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 03:00:00 | 3640.56392 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 02:00:00 | 3640.58324 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 01:00:00 | 3640.59257 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-17 00:00:00 | 3640.61189 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 23:00:00 | 3640.62121 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 22:00:00 | 3640.63054 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 21:00:00 | 3640.63986 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 20:00:00 | 3640.63919 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 19:00:00 | 3640.63851 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 18:00:00 | 3640.64784 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 17:00:00 | 3640.64716 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 16:00:00 | 3640.65648 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |
| 2019-10-16 15:00:00 | 3640.66581 | 11 - Poor | 1200 - Approved | 1 - Inst. Values |

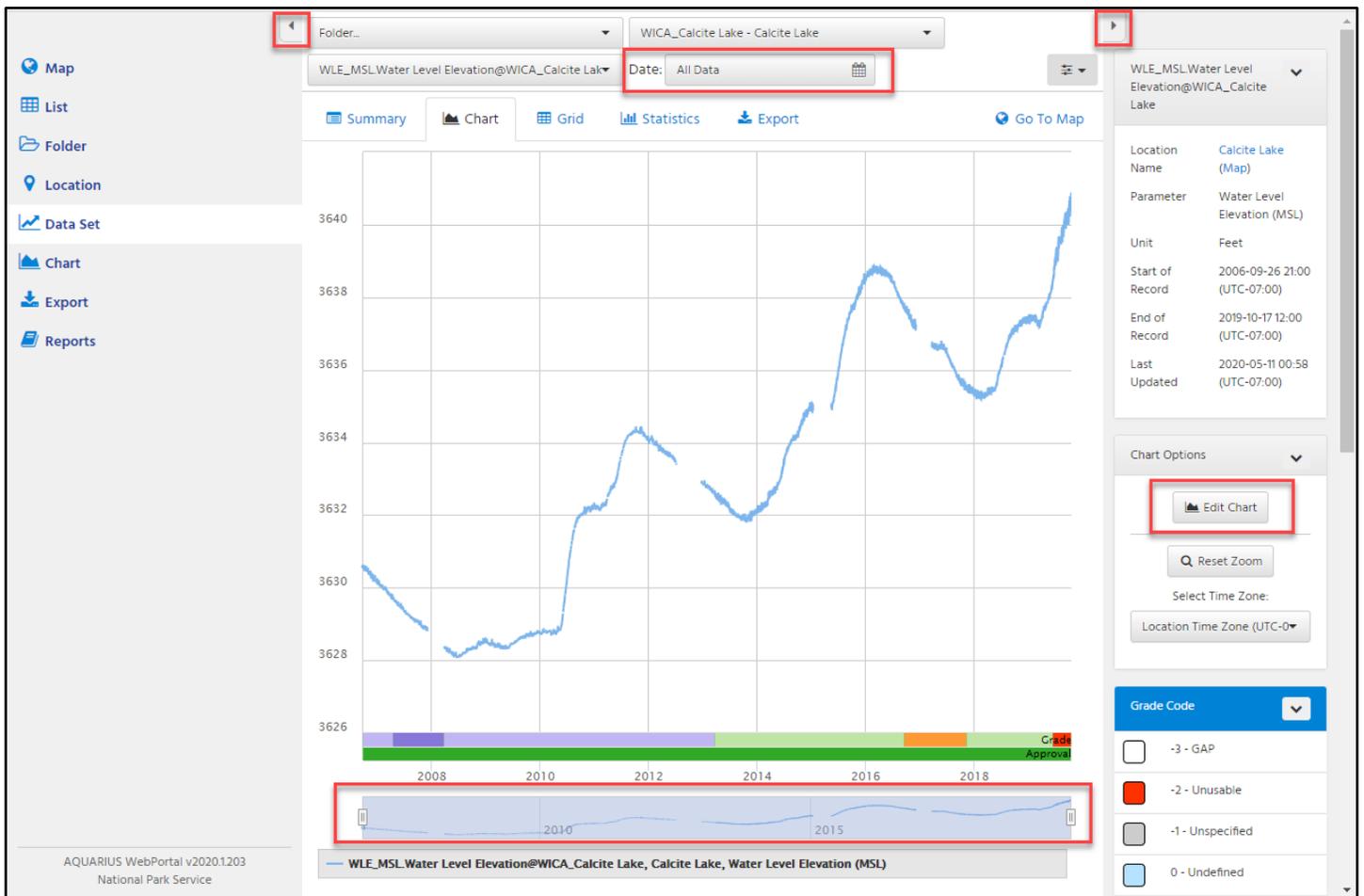
Location Name: Calcite Lake (Map)
 Parameter: Water Level Elevation (MSL)
 Unit: Feet
 Start of Record: 2006-09-26 21:00 (UTC-07:00)
 End of Record: 2019-10-17 12:00 (UTC-07:00)
 Last Updated: 2020-05-11 00:58 (UTC-07:00)

Grid Options: Select Time Zone: Location Time Zone (UTC-0)

Grade Code: -3 - GAP, -2 - Unusable, -1 - Unspecified, 0 - Undefined, 1 - Unverified, 2 - DRY

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Click the  **Chart** tab to create a graph/chart of the time series. Recall from above that you can collapse the left () and right () panels, if desired, to enlarge the Main Pane so the chart draws bigger.



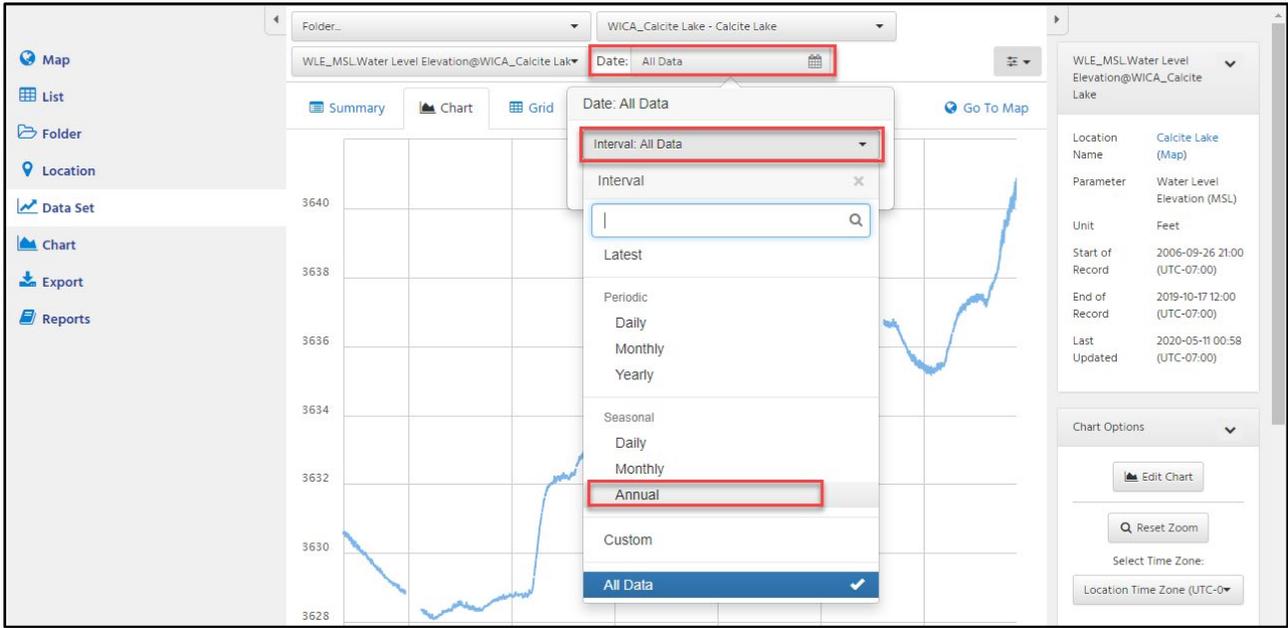
Drag the handles on the cyan navigator slider at the bottom of the Chart to zoom into a particular portion of the Chart. The slider shows an overview of the loaded dataset (based on the Data Selectors) with the handles delimiting the portion of the loaded data that is currently visible in the Chart.



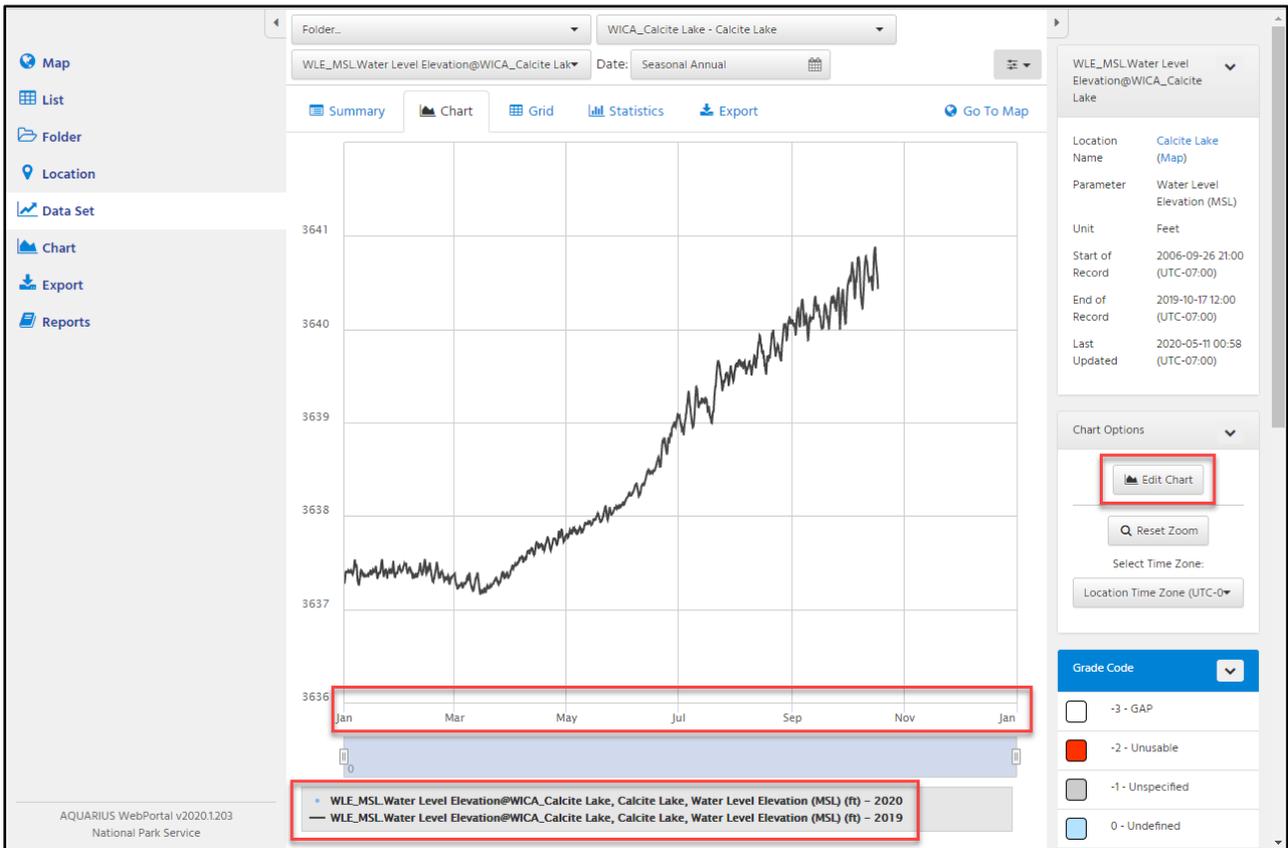
You can also just click and drag across a portion of the Chart and the Portal will zoom the Chart to that selection and show it on the slider.

The Date Data Selector at the top of the Main Pane can also be used to zoom into a section of a Chart by limiting the date range of data loaded into the Chart. You can specify date ranges by period, season, or by entering a start and end date.

Let's customize the Chart using Date Data Selector and the  button in the Info Panel on the right side of the screen. Currently the Chart shows the entire 'WLE_MSL.Water Level Elevation' at 'WICA_Calcite Lake' because the Date Data Selector is set to 'All Data'. Click  and then . Under 'Seasonal' choose 'Annual' and then click .



The Chart redraws showing the last two years of data as separate lines with a common X-Axis running for one year (Jan – Jan). While the Legend indicates there are two lines (2020 and 2019), there are no data yet in 2020. Let's change the years displayed by clicking **Edit Chart**.



The Portal displays the 'Edit Chart – Seasonal' form. Notice it has the settings for the two currently displayed chart series. Change the 'Year' setting for the first Chart Series from 2020 to 2018 and the setting for the second Chart Series from 2019 to 2017 as shown below.

Edit Chart - Seasonal

Chart Series | **Y Axes** | X Axis | Chart Settings | Chart Layers | Save Chart

Add one or more Chart Series and configure their display options from here. Click 'More' to show additional edit options per Chart Series.

+ Add Chart Series | Expand All | Collapse All

Chart Series Type: Data Set | Data Set: WICA_Calcite Lake - Cali | WLE_MSL.Water Level E | [Trash]

Chart Method: Auto | Y Axis: Primary

Year: < 2018 >

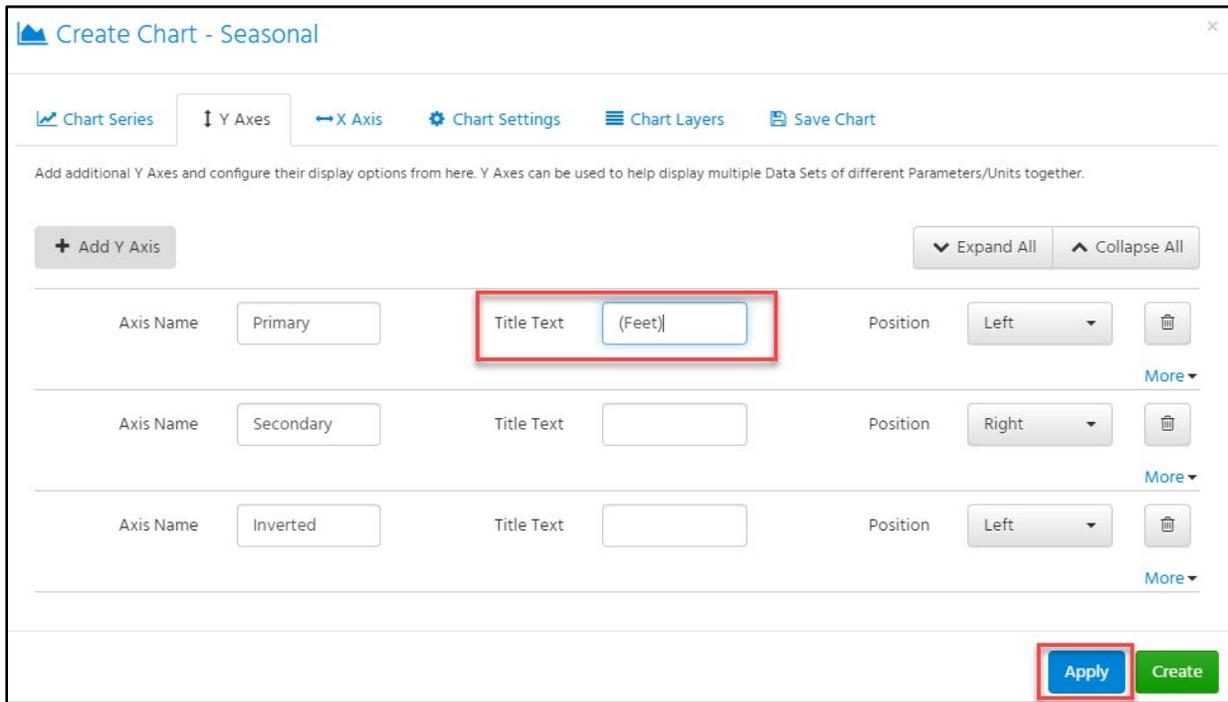
Chart Series Type: Data Set | Data Set: WICA_Calcite Lake - Cali | WLE_MSL.Water Level E | [Trash]

Chart Method: Auto | Y Axis: Primary

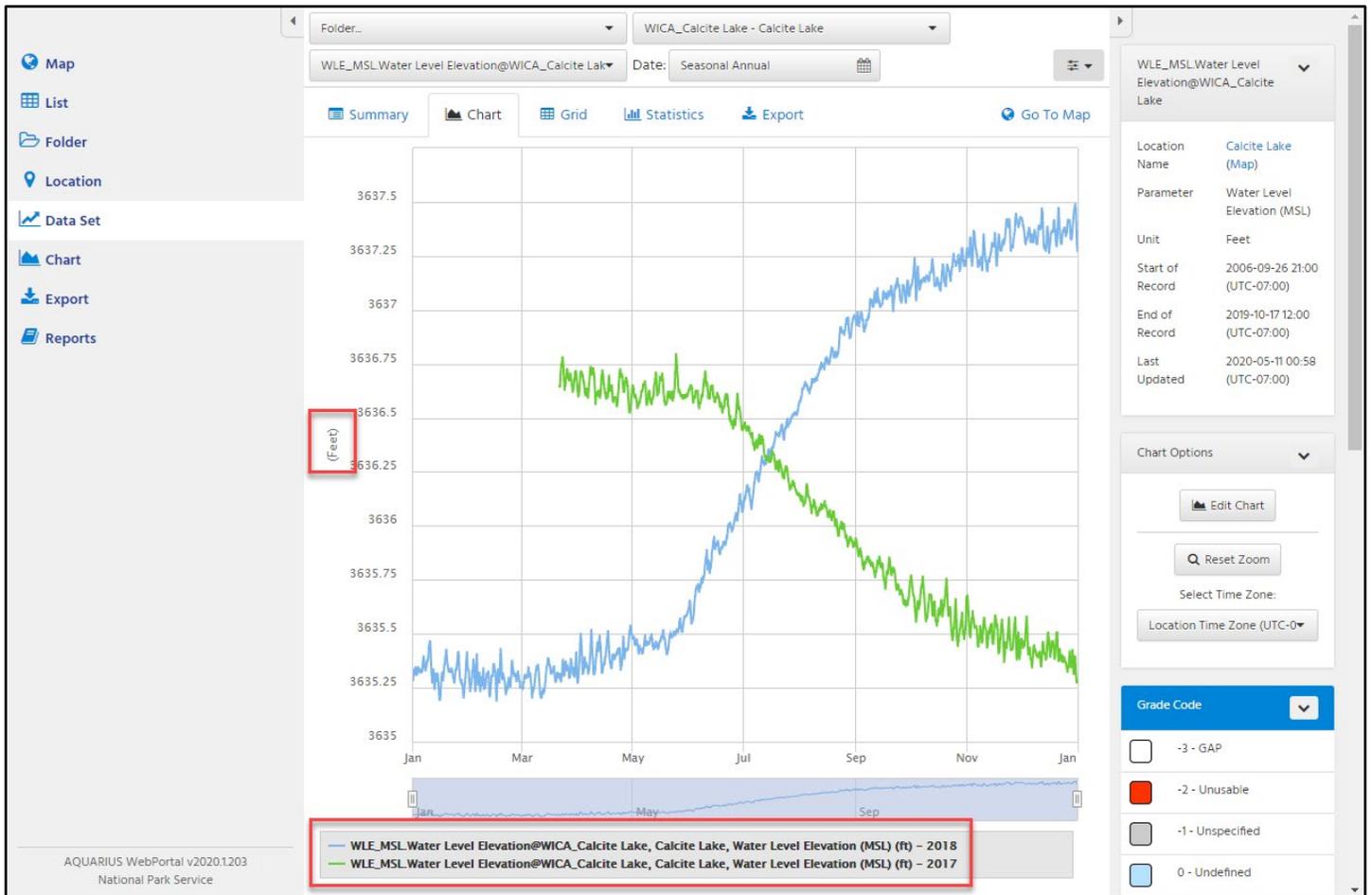
Year: < 2017 >

Apply | Save

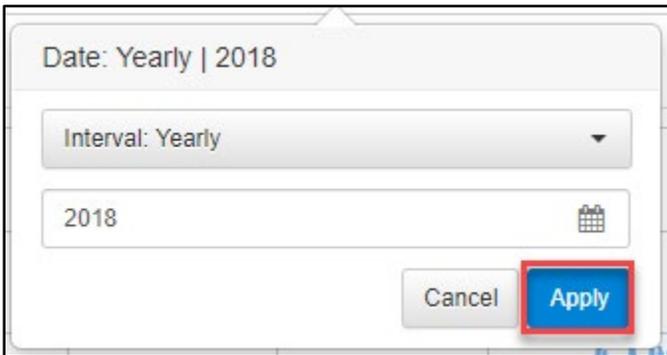
Notice all the other available options for customizing the Chart. You can click **+ Add Chart Series** to add additional Chart Series (e.g. the 2016 data for the same time series or a different time series altogether from a different location). You can change colors, sizes, and many other settings. For example, did you notice there is no label on our Chart's Y-Axis? Let's change that by clicking the **Y Axes** tab at the top to access the 'Y Axes' options. In the 'Primary' axis row name, enter '(Feet)' as the 'Title Text' and then click **Apply**.



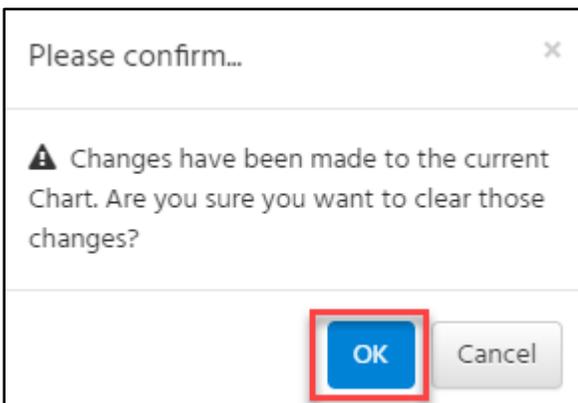
The Chart redraws and the 2018 water level elevation appears as a blue line, the 2017 water level elevation appears as a green line, and the Y-Axis is now labelled 'Feet'. The Chart highlights that water level elevation decreased between May and November 2017 but increased during those same months in 2018.



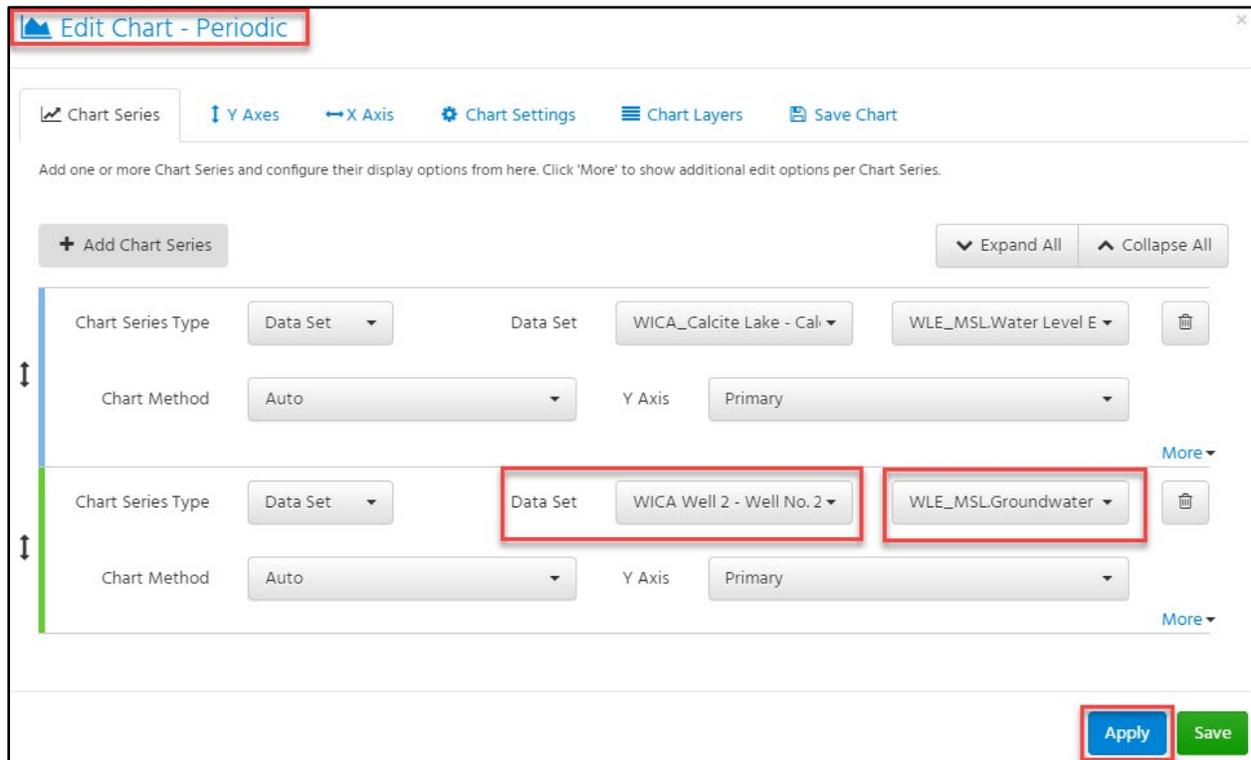
To investigate this further, let's compare the water level at two different locations (Calcite Lake and Well No. 2) in one chart for 2018. Click in the Date Data Selector and change the Interval from 'Seasonal Annual' to 'Periodic Yearly' and set the year to 2018.



The Portal will ask you to confirm the change because it will need to clear the changes to the current Chart. Just click 'OK'.

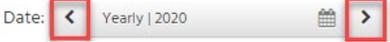


The Portal redraws the Chart to show only the 2018 water level elevation data at Calcite Lake because we set the Date Data Selector to 'Yearly | 2018'. To complete the Chart, click  and then . In the new Chart Series row, click  and enter/select 'WICA Well 2'. Under , select 'WLE_MSL.Groundwater Elevation@WICA Well 2'. Click  to redraw the Chart.



The water level elevation in the well followed the same pattern as Calcite Lake in 2018, albeit approximately 21' higher.



You can use the Date Data Selector () and its '<' and '>' to step the Chart through years and visually compare the lake and well water levels on the same Chart over time.

Options Menu and Permalinks

To the right, just above the Main Pane is the Options Menu button that looks like this: . Depending on what is displayed in the Main Pane, the Options Menu allows you to get a permalink for the page, export data or images, perform a bulk data set action, refresh the screen, or open the WebPortal User Guide. Permalinks (short for permanent link) allow you to bookmark or obtain a URL (link) to what is currently displayed (e.g. map, chart, grid, export, etc.) on the page and then email or provide that to someone else who can then use the link to return to the same page display. For example, here's the permalink for the 2018 chart generated above for water level at WICA's Calcite Lake:

https://irma.nps.gov/AQWebPortal/Data/DataSet/Chart/Location/WICA_Calcite%20Lake/DataSet/WLE_MSL/Water%20Level%20Elevation/Interval/Yearly/Calendar/CALENDARYEAR/2018

Note: Permalinks don't include options specified with the  Edit Chart button.

Here's a permalink that takes you to a summary of the datasets at a WICA's Calcite Lake:

https://irma.nps.gov/AQWebPortal/Data/Location/Summary/Location/WICA_Calcite_Lake/Interval/Latest

Here's a permalink that takes you to a screen to export the water level data at WICA's Calcite Lake:

https://irma.nps.gov/AQWebPortal/Data/DataSet/Export/Location/WICA_Calcite_Lake/DataSet/WLE_MSL/Water_Level_Elevation/Interval/Latest