

Real-time Water Data – Quick Start Guide

Ver. 2020.3– June 2021

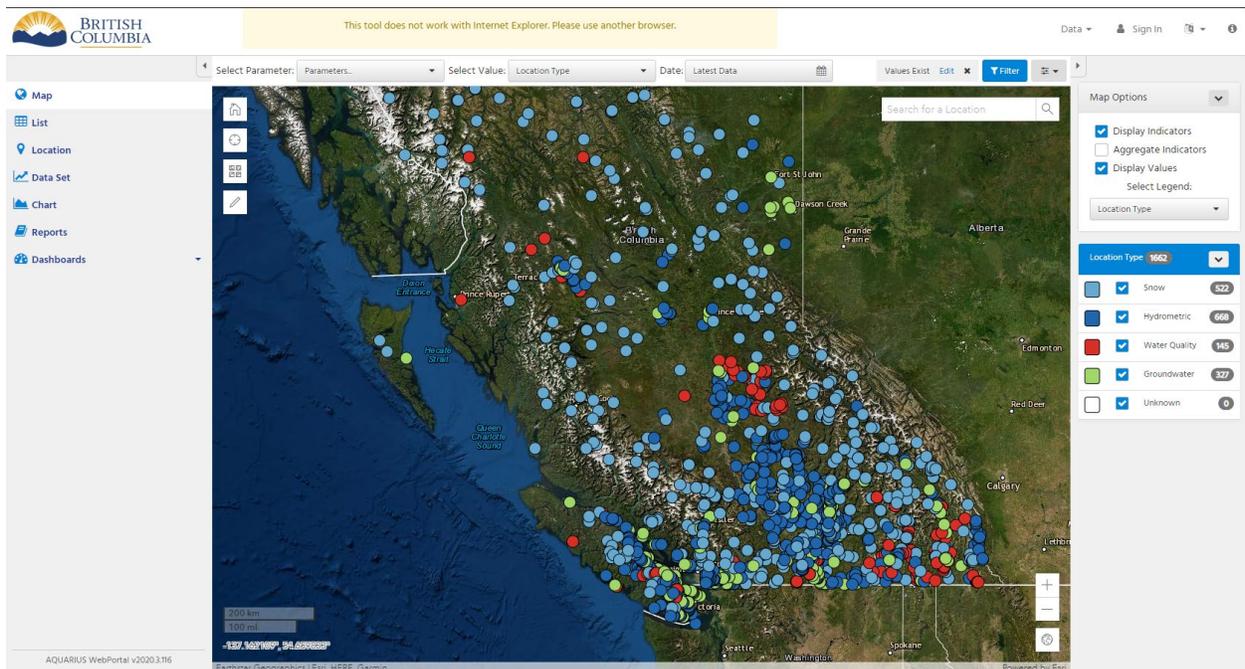
The Real-time Water Data Tool is a browser-based information and data presentation system that allows timely access to snow, surface and ground water monitoring data from stations across the Province. The tool allows you to graphically view data, reports, statistics, chart and download data.

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User Interface

When you open the tool you will be presented with the Map view of all of the locations in the Province coloured by Location Type and defined in the Location Type Legend on the right.

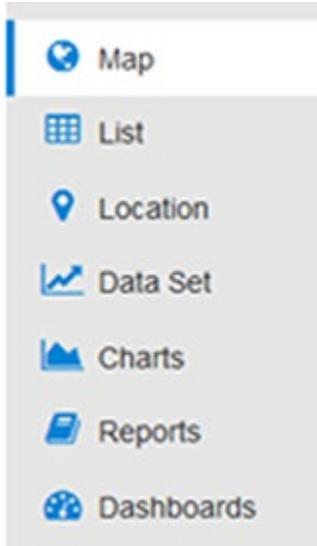


There are **5 main sections** of the user interface:

1. **View Type**
2. **Data View**
3. **Filter Options**
4. **Map Options**
5. **Select Legend**

By default, the "MAP" **View Type** is selected first.

1. View Types



In this section, you can select which View Type you want to use to find your desired location.

1. Map = allows you to find a location using a map interface
 2. List = allows you to select a location using a filtering table interface
 3. Location = allows you to search for a location by name or browse a pre-defined location set
 4. Data Set = allows you to search for a location and quickly view the location's data set
 5. Charts = custom charts
 6. Reports = custom reports by business folder and site name
 7. Dashboards = Business Area overviews and links
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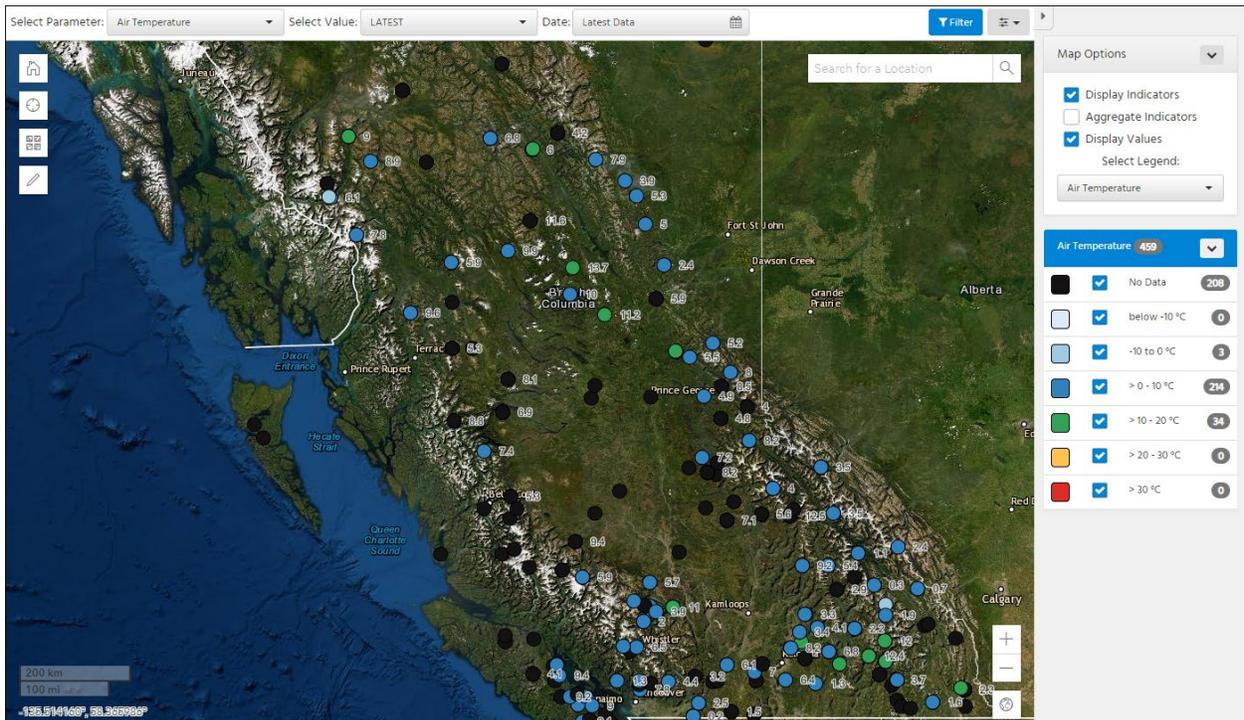
2. Data View

The Data View is the main viewing area. The Data Context Selectors define what information shows in your Data View.

Data Context Selectors

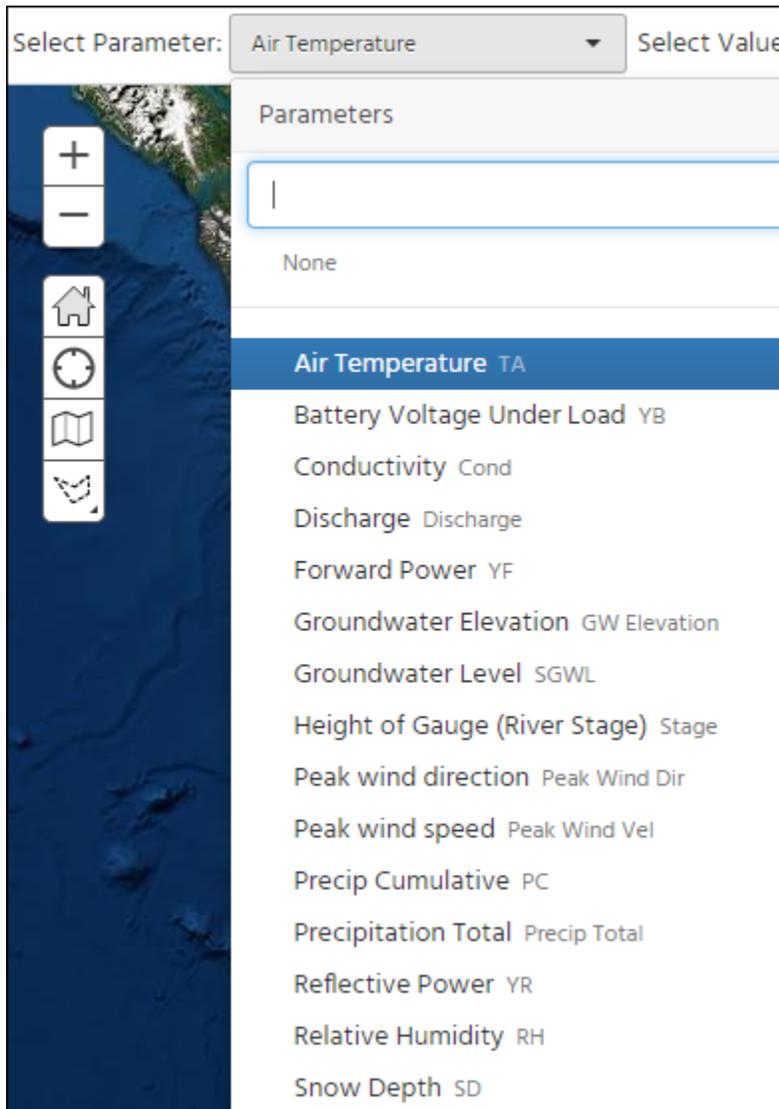
Select Parameter: Air Temperature Select Value: LATEST Date: Latest Data

Select your parameter, value and date to return a data view showing all locations with data matching your selection. If there is a legend available for that parameter it will show on the right. Black dots indicate there is data but it is not current for the date you selected. Values that meet your selection will show adjacent to locations.



NOTABLE FEATURES:

a) SEARCH AND SELECT – By Parameter – a list of available parameters are available

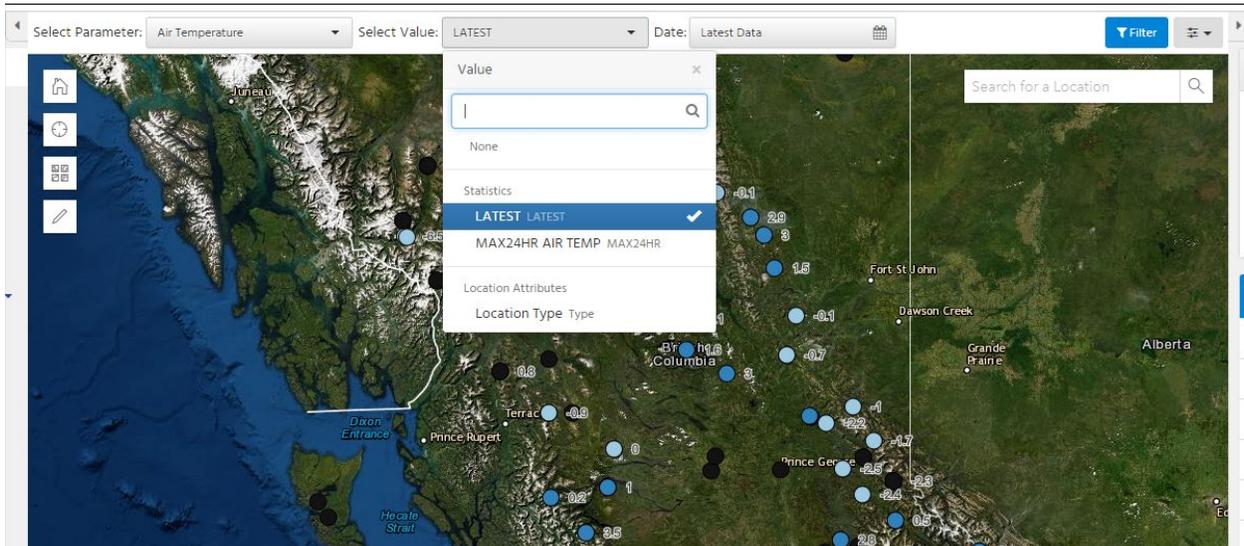


b) SELECT DATE

The date defines the period of time that you want to view. **Latest** provides the most recent data looking back up to 24 hours. Periodic intervals of **Daily, Monthly, Yearly** allow you to view additional statistical values like max/average/minimum where available.

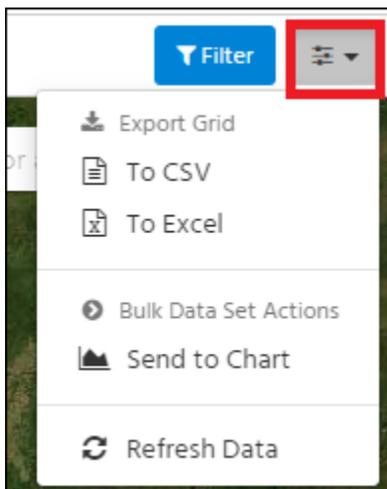
c) SELECT VALUE

The values available will vary depending on the Parameter, Value and Date selected.



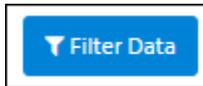
Note: if no data is showing on your map, or black dots without values are showing you may not have data for the value and date chosen. For instance, a latest value will not show if there hasn't been data transmitted in the last 24 hours. If you are looking for daily statistic there needs to be 24 hours of data to calculate so you may need to go back a day on the calendar to see daily statistics.

The Options menu contains useful functions listed below:

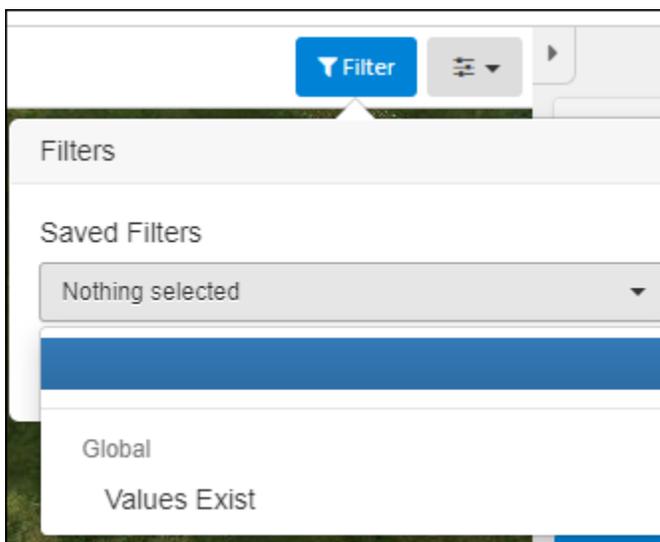


3. Filter Data

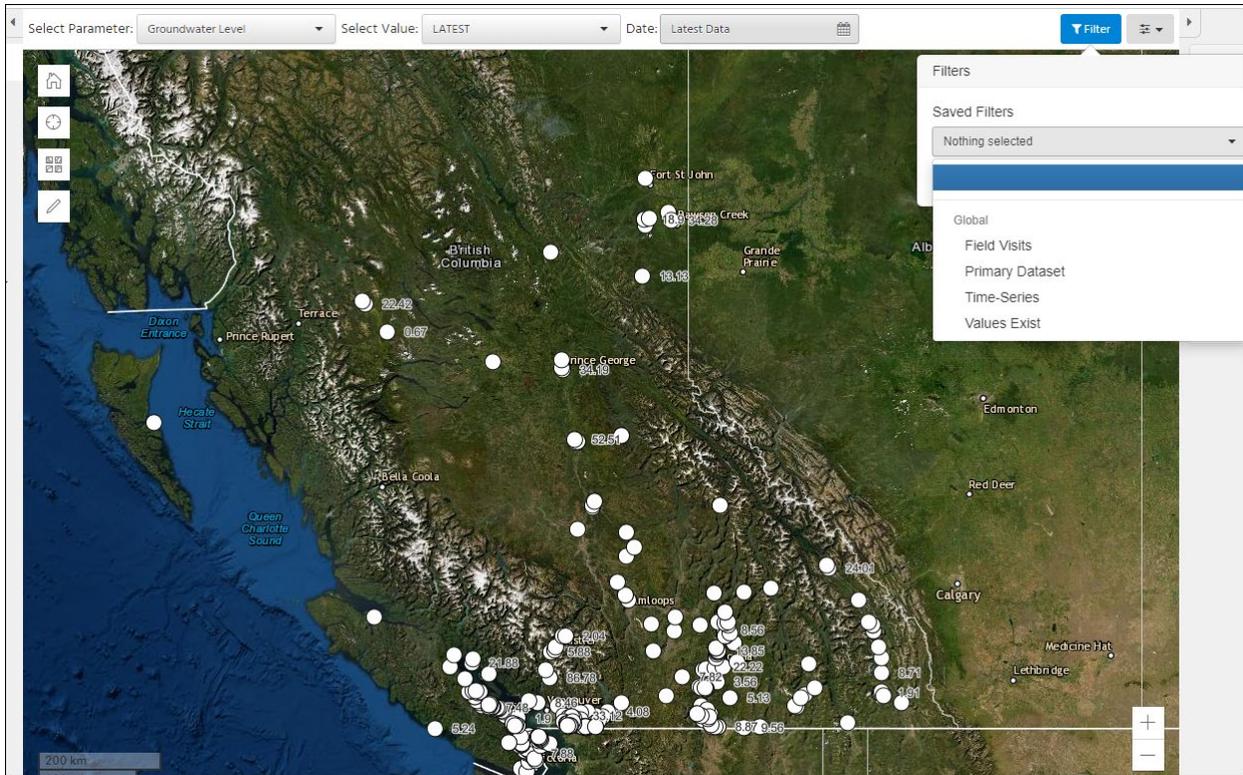
The Filter Data button is located near the top of the screen, beneath the Mode menu. There are options available to filter data based on Location attributes or by using a map selection.



Different filters will be available depending on the screen you are viewing. For instance, on the map view with all locations showing the only filter available is 'Values Exist'. This will filter for stations with current data within the last 24 hours.



If you have selected a parameter, value and date, more filters will show as below. This allows you to view field visits, versus time-series. Primary datasets which are the most corrected when multiple time-series datasets exist for the same site.



4. Map Options

The top left of the Map view shows various Map Options



The home button will restore the default provincial view



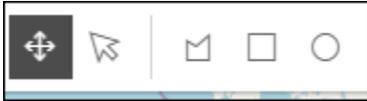
The Zoom to current location will zoom to your location if you allow it access. This is handy if you are in the field and want to zoom to your location



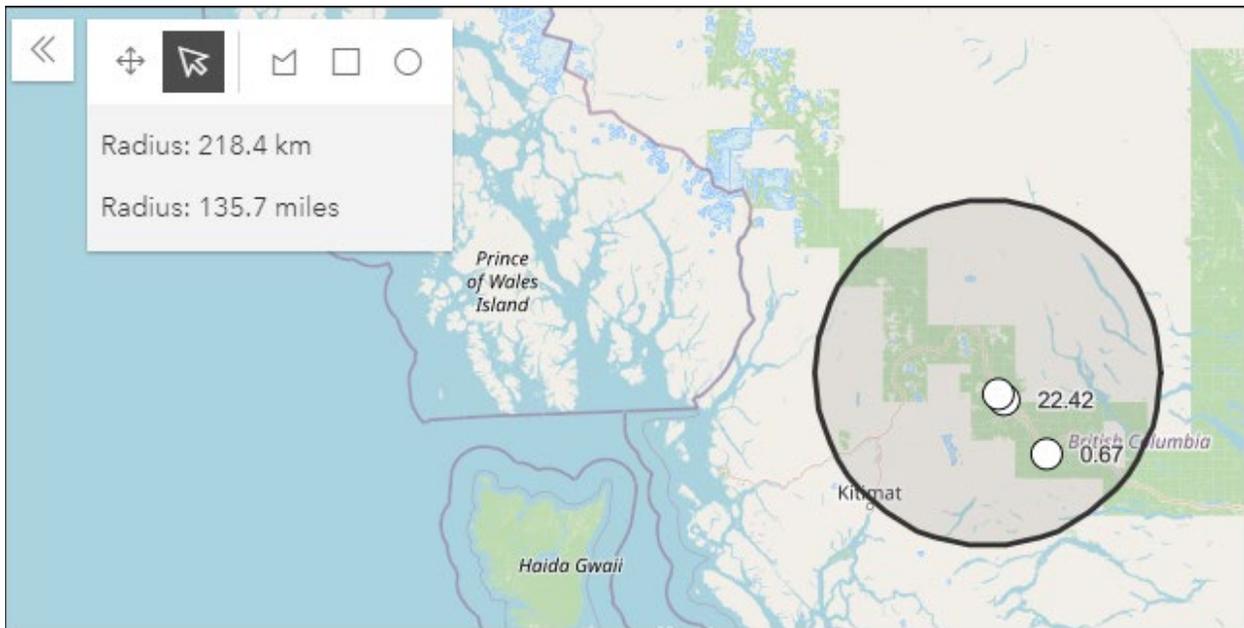
This button allows you to select from available base maps



The filter by map select tool allows you to draw a circle, rectangle or polygon around your area of interest and then list or export



For example, use the tool to filter your locations of interest



Click on the List tool to see a list of the locations

Data Set Id	Location	Location Folder	Start of Record	End of Record	Value	Status	Go To
SGWLWorking@OW386	OBS WELL 386 - HOUST...	Locations.GROUNDWA...	2002-01-03 10:00:00	2021-04-29 03:00:00	0.67 m	<input type="checkbox"/> -	Go To
SGWLWorking@OW377	OBS WELL 377 - SMITHE...	Locations.GROUNDWA...	2008-10-09 04:00:00	2021-04-28 18:00:00	22.42 m	<input type="checkbox"/> -	Go To
SGWLWorking@OW089	OBS WELL 89 - SMITHE...	Locations.GROUNDWA...	1969-12-02 12:00:00	2020-11-17 14:00:00		<input type="checkbox"/> -	Go To

If you cannot see all the locations you want, you may have to Clear a filter.



5. Legend

Legends may be available depending on the Parameter, Value and Interval selected.

Select Legend:

Air Temperature

Air Temperature 451

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No Data	221
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	below -10 °C	2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-10 to 0 °C	116
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	> 0 - 10 °C	112
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	> 10 - 20 °C	0
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	> 20 - 30 °C	0
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	> 30 °C	0

The initial map view of all locations has two legends available to select

Location Type 1663

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Snow	522
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Hydrometric	668
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Water Quality	145
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Groundwater	328
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unknown	0

Responsibility

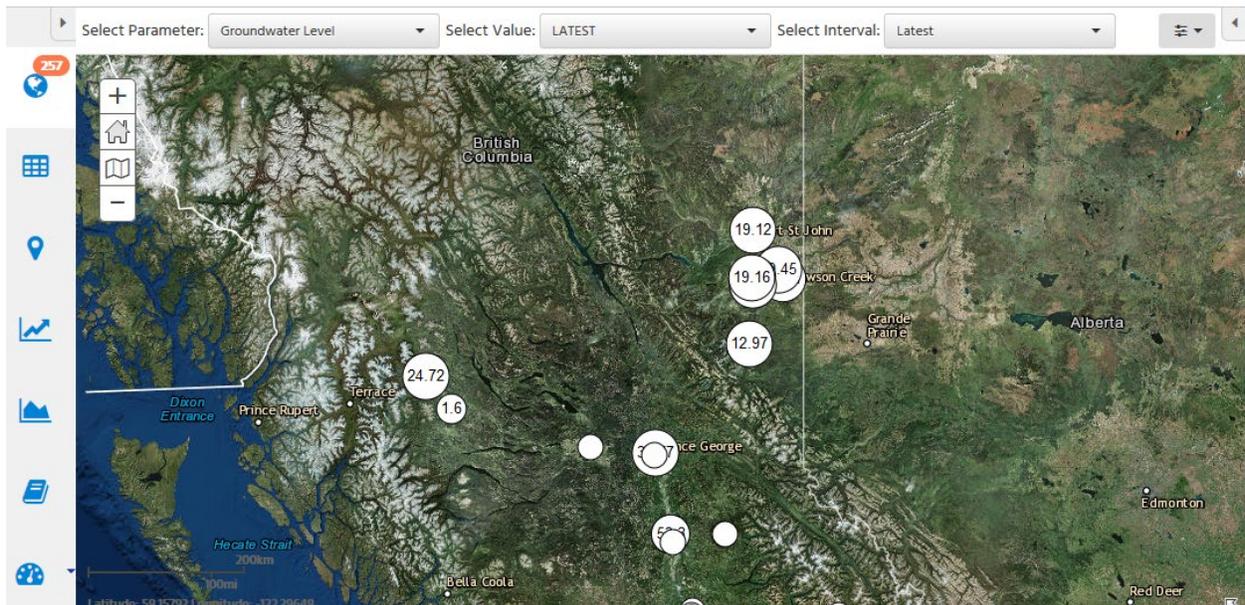
Responsibility 1663

<input checked="" type="checkbox"/>	None	4
<input checked="" type="checkbox"/>	BC Fisheries	45
<input checked="" type="checkbox"/>	BC Hydrometric	534
<input checked="" type="checkbox"/>	BC Research	66
<input checked="" type="checkbox"/>	BC Snow Survey Program	501
<input checked="" type="checkbox"/>	BC Water Quality	63
<input checked="" type="checkbox"/>	Provincial Groundwater Observation Well Network	302
<input checked="" type="checkbox"/>	BC Groundwater	1
<input checked="" type="checkbox"/>	First Nations	0
<input checked="" type="checkbox"/>	Non-Government Organizations	80
<input checked="" type="checkbox"/>	Municipal Government	49
<input checked="" type="checkbox"/>	Regional Government	14
<input checked="" type="checkbox"/>	Federal Government	3
<input checked="" type="checkbox"/>	BC Oil & Gas Commission	1

The legends are interactive and allow you to turn off/on to limit your selection

User Tip:

Collapsible sidebars



To increase the space of the **Data View**, click on the arrows to collapse the **View Type** and **Legend & View Options** sidebar.



List View

List View

The screenshot shows the AQUARIUS WebPortal interface. At the top, there are filters for 'Select Parameter' (Groundwater Temperature), 'Select Statistic' (Statistic), 'Select Interval' (Yearly), and 'Select Year' (2017). A red box labeled '1. Data Context Selectors' points to these filters. Below the filters is a table with columns: Data Set Id, Location, Location Folder, Start of Record, End of Record, Statistic Value, Classification, and Go To. A red box labeled '2. Sort and Filter Columns' points to the 'Location' column header. A red box labeled '3. Go To' points to the 'Go To' button in the table. A red box labeled '4. List Options' points to the 'List Options' panel on the right, which has checkboxes for 'Active', 'Inactive', 'Time-Series', and 'Field Visits'. A red box labeled '5. Options Menu' points to the 'Options Menu' icon in the top right corner. A red arrow points from the 'Options Menu' to the 'List Options' panel. A red box at the top center contains the text 'Click info link to access a Quick Start navigation guide'.

The List View displays all data for a selected parameter in a grid (table) format. Here you can select the data, statistic, and interval of interest; sort and filter data; and export to a variety of formats.

1. **Data Context Selectors:** use this menu to change the parameter, value, interval, and date range displayed. The available value will change based on the parameter and interval selected.
2. **Sort and Filter Columns:** use the filter button to isolate sites of interest. Clicking on a column header changes the sort order of the data set.
3. **Go To:** the Go To allows you to navigate to different views of the dataset.
4. **List Options:** use toggles on the list options to narrow down values of interest on the list view. e.g. timeseries versus field visit.
5. **Options Menu:** use the options menu to export data, reset sort orders, clear filters, refresh data, and access the full user guide.

Location View

The screenshot displays the 'Location View' for site 1A03P. At the top, there are search and date selection options. The main content area is divided into a 'Location Summary' on the left and a 'Data Sets' table below. The summary includes details like location name, type, coordinates, and elevation. The data sets table lists various datasets with columns for ID, name, start/end dates, and last updated time. Navigation and export options are visible throughout the interface.

The Location View allows you to search by site name or site ID and provides a detailed overview for an individual site. Here you can view or export data associated with a site of interest.

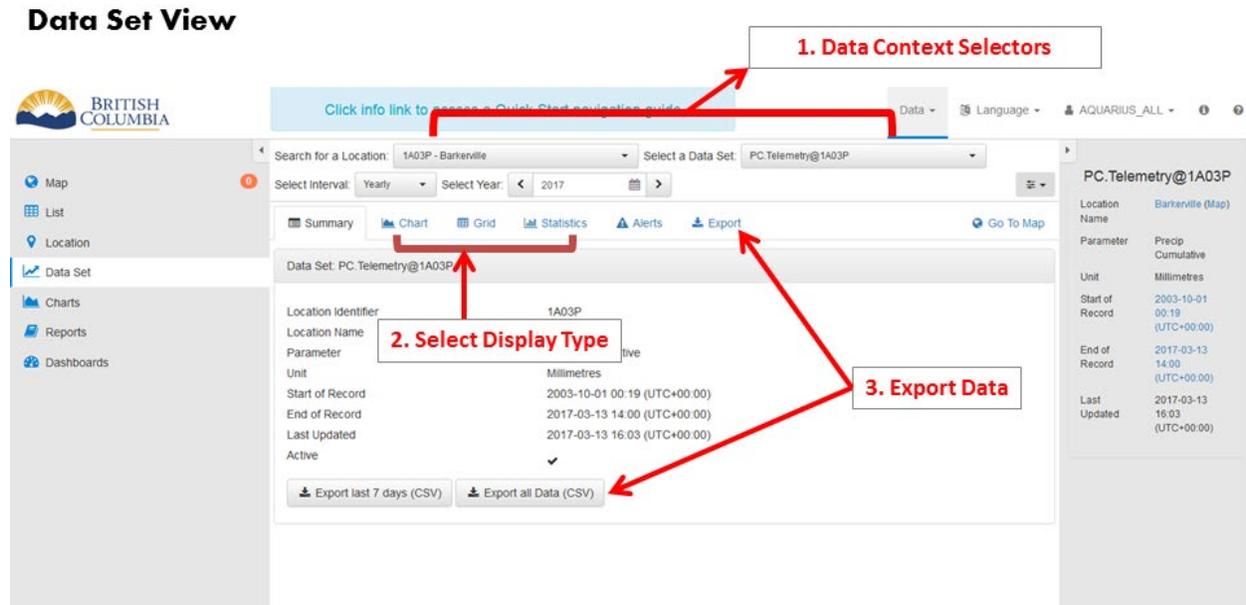
- 1. Data Context Selectors:** use this menu to change the location, interval, and date range displayed. You may select from the drop down list, or use the search bar.
- 2. View Location on Map:** press the Go To Map link to view the selected location spatially.
- 3. Location Summary:** review the metadata for the selected site.
- 4. Export Data:** export data from a pre-set time frame to CSV or export all data to CSV using the buttons in the location summary. To create a custom export, use the export tab located below the Data Context Selectors.
- 5. Sort and Filter Columns:** select the filter icon to narrow down data of interest. Clicking on a column header changes the sort order of the dataset.
- 6. Options Menu:** use this menu to export data, reset sort order, clear filters, refresh data, and access the full user guide.
- 7. Go To:** the Go To button displays the selected location on the map, summary, chart, grid, statistics, or export views.
- 8. Reports –** If reports are available they will be linked here.

By clicking on the Go To dropdown beside the dataset you can view the data, chart the data, export the data.

Data Sets Time Zone: Location Time Zone (UTC) [v] [v]

Data Set Id [v]	Parameter [v]	Start of Record [v]	End of Record [v]	Last Updated [v]	Active [v]	Go To [v]
SW.Field Visits@1C20P	Snow Water Equivalent	2016-03-23 12:00:00	2016-03-23 12:00:00	2017-03-07 20:24:22	✓	Go To [v]
SW.Telemetry@1C20P	Snow Water Equivalent	2003-10-04 09:05:09	2017-03-14 20:00:00	2017-03-14 22:03:38	✓	Go To [v]
TA.Telemetry@1C20P	Air Temperature	2003-10-04 09:05:09	2017-03-14 20:00:00	2017-03-14 22:03:38		Map
TA.Telemetry2@1C20P	Air Temperature	2016-03-24 00:00:00	2017-03-14 20:00:00	2017-03-14 22:03:38		<ul style="list-style-type: none"> [-] Data Set [+] Summary [+] Chart [+] Grid [+] Statistics [+] Export

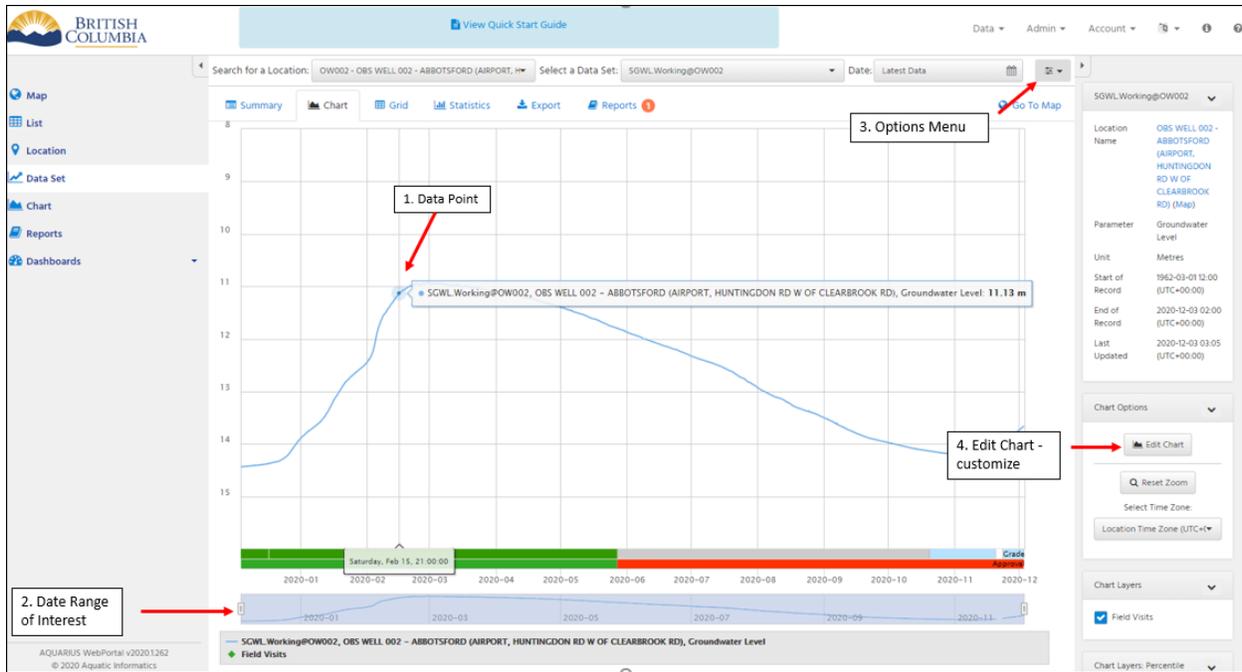
Data Set View



The Data Set View is the launch pad to view data charts, grids, or statistics for an individual site. Use the tabs at the top of the page to toggle between data set types, or export data from the main Data Set page.

1. **Data Context Selectors:** use the drop-down menu to search for or select a site of interest. Select a dataset and set the interval and date range to narrow down data results.
2. **Select Display Type:** the tabbed items at the top of the page display the selected data in a variety of formats as a chart, grid (tabular), statistics or alerts.
3. **Export Data:** export data from a pre-set time frame to CSV or export all data to CSV using the buttons in the Data Set summary. To create a custom export, use the export tab located below the Data Context Selectors.

The Chart tab is the second tab within the Data Set View. This allows you to see the change in values over time. You can use the preconfigured charts or customize your own charts and export them as .PNG, JPG, or .PDF files.



1. **Data Point:** hover over a data point in the chart to view its value.
2. **Date Range of Interest:** use your mouse to click and drag across the chart to zoom in to a date range of interest or use the blue navigation screen at the bottom.
3. **Options Menu:** use the options menu to export an image of the chart to PNG, PDF, or JPG. Alternatively, export the selected data to Excel, PDF, or CSV.
4. **Create Custom Chart:** press the Edit Chart button to add or format axis, change the chart type, add additional data sets, and save your custom chart.

The Grid tab is the third tab within the Data Set view. This allows for sorting, filtering, and exporting of data.

The screenshot displays the AQUARIUS web portal interface. At the top, there is a search bar for location (1A03P - Barkerville) and data set (PC Telemetry@1A03P). Below this, there are navigation tabs: Summary, Chart, Grid (selected), Statistics, Alerts, and Export. The main area shows a data table with the following columns: Timestamp, Precip Cumulative (...), Grade Code, Approval Level, and Interpolation. The table contains 16 rows of data, with the 'Grade Code' column highlighted in cyan and the 'Approval Level' column highlighted in yellow. Two callouts are present: '1. Sort and Filter' pointing to a filter icon on the 'Precip Cumulative' header, and '2. Options Menu' pointing to a dropdown menu icon on the right side of the table. The right sidebar shows a 'Grid Options' section with a 'Select Time Zone' dropdown set to 'Location Time Zone (UT)'. A legend for 'Grade Code' is also visible, showing categories like -2 - UNUSABLE, -1 - UNSP, 0 - UNDEF, 10 - POOR, and 20 - ESTIMATED.

1. **Sort and Filter Columns:** select the filter icon to narrow down data of interest. Clicking on a column header changes the sort order of the dataset.
2. **Options Menu:** use this menu to export data, reset sort order, clear filters, refresh data, and access the full user guide.

The Grid View allows you to view the data in a tabular format with the grade and approval level showing. You can also adjust the time zone if you want to view the telemetry data (UTC) in local time (PST).

The screenshot shows the 'SW Telemetry@1C20P' interface. At the top, there are search and filter options: 'Search for a Location: 1C20P - Boss Mountain Mine', 'Select a Data Set: Data Set...', and 'Select Interval: Latest'. Below this is a navigation bar with tabs for 'Summary', 'Chart', 'Grid', and 'Statistics'. The 'Grid' tab is selected and circled in red. The main area displays a table with columns: 'Timestamp', 'Snow Water Equivalent (m...)', 'Grade Code', 'Approval Level', and 'Interpolation Type'. The table contains 25 rows of data from 2017-03-14. On the right side, there is a sidebar with 'SW Telemetry@1C20P' details, including location, parameter, unit, and record dates. Below this is a 'Grid Options' section with a 'Select Time Zone:' dropdown and a 'Location Time Zone (UTC)' dropdown, both circled in red. At the bottom of the sidebar is a 'Grade Code' legend with color-coded boxes for values: -2 (UNUSABLE), -1 (UNSP), 0 (UNDEF), 10 (POOR), 20 (ESTIMATED), 30 (GOOD), 40 (VERY GOOD), and 50 (EXCELLENT).

The Statistics tab is the fourth tab within the dataset view. This displays prepopulated statistics that have been calculated against the selected dataset. Not all parameters will have statistics.

The screenshot shows the 'SW Telemetry@1A03P' interface. At the top, there are search and filter options: 'Search for a Location: 1A03P - Barkerville', 'Select a Data Set: SW Telemetry@1A03P', 'Select Interval: Daily', and 'Select Date: 2017-03-09'. Below this is a navigation bar with tabs for 'Summary', 'Chart', 'Grid', 'Statistics', 'Alerts', and 'Export'. The 'Statistics' tab is selected. The main area displays a table with columns: 'Statistic', 'Timestamp', 'Event Timestamp', 'Value', 'Grade Code', and 'Interpolation Type'. The table contains three rows of statistics: 'AVG SWE', 'Heaviest Snowfall', and 'MAX SWE'. On the right side, there is a sidebar with 'SW Telemetry@1A03P' details, including location, parameter, unit, and record dates. Below this is a 'Grade Code' legend with color-coded boxes for values: -2 (UNUSABLE), -1 (UNSP), 0 (UNDEF), 10 (POOR), 20 (ESTIMATED), 30 (GOOD), 40 (VERY GOOD), and 50 (EXCELLENT). Three red arrows point to specific elements: '1. Select Statistics' points to the 'Statistics' tab, '2. Sort and Filter' points to the 'Timestamp' column header, and '3. Options Menu' points to the 'Grade Code' legend.

1. **Select Statistics:** use the drop-down menus to select the data set, interval, and date range of interest. Not all options in the drop-down menu will have statistics calculated, so some selections will result in an empty data set.
2. **Sort and Filter Columns:** select the filter icon to narrow down data of interest. Clicking on a column header changes the sort order of the dataset.
3. **Options Menu:** use this menu to export data, reset sort order, clear filters, refresh data, and access the full user guide.

You can **Export** the full period of record to various file formats.

The screenshot displays a web application interface for data management. At the top, there are search and selection fields: 'Search for a Location: 1C20P - Boss Mountain Mine', 'Select a Data Set: Data Set...', and 'Select Interval: Latest'. Below these are navigation tabs: 'Summary', 'Chart', 'Grid', 'Statistic', and 'Export'. The 'Export' tab is highlighted with a red circle. The 'Export' section contains the following fields and options:

- Data Type:** Data Set
- Available Period of Record:** 2003-10-04 09:05 - 2017-03-14 20:00 (UTC+00:00)
- Date Range:** 2003-10-04 09:05 to 2017-03-14 20:00
- File Format:** CSV
- Unit:** Millimetres
- Time Zone:** Location Time Zone (UTC+00:00)
- Processes:** (empty text field)
- Download:** (button)

On the right side of the interface, there is a sidebar with the following labels: 'SW.T', 'Location Name', 'Parameter', 'Unit', 'Start of Record', 'End of Record', and 'Last Updated'.

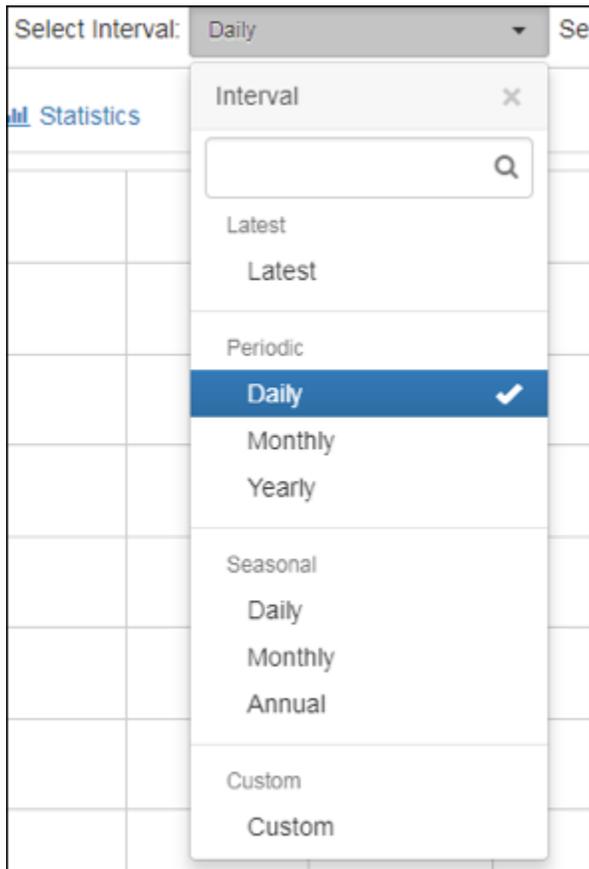
Charts View

The Charts view contains preconfigured charts for select locations, intervals, or data sets. From here, you may also create a custom chart.

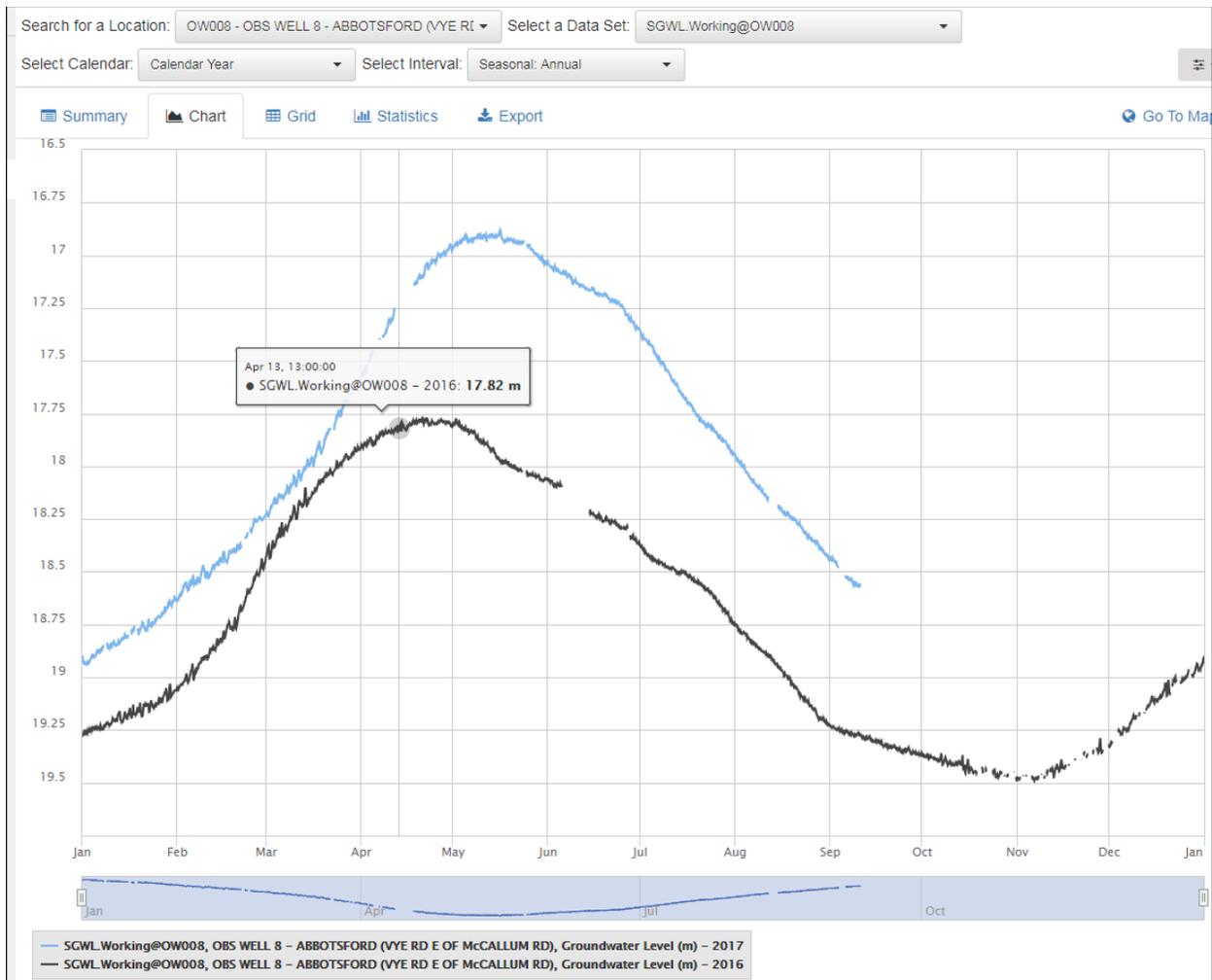
1. **Display Preconfigured Chart:** commonly accessed charts will be created in advance by a System Admin. Select an interval of interest, then view available charts for that interval.

The Chart View defaults to the last 7 days of data. You can change the interval, or Edit the Chart using the Chart Options.

Select Interval – allows you to view latest 7 days (default), Daily, Monthly, Yearly or chose Custom Dates



Seasonal Intervals allow you to display more than one year of data on the same chart (see screenshot below):



The Chart Options allow you to Edit the Chart, add text, add additional Data Sets or Statistics to your chart, or adjust colours and chart type.

1. Use the five tabs at the top of the Edit Chart interface to edit your chart

The screenshot shows the 'Edit Chart - Seasonal' interface. At the top, there are five tabs: 'Chart Series', 'Y Axes', 'X Axis', 'Chart Settings', and 'Chart Overlays'. Below the tabs, there is a message: 'Add one or more Chart Series and configure their display options from here. Click 'More' to show additional edit options per Chart Series.' A red warning banner states: 'You are not signed in to AQUARIUS WebPortal. Changes can be made to the charts but cannot be saved without signing in first.' Below the warning, there is a '+ Add Chart Series' button. Two chart series are listed. Each series has the following settings: Chart Series Type: Data Set; Data Set: OW008 - OBS WELL 008; SGWL Working: SGWL Working@OW008; Chart Method: Auto; Axis: Inverted; Year: 2017 (for the first series) and 2016 (for the second series). A blue 'More' button is located at the bottom right of each series configuration. At the bottom right of the interface, there are 'Preview' and 'Close' buttons.

2. Clicking the blue [More](#) button on the bottom right of Data Set tab allows you to alter colours, line types, widths,...etc. When you are finished, click the Less button. After completing the changes you want on your chart click the Preview button.

Edit Chart - Seasonal

Data Sets | Y Axes | X Axis | Chart Settings | Chart Overlays

Add additional Data Sets to the Chart and configure their display options from here. Click 'More' to show additional edit options per Data Set.

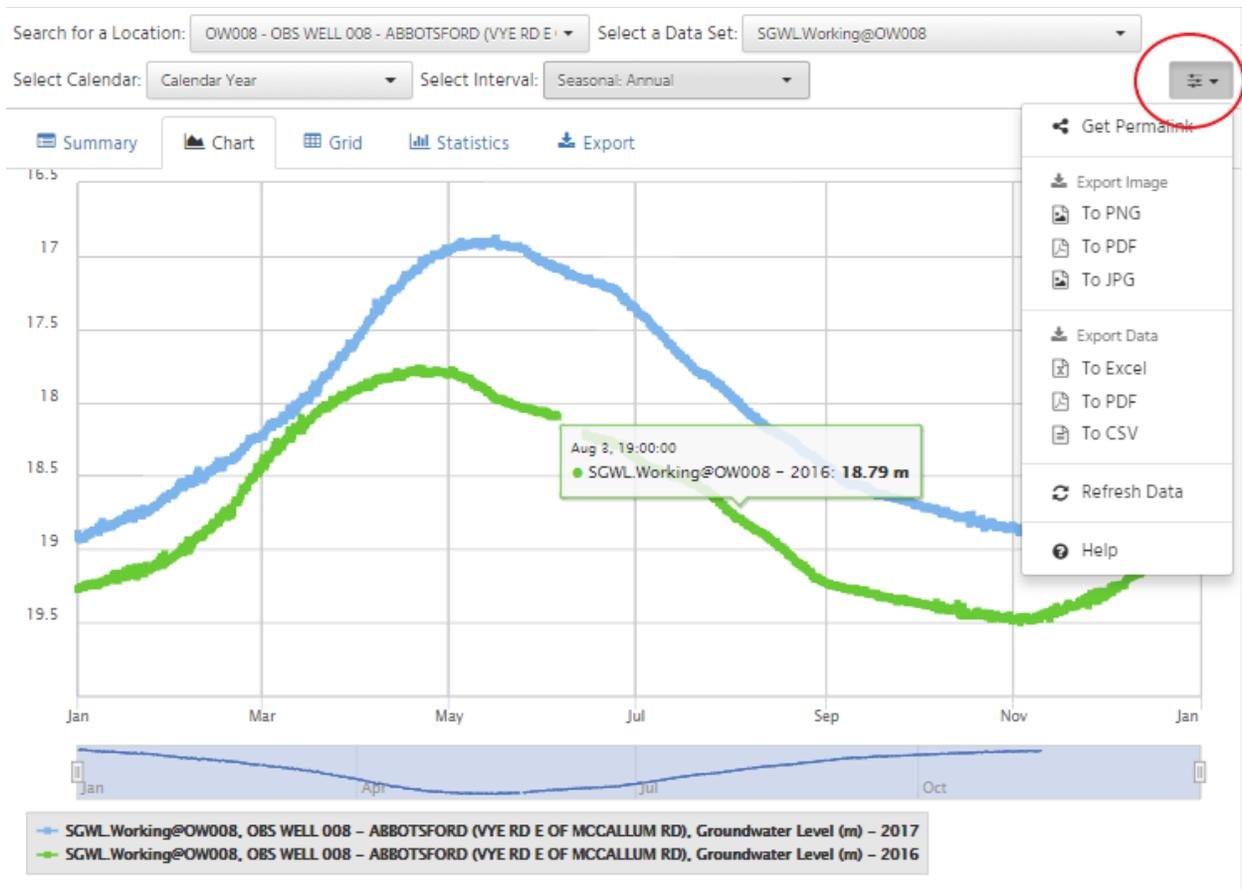
⚠ You are not signed in to AQUARIUS WebPortal. Changes can be made to the charts but cannot be saved without signing in first.

+ Add Series

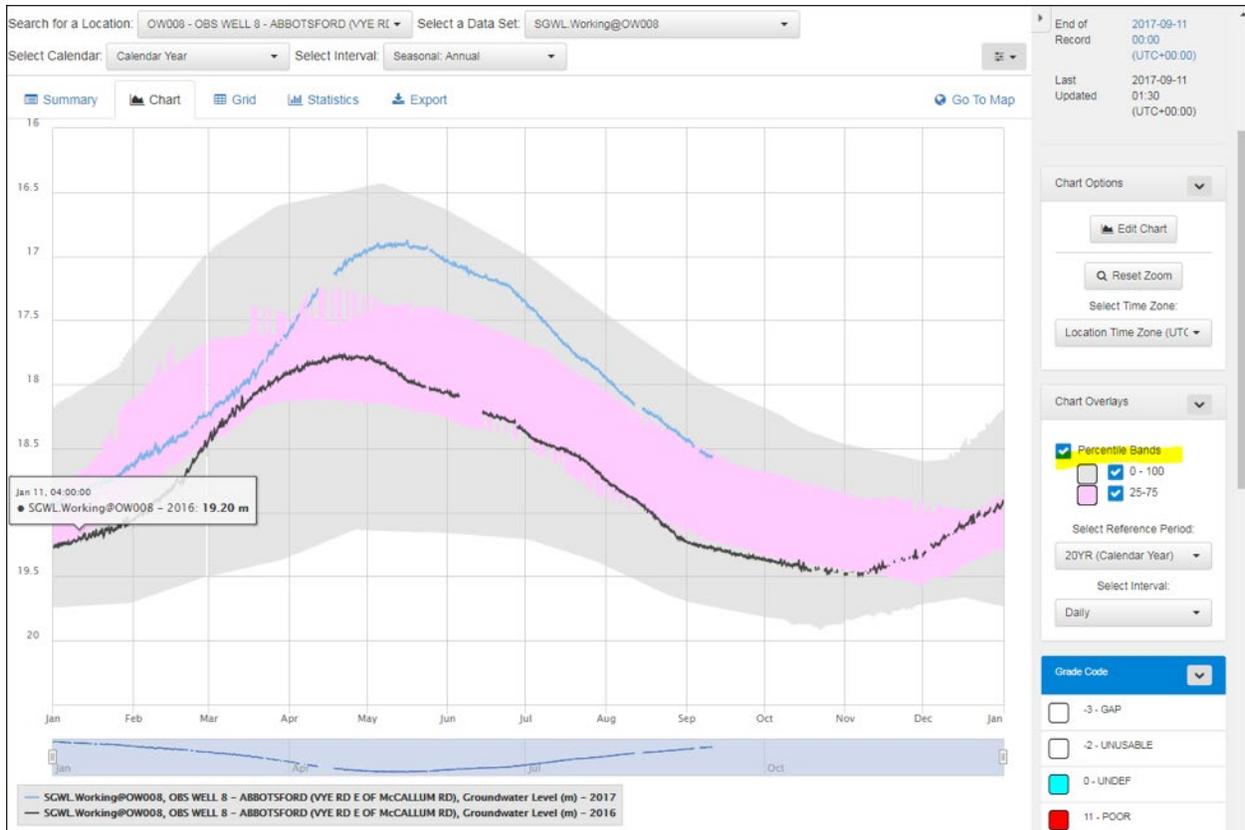
Series Type	Data Set	Axis	Year	More
Data Set	OW008 - OBS WELL 8 · SGWL.Working@OW0C	Inverted	2017	More
Data Set	OW008 - OBS WELL 8 · SGWL.Working@OW0C	Inverted	2016	More
Data Set	OW008 - OBS WELL 8 · SGWL.Working@OW0C	Inverted	2015	More

Preview Close

3. By clicking on the options box on the top right of the chart, you can export the chart to PNG, PDF, or JPG formats.



OPTION: Add Percentile Bands to your chart by clicking the checkbox in the Chart Overlays.



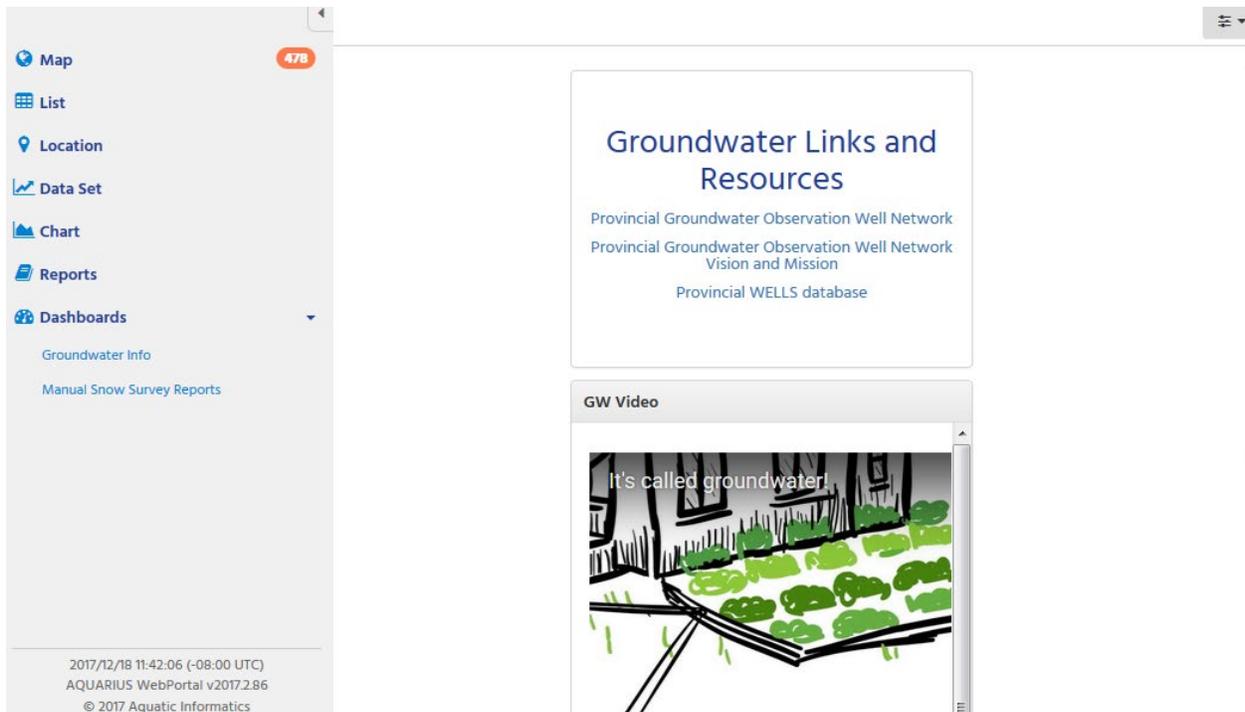
Reports View

The Report View provides a list of pre-configured reports that are available for download to PDF in a standardized format. Using the right-hand panel, select the site of interest to open that site's folder. Click on the report title to download.

The screenshot displays the British Columbia Reports View interface. On the left is a navigation menu with options: Map, List, Location, Data Set, Charts, Reports, and Dashboards. The main content area features a large grey box with the text "Select Report" and a subtext "Select a Report to be downloaded to your machine". To the right, a "Downloadable Reports" panel lists various sites (OW002, OW008, OW015, OW035, OW045, OW047, OW058, OW060, OW065, OW071) and a "Groundwater Level Chart" report. A red callout box with the text "Select preconfigured report to download in standardized format" has a red arrow pointing to the "Groundwater Level Chart" report. Below this, a report preview is shown for "2 year water level with historical max, mean, min statistics" dated "March 13, 2017 00:04". The report content includes a line and scatter plot titled "SGWL Working@OW047, OBS WELL 47 - SILVER STAR MOUNTIAN (SOVEREIGN LAKE ROAD) (m)". The y-axis is labeled "Water level below ground surface in metres" (0 to 12) and the x-axis is "Month" (Jan 1 to Jan 1). The legend indicates: Historical Max (yellow dots), Historical Mean (light blue line), Historical Min (red dots), 2015-Validated (green line), 2015-Invalidated (dark blue line), 2016-Validated (purple line), and 2016-Invalidated (grey line).

Dashboards

Dashboards display various Business Area links and information including charts, tables, videos and websites.



The screenshot displays the AQUARIUS WebPortal interface. On the left is a vertical navigation menu with the following items: Map (with a red badge showing '478'), List, Location, Data Set, Chart, Reports, and Dashboards. Under the Dashboards section, there are two sub-links: 'Groundwater Info' and 'Manual Snow Survey Reports'. At the bottom of the menu, the text reads: '2017/12/18 11:42:06 (-08:00 UTC)', 'AQUARIUS WebPortal v2017.2.86', and '© 2017 Aquatic Informatics'. The main content area on the right features a large white box titled 'Groundwater Links and Resources' containing three links: 'Provincial Groundwater Observation Well Network', 'Provincial Groundwater Observation Well Network Vision and Mission', and 'Provincial WELLS database'. Below this is a 'GW Video' player showing a cartoon illustration of a house with green bushes and the text 'It's called groundwater' overlaid on the scene.

The Dashboard view contains useful information or program updates. New content is added to the dashboards regularly.

Data Parameter Explanations

The Aquarius Reporting Tool displays locations that monitor and record environmental data including automated continuous and manually collected data. Descriptions of parameters available in the Aquarius Database are listed below:

- **Air Temperature (TA):** The temperature of air measured electronically in degrees Celsius
- **Barometric Pressure:** also known as atmospheric pressure is the pressure with the atmosphere of the Earth. Barometric pressure impacts pressure transducer readings.
- **Conductivity:** is a measure of water's capability to pass electrical flow. This ability is directly related to the concentration of ions in the water. These conductive ions come from dissolved salts and inorganic materials such as alkalis, chlorides, sulfides and carbonate compounds.
- **Conductivity:** Conductivity is a measure of the ability of water to pass an electrical current. Because dissolved salts and other inorganic chemicals conduct electrical current, conductivity increases as salinity increases. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity.
- **Cumulative Precipitation (PC):** the amount of accumulated precipitation measured in mm in a device like a tipping bucket or a pipe. This value will continue to climb until the device is emptied.
- **Discharge:** The amount of water flowing through a stream, river or creek at any given time. Discharge is typically measured in units of cubic meters per second (m³/s) .
- **Groundwater Level (SGWL):** The depth in metres (m) measured down from the ground surface to the water level in a well. The larger the value the lower the water level in the well.
- **Groundwater Elevation (GWE):** The depth in metres (m) measured down from the ground surface to the water level in a well added to the local elevation (above sea level).
- **Height of Gauge (Stage):** The height of the water above a set reference level measured in metres (m). The river stage is related to discharge but not equivalent and more information (i.e. a ratings curve) is required to calculate discharge from river stage.
- **Relative Humidity:** Is a ratio, expressed in percent, of the amount of atmospheric moisture present relative to the amount that would be present if the air were saturated. Since the latter amount is dependent on temperature, relative humidity is a function of both moisture content and temperature.
- **Snow Depth (SD):** the depth of snow measured in cm.
- **Snow Water Equivalent (SW):** A measurement of how much liquid water is being stored in the snow-pack at a particular location. It can be thought of as the theoretical depth of liquid water (in mm) if the entire snow-pack were instantaneously melted. SW values are obtained by taking the weight of the snow pack over a snow scale or snow pillow.
- **Specific Conductance:** Measures a fluids ability to transmit electrical current which is related to the amount of ions in the water.
- **Total Precipitation:** Total Precipitation represents a total amount of precipitation for a given time period (e.g. hourly, daily, monthly).

- **Turbidity, ntu:** Turbidity is the cloudiness of a fluid caused by suspended solids which can be used as an indicator to monitor water quality. NTU stands for Nephelometric Turbidity Unit and signifies that the instrument is measuring scattered light from the sample at a 90-degree angle from the incident light.
- **Water Temperature (TW):** the temperature of water measured electronically in degrees Celsius (oC)
- **Wind Direction (Wind Dir):** the wind direction measured in degrees.
- **Wind Velocity (Wind Vel):** the velocity or speed of the wind measured in kilometers per hour (km/hr).