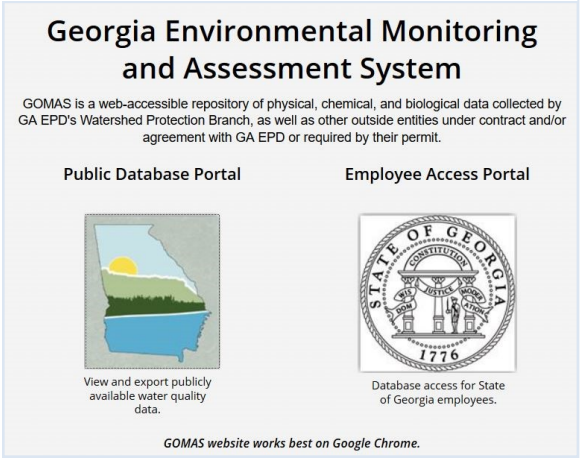
Georgia Environmental Monitoring and Assessment System User Guide

What is the Georgia Environmental Monitoring and Assessment System

The Georgia envirOnmental Monitoring and Assessment System (GOMAS) is a web-based repository of physical, chemical, and biological data collected in Georgia's rivers, lakes, estuaries, and other waters. These data are collected by the Georgia Environment Protection Division's Watershed Protection Branch, as well as other outside entities under contract and/or agreement with GA EPD or as required by their permit. To view Monitoring Locations and download data, please go to the GOMAS Public landing page and choose the Public Database Portal link. GOMAS Public website works best in Google Chrome. Please send questions or comments to gomas.questions@dnr.ga.gov



Data Search Options

The data stored in GOMAS is currently accessible via two different search pathways that will allow users to define their search criteria in a variety of ways to find water quality data they are interested in. The end result of all searches will allow users to download an Microsoft Excel workbook with results, associated metadata, and details about the Monitoring Locations selected during the export process.

Map Search for Monitoring Data

The first search pathway is the Map Search for Monitoring Data. It is a two-step process that begins with selecting Monitoring Location(s) via the GOMAS web map, and then doing an Advance Search on the selected Monitoring Locations. Monitoring Locations can be selected using location information (street address or latitude/longitude) or geographic criteria .

Choose how to search for data

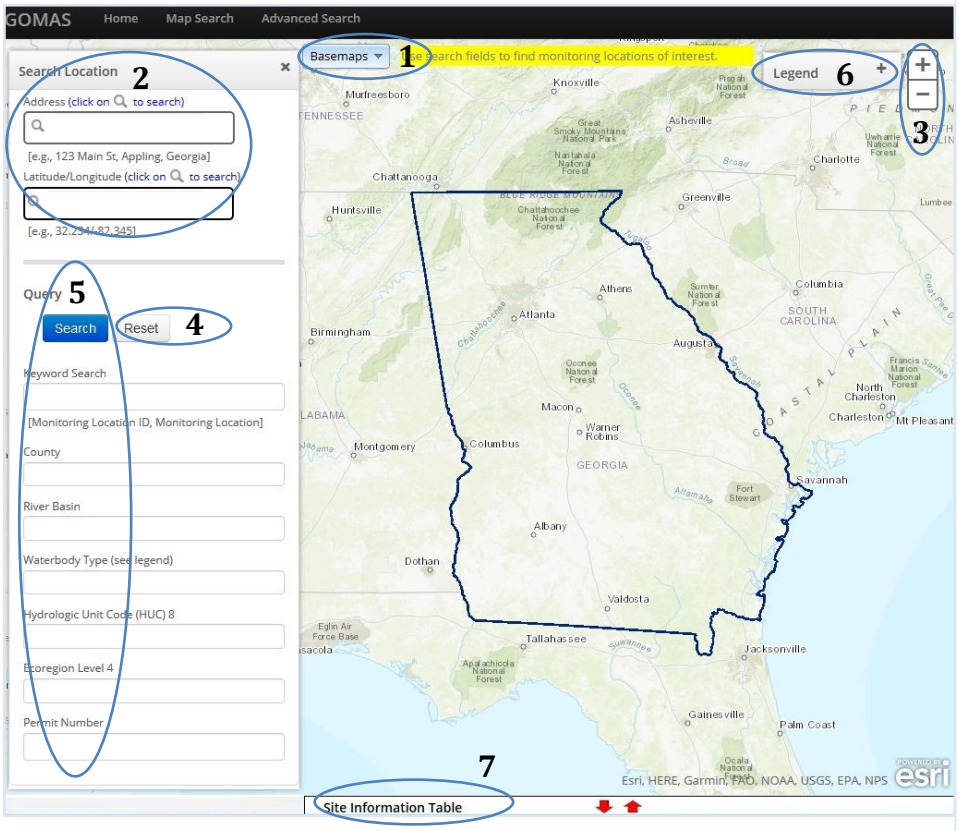
Advanced Search for Monitoring Data

The second search pathway is the Advanced Search for Monitoring Data. This pathway allows users to download data using search criteria including sample date, location, parameter, and project (e.g., Watershed Assessment data).

Map Search Guide

The GOMAS web map will open without any Monitoring Locations displayed. Users can choose from a variety of basemaps by clicking on the "**Basemaps" button (1)** located at the top to the right of the search sidebar. Users should use the search fields to find Monitoring Locations of interest. This can be done with the Search Location or Query search.

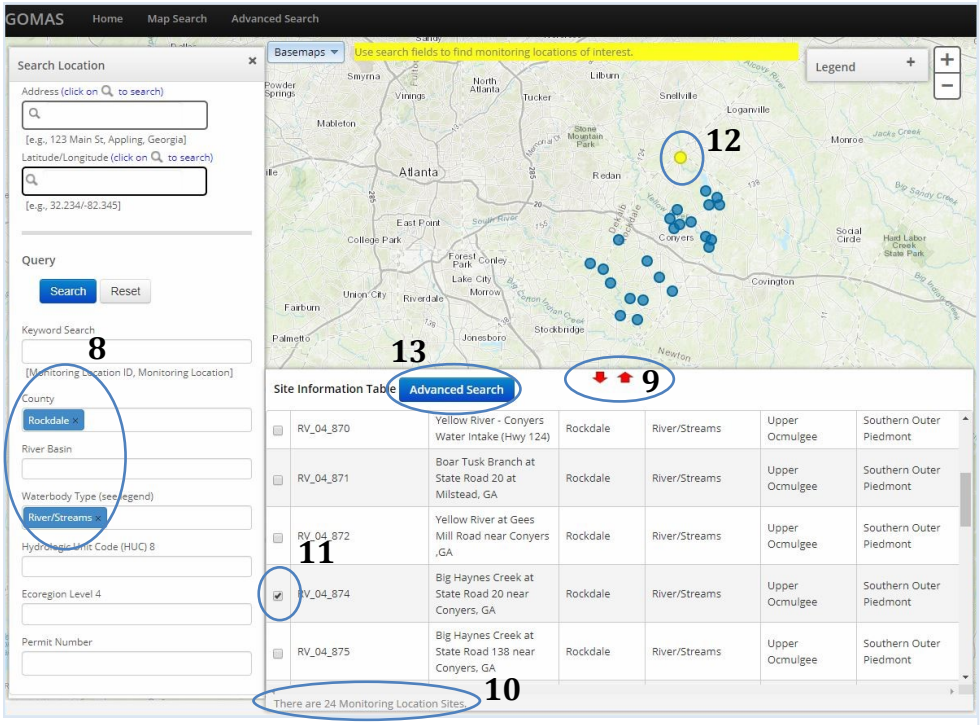
The **Search Location (2)** fields will find monitoring sites near a street address or a location defined by Latitude and Longitude using decimal degrees. Examples of how to enter the Search Location criteria are provided below the search fields. Click on the magnifying glass on the left side of the search field. The location will be displayed as a large green dot. Zoom out to see nearby Monitoring Locations, using the **"+" and "-" buttons (3)** located in the right hand corner of the map. Please note the map will only show a maximum of 500 Monitoring Locations. The ⊗ on the right side of the search field will clear the field, but will not delete the previously displayed search location (large green dot). If you do another location search, the green dot will move to the new location. To clear the map, click on the "**Reset" button (4)** .



The **Query search (5)** for Monitoring Locations allows the user to search for monitoring sites by County, River Basin, Waterbody Type, Hydrologic Unit Code (HUC 8), Ecoregion Level 4, and NPDES Permit Number where Compliance Sampling Inspections have been conducted. A Keyword, such as stream name, city, road crossing, etc.., that may appear in the Monitoring Location name can be used for the Keyword Search. Everything except the Keyword Search and Permit Number are drop down menus, where you can select more than one criterion. The selected criteria will appear in blue boxes. Multiple criteria can be used together (i.e. and, not or) to narrow the resulting Monitoring Locations. Click search to view your results. The color of the Monitoring Location identifies the Waterbody Type, as shown by clicking on the **Legend button (6)**, which can be found in the upper right hand corner of the map next to the zoom buttons. Clicking on each Monitoring Location will provide a popup box with a summary of location information. To start another Monitoring Location search, click on the "Reset" button.

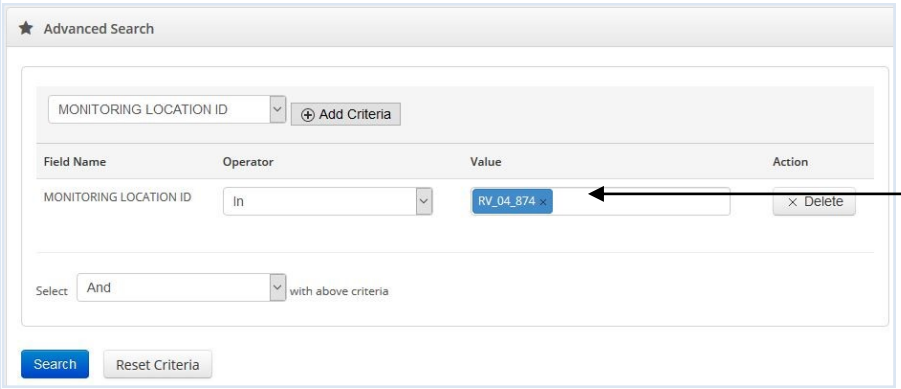
To view the **Site Information Table (7)**, click the red up arrow at the bottom of the screen. Hovering over a row on the table highlights the corresponding Monitoring Location on the map (yellow dot). The site information can be sorted by clicking on the column headers (Monitoring Location ID, Monitoring Location, County, Waterbody Type, River Basin, Ecoregion Level 4). Select the sites you wish to get data for by checking the box in the leftmost column of the table. If you want to select all sites, check the top box in the left column. Click the "Advanced Search" button to proceed to the Advanced Search screen, where you can export data for the selected sites.

An example of the Map Search screen and Site Information Table are shown below. The **Query search fields (8)** of County and Waterbody Type were utilized**.** After the search was performed, the Site Information Table was opened utilizing the **red Up arrow (9)** on the top of the table**.** The **number of Monitoring Locations (10)** displayed on the map and summarized on the table is shown in the bottom left corner of the table**.** The **selected Monitoring Location (11)** "Big Haynes Creek at State Road 20 near Conyers, GA" is a **highlighted yellow dot (12)** on the map. Click on the blue **"Advanced Search" button (13)** when all desired Monitoring Locations have been selected, and the user is ready to proceed to the Advanced Search screen.



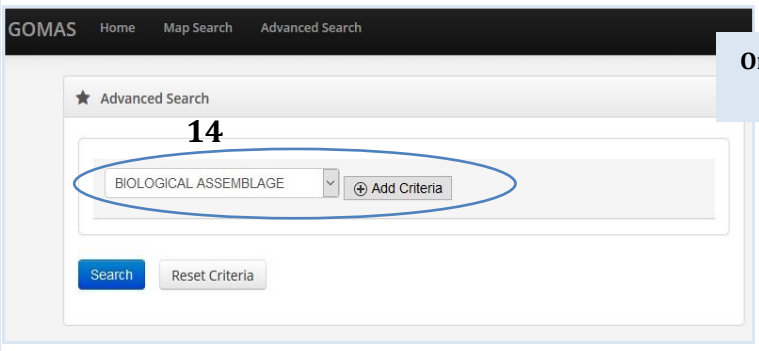
Advanced Search Guide

The Advanced Search screen allows the user to refine the data exported by Monitoring Location, Parameter, sample Date, and Project Name. If you use the Map Search, the Monitoring Location ID selected will be pre-filled.

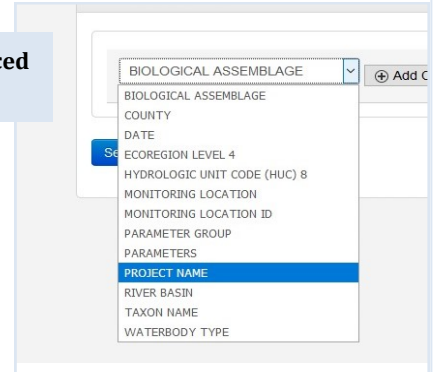


Monitoring Station ID pre-filled based on previous Map Search

If you use the Advanced Search for Monitoring Data, you will have to select criteria to search on from the **dropdown menu (14)** next to the Add Criteria button located at the top of the page.

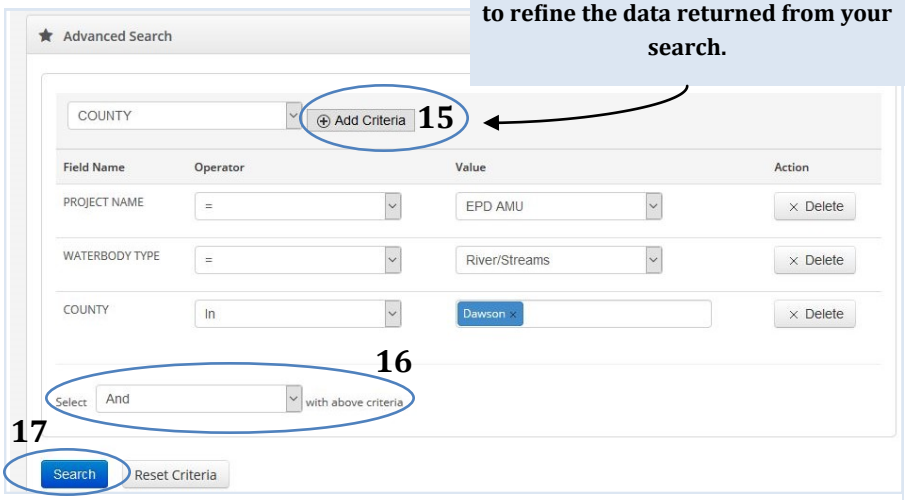


Or select desired Advanced Search criteria



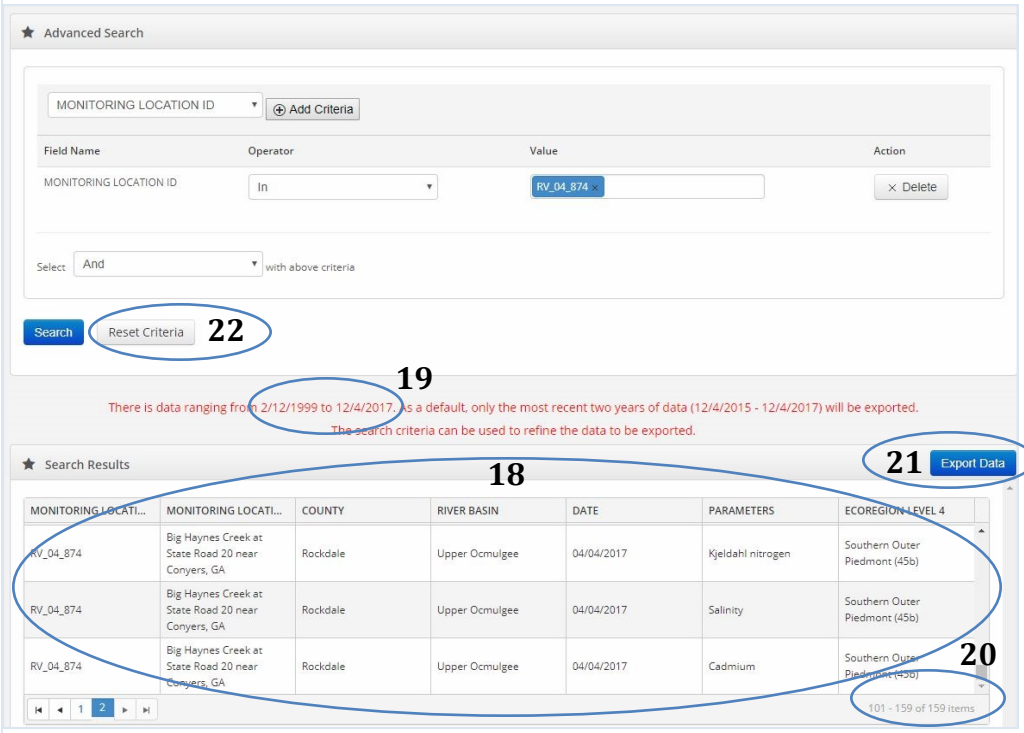
The location based criteria are County, Ecoregion Level 4, Hydrologic Unit Code (HUC 8), Monitoring Location, Monitoring Location ID, River Basin, and Waterbody Type. The parameter based criteria are Biological Assemblage, Parameter, Parameter Group, and Taxon Name. Date is the date the sample(s) were collected, and can be given as a range using various operators (=, <>, >=, <=,>, < , contains). Project Name is the entity responsible for the monitoring (e.g., EPD AMU, USGS Regulatory, City of, County).

Multiple search criteria can be added to refine the data returned from your search.



Select the criterion you would like to use by clicking on the "**Add Criteria" button (15)**. The Field Name is the criterion you have just selected. The Operator is used to limit the selection. The value will be either an open field or dropdown/autofill menu. Date is an open field that must be formatted as mm/dd/yyyy. Dropdown menus are available for all other criteria (Biological Assemblage, County, Ecoregion Level 4, Hydrologic Unit Code, Monitoring Location, Monitoring Location ID, Parameter Group, Parameter Group, Project Name, River Basin, Taxon Name, and Waterbody Type). ALL criteria selected are either **And** or **Or (16)**.

Click the **"Search" button (17)** to populate the **Search Results table (18)** in the lower portion of the screen. Please note only the most recent two years of data will be displayed; however, the **date range (19)** of all available data will be provided. The Search Results can be sorted by clicking on the column headers (Monitoring Location ID, Monitoring Location, County, River Basin, Date, Parameters, Ecoregion Level 4).



The total **number of individual results (20)** is given in the bottom right corner of the Search Results table. Please note that the export is limited to 15,000 items. If more than 15,000 results are in the grid, then you will need to refine your search until 15,000 or fewer results are shown. To view and download the un-displayed data excluded by the two year default, the search should be refined by adding a Date criterion within the date range of available data. Click on the "**Export Data" button (21)** to download the data displayed in the Search Results Table to an excel workbook. Depending on the size of the dataset, it could take several minutes, up to 20.

To start another search, click on the **Reset Criteria button (22)**.