

JAMAICA'S WATER INFORMATION SYSTEM

Hydrologic Database User Guide

Water Resources Authority, Jamaica

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Contents

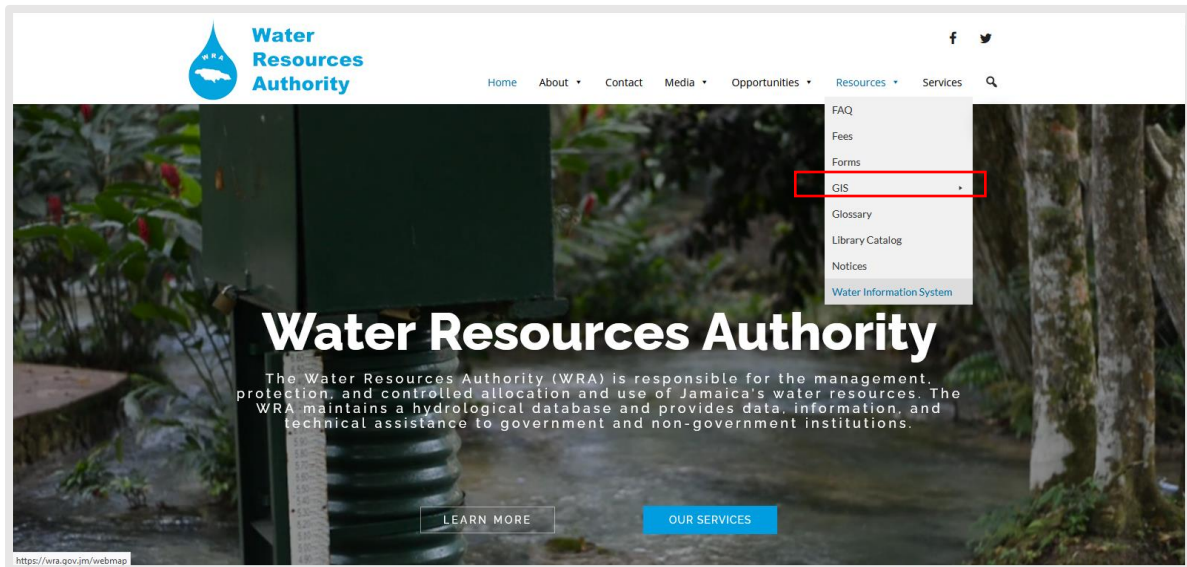
Part A: Accessing the Jamaica Water Information System (WIS)	1
Part B: View/download an entire layer	3
Part C: View/download Data Attachments	3
Streamflow/Spot Measurement:	4
Groundwater Levels	5
Other Attachments	5

The Jamaica **Water Information System (WIS)** is a hydrologic database containing ground and surface water information for Jamaica. It is managed by the Water Resources Authority of Jamaica. Hydrologic data may be viewed in map and data format.

Part A: Accessing the Jamaica Water Information System (WIS)

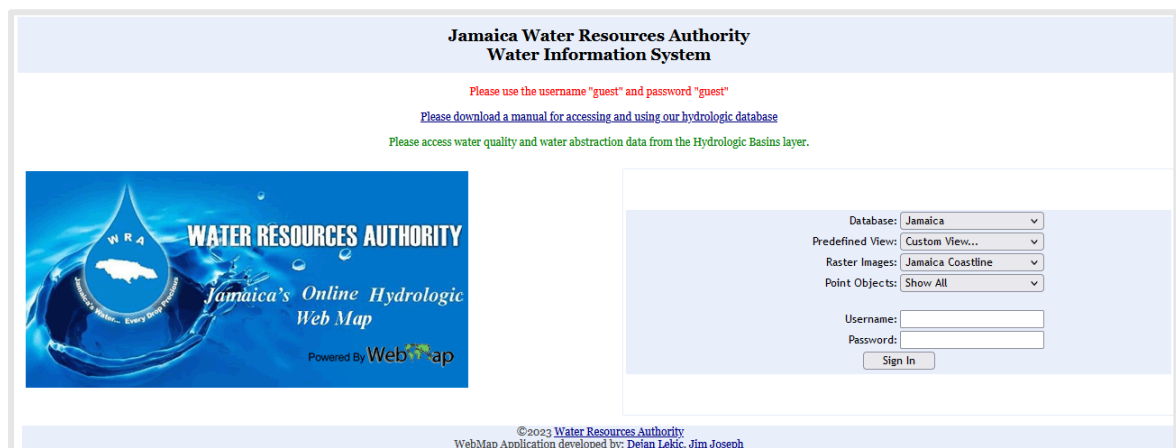
- 1) Go to <https://www.wra.gov.jm/>
- 2) Select **Resources**, then select **Water Information System** (Figure 1).

Figure 1: Accessing the Water Information System



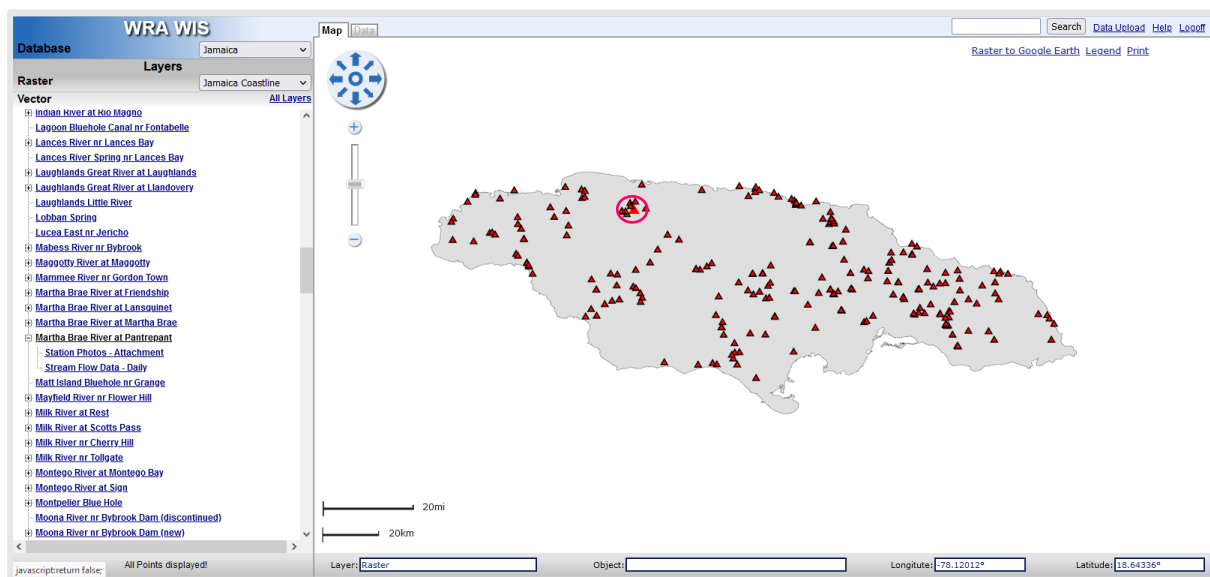
- 3) The WIS login page should appear as shown in Figure 2.

Figure 2: WIS login page



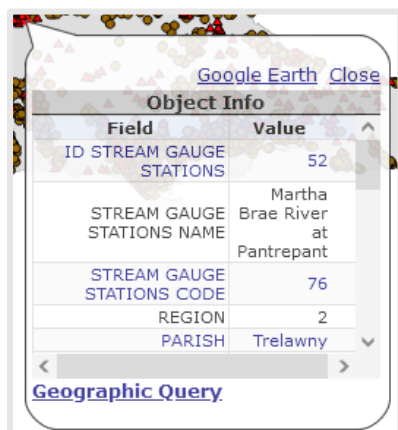
- 4) Log in with username 'guest' and password 'guest', then select **Sign In**.
- 5) After successful log in, a list of all the layers available on the platform is presented. Select the layer(s) of interest and then select **Submit** to proceed, or **Cancel** to make a different choice.
- 6) The submitted layers will load on the **Map** display of the WIS as shown in Figure 3.

Figure 3: WIS map view



- 7) Layers are represented on a coastline Basemap by default. Users may choose a different Basemap in the **Raster** section at the top left hand of the Map display.
- 8) Layers and their associated features are listed under the **Vector** table of contents. Users may click on a feature of interest in the list, or click on a feature of interest on the map. Selected features will be highlighted on the map. A pop-up will appear with information about the selected feature (Figure 4).


Figure 4: WIS feature pop-up



- 9) Users have the option to open a feature in Google Earth using the **Google Earth** link on the pop-up. The feature will be downloaded as a **kml** file which can then be opened in Google Earth (*Google Earth must be installed on the device that will be used to open the kml file*).

Part B: View/download an entire layer

Note: *It is recommended that users request a copy of the layers of interest from the Water Resources Authority via email at info@wra.gov.jm in order to gain access the most current dataset.*

Selecting the  tool beside the layer name in the Vector table of contents provides users with the following options:

- 1) View the attribute table of the entire vector layer by going to **Inventory**, selecting **Objects**, then selecting **Display As a Table, Word Report, Excel Table, Text** or **Download (CSV)**. Select **Display** to view the information in the desired format.
- 2) View all associated data attachments (*see Part C about data attachments*) to the layer by going to **Inventory**, selecting **Parameters**, then selecting to **Display As a Table, Word Report, Excel Table, Text** or **Download (CSV)**. Select **Display** to view the information in the desired format.
- 3) Download a **GIS Definition** of the layer from **Inventory** as Map Info MIDI Sequence and MIF file. Select **Display** to download.
- 4) View entire vector layer in Google Earth by selecting the **Google Earth** option from **Inventory**, then selecting **Display** to download and view in Google Earth.

Part C: View/download Data Attachments

- 1) Some features in a layer may have data attachments as shown in Table 1.

Table 1: Data attachments on the WIS

Layer	Attachment
Stream Gauge Stations	Streamflow daily
	Spot Measurements monthly
	Station Photos
Wells	Groundwater Levels monthly
	Blanket Measurements 2017
	Well Record
	Well Lithology
	Well Photo
Hydrologic Basins	Water Quality: <ul style="list-style-type: none"> • groundwater quality for select wells in each basin • surface water quality for select surface water points in each basin
Hydrostratigraphy	Hydrostratigraphy Map
Sewage Treatment Plants	Effluent Discharge 2010 - 2013
	Inspection Form
	Pictures

Typically, streamflow and groundwater level data are collected from the WRA’s ground and surface monitoring points. Streamflow and groundwater level data are current up to the previous quarter for stations that are **currently** being monitored.

- 2) To access data attachments, click on the feature of interest in the layer, then select the data for viewing or downloading as shown in the example in Figure 5. A ‘+’ sign beside a feature is indicative of that feature having one or more data attachments. View the attachment in the right panel as shown in the example in Figure 6.

Figure 5: Accessing data attachments



Figure 6: Viewing data attachments

Layer:	Wells	Year From/To:	2013	Parameter:	All Parameters	Display As:	Table
Object:	Amity Hall 1 (North)	Aggregat.:	Monthly	Owner:	WRA	Display:	Display
DAT	VALUE ASL	VALUE BGL	STATE	REMAI			
metres							
1986-12-01	7.900						
1987-01-01	7.970						
1987-02-01	7.630						
1987-03-01	6.780						
1987-04-01	6.020						
1987-05-01	6.710						
1987-06-01	8.180						
1987-07-01	8.090						

- 3) Data may be viewed on the WIS in **Table, Chart or Statistics** format, or downloaded as a **Word Report, Excel Table, Text or csv (Download)** file.
- 4) Note the following information with regards to accessing streamflow, spot measurement and groundwater level data on the WIS.

Streamflow/Spot Measurement:

- Values are in cubic metres per second
- Values of -9999 indicate no flow dry river/stream.
- Values of -7777 indicate that the Hermitage Dam is at capacity.

- Values of 0.00 are likely to be seen in the data prior to 2015; they may indicate no flow, dry or full dam. These values will be updated with -9999 or -7777 in short order.

Groundwater Levels

- Values are given in metres above sea level (**ASL**) and/or in metres below ground level (**BGL**).
- Static water levels are represented unless otherwise stated in the **State/Remarks** columns.
- Values of 0 or -9999 represent no data values; zero values will be updated to -9999 in short order.
- While users may opt to display data in ASL or BGL, **it is strongly recommended that the All Parameters option be used to view groundwater level data** so that accompanying remarks measurements can be seen (e.g. whether values reflect pumping water levels, a nearby well was pumping or why a measurement is not available).

Other Attachments

- Water quality data is updated as available. It may be downloaded as an excel table from the Hydrologic Basins layer. Each basin has an excel file attachment that contains a list of wells and a list of surface water sources with corresponding water quality data.
- All data related to sewage treatment plants were obtained from the Ministry of Health at the inception of the WIS 2.0 launch in 2013.
- All other data attachments are updated as needed.

-End of user guide-

For all queries related to the WIS, users may contact:

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