

RWater Interface

User Account and the RWater Interface

Any user with a valid email address can create a user account in **mygeohub** (<https://mygeohub.org/groups/water-hub>) and access RWater. Following is a screenshot for the RWater interface. It has three major components: (i) scripting panel, (ii) data workspace and (iii) Plots window.

The screenshot displays the RStudio interface within a web browser window. The browser address bar shows the URL: <https://drinet.hubzero.org/tools/rwater/session/2285>. The RStudio window has a menu bar (File, Edit, Code, View, Plots, Session, Project, Build, Tools, Help) and a toolbar. The main workspace is divided into several panels:

- Scripting Panel (Left):** Contains an editor for 'Untitled1.R'. A text box explains: "This is where a user has to write the program. For subsequent usage, the write-up can be saved as a separate R script file by going to the 'File', clicking 'Save As' and giving a particular name". Below the editor is the **Console** panel, which shows the R prompt and some text: "publications. Type 'demo()' for some demos, 'help()' for on-line help, or 'help.start()' for an HTML browser interface to help. Type 'q()' to quit R."
- Workspace Panel (Top Right):** Lists active objects. A text box explains: "All the active objects (e.g. data sets) are listed here. Clicking on any of the items will load that in the left panel in a spreadsheet format".
- Plots Panel (Bottom Right):** A tabbed interface for viewing plots. A text box explains: "The 'Plots' tab will show all the graphs, being generated by the user's program."

At the bottom of the RStudio window is a toolbar with several icons. Two specific icons are highlighted with red boxes and explained in text boxes below:

- Import/Export Icon:** A red box highlights the 'Import/Export' icon. A text box explains: "Allows users to upload any file to the RWater directory or download any file from therein." Below this is a screenshot of the 'Import/Export' dialog box, which has options for 'Upload' and 'Download' and a note: "Popups must be enabled." with a 'Cancel' button.
- Resize Handle Icon:** A red box highlights the diagonal resize handle icon. A text box explains: "A user can re-size the RWater interface to fit into the computer screen by clicking on this icon and dragging the cursor, preferably in diagonal direction".

Setting up Working Directory

A working directory is where the user wants to store all the works of the current project. In the Session tab, click on Set Working Directory and then Choose Directory. This will prompt to the RWater's home directory, where user can create a new folder simply by right clicking on the cursor, and select Choose.