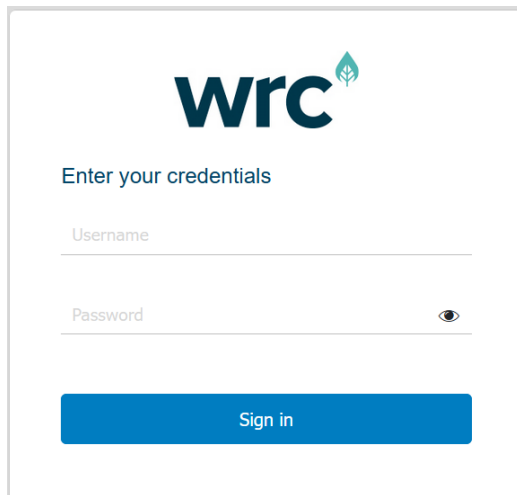


HOW TO LOG IN FOR THE FIRST TIME

You will be sent a URL, username and password by email.

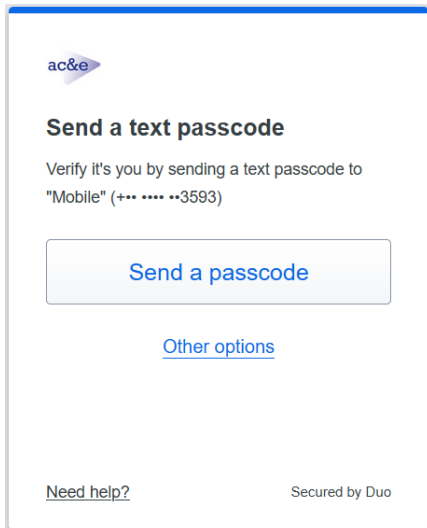
When you click on the URL, the login page will appear in your default browser as below.

A screenshot of a web browser showing the WRC login page. The page features the WRC logo at the top, which consists of the letters 'wrc' in a bold, dark blue font with a small green leaf icon to the right. Below the logo, the text 'Enter your credentials' is displayed. There are two input fields: 'Username' and 'Password'. The 'Password' field has a small eye icon to its right, indicating a toggle for password visibility. At the bottom of the form is a blue rectangular button with the text 'Sign in' in white.

Login with your assigned username and password.

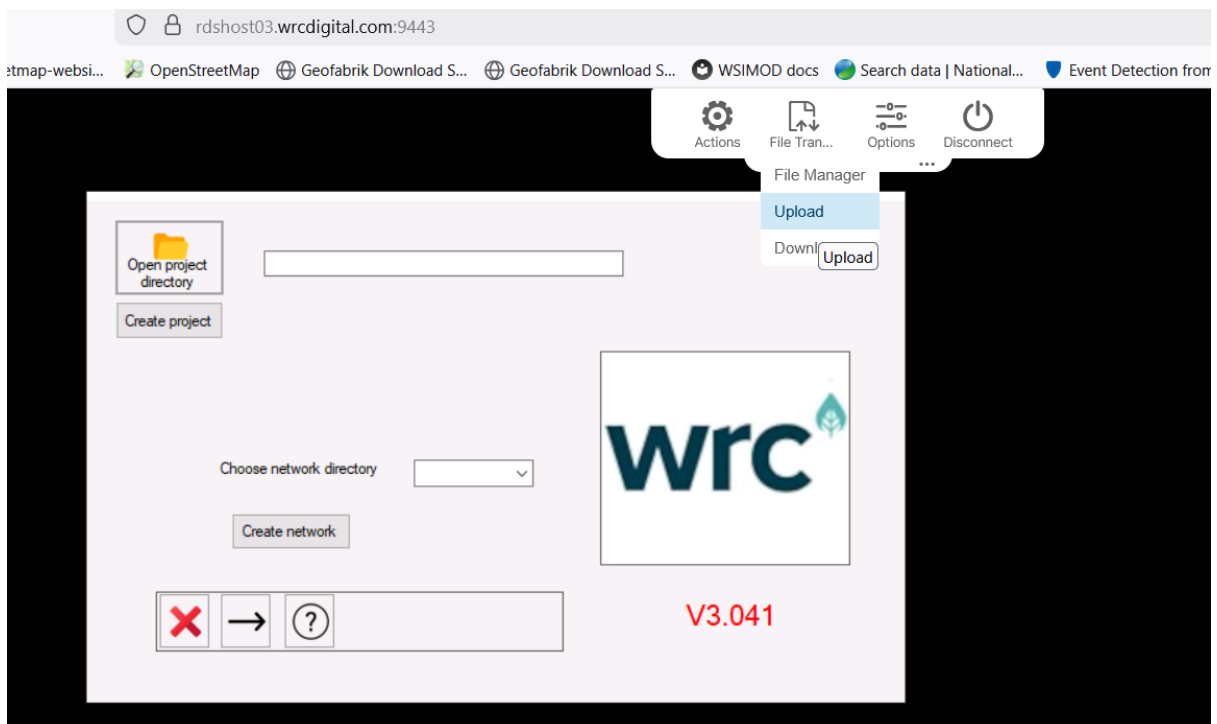
You will be asked to change your password and setup a duo 2fa passcode to use the system. The DUO app can be downloaded from the Google Play Store for Android and App Store for iPhone.

Once the duo has been configured you will be asked for a 2fa passcode at each login:

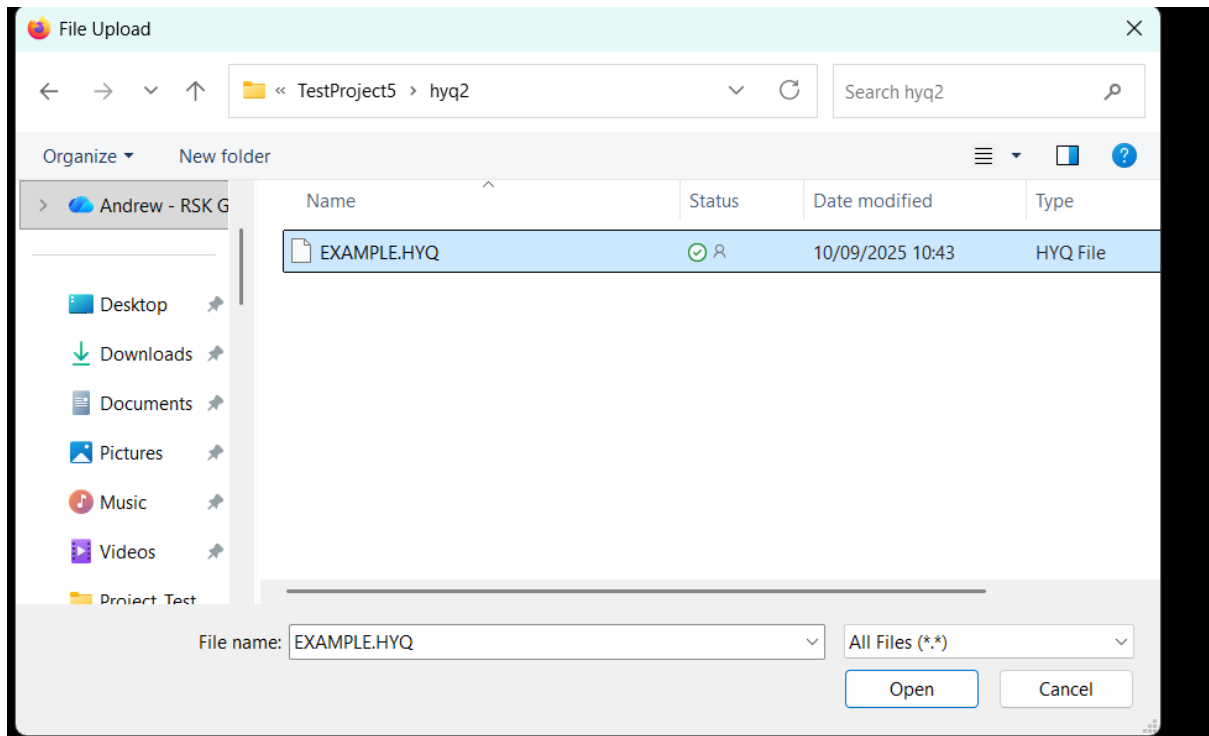


UPLOADING AND IMPORTING A HYQ FILE

To initially upload a HYQ file from your local computer to the remote host, access the upload function of the file transfer tool in the remote host, as shown in the screenshot below.

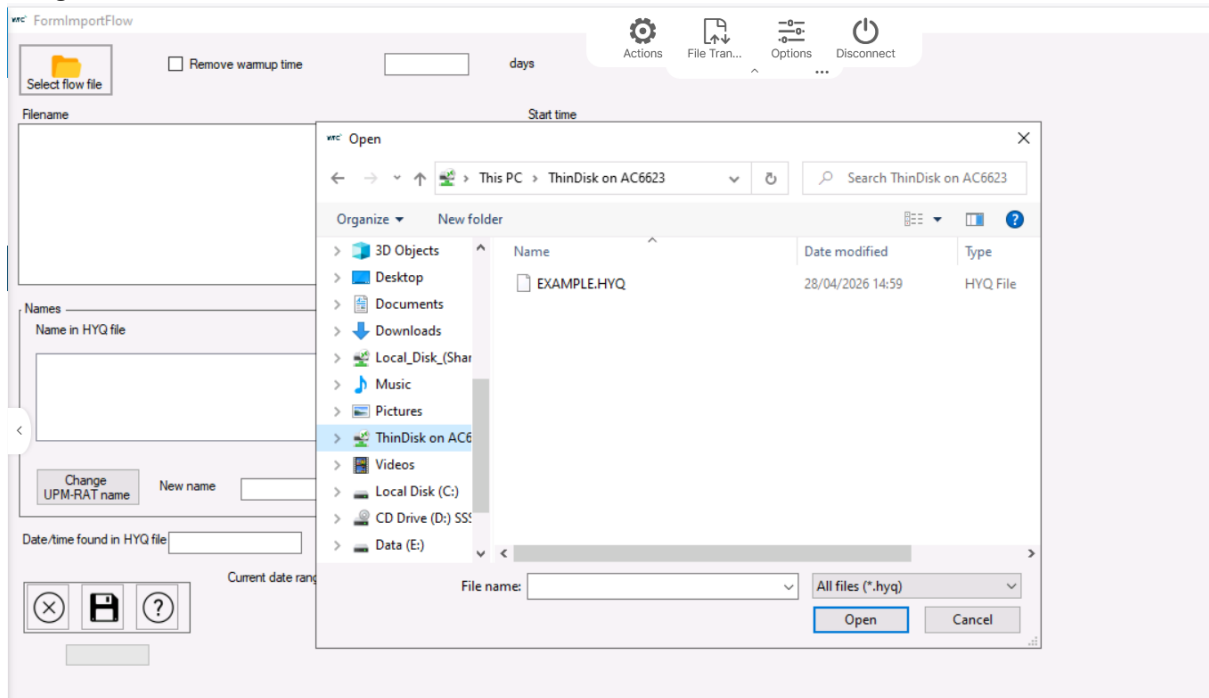


A file explorer window will open, allowing you to select a file from your local computer. Browse to the HYQ file you want to upload and select it.



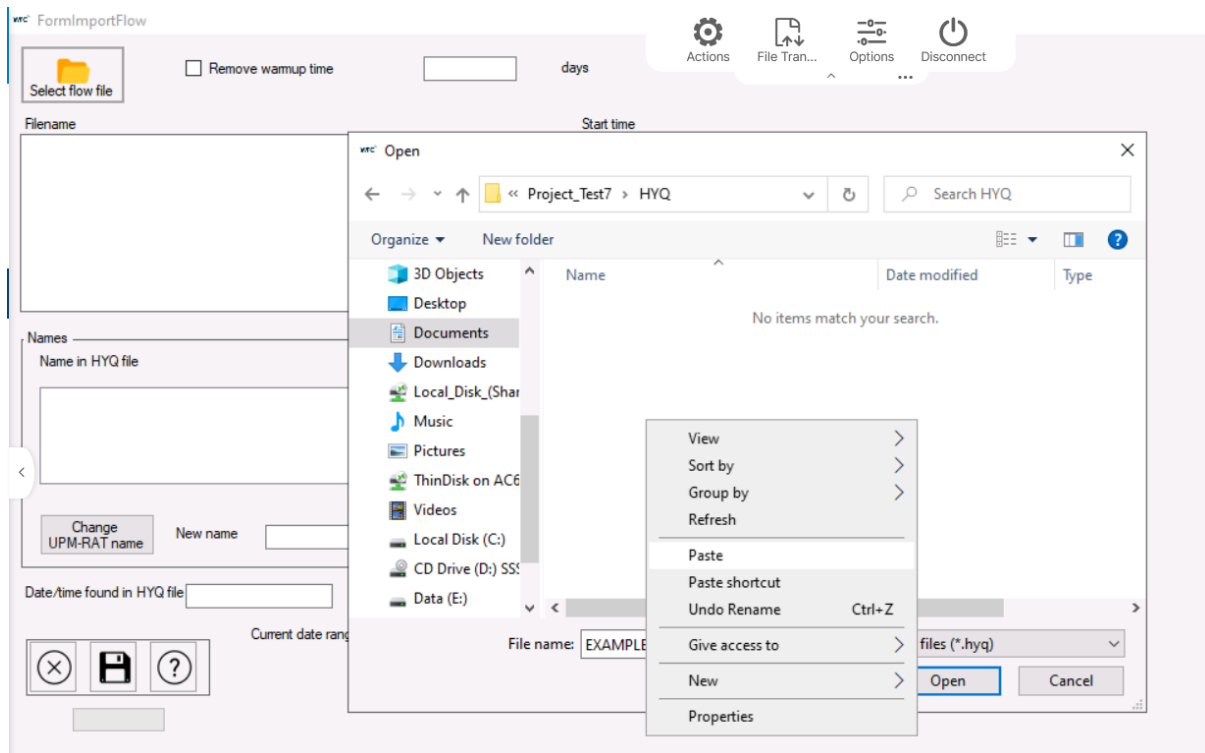
Once the file is uploaded, it will be stored in a disk drive on the remote host called ThinDisk. It is important to remember that you can't directly work off ThinDisk – this drive acts as a temporary holding space for uploading and downloading files. To use the uploaded HYQ file on the remote host, you need to move it your working folder. The easiest way is to open the UPM-RAT project you want to use the HYQ file in and navigate to the 'Import Flow Files' window.

In the UPM-RAT 'Import Flow Files' panel, click on the 'Select Flow File' button, which will bring up a file navigation window. Browse to 'ThinDisk', as shown below.



In ThinDisk, you can see the HYQ file that was uploaded. At this point, it is important that **YOU DO NOT** try import the HYQ file directly from ThinDisk. Right click on the HYQ file, and select copy or cut. Navigate

to your working space, right click and select paste to paste the file to your working space, as illustrated below.



Importantly, you can use the file navigator to set up folders to hold the HYQ files.

Once the HYQ file is pasted into your working folder, select it and press Open.

The HYQ file links will appear in the 'Import Flow Files' panel, and you can go ahead and select the flows you need. For further information on this process, you can refer to the user guide.

FormImportFlow Actions

Remove wamup time days

Filename: EXAMPLE.HYQ

Start time: 01/01/2013

Names

Name in HYQ file: SN79040201_Dummy.1

Name in UPM-RAT: SN79040201_Dummy.1

New name:

Date/time found in HYQ file: Start date/time to use:

Current date ranges

```

Rain_1Year_example: 01/01/2062 - 01/01/2063
Rain_10Year_example: 01/01/2062 - 01/01/2072
Rain_5Year_example: 01/01/2062 - 01/01/2067
Rain_ForHyq: 01/01/2062 - 01/01/2063 08:00:00

```

HOW TO COPY OFF THE MODEL RESULTS

To download the model results, open your UPM-RAT project, and navigate to the 'View Results' panel.

You can select the result file you want to download, but in actual fact this is not required.

DO

1 year	0	0	0	0	0	0
3 months	0	0	0	0	0	0
1 month	0	0	0	0	0	0

FIS exceedences (no. /year)

UnAmm (mg/l)	0'001	0'003	0'001	0'003
Amm (mg/l)	0'1	0'5	0'1	0'5
BOD (mg/l)	5'8	4'4	5'3	4'5

Concentration

UnAmm	0'0	0'0	0'0	0'0
Amm	0'3	1'0	0'3	1'0
BOD	8'1	1'0	1'3	1'0

Upstream end of reach

From tank	0	0	0
22C3	Catchment 3	0	0
22C2	Catchment 2	0	0
22C1	Catchment 1	18	22517

Discharges to river reach

22C3 WW-TW

22C1 22C2 Storm tank

Run date: 08/10/2022

Run file: RunTest

select results file

mc FormView.html

Actions

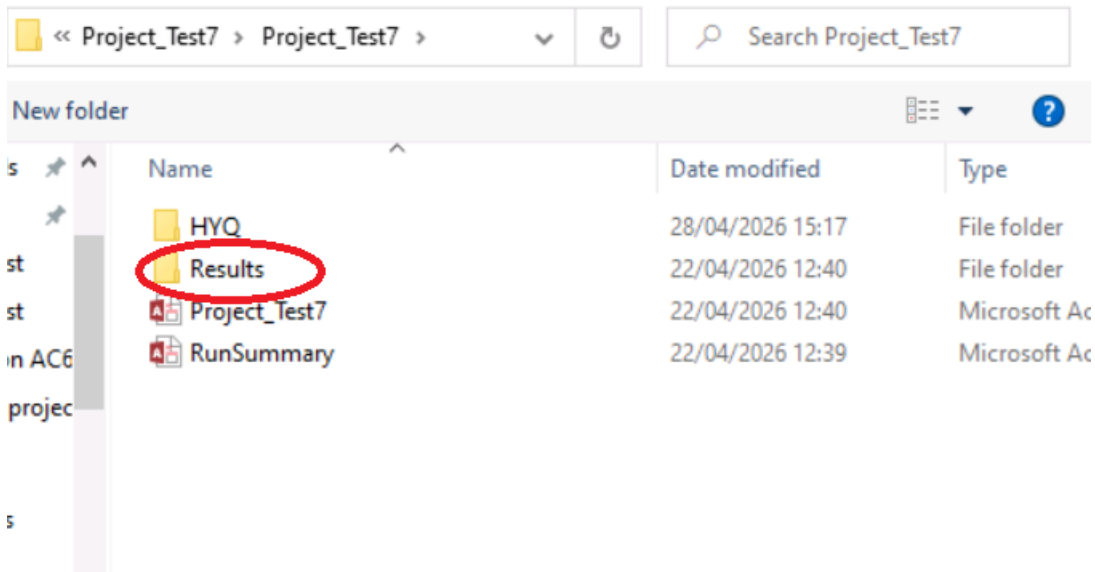
File Tree

All you need to do is to go to the bottom of the panel and select the button with the folder icon.

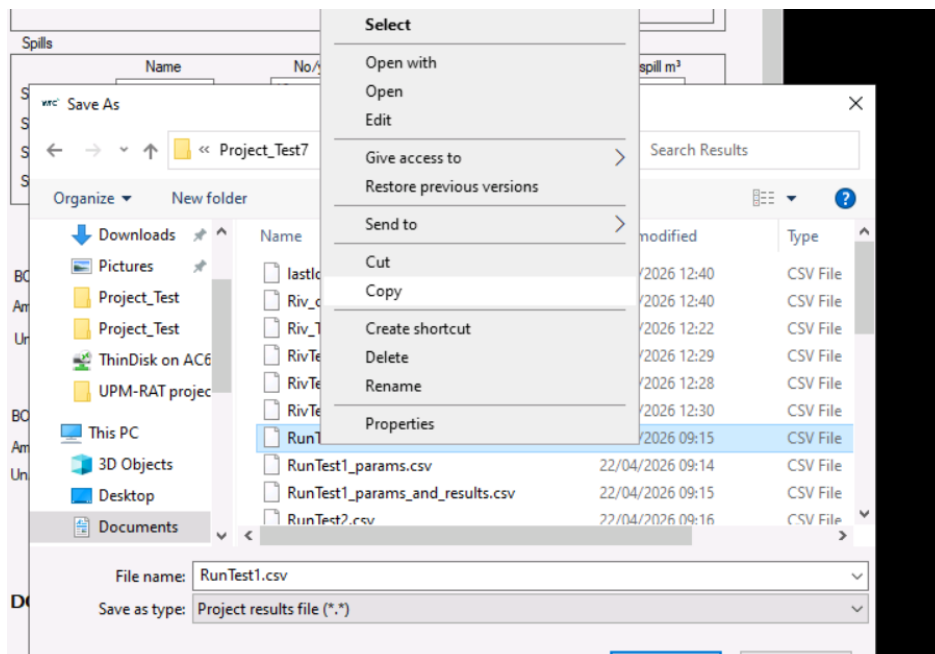
FIS exceedences (no. /year)

		1 h	6 h	24 h	1 h	6 h	24 h
DO	1 month	0	0	0	0	0	0
	3 months	0	0	0	0	0	0
	1 year	0	0	0	0	0	0
UnAmm.	1 month	0	0	0	0	0	0
	2 months	0	0	0	0	0	0
	1 year	0	0	0	0	0	0

This will bring up a file navigator. In the navigator, select the results file you want to download. This will be in the 'Results' directory of the project and network you created.

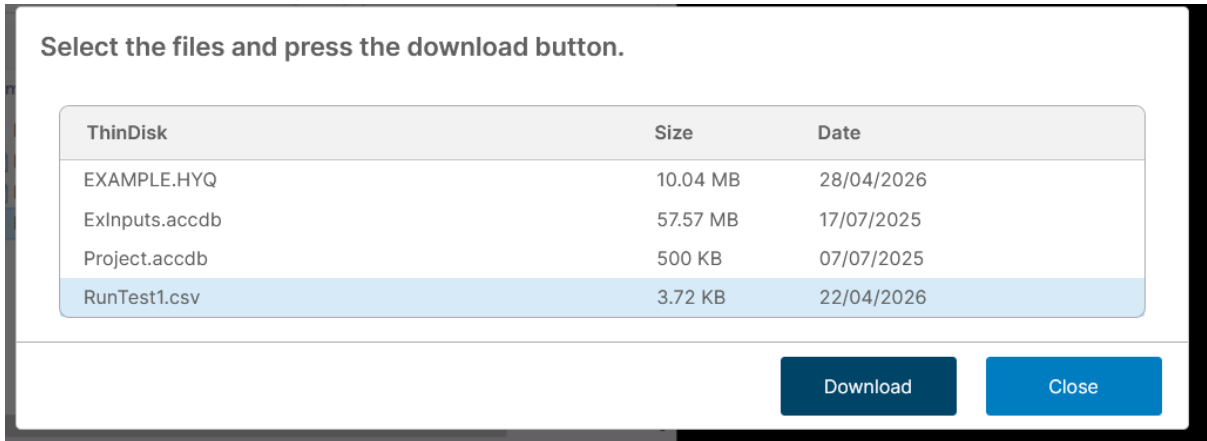


The results file will be a CSV (comma-separated values) and will be named after your model run name. Select the file, right click and select copy.



Then, navigate to your ThinDisk space, and right-click paste the CSV file there.

Once the file is pasted in ThinDisk, the remote host might automatically download the file to your Downloads folder on your local machine. If not, you can use the File Navigator tool in the remote host to download the file.



You can then press 'Cancel' in the file navigator in UPM-RAT, as the file has been downloaded.

WHY DO SPILLS LOOK TOO HIGH WHEN USING A HYQ FILE

If spill counts are higher than expected when using a HYQ file to specify spills, please check whether small spills ($0.001 \text{ m}^3/\text{s}$) should be ignored. To ignore these small spills, go to the 'Use HYQ Files' tab in the 'View Edit Model Parameters' frame and check the 'Ignore small spills' check box'.

Layout SSC1 SSC2 SSC3 Storm Tank WwTW U/S River River Reach Use HYQ Files Actions File Tran... Option

Spill	Additional storage/green solution volume (m³)	Drain-down time (h)	Ignore small spills (< 0.001 m³/s)
<input checked="" type="checkbox"/> For SSC1 Hyq1	0	1	<input checked="" type="checkbox"/>
<input type="checkbox"/> For SSC2	0	1	<input type="checkbox"/>
<input type="checkbox"/> For SSC3	0	1	<input type="checkbox"/>
<input type="checkbox"/> For storm tank and final effluent	0	1	<input type="checkbox"/>
<input type="checkbox"/> For final effluent	0	1	<input type="checkbox"/>

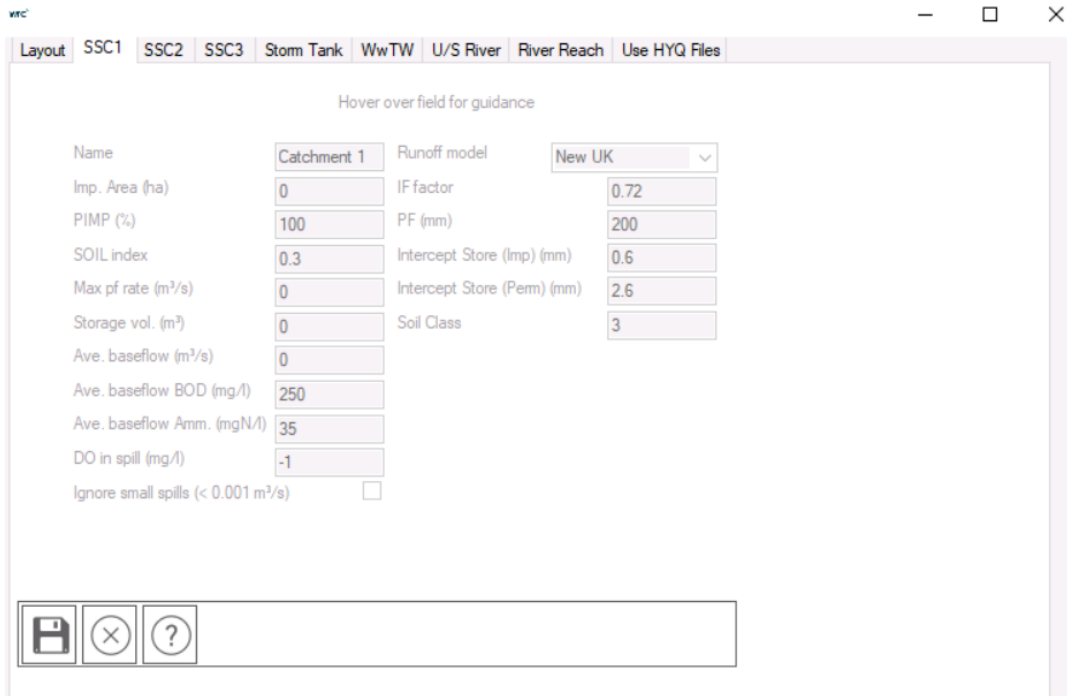
Event WQ Parameters

Name	EMC BOD	EMC NH3	EMC DO	Profile BOD	Profile NH3	Use Profile
Hyq1	100	10	6	0	0	<input type="checkbox"/>

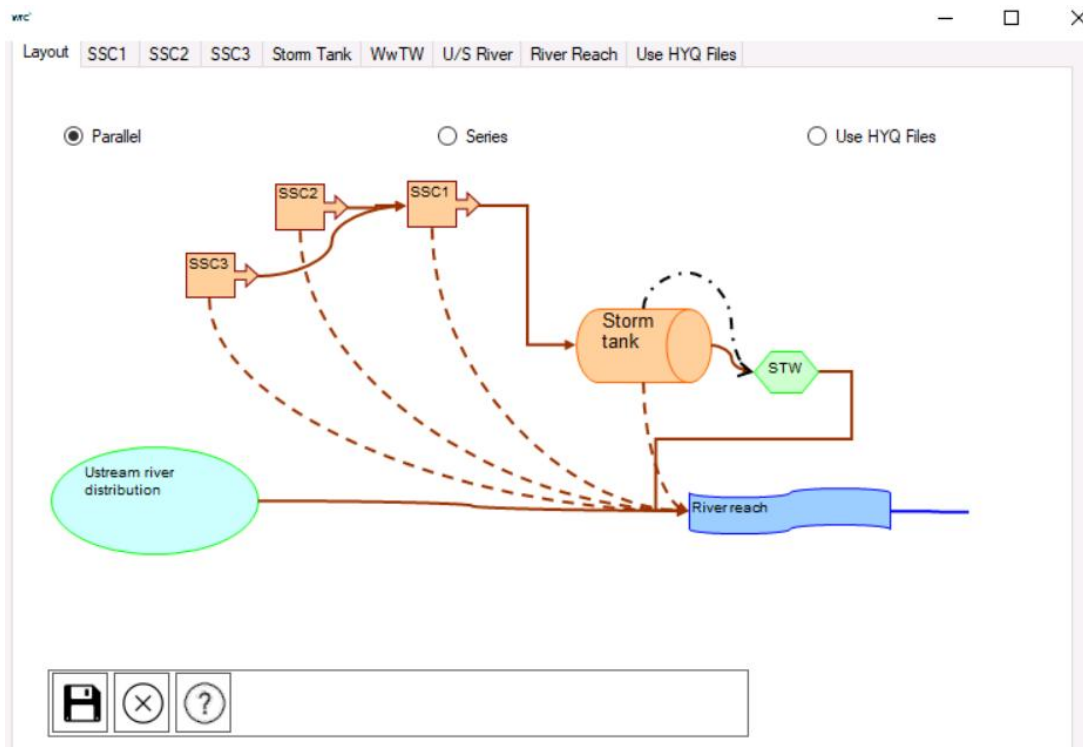
Hyq profile
Hyq1: 01/01/2062 - 01/01/2072

CANNOT ACCESS SSC PARAMETERS

You may find that you can't access the Sewer Sub-Catchment (SSC) parameters because the tab is disabled, as shown below.



Please go to the 'Layout' tab and ensure that you have selected either the 'Parallel' or 'Series' options and then press the save button. This should ensure that the three SSC tables become editable.



HOW IS THE WWTW WATER QUALITY AND FINAL EFFLUENT FLOW RATE SET WHEN USING A HYQ FILE?

UPM-RAT allows water quality of individual HYQ files to be set as Event Mean Concentrations (EMC) in the 'Use Hyq File Tab'. This does lead to confusion when setting final effluent flow rate of a WwTW using a HYQ file, as WwTW final effluent quality can be set in the WwTW tab. **The water quality of a WwTW is always set in the WwTW tab.** In addition, **if the user has both selected 'Use Random Pick for Flow' in the WwTW tab and set a HYQ file for the WwTW, UPM-RAT will default to the random pick for flow.** If the user has chosen to include the WwTW in the run and has neither set a random pick for flow or a HYQ file, the model will bring up a message as such and the run will terminate.

