

1) How do I add new user to become an admin?

1) Click Admin List > Add User.

2) Enter related information on the form provided.

3) Click "Submit" button

The screenshot displays the 'UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM' interface. On the left is a navigation menu with items: Home, Admin List, Site Management, Data Management, Web Services, WQI Index, Biodiversity, Learning Tool, Reports, and UM Utility Report. The 'Admin List' menu item is highlighted with a red box. The main content area shows the 'Add User' form, which is also highlighted with a red box. The form is titled 'User Profile' and contains the following sections:

- Login ID & Password:** Username: [text input], Password: [text input].
- Login Status:** Radio buttons for Active and Disable.
- Site Details:** Site: ANAK ENDAU (dropdown menu).
- User Details:** Roles: Admin (dropdown menu), Name: [text input], Gender: Female (dropdown menu), Address: [text area].
- Organisation/Company Details:** Occupation: [text input], Organisation Name: [text input], Organisation Address: [text area], City: [text input], Zip/Postal Code: [text input], Country: [text input], Email: [text input], Telephone: [text input].

At the bottom of the form are two buttons: 'Submit' and 'Reset'. The 'Submit' button is highlighted with a red box.

2) How do I add new sampling site?

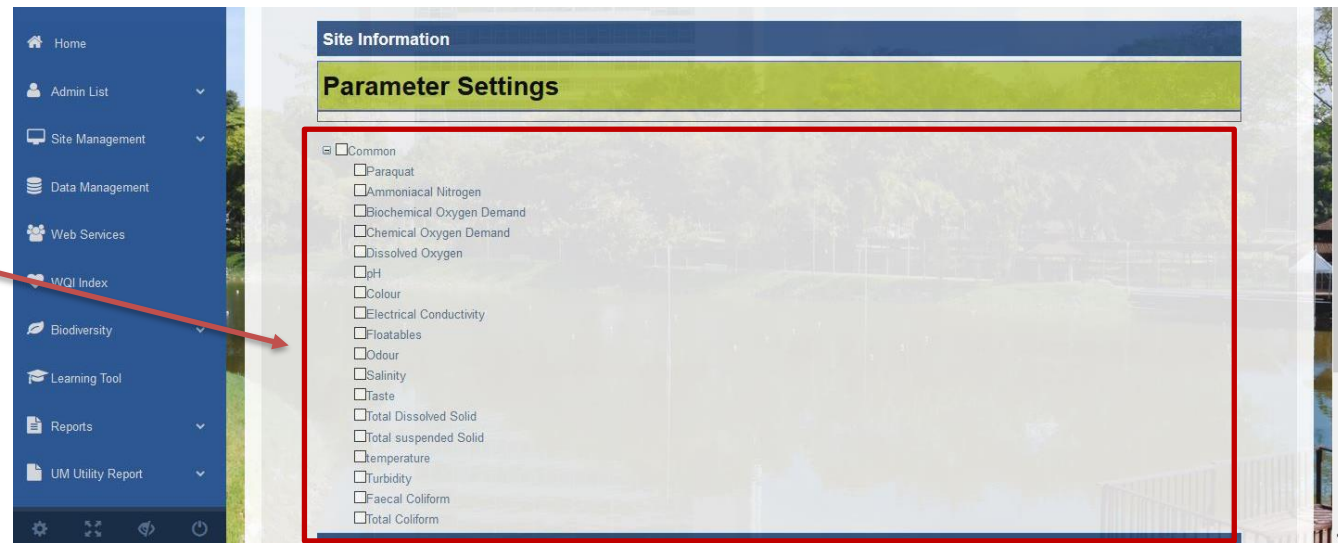
1) From menu click Site Management > Add New Site.

2) Enter information into the column.

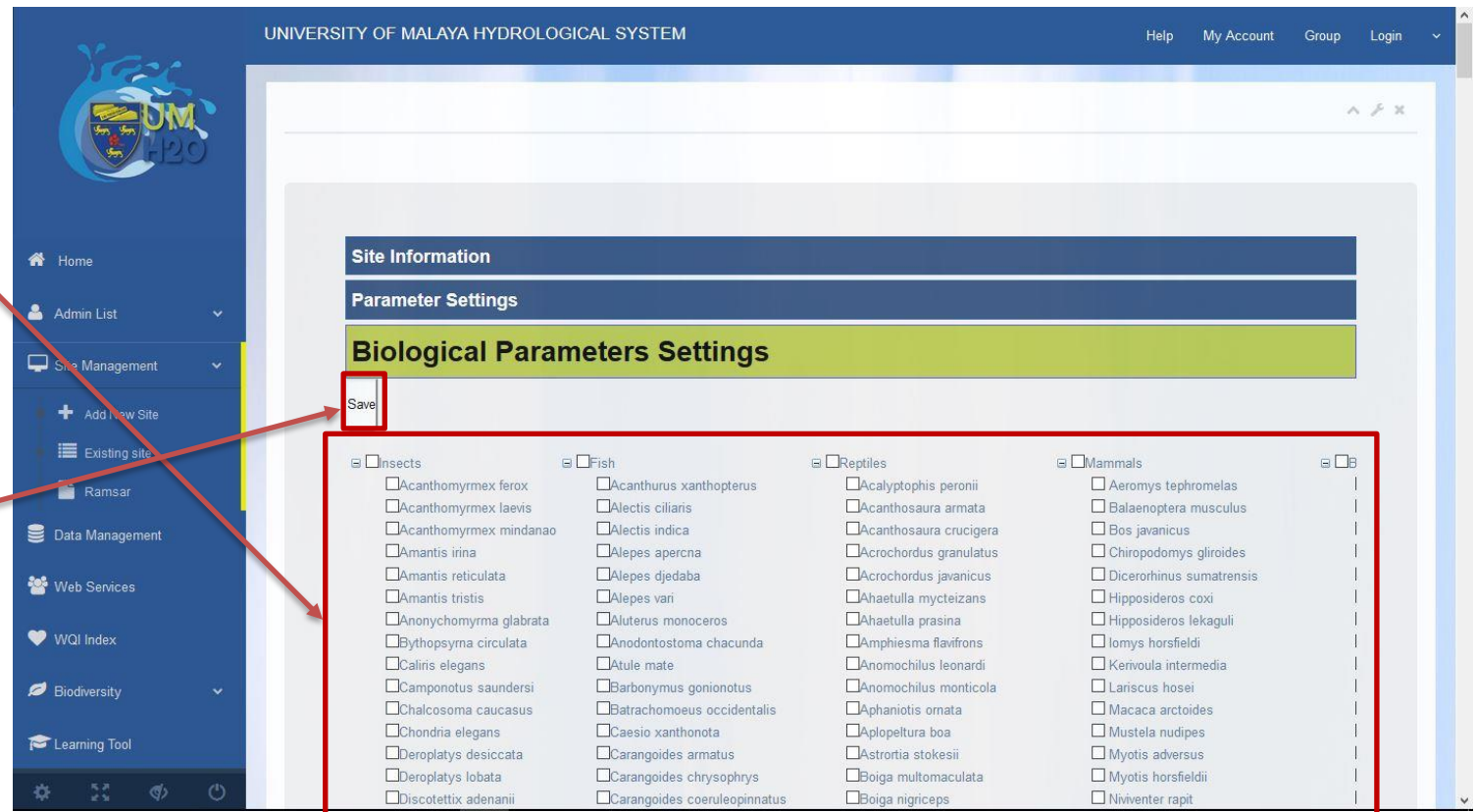
3) click "Save" button to submit new sampling site.

The screenshot displays the 'UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM' web interface. On the left is a dark blue sidebar menu with the UM H2O logo at the top. The menu items are: Home, Admin List, Site Management (highlighted with a red box), Data Management, Web Services, WQI Index, Biodiversity, Learning Tool, Reports, and UM Utility Report. The main content area features a 'Site Information' form with a light green header. The form fields include: Site Name (text input), Country (dropdown menu showing 'Select Country'), Coordinate (text input), Elevation (text input), and Area (text input). Below these is a 'General View' section with a large image placeholder and a 'Save' button. Underneath the form are two dark blue sections: 'Parameter Settings' and 'Biological Parameters Settings'. The top right of the page has links for 'Help', 'My Account', and 'Login/Register'.

4) Click the “Parameter Settings” tab, and select parameter needed.



5) Click the “Biological Parameters Setting” tab and select any species needed.



6) Click “Save” button to upload the sampling site into database.

4) How do I upload data into UMH2O?

1) From menu click Data Management.

2) Upload the data by fill the readings as required.

3) Data also can be upload from local computer. First select "Site" and click "Browse" and select file on the local computer. Click "Upload" to upload the file in the database.

UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM

Help My Account Login/Register

Home Admin List Site Management **Data Management** Web Services WQI Index Biodiversity Learning Tool Reports UM Utility Report

Search Data

Add Data

Site: ANAK ENDAU Station: SUNGAI ANAK ENDAU Sampling Point: 4EN01

Record Date:

Save

No	Parameter	1st Reading	2nd Reading	3rd Reading	4th Reading	5th Reading	Quantifier	
	Dissolved Oxygen0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	mg/l	DELETE
	Biochemical Oxygen Demand0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	mg/l	DELETE
	Chemical Oxygen Demand0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	mg/l	DELETE
	Total suspended Solid0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	mg/l	DELETE
	pH0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	-	DELETE

UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM

Help My Account Group Login

Home Admin List Site Management **Data Management** Web Services

Search Data

Add Data

Upload Data

Site: ANAK ENDAU

Browse... No file selected.

Upload

5) What is WQI Index?

1) From menu click "WQI Index".

2) The WQI is a unit less number ranging from 1 to 100.

The higher the number indicative of better water quality.

PARAMETERS:

pH
Ammoniacal Nitrogen (NH₃N)
Biological Oxygen Demand (BOD)
Chemical Oxygen Demand (COD)
Dissolved Oxygen (DO)
Total Suspended Solid (TSS)

UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM

Help My Account Login/Register

UM H₂O

Home
Admin List
Site Management
Data Management
Web Services
WQI Index
Biodiversity
Learning tool
Reports
UM Utility Report

WQI Index

UNIVERSITY MALAYA Generate Eco-Heart Generate WQI Report

From Date: 01/01/2016
To Date: 12/31/2017

WATER QUALITY INDEX

CLASS:	I	II	III	IV	V
WQI INDEX:	>92.7	76.5 - 92.7	51.9 - 76.5	31.0 - 51.9	<31.0
COLOUR INDEX:	VERY CLEAN	CLEAN	SATISFACTORY	POLLUTED	VERY POLLUTED

Map Satellite

Block E, Institute of Biological Sciences...
Lingkungan Budi
Pejabat Pos Universiti Malaya
CIMB Bank University Malaya
International Student Centre...
University of Malaya
University of Malaya Art Gallery
Fakulti Kejuruteraan
Sungai Pantai
Pendi a Karr

Chemical Oxygen Demand: 35.333
pH: 7.190
Dissolved Oxygen: 2.900
Ammoniacal Nitrogen: 3.50
Biological Oxygen Demand: 4.15

DO pH NH₃N
COD BOD
TSS

6) How can I generate WQI report?

1) From menu click "WQI Index".

2) Click "Generate WQI Report" to download report for WQI.

3) Click "Ok" to download the file.

The screenshot displays a web application interface for generating a WQI report. The interface includes a sidebar menu with the following items: Admin List, Site Management, Data Management, Web Services, WQI Index (highlighted), and Biodiversity. The main content area features a 'Generate WQI Report' button, a 'Generate Eco-Heart' button, and a 'WATER QUALITY INDEX CLASSIFICATION' table. The table shows the following data:

CLASS:	I	II	III	IV	V
WQI INDEX:	>92.7	76.5 - 92.7	51.9 - 76.5	31.0 - 51.9	< 31.0
COLOUR INDEX:	VERY CLEAN	CLEAN	SATISFACTORY	POLLUTED	VERY POLLUTED

The interface also includes a map showing the location of 'Tasik University Malaya' and 'Sungai Pantai'. A circular gauge displays various water quality parameters: pH, DO, NH3N, COD, BOD, and TSS. The 'Generate WQI Report' button is highlighted with a red box, and the 'OK' button in the 'Opening WQIReport.csv' dialog is also highlighted with a red box. The dialog box shows the following text:

Opening WQIReport.csv
You have chosen to open:
WQIReport.csv
which is: Microsoft Excel Comma Separated Values File (550 bytes)
from: http://localhost:63127
What should Firefox do with this file?
 Open with Microsoft Excel (default)
 Save File
 Do this automatically for files like this from now on.

7) How do I "Check-In" the species in UMH2O?

1) From menu click Biodiversity > Species Check-In.

2) Select the species want to check in and press "check in" button.

UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM

Help My Account Login/Register

Species Check-In

Species Information

Species Name: Cempedak - *Artocarpus integer*

Longitude: 101.6535212

Latitude: 3.1235682

Check In

Map Satellite

Kuala Lumpur

Common Name: Cempedak
Scientific Name: *Artocarpus integer*
Kingdom: Plantae
Order: Rosales
Family: Moraceae
Tribe: Artocarpeae
Genus: *Artocarpus*
Species: *A. integer*
View more information about this species

8) How do I search for the species in UMH2O?

1) From menu click Biodiversity > flora **or** Biodiversity > fauna

2) Select the species name and chose the from and to date and press "search species".

The screenshot displays the UMH2O web application interface. The header includes the University of Malaya Hydrological System logo and navigation links for Help, My Account, and Login/Register. A left sidebar menu contains options like Home, Admin List, Site Management, Data Management, Web Services, and WQI Index. The Biodiversity section is expanded, showing sub-options: Add Species, Check In, Flora, and Fauna. A search form is visible with the following fields: Species Name (White Heron - Ardea alba), From Date (05/02/2005), and To Date (05/02/2017). A Search Species button is located below these fields. The search results display a map of Kuala Lumpur with two yellow location pins, a photograph of a white heron, and its taxonomic classification: Scientific Name: Ardea alba, Kingdom: Animalia, Order: Pelecaniformes, Family: Ardeidae, Genus: Ardea, and Species: A. alba.

9) What is the purpose of learning tool?

1) From menu click Learning Tool

Educational or Research

2) Fill in the class of each parameter (I, II, III, IV, V)

3) Click "Draw Heart" to generate Heart Shape that shows the parameter of WQI Index.

4) The Heart shape that shows 5 parameters of "WQI Index".

The screenshot displays the 'Eco Heart Generator Research' application. On the left is a blue sidebar menu with options: Home, Admin List, Site Management, Data Management, Web Services, WQI Index, Biodiversity, Learning Tool, Reports, and UM Utility Report. The main content area features a green header 'Eco Heart Generator Research' and a large 'WQI INDEX' diagram. The diagram is a circular scale with five axes: pH (top), DISSOLVED OXYGEN (left), Chemical Oxygen Demand (right), Amn Nit (bottom-right), and Bic (bottom-left). Each axis has five tick marks labeled I through V. A red heart shape is drawn over the diagram, with its points corresponding to the class values for each parameter. Below the diagram is a form with dropdown menus for each parameter, all set to class 'II'. A 'Draw Heart' button is located at the bottom of the form.

Eco Heart Generator Research

WQI INDEX

Parameters and their classes shown in the heart shape:

- pH: II
- DISSOLVED OXYGEN: II
- Chemical Oxygen Demand: II
- Amn Nit: II
- Bic: II

Form fields (all set to II):

- Total Suspended Solid: II
- Chemical Oxygen Demand: II
- pH: II
- Dissolved Oxygen: II
- Ammoniacal Nitrogen: II
- Biological Oxygen Demand: II

Buttons: Draw Heart

10) How do I download the reports from UMH2O?

- 1) From menu click Reports > Multi-station Report or Multi-variable Report or Matrix Report

UNIVERSITY OF MALAYA HYDROLOGICAL SYSTEM

Help My Account Login/Register

Home Admin List Site Management Data Management Web Services WQI Index Biodiversity Learning Tool Reports UM Utility Report

Multi Station Report

From Date: 05/02/2005 To Date: 05/02/2017

Site: ANAK ENDAU

Sampling Point: 4EN01 4EN02

Variables: pH

Yearly Monthly Weekly

Submit

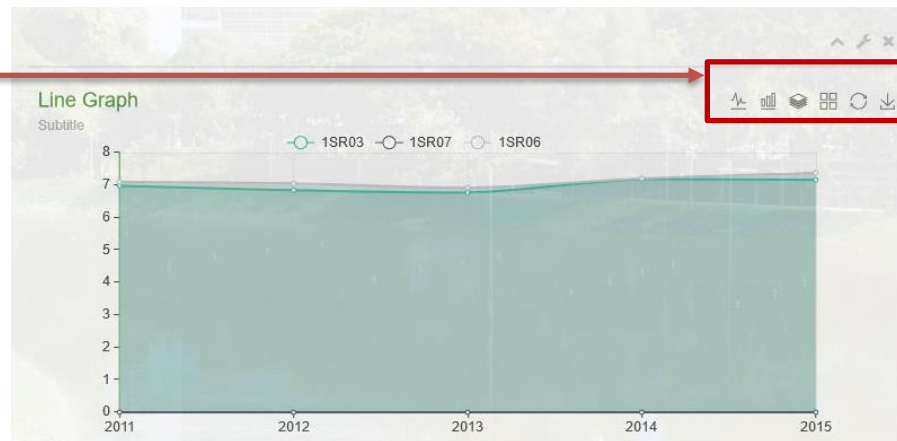
Line Graph

Subtitle

4EN01

5/23/2005 4/7/2006 2/26/2007 10/4/2007 8/14/2008 6/16/2009 4/12/2010

- 3) The button above indicates the function to view the data on a different type of graph.



- 2) Press the "save image" icon to save the graph in .PNG file format.

4) The report provided many different type of graph view.

