

# Node Data

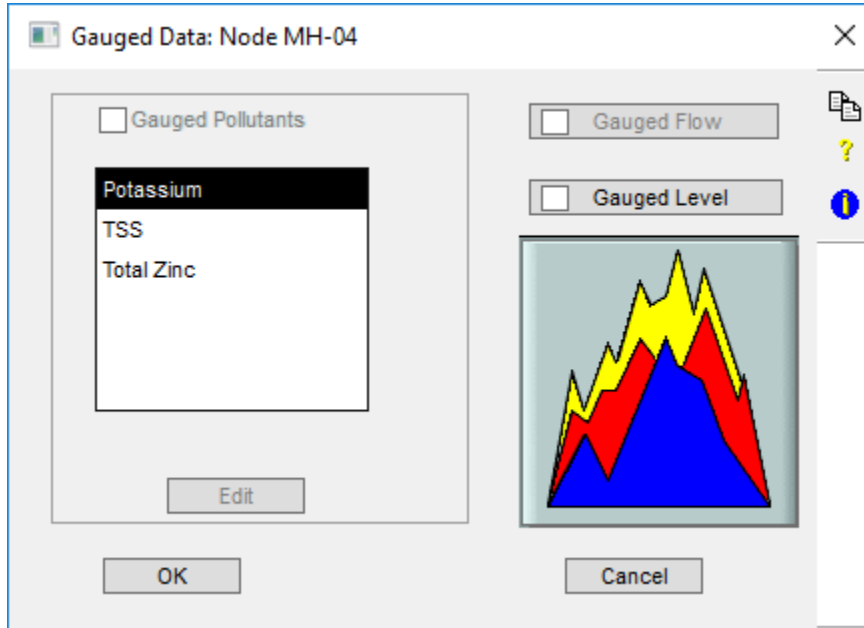
This section details the various data options for individual Nodes. These can be accessed by selecting and double-clicking a Node within the network.

There are different settings and parameters for each mode. To view and edit the details for each mode's node data, click the links below:

- [Runoff Node Data](#)
- [Sanitary Node Data](#)
- [Hydraulics Node Data](#)

## Gauged Data

Measured time series data can be entered directly at a node or link for comparison with model results. This time series is displayed on graphs created with the [Review Results](#) tools. Note that the scales of the x (time) and y (values) axes on the review results graphs are based on the ranges of the model results. Gauged data outside the ranges of the model results will not appear on the plots.

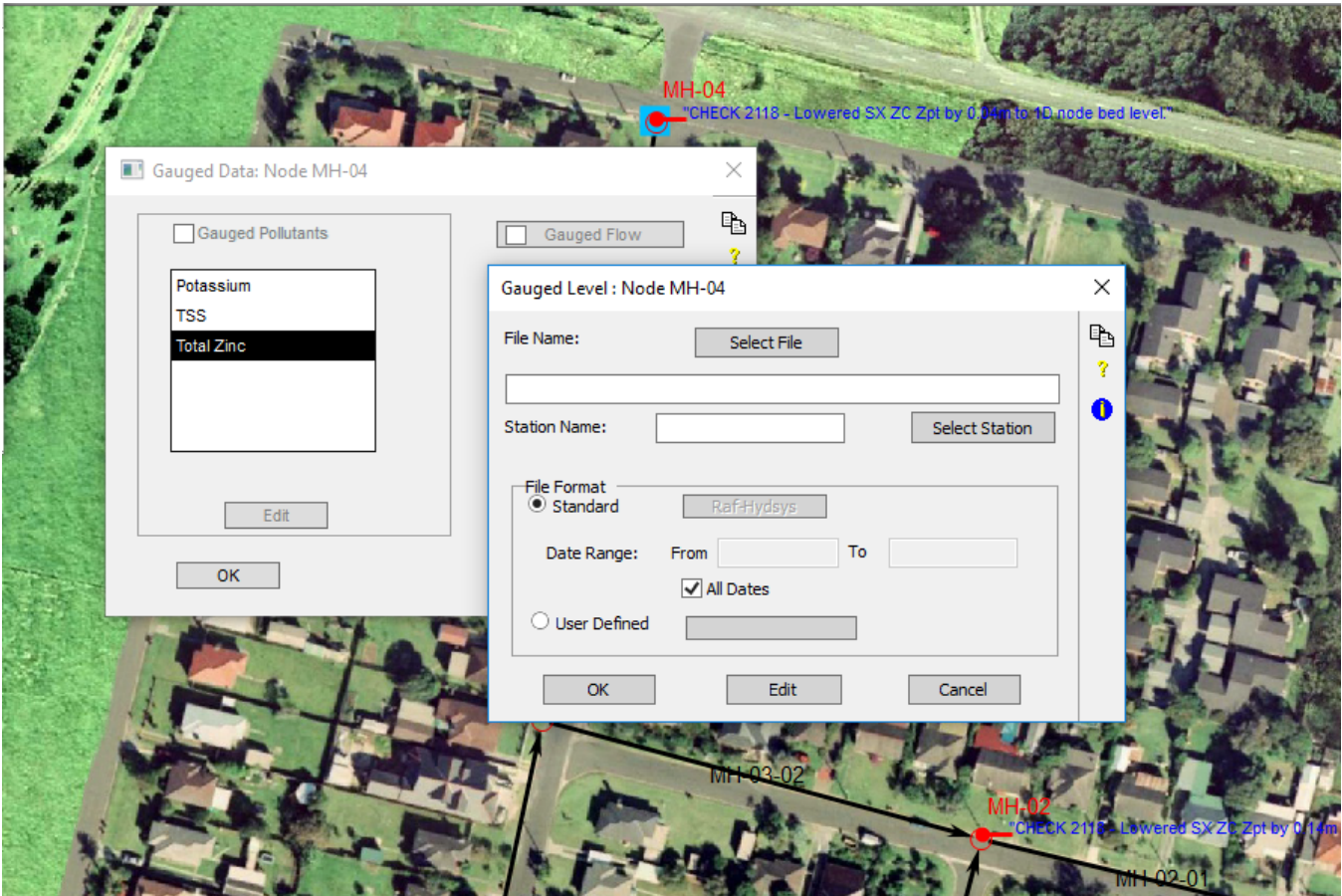


- Check boxes in this dialog will be enabled or disabled depending on the calling (parent) dialog. For example, a node in Hydraulics mode supports levels and not flows, but the same node in Runoff supports flows and not levels.
- Gauge Pollutant graphing is available in the Runoff and Sanitary modes. **Gauged Pollutants** must be checked in the [Job Control](#) settings to enable tagging pollutant data to a node or link.

Mode	Supported data types	
	Nodes	Links
Hydraulics	levels	flow, pollutants
Runoff	flow, pollutants	flow, pollutants
Sanitary	flow, pollutants	flow, pollutants

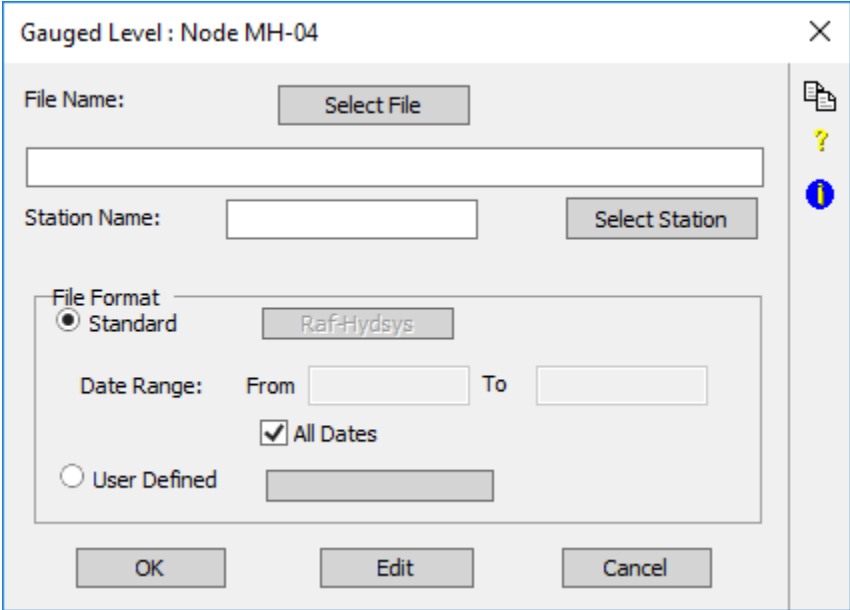
## Gauged Flow

A flow time series can be entered directly at a node or link for comparison with model results. This time series is displayed on graphs created with the [Review Results](#) tools.



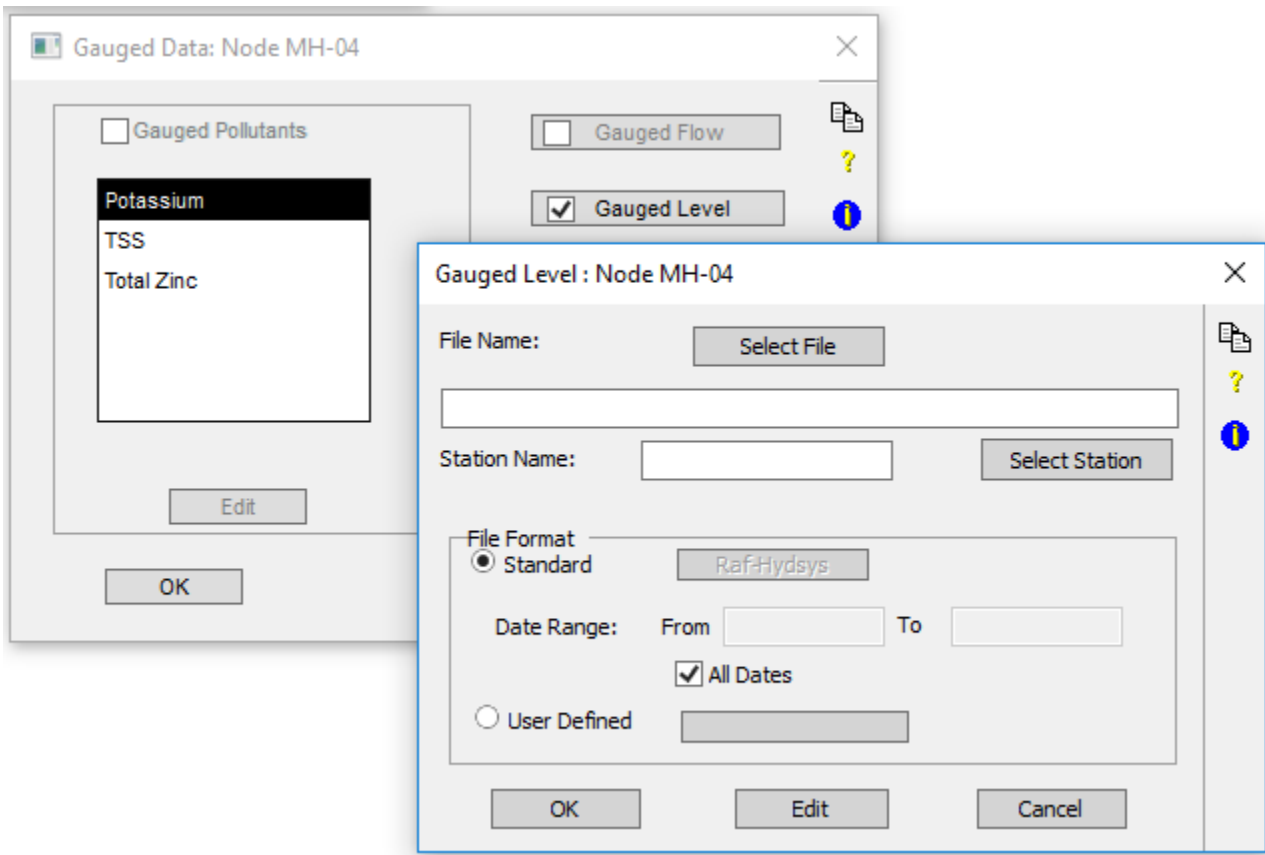
### Gauged Level

In **Hydraulics mode**, a time series of the stage (elevation of the water surface) can be entered directly at a node for comparison with model results. This time series is displayed on graphs created with the **Review Results** tools.



### Gauged Pollutants

A pollutant load or concentration time series can be entered directly at a node or link for comparison with model results. This time series is displayed on graphs created with the **Review Results** tools.



Gauge Pollutant graphing is available in the Runoff and Sanitary modes. Gauged Pollutants must be checked in the [Job Control](#) settings to enable tagging pollutant data to a node or link.

## Gauged Data File Management

The following parameters and options are available for the Gauged Data dialogs:

### **File Name**

Click on the Select File button to open a Windows Explorer dialog. Navigate to the location of the data file.

A new file may be created for the HYDSYS format only.

### **Station Name**

If you choose "Select Station" a list of all available stations in the selected file will be displayed, and the appropriate station may be selected from the list as shown below. If you are using XPSWMM to create a new station then type in your own Station Name.

A time series file can contain any number of stations, so that multiple time series can be stored within the same file. New stations may be added to the file by entering any alpha-numeric name not contained in the above list. Note that editing processing efficiency diminishes as the number of stations within a time series file increases.

Note that a single file may contain a number of time series from different stations and of different type.

### **File Format**

Gauged data files are text files. There are four predefined formats. Users may select or modify any of these formats for inputting level, flow or pollutant data at a node or link.

In the Gauged Flow, Gauged Level or Gauged Pollutant dialog, check the User Defined radio button and click on the adjacent box. The Select User Defined Files dialog opens.

Select a file format. Click on Edit to view or modify the format. To create a new format, enter the name in the box at the bottom of the dialog. Click on Add and then Edit.

User Defined Files:DDSWMM 02/01/93

General

Number of Header Lines: 7

Free Format (CSV)

Introduce Time Intervals

Start Date: 02/01/93

Start Time: 0

Time Intervals (mins): 1

Field Information

Field	Width
Dummy Station (STN)	

Add

Insert

Update

Delete

Dummy 0

OK Cancel

### Edit

Selecting the "Edit" button allows you to modify or create data for the Station and File name defined above. If a current file does not exist a new file is created. Similarly, if a station of the selected name does not exist a new station is created.

Gauged Level Data : Node MH-04 : Catchment.dbf :

	Station	Date (dd/mm/yyyy)	Time (hh:mm)	Elevation (m)
1		01/01/1900	00:00	
2		01/01/1900	00:00	
3		00/00/0000	00:00	

Note: Load is an instantaneous value

OK Cancel Insert Delete Graph

While in this dialog, users may move through the data using <Pg Up>, <Pg Down>, <Up Arrow> and <Down Arrow> or "Go To" a particular row number. Data can also be inserted and deleted using <ins> and <Del> and sort data in chronological order. Clicking "OK" will save data to the currently selected file.



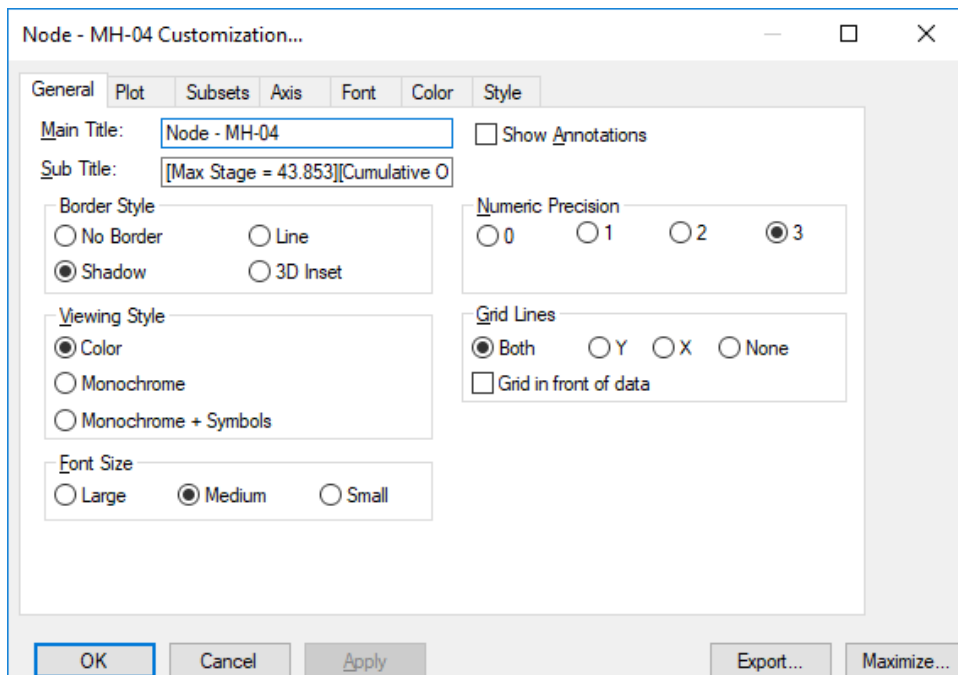
Since data is loaded into memory from disk it may not always be possible to load very large time series for editing. Should this prove to be a problem, a sub-set of the data may be loaded by selecting the starting and finishing date of the data to be edited using the "Edit Date Range" option.

## Export Hydrograph to Excel

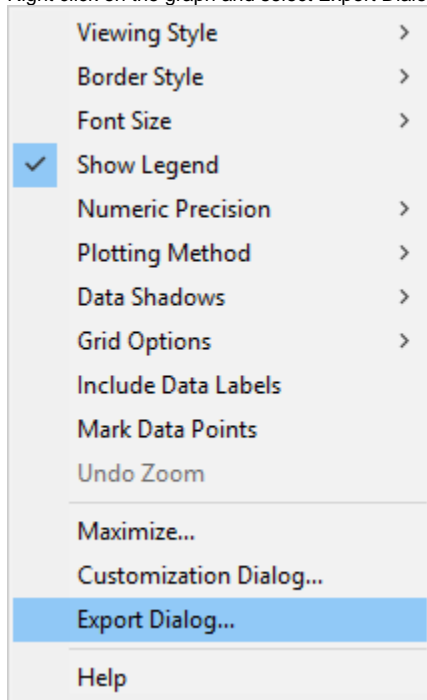
To export a hydrograph from a solved [xp](#) model:

1. Select a link

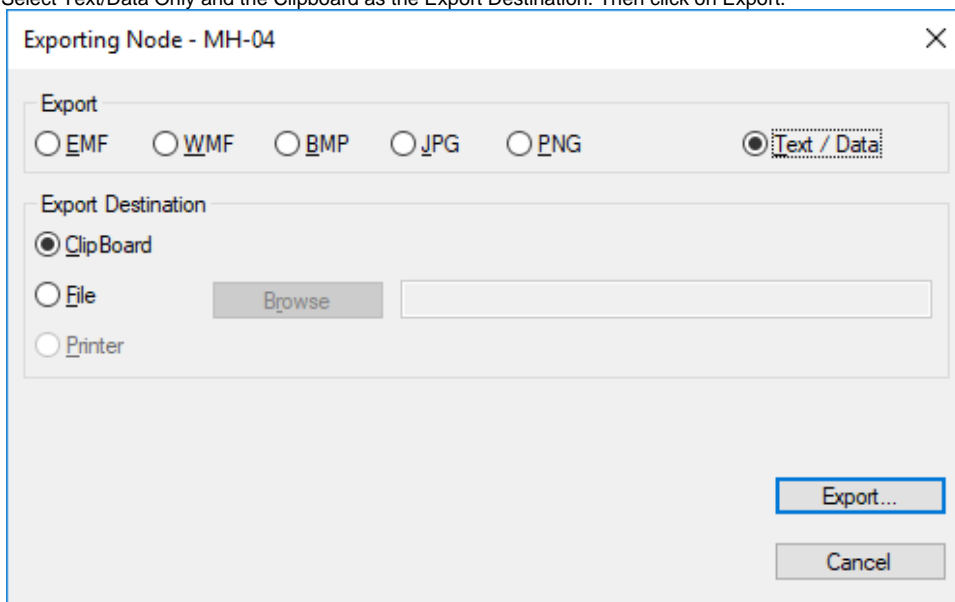
2. Click on the Review Results tool.
3. Do one the following:
  - a. Double-click on the graph and then click on the Export button on the lower right hand corner of the dialog, or



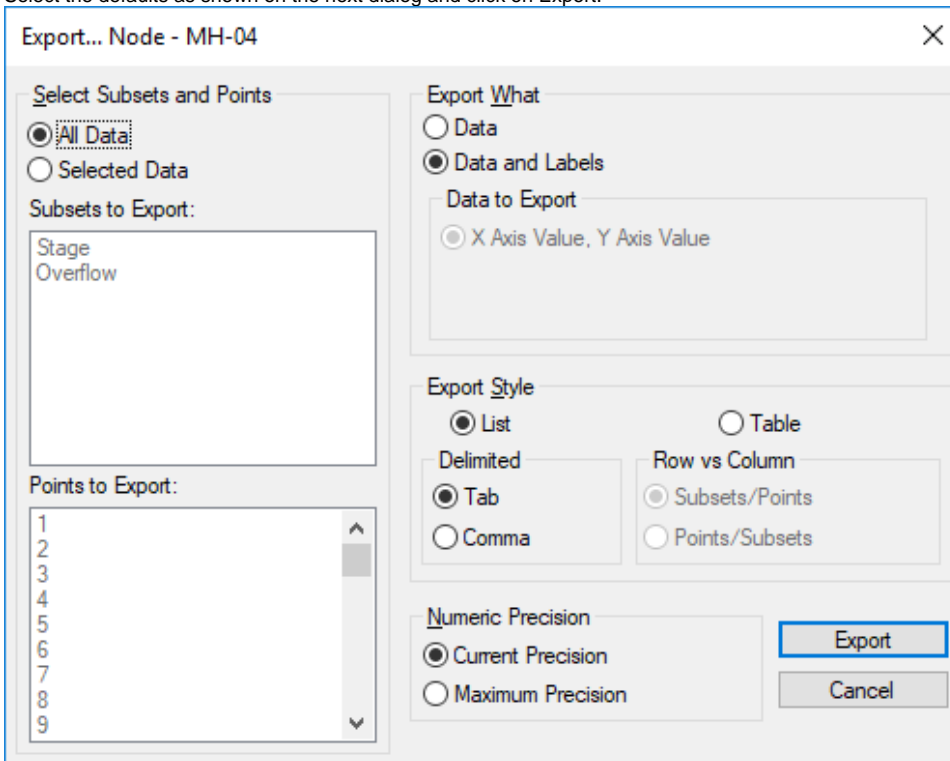
- b. Right click on the graph and select Export Dialog from the pop-up menu.



4. Select Text/Data Only and the Clipboard as the Export Destination. Then click on Export.



5. Select the defaults as shown on the next dialog and click on Export.



6. Launch or switch to Excel. Paste the clipboard contents to a blank worksheet.

	A	B	C	D	E	F
1	Stage	1	01/01/1995 0:00	40.5		
2	Stage	2	01/01/1995 0:01	40.5		
3	Stage	3	01/01/1995 0:02	40.5		
4	Stage	4	01/01/1995 0:03	40.5		
5	Stage	5	01/01/1995 0:04	40.5		
6	Stage	6	01/01/1995 0:05	40.5		
7	Stage	7	01/01/1995 0:06	40.5		
8	Stage	8	01/01/1995 0:07	40.5		
9	Stage	9	01/01/1995 0:08	40.5		
10	Stage	10	01/01/1995 0:09	40.5		
11	Stage	11	01/01/1995 0:10	40.5		
12	Stage	12	01/01/1995 0:11	40.5		
13	Stage	13	01/01/1995 0:12	40.5		
14	Stage	14	01/01/1995 0:13	40.5		
15	Stage	15	01/01/1995 0:14	40.5		
16	Stage	16	01/01/1995 0:15	40.5		
17	Stage	17	01/01/1995 0:16	40.5		
18	Stage	18	01/01/1995 0:17	40.5		
19	Stage	19	01/01/1995 0:18	40.5		
20	Stage	20	01/01/1995 0:19	40.525		

Average: 11585.57488    Count: 124    Sum: 1077458.464

The contents of the columns are:

- a. Parameter
- b. Time Step Number
- c. Time
- d. Value

Scroll down to view the results of the other parameters.

For additional information consult the [Review Results](#) topic in the Help file and follow the links found there.