Common 2D modelling errors

Below is a list of common 2D error messages and how to resolve them.

Diagnostic Message	Explanation	Solution
ERROR - Could not find a connection at the end of HX line with name	The end of the 1D/2D interface (HX code) must have a connector. **FIX THIS FIRST!!!**	Make sure both ends of the 1D/2D interface string have a connector to a 1D node
Could not find a 1D node connected to EC or CN line with name		Node - **Link invert to 2D** must be selected
ERROR - Connection object unused or not snapped to 2D HX or 2D SX object.	The 1D/2D connector no longer connects to the 1D/2D interface	Delete the connector and create a new one so that the snap will work
ERROR - Unresolvable connections to 1D Nodes: Node 15, Node 15, Node 11, Node 25	The 1D/2D connector no longer connects to the 1D/2D interface	Delete the connector and create a new one so that the snap will work
CHECK - Repeat application of HX boundary to 2D cell ignored	Two of the 1D/2D interfaces lines go through one cell	Turn on the 2D domain so you can see the cells. Move or Delete one of the 1D/2D interface lines
ERROR - ZC level of 157.6 at 2D HX cell is below interpolated node bed level of 157.9	The 2D cells that form the banks along the 1D/2D interface must be higher than the nodes inverts of the 1D channel Test levels along the 1D/2D interface are interpolated from the invert levels of the connected nodes. The cell centers along the interface string must be above these test levels	First, check the invert levels of the nodes you have connected to the 1D/2D interface. If these are correct then consider adding more 1D/2D connectors so that the 1D/2D interface line has more points to interpolate between. Next, check if the 1D/2D interface has been drawn through a low point and not stayed up on top of the bank (i.e. lower than the nodes)

	If this error is at a cell center that you thought was inactive, then check the boundaries and see if the cell falls under the 50% rule. **	Adjust the inactive/active boundary. Add the 2D active and inactive layers on with the 2D domain to see where the active cells are located
Cannot move 1D/2D connector and get a snap onto the interface even though selectable and snap is turned on?		delete the connector and create a new one
It just will not run 2D		check the *.2dlog file for error messages if not try the *.tlf file
mif errors in *.2d log and/or *.tlf file	The polygons in XPSWMM are not valid. Most likely small polygons have been created by mistake	Look through the *.mif files with a text editor to find one that ends with odd characters. Check the file name to find out the data type. Only show this one layer in XPSWMM and use the select rectangle to select all of the polygons. Now that they are all selected, small unwanted polygons may appear. Delete these
Too many messages are shown	You can limit the number of messages	Right click in layer control on the diagnostic file and change setting on data tab
Backward Compatibility Defaults are no longer valid, please use XPSWMM 2018.1 or earlier.	PRE-2013 and earlier are no longer supported in XPSWMM/XPStorm 2018.2.1 and later.	1. Go to **Configuration > Job Control > 2D Model Settings**. 2. Click the **Advanced Settings** tab. 3. Clear the selection for **PRE 2012**.
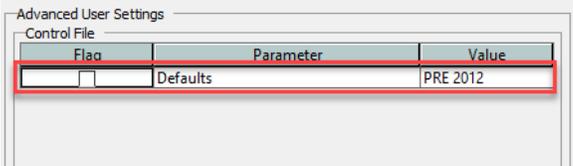
** What makes the cell active? (The 50% Rule)

- Default mode is changed by Active and Inactive area polygons. If 50% of a cell side is on the active side then the cell is active