

HEC-RAS Known Issues

Version 6.0 Beta 2

Released: 03 February 2021

Summary of Issues Repaired for HEC-RAS 6.0 Beta 3 (released 22 March 2020)

Issue	Description
2D Bridges and Metric Units	There was an additional bug in converting metric units data into U.S. Customary units for the computations of a 2D Bridge. This has been resolved.
SA/2D Hydraulic Connection and Metric Units	There was a data check that was not converting the user entered Weir station/elevation data to U.S. Customary units before comparing the elevations to the cell elevations they were connected to. The message stated that the weir elevations were lower than the connected cell elevations. This has been resolved.
Base n Override Values Not Saving	Base n Override Values were not saving in RAS Mapper.
1D Steady Flow - Mixed Flow regime at Junctions	There is an issue when running mixed flow regime for steady flow models with junctions. In this case the main river was supercritical flow regime, by a tributary should have been subcritical flow regime. The program was not using the subcritical answers for the tributary.
2D Bridges	An issue was found with dimensioning the number of points used in the Bridge curves. When making the curves it automatically uses 100 points from the lowest elevation to the highest. However, for 2D bridges, additional points get added for the invert elevation of every face in the bridge opening, in order to detect when that face will have flow crossing it. So, more cells means more points get added. However, the software was only using the first 100 points in the tables, no matter how many points got added. So if you had a model with lots of cells in the bridge opening, more than likely it was not correctly distributing the flow at

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	higher water surface elevations. This has been fixed and will be in Beta 3. For now make you max elevation in your tables higher, and possible use fewer cells across the bridge opening.
Structures added from RAS Mapper	Structures added from RAS Mapper had the hydraulic property tables parameters set to zero. The default parameter values (50, 50, 20) are now correctly initialized.
Negative Flows in Unsteady IC	RAS interface allowed negative flows to be entered as initial conditions. RAS now flags that as an invalid initial condition.
2D Connections	A 2D Connection, fully contained within a 2D Flow Area, may automatically connect to neighboring Storage Area in RAS Mapper. Currently, you will need to fix the connection from the Geometric Data Editor.
Import of GIS (.geo) File	Import of legacy .geo file results in an "index out of range" error.
Terrain Modifications	Some modification methods (Higher, Lower) were not implemented for simple shapes.
Non-Newtonian Yield Stress and Mixture Dynamic Viscosity Methods	Selecting the Exponential Yield Stress and Mixture Dynamic Viscosity methods do not work. To avoid this bug, the user select the User Specified Yield Stress and Mixture Dynamic Viscosity methods.
Non-Newtonian Bulking	There were issues with bulking in this version in certain situations.
Bulking-Only Interface/Non-Newtonian Method Selection	We changed the way users select the "bulking only" approach. Instead of selecting "Bulking Only" as a method, users now select "Newtonian" and then set the Cv and choose "Bulking" in the bulking method below.

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	This changed the indexing from the drop down box, so it will impact the backward compatibility of the non-Newtonian editor. Users will have to go in and re-select their non-Newtonian methods
User Defined Sediment Variables	We reordered the 1D and 2D sediment Variable Lists in the User Specified Sediment Variable list. It is not grouped by importance/type for 1D and grouped by cell/face/subcell/subface for 2D and alphabetically in those 2D subgroups. We also changed a few variable names and removed duplicates and quasi-duplicates.
Sediment Plotter Color Ramps	We added several color ramps (sediment grain classes and longitudinal/temporal monotonic), new color defaults, and new methods for users to edit sediment plotter colors
Delete a Sediment Layer	The model crashed when users deleted a sediment layer. This has been fixed.
Vertical Varying n Values for 1D Cross Sections	If a cross section has vertical varying Manning's n value data and then edited in RAS Mapper, the vertical varying Manning's n value data is lost.
Sediment DSS Selection	The sediment time series DSS option does not open a new file and cannot run with a DSS 7 file in the initial 6.0 release