**What’s New with SRH-2D Version 2.2?**

SRH-2D Version 2.2 was completed in August, 2012. There are numerous improvements with version 2.2 over previous versions. Listed below are a number of highlights:

* It now works also with SMS 11.x, in addition to earlier versions of SMS.
* The XMDF format is also offered for results output. This output format works with SMS directly for post-processing of results with several advantages and it is recommended. This format combines all unsteady results outputs into one file and results can be updated automatically within SMS. It is cautioned that the XMDF version of SRH-2D may encounter problems with some PCs, as reported by a few users. If this happens, you may have to use the NOXMDF versions that are also provided with the SRH-2D package.
* The version is generally much faster in comparison with any previous SRH-2D versions. For example, it is more than 15% faster than version 2.1 for most problems we tested, and even more than version 2.0.
* Both the 32-bit and 64-bit versions are included with the package. Our tests showed that the 64-bit version was more than 15% faster than the 32-bit version on the same 64-bit PC. So use the 64-bit version if you have a x64 PC.
* In addition to the FLOW modeling, a “MORPhological” option is added that allows a user to obtain additional outputs from the computed flow variables for morphological assessment. Output variables include the threshhold sediment diameter below which sediments will be mobilized, Shields parameter, and sediment transport rate.
* An “infiltration” option is added that allows loss of surface water through infiltration. It can only be accessed through the Partial-Interface mode.
* Check out our write-up for unsteady dam break modeling with SRH-2D that gave guidelines on how to do unsteady, time-accurate modeling.
* Various enhancements of error checking, and simplifications of model setup process.
* For Hot Start (Restart) from a previous result, say stored in \_RST33.dat, you may set IREST=33 in the \_DIP file to achieve it. That is, IREST=I in the \_DIP.dat file provides the ID of the RST that will be used for hot start. In previous SRH-2D versions, one has to do two things (1) rename the restart file to \_RST.dat, and then (2) set IREST=1 in the \_DIP.dat file.