ArcSWAT 2.1.4 Release Notes 12/01/08

Updates\Bug Fixes from Version 2.1.3

General:

The most important update to ArcSWAT with version 2.1.4 was a fix to an error that was found to occur with watersheds that had draining inlets defined. The error would result in a crash during calculation of subbasin parameters. Other updates are minor bug fixes and an enhancement to the way exempt land uses are treated during HRU definition.

SWAT Project Setup:

1. None

Watershed Delineation:

1. Made a correction to error that occurred when calculating subbasin parameters for a model with inlets defined. This error resulted from erroneous GRIDCODE values in a temporary "WDCWATERSHED" feature class. This error was present in ArcSWAT version 2.1.2 and 2.1.3 and is now fixed at 2.1.4.

HRU Analysis:

- 1. Made a correction in the final HRU report. The full watershed area was not getting calculated correctly in the report.
- 2. Modified the handling of exempt land uses. The new method preserves the actual area of the exempt land uses and does not redistribute the area from those land uses that fall below the threshold area to them. This ensures that the original GIS-based are for these exempt land uses does not get altered.

Write Input Files:

1. Modified interface for editing the user weather stations. The interface now looks to the "wgnrng" table to retrieve the min and max values used in tooltips and in value checking.

Edit SWAT Input

- 1. Modified interface for editing the user weather stations. The interface now looks to the "wgnrng" table to retrieve the min and max values used in tooltips and in value checking.
- 2. New parameters in the MGT2 table, PST_DEP and IHV_GBM, are added as new fields to the table for models created with earlier versions of ArcSWAT. An error was found to occur if the values for these new fields were not set to a default of "0". This is now performed automatically when the fields are added to the table.
- 3. When loading a saved management schedule, errors could result in cases where the schedule being loaded used a different scheduling method (i.e., date versus heat units) than the current method for the HRU. This error is now resolved.

SWAT Simulation

- 1. Fixed memory errors that could occur when writing point source files. This error was found to happen when writing a large number of point source files during the "Setup SWAT Run" operation. This error has now been fixed through memory releases.
- 2. Modified the setting of the ICLB parameter in "cio" table. In previous versions, it was possible that following auto-calibration and resetting a default simulation, that the ICLB parameter would not get properly set back to a value of 0. This has been fixed so that the ICLB parameter is always set back to 0 whenever "Setup SWAT Run" occurs.