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Release notes for PHABSIM 1.5.1

Background

Numerous users have reported that PHABSIM for Windows as downloaded from the Fort Collins Science Center (FORT) web site will not install and run on Windows Vista and Windows 7 ™. Miller Ecological Consultants (Miller), a consulting firm in Fort Collins, Colorado acquired the source code for the user interface for the then existing version 1.2 of PHABSIM for Windows and modified the code to produce a version that was compatible with Windows 7 for their internal use.

USGS, IFC, and Miller Ecological Consultants shared the goal of providing the PHABSIM for Windows software in the public domain in a form that was compatible with Microsoft Windows 7™. To ensure that goal was met, USGS performed independent testing of the software and found the functionality of the original USGS product has been retained and a few enhancements added. A separate memorandum describing the testing performed by FORT is available from Chris Holmquist-Johnson,
h-johnsonc@usgs.gov.
The revised software is provided as PHABSIM for Windows, version 1.5 on the Fort Collins Science Center (FORT) web site as noted in the installation instructions below.

Miller Ecological Consultants have provided the following enhancements in **Version 1.5**.

1)   Coordinate data are checked for ascending stationing numbers prior to saving the data file. An error code is generated for non-ascending stationing and the user must correct the error prior to any file save function.
2)   Habitat suitability data can be entered either by entering a single data point at a time or by a "Copy" and "Paste" function from an external spreadsheet.
3)   A "0" value in the first row and column of the Suitability data is a valid data point and will allow the advance to additional rows.
4)   The habitat suitability data are checked for duplicate data points for depth, velocity or channel index.

Version 1.5.1

Compiler upgrade: After distribution of Version 1.5 Miller obtained the source code for the computational portion of PHABSIM. Version 1.5.1 was completly compiled under C++ version 6. This version was a recompile of both the computational source code and user interface.

Bug Fix: Version 1.5 contained a bug in the HABTAE program that was corrected in Version 1.5.1

Bug Fix: Version 1.2 had an error in the graphical display of the habitat area due to the algorithm used for the graphing package. This error was corrected to produce a graph that matched the tabular data.

Enhancement: Version 1.5.1 added functionality to the selection of Velocity Calibration Set Assignments. Earlier versions required manual entry to specify the velocity calibration set for each flow and each cross section. Version 1.5.1 has a drop down selection added so the user can select individual discharges, multiple discharges, all discharges, or manual entry. The drop down menu will apply the calibration set number to the discharges selected from the drop down menu. The program will alert the user by on screen error messages when invalid selections are made.

Installation instructions:

Extract the file "SetupPHABSIM.exe" from the file "SetupPHABSIM.zip"
Place the file named "SetupPHABSIM.exe" on the desktop.
Double click on the SetupPHABSIM icon.
Follow the on screen insructions