



WISE Release 2.0.3
February 28, 2004

WISE Users,

WISE Version 2.0.3 presents significant advances over previous versions.

Projected Coordinate System added to Project Options

This version of WISE requires you to specify the Projected Coordinate System for each WISE project on the Project tab of Project Options. When you set up a new project in Project Options, you'll need to identify the Projected Coordinate System for the project. If your WISE license includes geographic limitations (you can only work in a specific area) or if you change Project Options or set up a new module for an existing project, you'll be prompted to specify the Projected Coordinate System. However, if you don't have any geographic limitations and don't make any changes in Project Options, you can continue to work on an existing project without completing this step.

For example, if you are working on the North Carolina Floodplain Mapping Project and need to change Project Options, you would select **NAD 1983 StatePlane North Carolina FIPS 3200 Feet** from the middle of the list. (Be careful to select this projection rather than the nearly identical option that is based on metric measurement.)

All of the tutorials available on the web site are set up to use this projection as well.

HEC-RAS 3.1 Installed

WISE 2.0.3 utilizes certain functions in HEC-RAS and so it will automatically install version 3.1 in a separate folder within C:\Program Files\. If you already have a version of HEC-RAS installed, it will not overwrite the existing version unless you direct it to install to the same folder. You can have two versions of HEC-RAS installed on your computer.

Converting Projects from Previous Version

As was the case with WISE 2.0.1 and 2.0.2, we've built in an automatic conversion that starts as soon as you select a project built with previous versions. If you're converting a project from 2.0.x, you'll be presented with the option to create a backup copy of the project. If you're converting a project from 1.9.x, then a backup copy of the project will automatically be created in the project folder (by default). The converted project will open in the plan view.

After the conversion, you should re-create the photo, historical interview and Approximate Structures shapefiles and all shapefiles for Closed Inventory or Open Inventory projects.

Here's how to re-create your shapefiles.

1. Open the project in WISE 2.0.3. When the Project Conversion prompt is shown, click Yes to convert the project. Note that conversion was successful.
2. To re-create shapefiles, click File and then click Project Options. Click the tab for the Closed Inventory or Open Inventory or Hydraulics module.
3. In Closed Inventory or Open Inventory, click the Setup Shapefiles button and click Yes. Replace all existing shapefiles.
4. In Hydraulics, click the open folder beside the Approximate Structure shapefile. Select the shapefile and click Yes.

New Features by Module

A summary of new features in WISE 2.0.3 by individual module follows these general notes.

Research & Development Department
Watershed Concepts
2300 West Meadowview Rd, Suite 110
Greensboro, NC 27407
(336) 855-8422 ext 113
(336) 855-0640 fax
www.watershedconcepts.com

*Release notes are available through our web site at
www.watershedconcepts.com*

New Features in WISE

Documentation Updates

Download documentation from

http://www.watershedconcepts.com/software/documentation_general.html

- Getting Started with WISE – a new WISE ReadMe has been created that walks you through installation and setting yourself up as a user (stand-alone or Citrix) as well as downloading and setting up tutorials.
- Survey Manual – corrections to Survey Codes for a Bridge on pages 1-24 and 1-25.
- Introduction to WISE Tutorial – revised with new section on query tools.
- WinHSPF using Water Quality Tutorial – new tutorial published.
- Scoping – new tutorial and new user guide published.
- Online Help for WISE – topics have been added, expanded or updated for all features listed in these Release Notes except the last two Terrain tools. You can also preview SQL Server functionality through the Help topics. (available on Citrix and with WISE upgrades)

General Functionality

- Right-click on any theme in the table of contents to select Move to Top or Move to Bottom.
- A Print Preview function has been added to develop simple maps from the plan view.
- Functions to set up a Theme Library to easily access files used repeatedly in projects have been added.
- The Symbol Properties for themes now will allow you to color code by Unique Values or Classes and also add labels. You can also leave the Symbol Properties dialog box open and click on another theme to change its properties.
- The ability to select specific features by query has been greatly expanded. You can now develop queries by either attribute or location or by location relative to previously selected features.

Terrain Module

- When re-opening the Select Terrain Project, clicking Cancel will retain a current Terrain Project. Clicking Clear Settings will de-select a current project.
- TOPAZ functionality has been removed, as FAUCET produces superior results.
- A tool to Replace MODs with GRDs for selected major cells has been added that effectively erases all changes to a MOD file. This rebuilds MOD files based on the existing GRD files (without having to rebuild the TIN structure or resample the TIN).
- When Replace MODs with GRDs is run (or when you Build TINs or Resample GRDs from TINs on selected cells), any existing vec or ina files will be deleted, and all existing acc files will be deleted, since these files will have to be re-created based on the new MODs.

- A tool to Randomize Flat Areas has been added. This tool will check selected major cells for extensive flat areas and randomly adjust their MOD elevations to ensure that flow will exit from each cell. While FAUCET is preferred to fix flat areas, this tool can be used for very large flat areas produced by highly precise DTM data.
- A tool to process a “merged” 3-dimensional shapefile and flatten out any “lumps” in the network. These lumps typically occur at the join points between the networks.
- A tool to clip 3-dimensional stream networks into individual 3-dimensional shapefiles based on a polygon index shapefile has been added.

Open Inventory Module

- If there are invalid lines in input files, the QC function will note that extra data was found in the error file.
- Default values are now set for culvert material and inlet/outlet types in the Field Data Editor. If a box culvert is selected, the material is set to “Concrete – reinforced” with the inlet/outlet being “Cut”. For an ellipse, the material is set to “Corrugated metal” with the inlet/outlet being “Cut”. For a pipe, the material is set to “Concrete – reinforced” with the inlet/outlet set to “Cut”.
- The cross section view in the Field Data Editor and the Export to CodeH2 function have been modified to use channel top width and bottom width to calculate the four-point trapezoidal channel for culverts.
- When exporting a structure to CodeH2, if an existing TOR exists at the first or last rail station, it will be used to signify the start or end RAIL. Otherwise, a point or points will be inserted with the corrected TOR elevation.
- The stream station, date and time are now copied from a main structure to internal cross sections for the structure.

Hydrology Module

- A tool to delete all selected basin breakpoints has been added that should reduce the need to manually edit this shapefile.
- A tool to Export Hydrology data from WISE database to NC’s Access database has been added to the File menu.

Hydraulics Module

- A tool to Export Hydraulics data from WISE database to NC’s Access database has been added to the File menu.
- Check cross section stationing has been rewritten, allowing the selection of one or more streams. This tool will now handle sections that cross more than one stream, as long as the section has the name of one of those streams.
- When selecting streams for cross section placement, you can select one or more streams from an alphabetized list.
- You can now select more than one stream on which to place cross sections.
- The formula used to calculate the hydraulic radius of trapezoidal open channels for Time of Concentration is now being based on the bottom width rather than the depth.

Scoping Module

- The Scoping Module has been fine-tuned and enlarged to simplify setting up users.
- Scoping now includes Ranking tools that export and import spreadsheets. Download the Scoping Tutorial from the web site http://www.watershedconcepts.com/WISE/Documentation/Scoping_Tutorial for a detailed explanation of how to use this module.