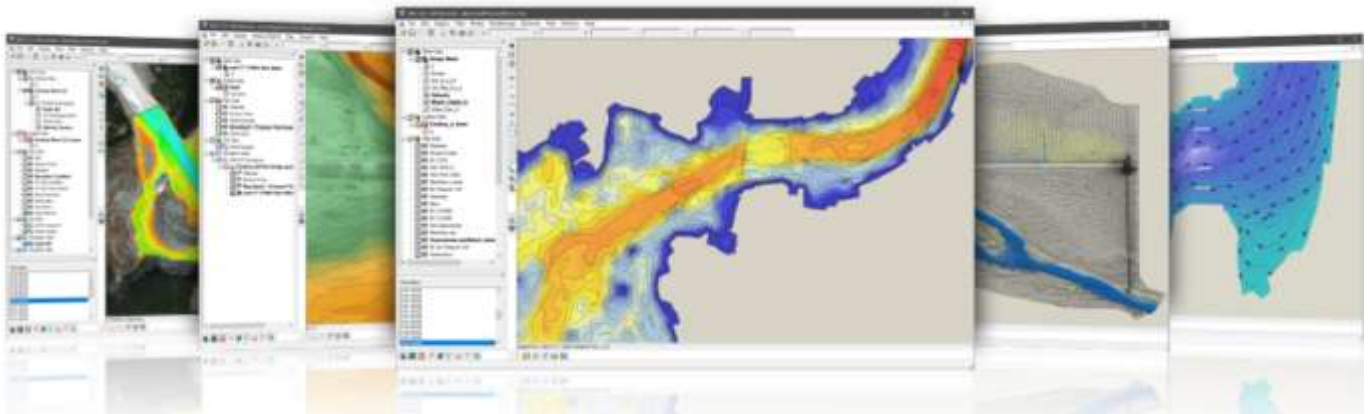


SMS

SMS 13.3 - The Complete Surface-water Solution

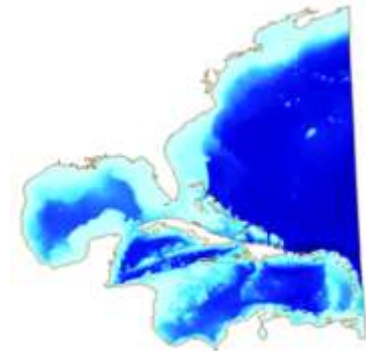
Access a full range of coastal and riverine solutions with SMS - the leading application for surface-water modeling.



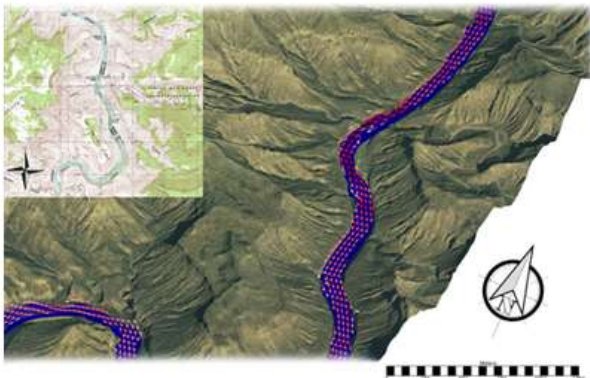
Flexible modeling approaches

Aquaveo pioneered the conceptual model approach. Build a conceptual model in SMS by constructing a high level representation of the model using familiar GIS objects: points, arcs and polygons. Work with large, complex models in a simple and efficient manner by using the conceptual modeling approach and easily update or change the model as needed.

SMS also has powerful tools to build meshes and grids.



3D visualization optimized for performance



SMS is the most advanced software system available for performing surface-water simulations in a three-dimensional environment.

- Interact with models in true 3D
- Optimized OpenGL graphics for improved hardware rendering
- Create photo-realistic renderings
- Generate animations for PowerPoint or web presentations
- Drape images over the model and control the opacity
- Annotations – Add north arrows, scale bars, reference images, company logos, and more

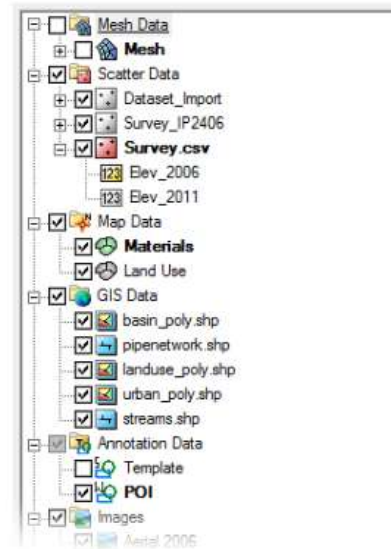
Import a variety of data formats & imagery

Models require data from many different sources.

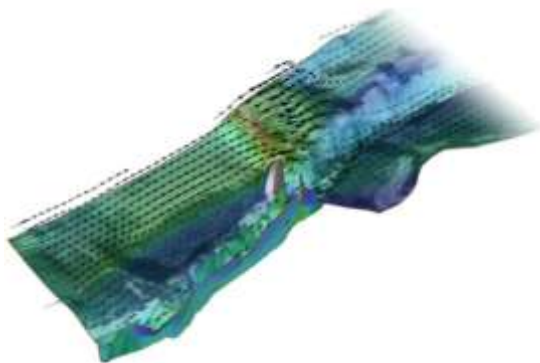
That's why SMS is built to easily import numerous file types:

- Raster images including georeference and projection support
- Topographical maps & elevation data
- Elevation & bathymetry data
- Web data services such as TerraServer
- ArcGIS geodatabases and shapefiles
- CAD files including .dwg, .dgn, and .dxf formats
- Worldwide projection support including Cartesian and Geographic Systems
- File Import wizard for delimited text files and spreadsheets

[View a complete list of raster, DEM, and vector file types supported by SMS.](#)



Advanced riverine & coastal modeling



SMS interfaces with a wide range of numerical models for applications including:

- Riverine analysis
- Contaminant transport
- Sediment transport
- Particle tracking
- Rural & urban flooding
- Estuarine
- Coastal circulation
- Inlet & wave modeling

Software from an Industry Leader

SMS is developed by Aquaveo, an engineering services company with many years of experience developing surface-water modeling solutions.

- Step-by-step tutorials and how-to videos
- Online community forum and product documentation
- Phone and email technical support
- Regularly scheduled training courses taught by expert modelers.
- On-site training available
- Professional consulting services



SMS 13.0 System Requirements

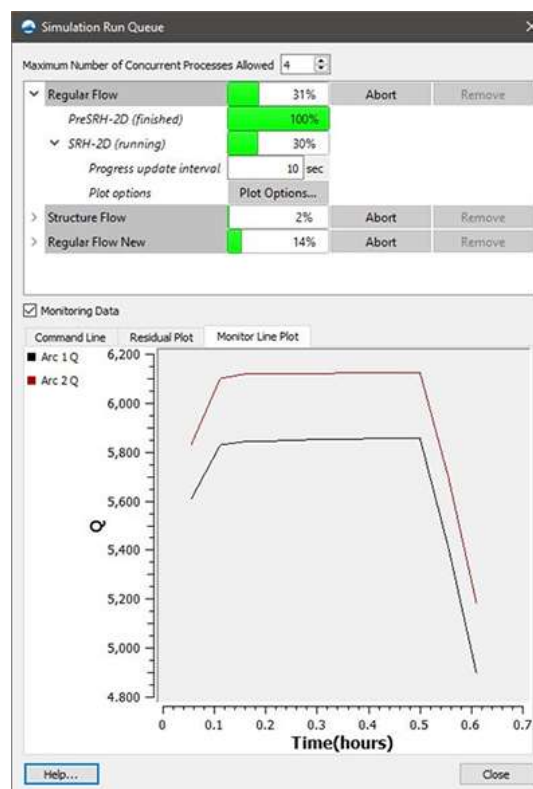
- **Operating System:** Windows 7, Windows 8/8.1 or Windows 10
- **RAM:** 4 GB (8GB or more recommended)
- **CPU:** SMS software is CPU intensive. Some models and utilities integrated with SMS can take advantage of multiple processor cores simultaneously. We recommend the fastest CPU your budget allows.
- **Graphics Card:** For all display features to be enabled, OpenGL 1.5 or higher must be supported. The use of a dedicated graphics card is strongly recommended. Integrated graphics cards are often problematic.
- **Display Resolution:** 1920 x 1080 or greater

What's new in SMS 13.1 Beta

The following is a list of the more significant changes and new features available in SMS 13.1 Beta.

Simulation Run Queue

Manage multiple model runs for ADCIRC, SRH-2D, or STWAVE simultaneously in the new Simulation Run Queue. Diagnostic information such as monitoring plots is displayed during model runs. The new run queue is a modeless dialog which means users can continue using SMS while simulations are running. Completed runs may be visualized in SMS while additional runs are still in process.



Floodway Delineation Tool

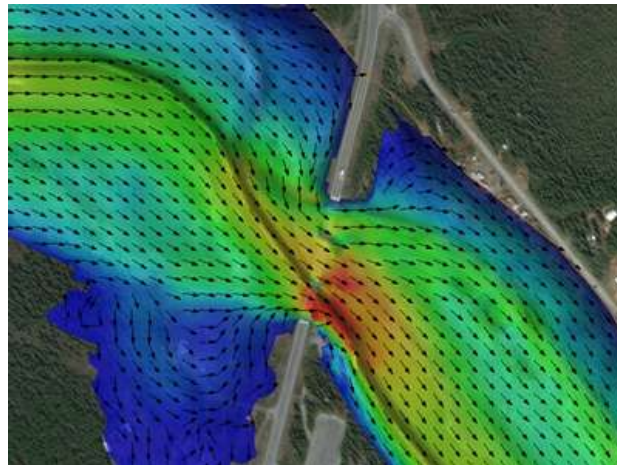
The floodway tool is used to delineate approximate floodway extent arcs based on the geometry of the mesh, scatter set or cartesian grid used in a project.

Map Flood Tool

Quickly identify changing floodplain extents when changes occur to the floodwater elevation. SMS can help visualize the impacts of possible modifications in the flood level by utilizing ground elevations and existing FEMA flood hazard maps.

Bridge Scour Tool

The Bridge Scour coverage will take an existing dataset from a 2D hydraulic modeling of a bridge crossing and export many of the needed variables to the Hydraulic Toolbox for a scour analysis. Bridge scour output values may also be copied for use with other tools.

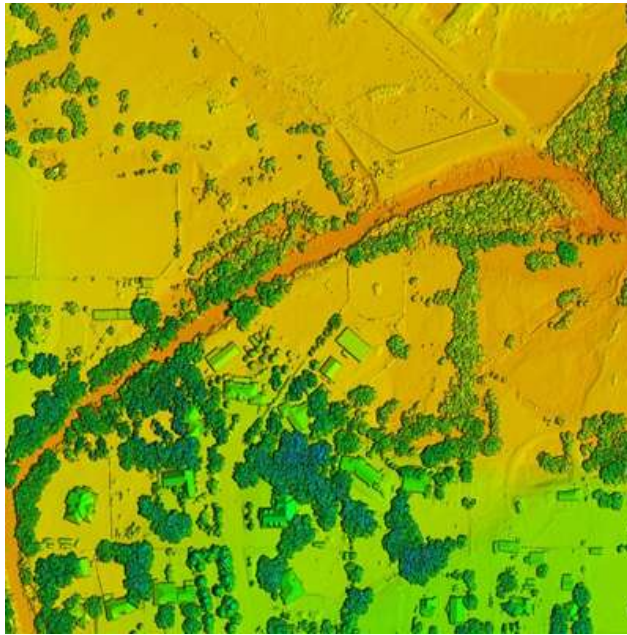


Core Module Improvements

- Constant paving density option (Map)
- Arc redistribution based on size function. This impacts mesh generation because it is not done automatically during mesh generation anymore. (Map)
- New 'Snap Arcs to Mesh' command which changes mesh nodes to match arc nodes and vertices (Map)
- Faster meshing (Map)
- Meshing now handles single segment breaklines (Map)
- Meshing no longer redistributes the arcs when scalar paving is used (Map)
- Ability to interpolate solution sets to another mesh (Mesh)
- Convert 2D scatter sets to raster data (Scatter)

LIDAR Management

SMS now supports advanced LIDAR data handling tools for reading, viewing, and converting LIDAR data to other formats for use with your model. Large LIDAR datasets are efficiently displayed with options to specify the number of points visualized and exclude points outside the extent.



General Features

- Updates to the measurement tool
- Coordinate system preview option
- New GIS tab showing GIS information in the information dialog
- New Notes tab included in property dialogs
- Toolbox and scripting updates
- Web menu items moved to File menu
- Import STL files
- Improvements to Plots
- Select features and enhancements

Model Interface Improvements

- The ADCIRC and STWAVE interfaces have been updated to allow for multiple simulations in a single project
- The HEC-RAS, SRH-2D, and TUFLOW interfaces have been updated with additional features