

HYDRO_AS-2D Model Interface Enhancements

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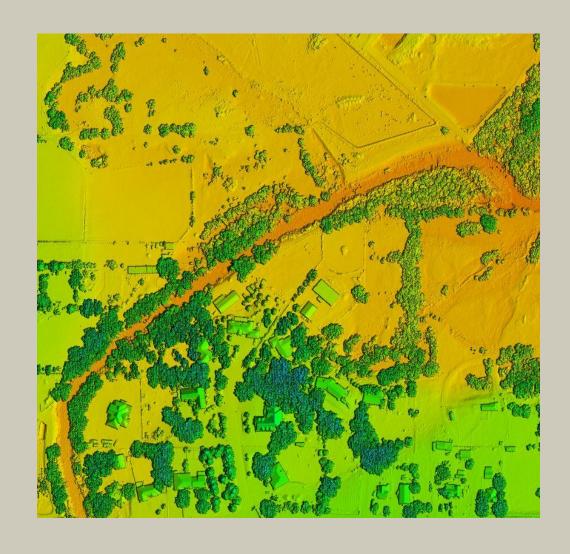
SMS Development Highlights (13.0 Beta Release)

- LiDAR tools
- Raster tools
- Bridge Scour Tool
- Summary Table Tool
- Web data commands/options
- Mesh generation improvements
- Plot Tools
- Metadata tools
- Flexible License Management
- Dynamic Model Interface with Python



LiDAR tools

- Memory efficient preview
- Display options
- Exclusion options
 - By classification
 - By region
 - By elevation
- Interpolation
- Convert to Raster
- Convert to Scatter

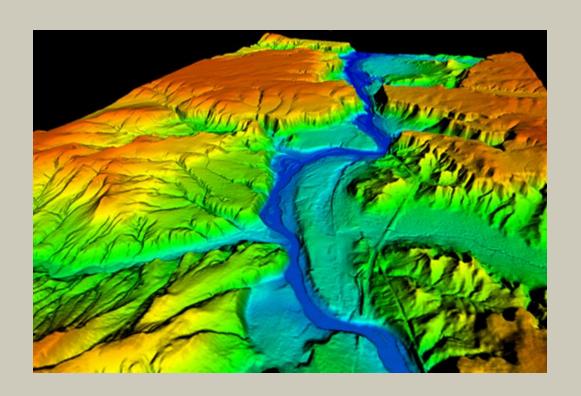




Raster tools

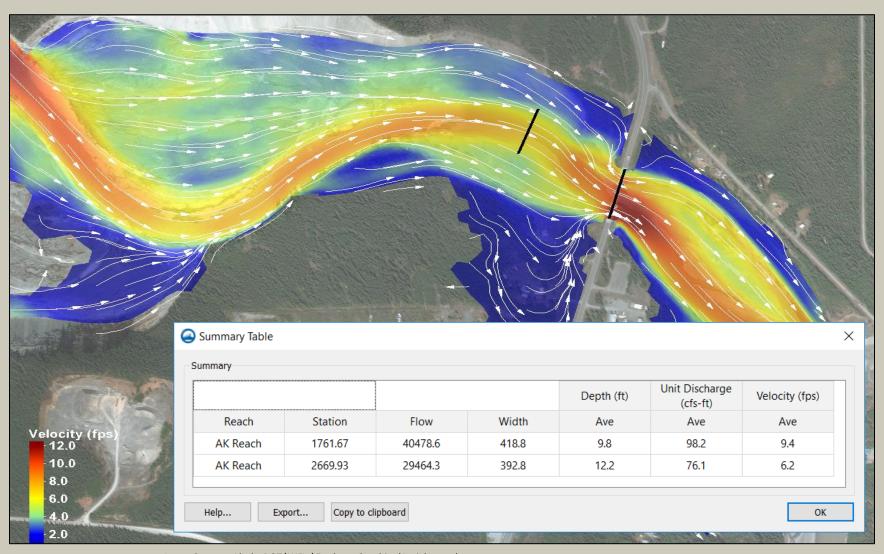
- Display
- Resample
- Interpolation
- Floodplain raster generation
- Creation of Raster from scatter set

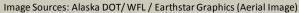
- Coming soon
 - Comparisons
 - Feature stamp editing





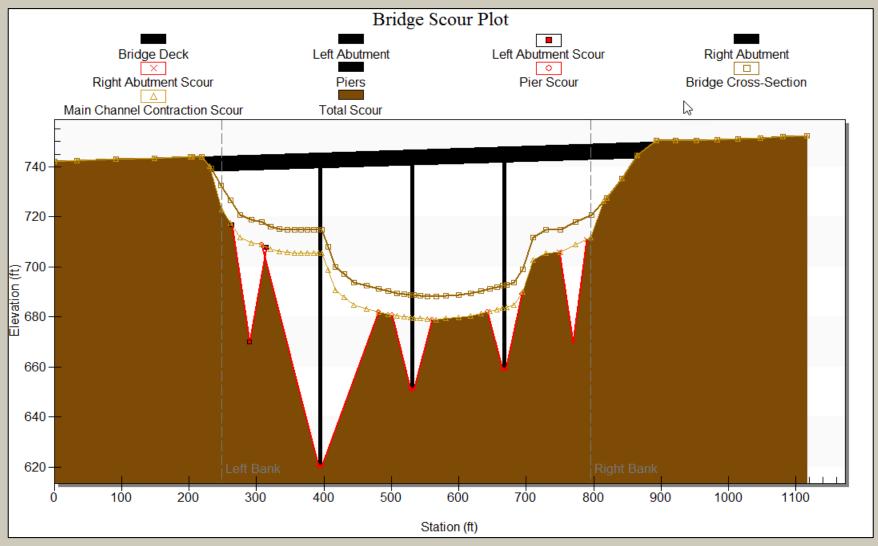
Bridge Scour Assessment

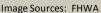






Scour Plots through FHWA Hydraulic Toolbox (v4.4)







Summary Table Tool

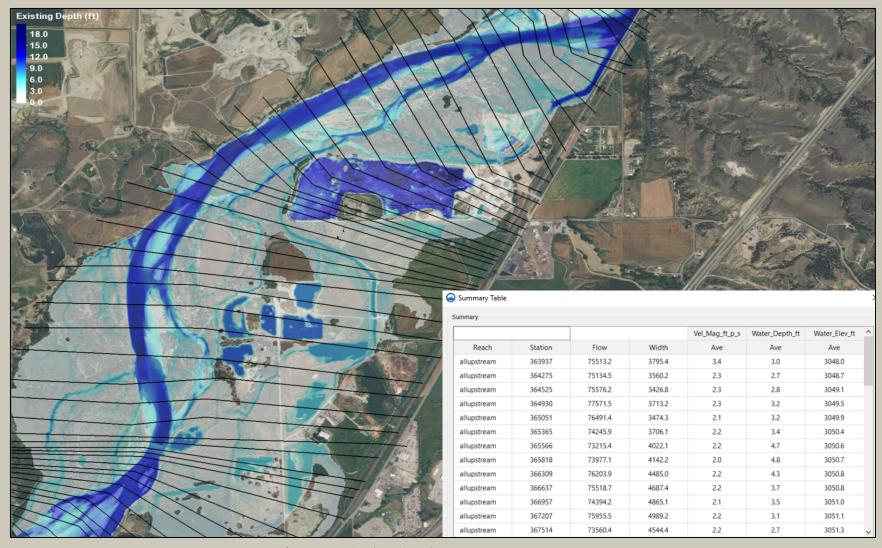
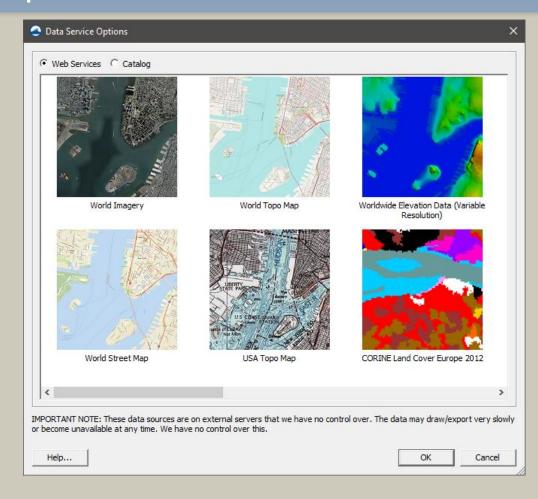


Image Sources: Montana DOT / Earthstar Graphics (Aerial Image)



Web data commands/options

- Moved to File Menu
- Data managed in GIS module





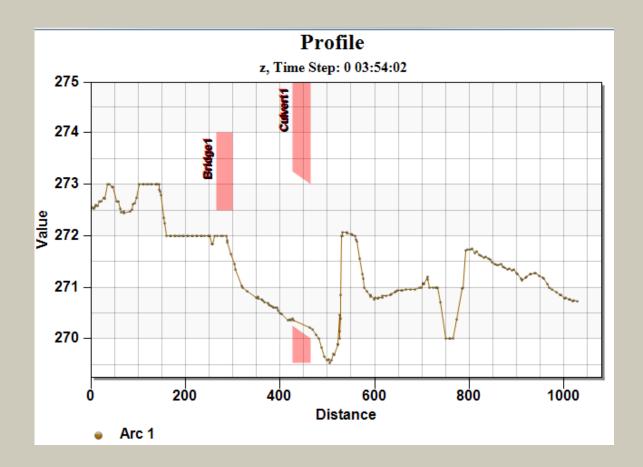
Mesh generation improvements

- Arc redistribution to nodal spacing function (size function)
- Constant target paving option
- Improved speed and quality
- ARR mesh quality plot



Plot Tools

- Plot coverage
- Multiple axes
- Plot attributes
- Saved plots





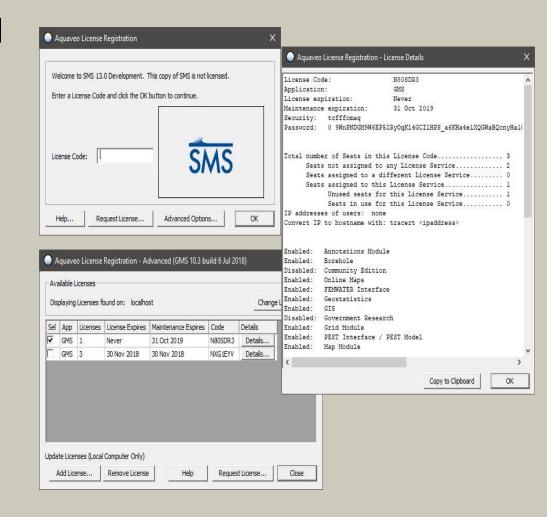
Metadata tools

- Project report summary
- Project packaging
- Properties right click on all tree items



Flexible License Management

- Software key based
- Simple, 1-Step registration process for single-seat local licenses
- Easy Check-in and Check-out of licenses
- Advanced features for network and multi-seat licenses





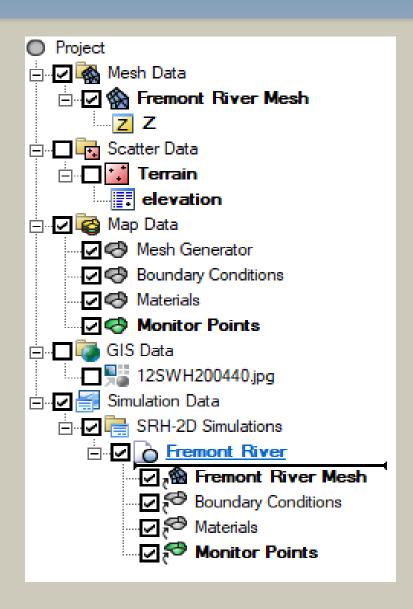
Dynamic Model Interface with Python

- Simulation Based Modeling
- Scripted File I/O
- Scripted model checks
- Run Queue
 - Modeless multiple simulations running at a time.
 - Progress plots



Simulation Based Modeling

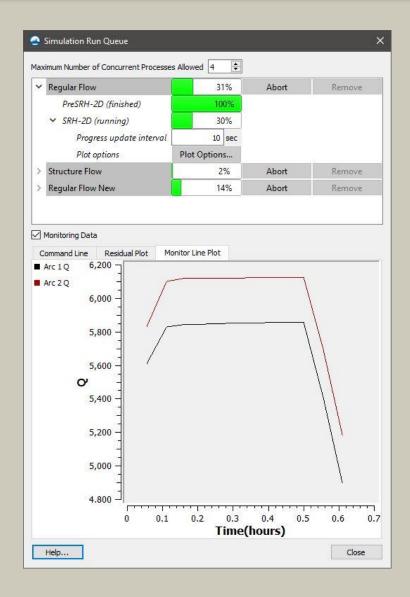
- "Recipe" Concept
- Manage Multiple
 Simulations in a
 Single Project
- Easily Swap Components
- No Need to Map Properties to Geometry
- Dynamic Model Interface





Simulation Run Queue

- Modeless
 - Work in SMS continues
- Progress tracking
- Monitor plots
- Solution loads into simulation folder





Other new features

- Measure tools shows an angle
- Improved source/target redistribution
- Select by polygon feature now can select map data objects
- Floodway delineation
- Floodplain raster
- Cross section management
- Feature stamping improvements



Floodway Delineation

