Meshing for HEC-RAS 6.x

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Objective

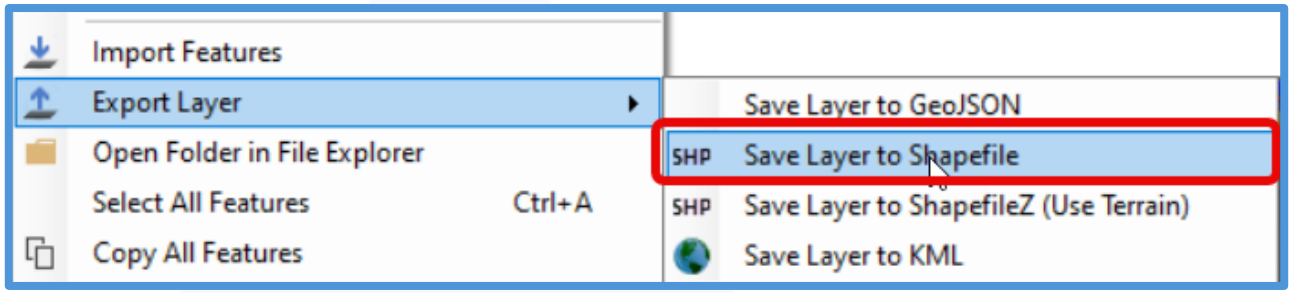
- This presentation will provide detailed discussion on developing a mesh for use in HEC-RAS 6.x and comparing results between versions.
  - Creating a Mesh
  - Exporting a Mesh
  - Incorporating Bridges
  - Importing HEC-RAS 6 results to HEC-RAS 2025

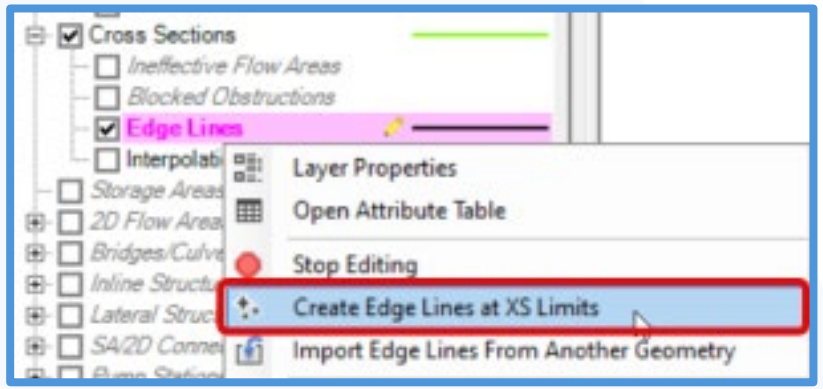
Creating a Mesh for HEC-RAS 6.x

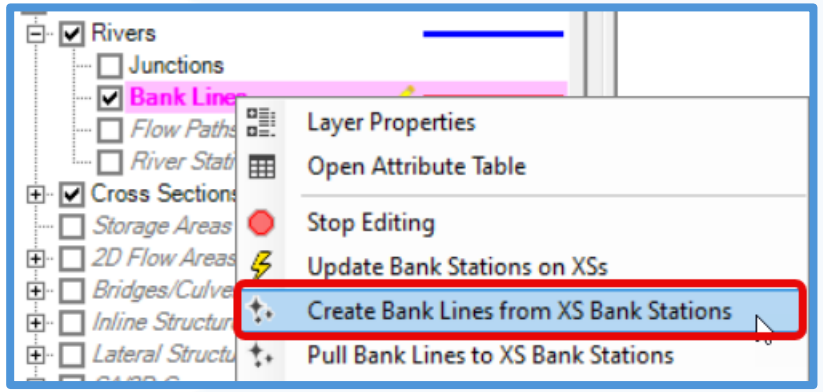
- Convert a HEC-RAS 6.x 1D model to 2D
- Export features from RAS Mapper
  - Edge Lines
  - Bank Lines
- Import them to the HEC-RAS Conceptual Mesh

HEC-RAS Mapper

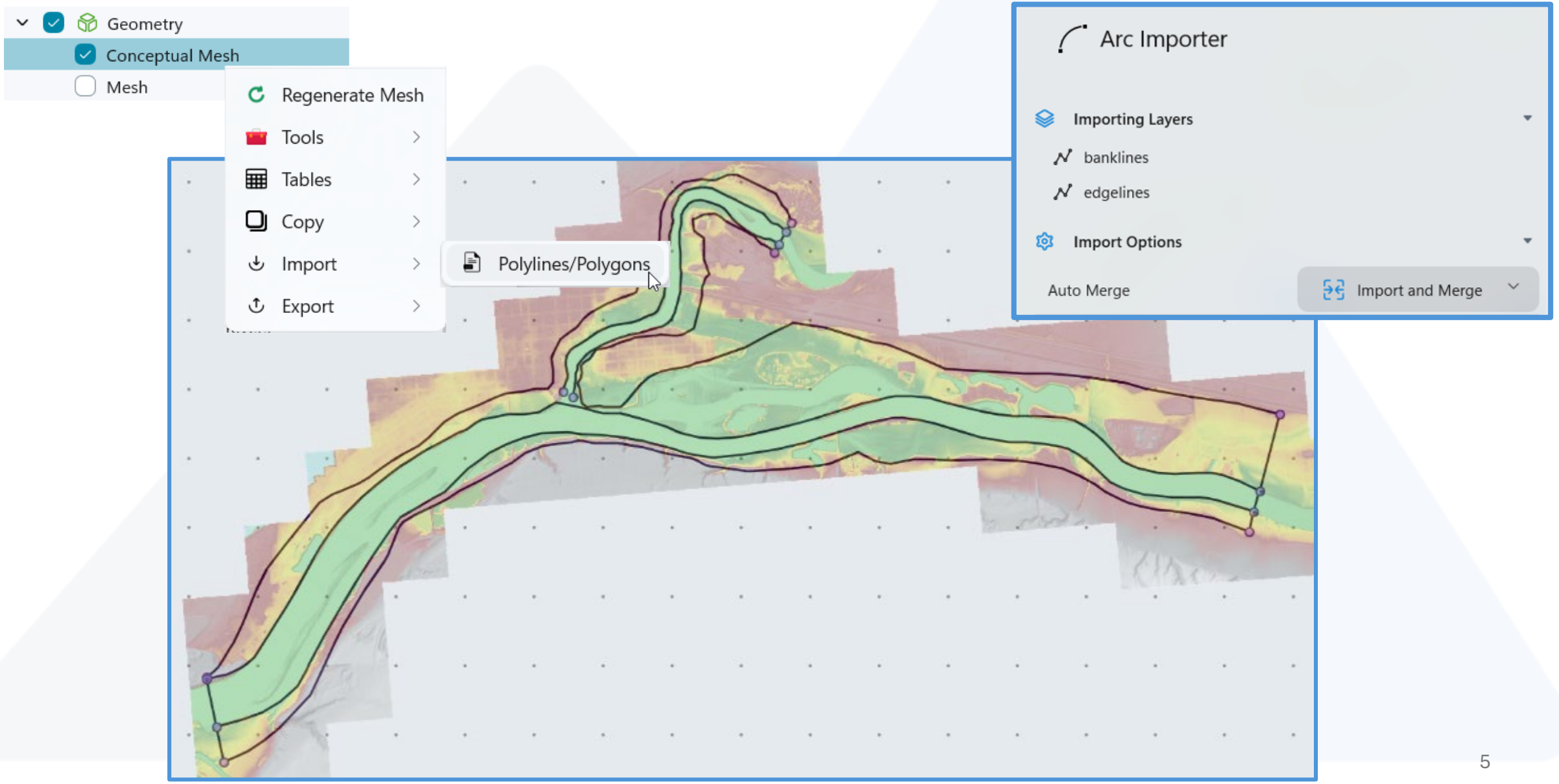
- Export a Layer
  - Cross Sections?
- Edge Lines – define model boundary or floodplain
- Bank Lines – define the river channel





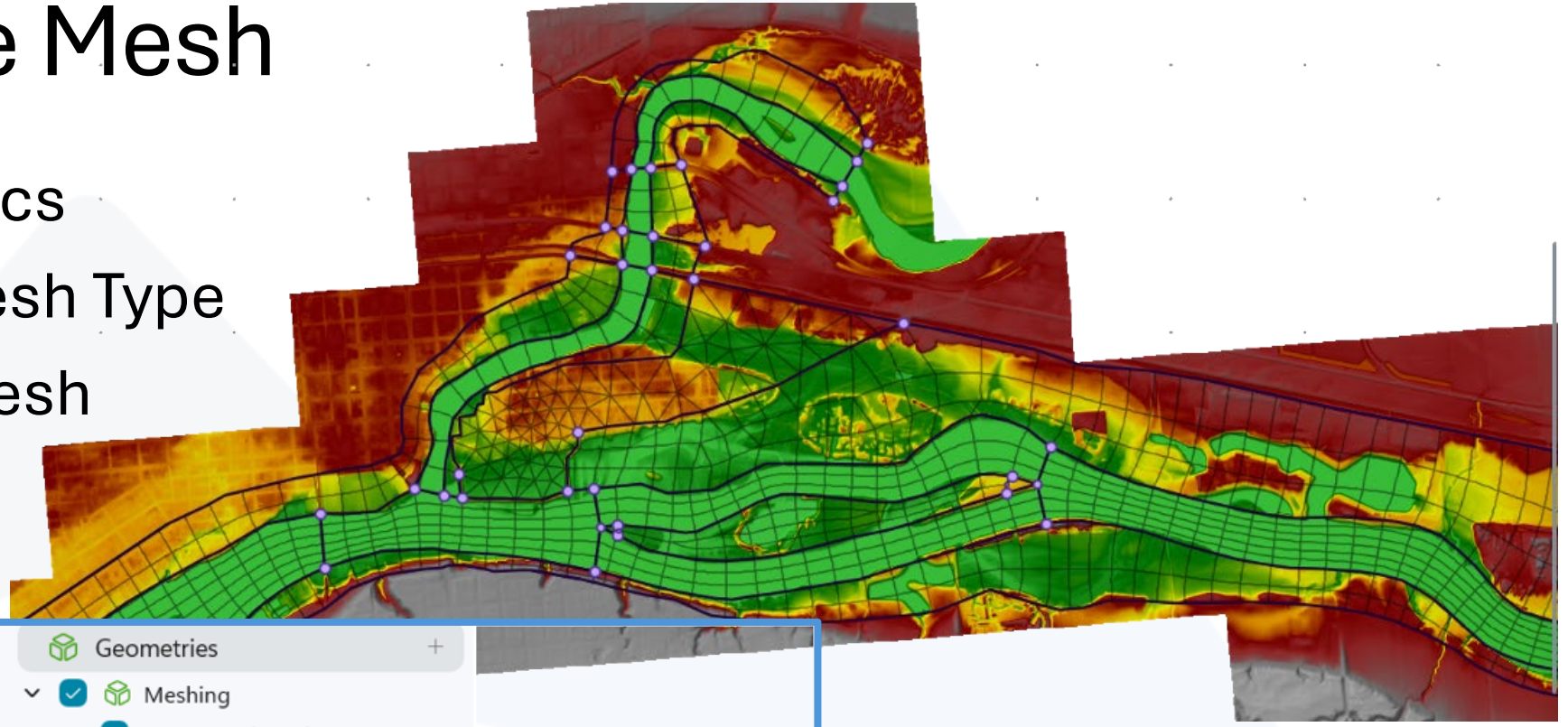


Import to Conceptual Mesh

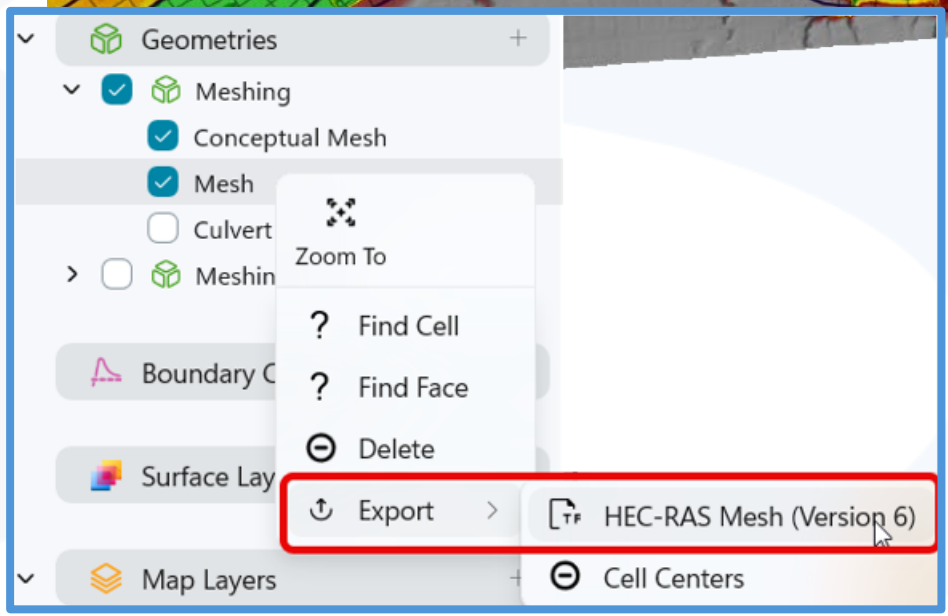


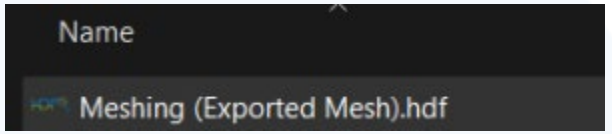
Complete the Mesh

- Add Nodes and Arcs
- Specify Region Mesh Type
- Regenerate the mesh

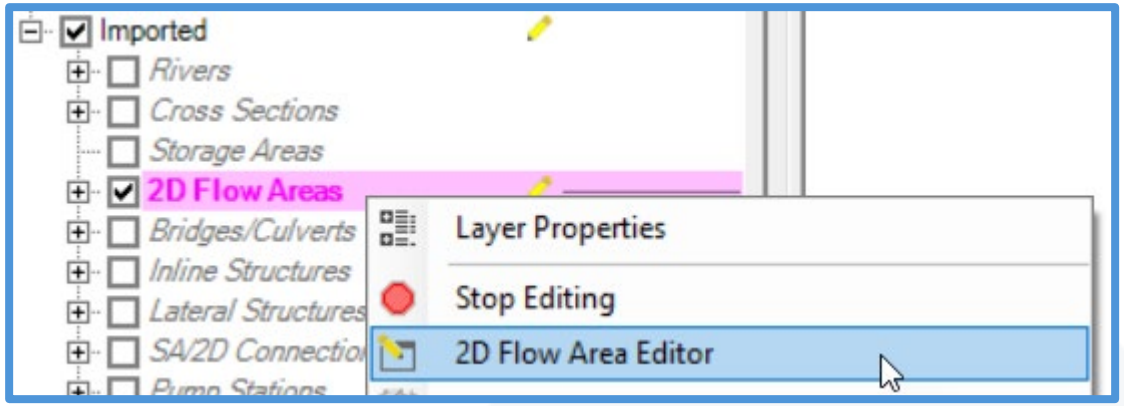


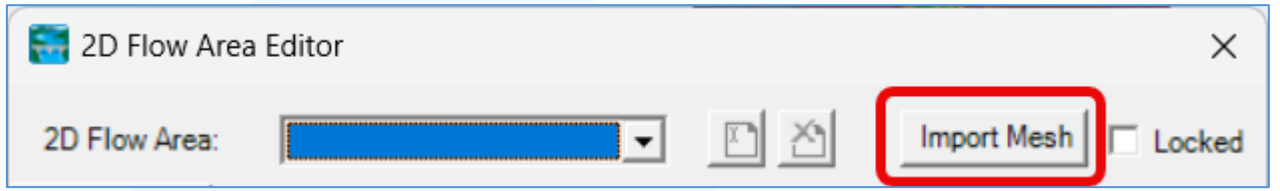
- Export the Mesh

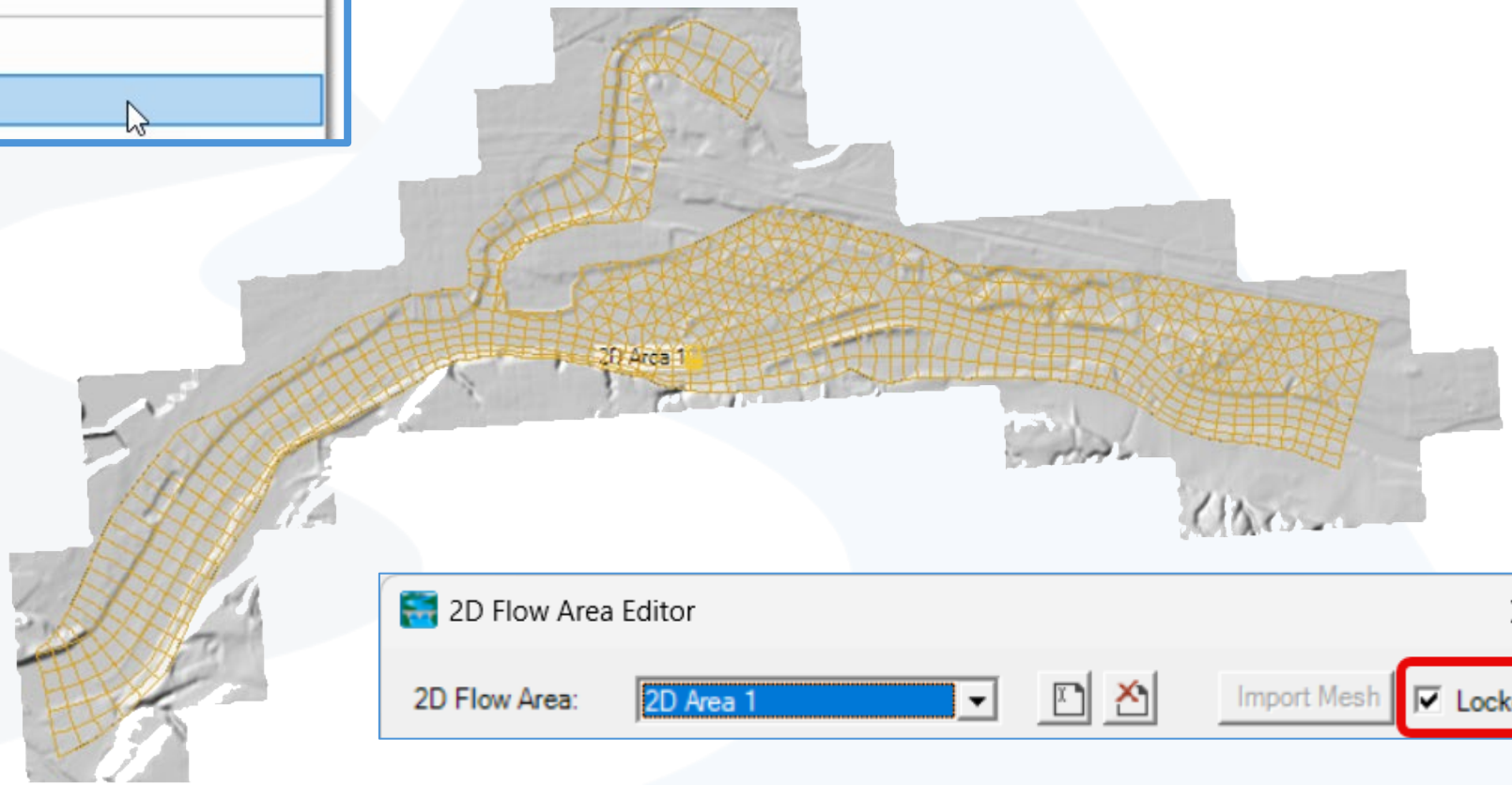




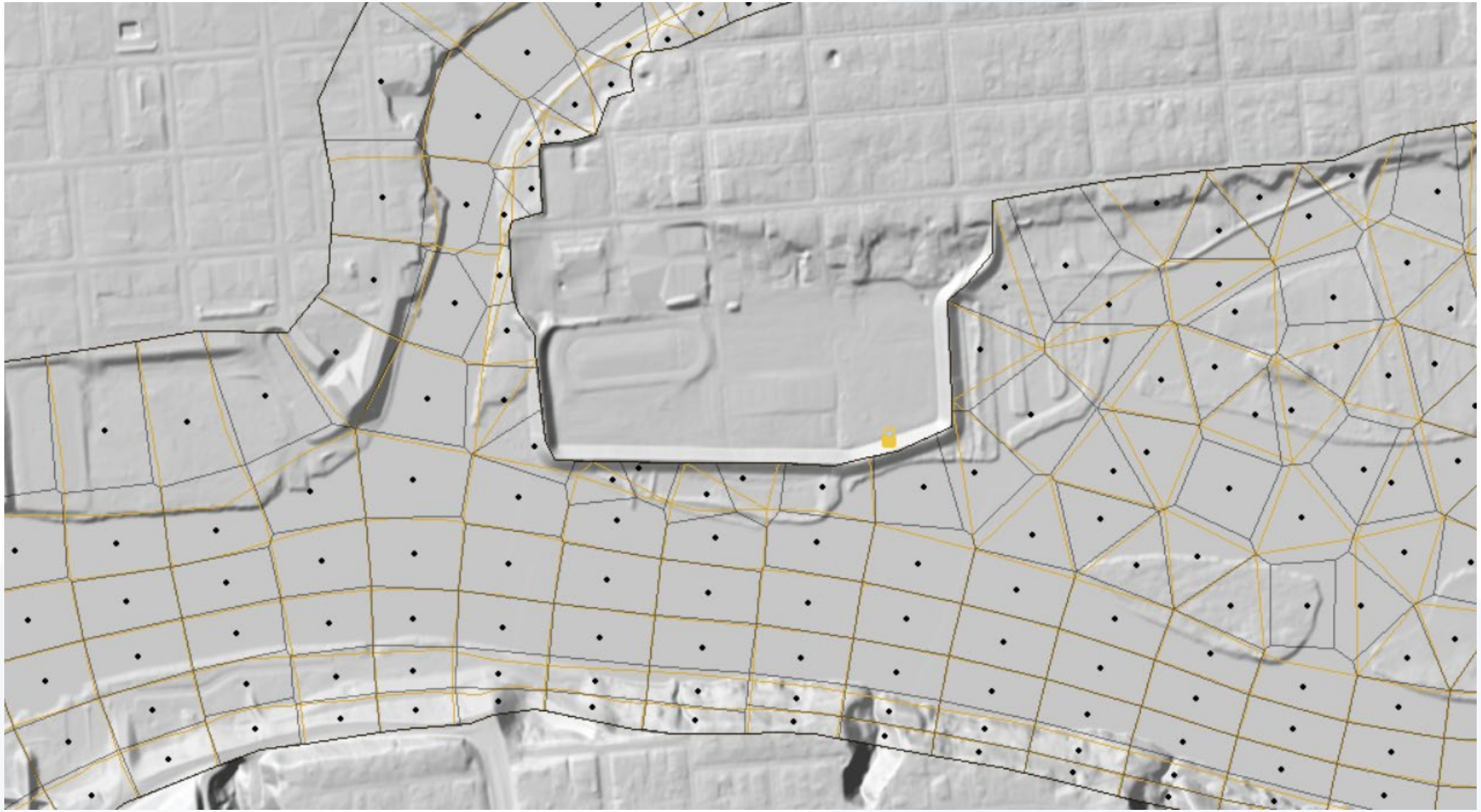
Import Mesh to HEC-RAS 6.x



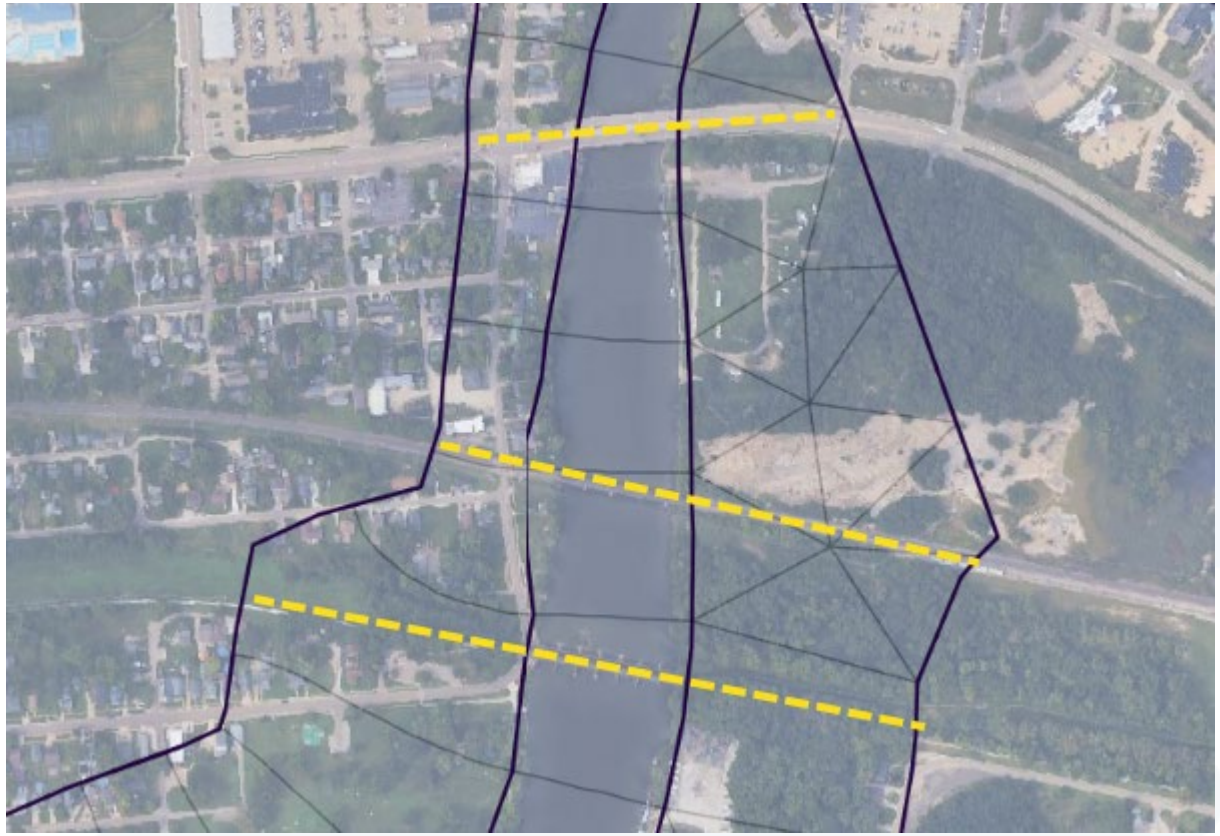




Meshing in 6.x is NOT same in HEC-RAS 2025

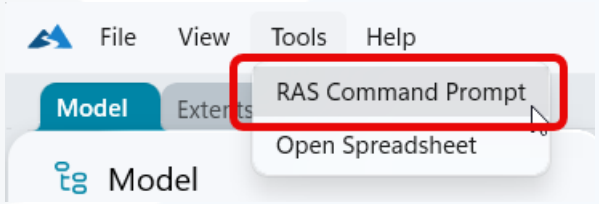


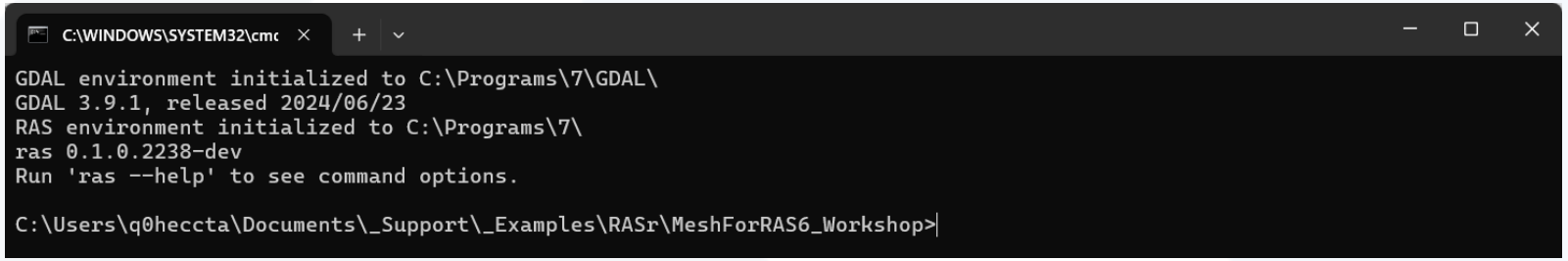
Bridge Locations



Results

- You can load HEC-RAS 6 results to HEC-RAS 2025 for evaluation
- HEC-RAS 6 result files (.hdf) are not identical to the new format (.h5)
- RAS Command Prompt
  - Opens a CMD window to call HEC-RAS command line tools





- `migrate project -s "/path/filename.hdf" -d "."`
- Copy to the results.h5 file into the /Results directory

Results Comparison