



North Central Texas
Council of Governments

TSI H&H Model Enhancements

TSI Subarea Meeting in Burleson, September 22, 2025



Funded by the Texas General Land Office,
Community Development Block Grant,
Disaster Recovery Program.



Also Funded by the Texas Water Development Board
and Texas Department of Transportation.

Model Enhancements - Hydrology

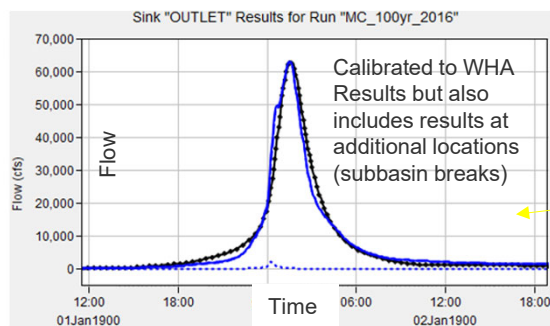
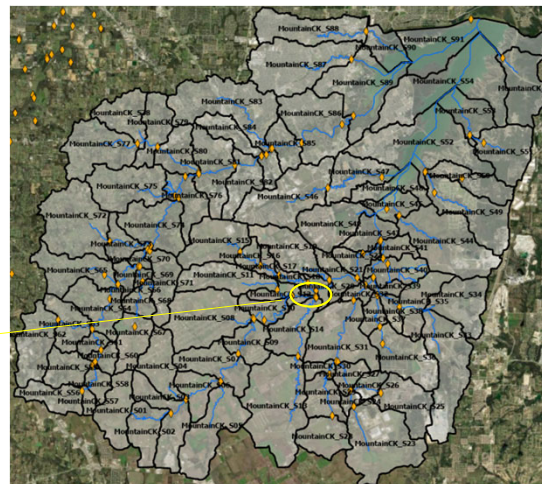
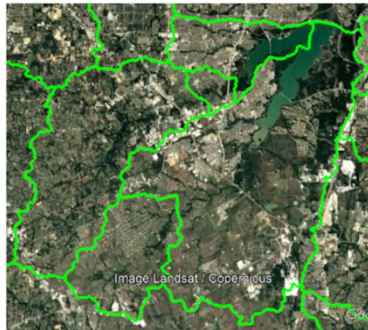
InFRM Watershed Hydrology Assessments are being enhanced.

Enhancements include:

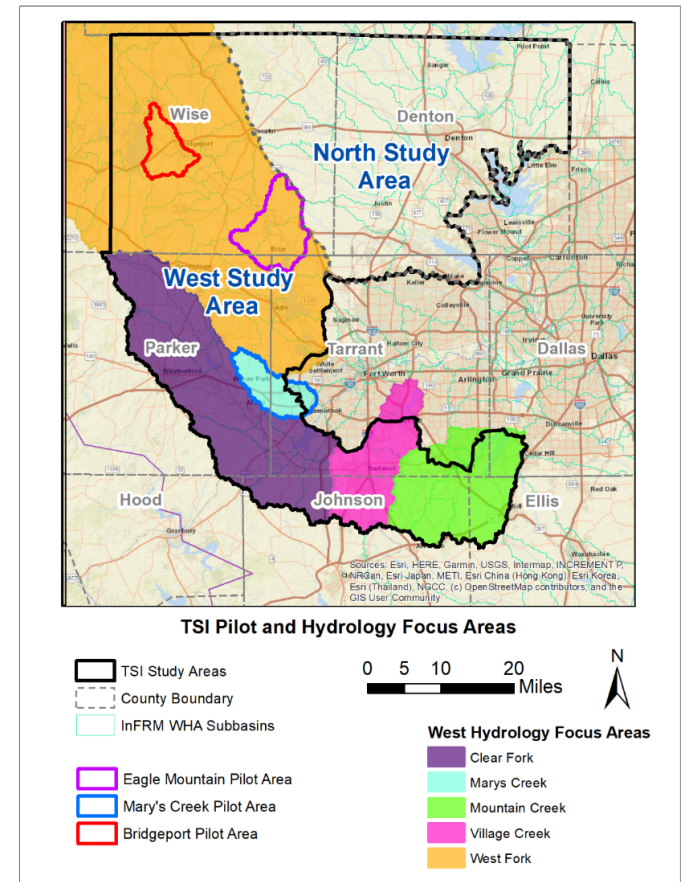
- Additional subbasins
- Future land use
- Future valley storage

Progress includes:

- Mary's Creek Completed
- Mountain Creek Completed
- Village Creek Completed
- Clear Fork Underway
- West Fork Underway



Final subbasin layout for Mountain Ck (Originally 5 subbasins)

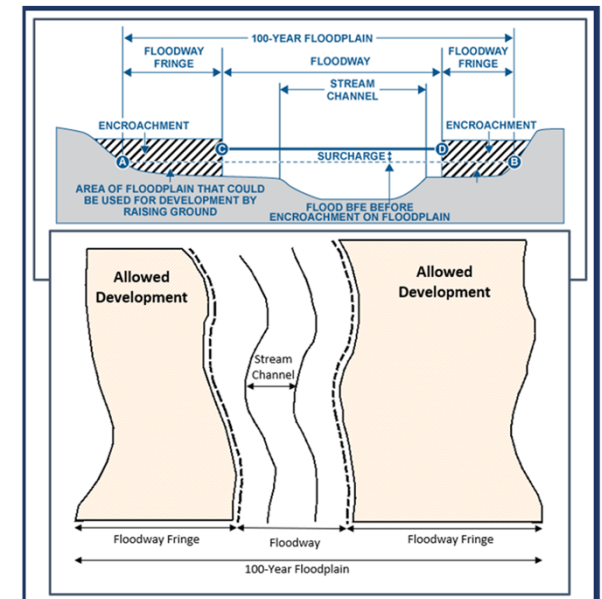
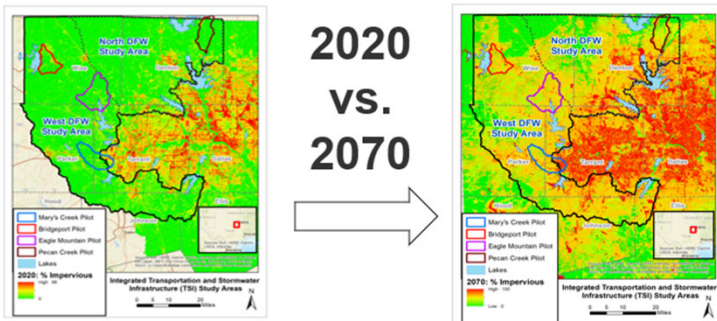


Model Enhancements - Hydrology

InFRM Watershed Hydrology Assessments are being enhanced.

Enhancements include:

- Additional subbasins
- Future land use
- Future valley storage



Model Enhancements – 1D Hydraulics

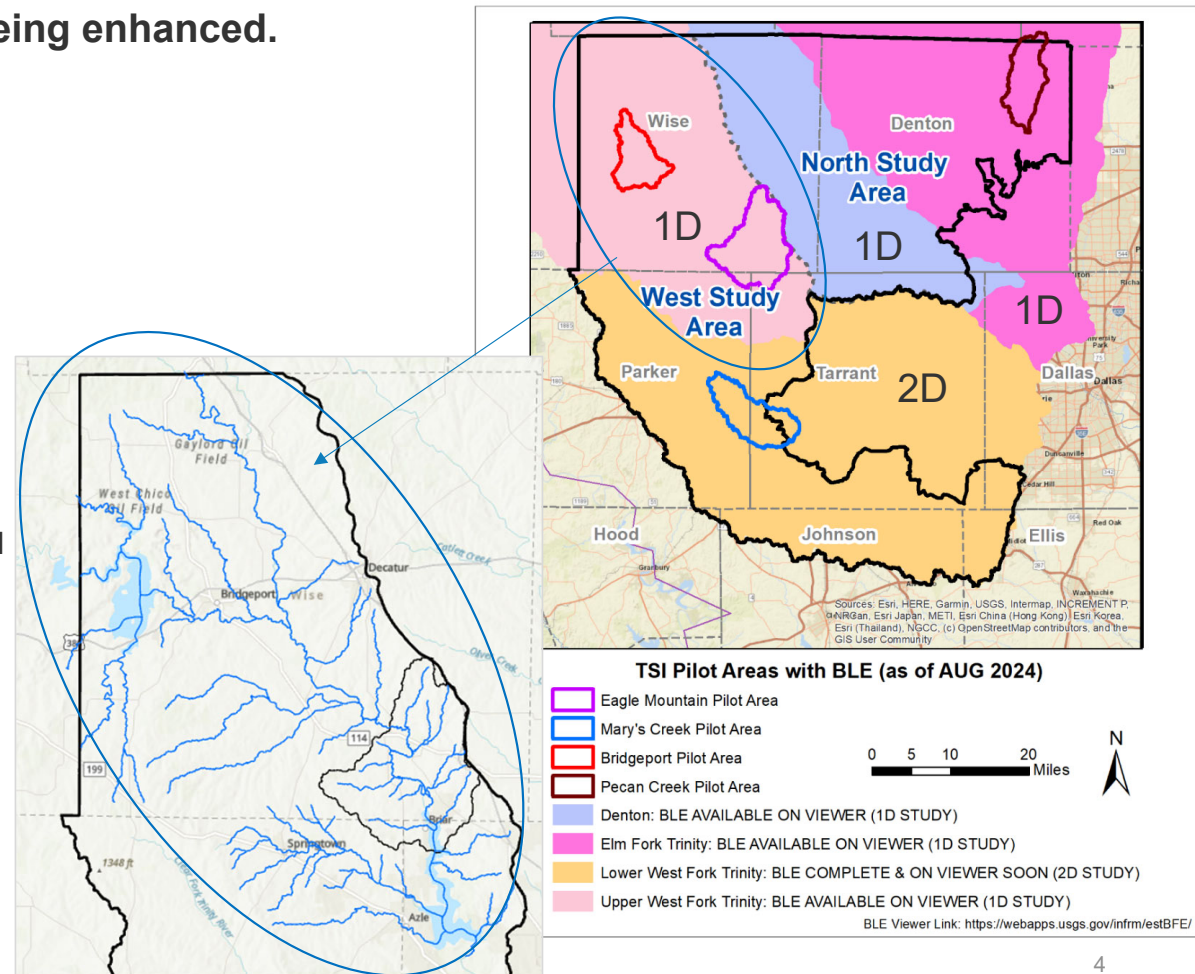
Base Level Engineering (BLE) models are being enhanced.

Enhancements include:

- Addition of TxDOT Bridges
- Future discharges
- Other enhancements
- 50+ streams

Progress includes:

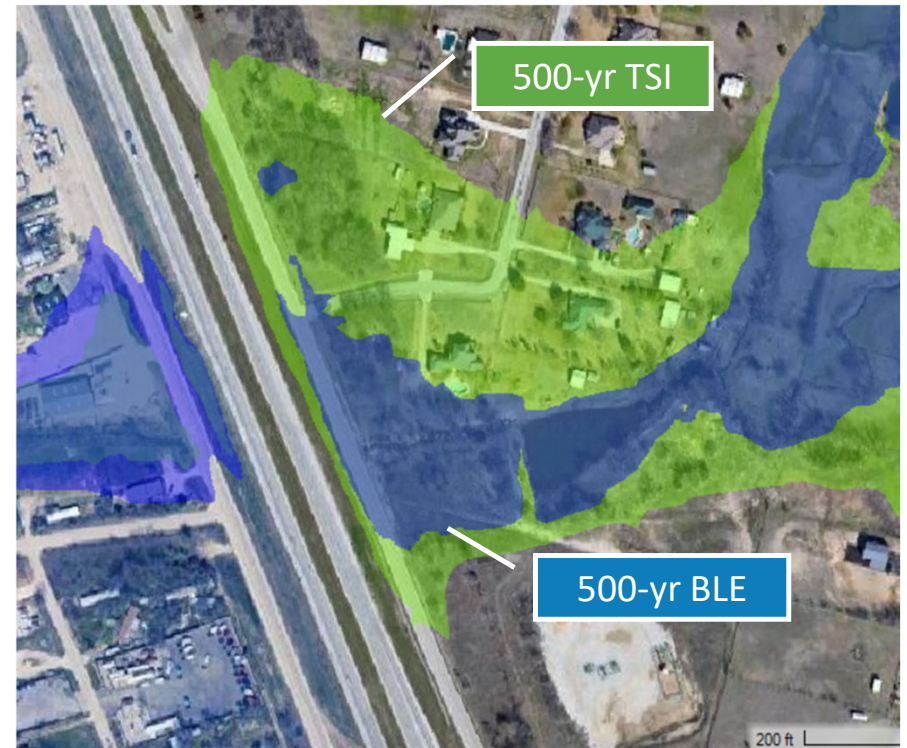
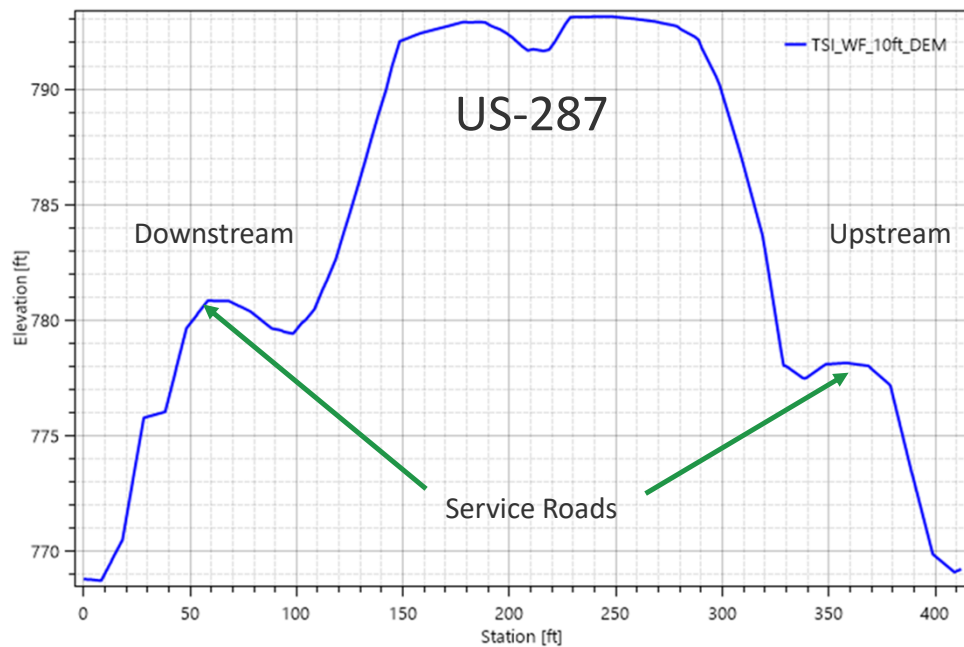
- 14 model enhancements completed
- 16 models substantially completed (need future flows)
- 1D and 2D model enhancements underway
- Coordinating 2D Future Valley Storage Approach with FNI



Model Enhancements – 1D Hydraulics

Addition of TxDOT Bridges/Embankments

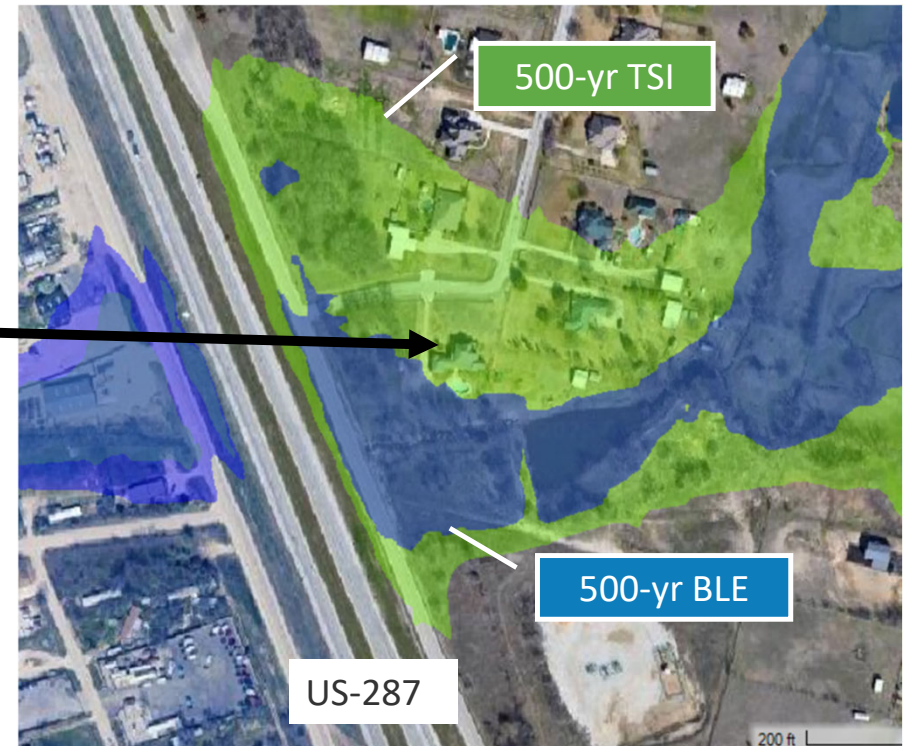
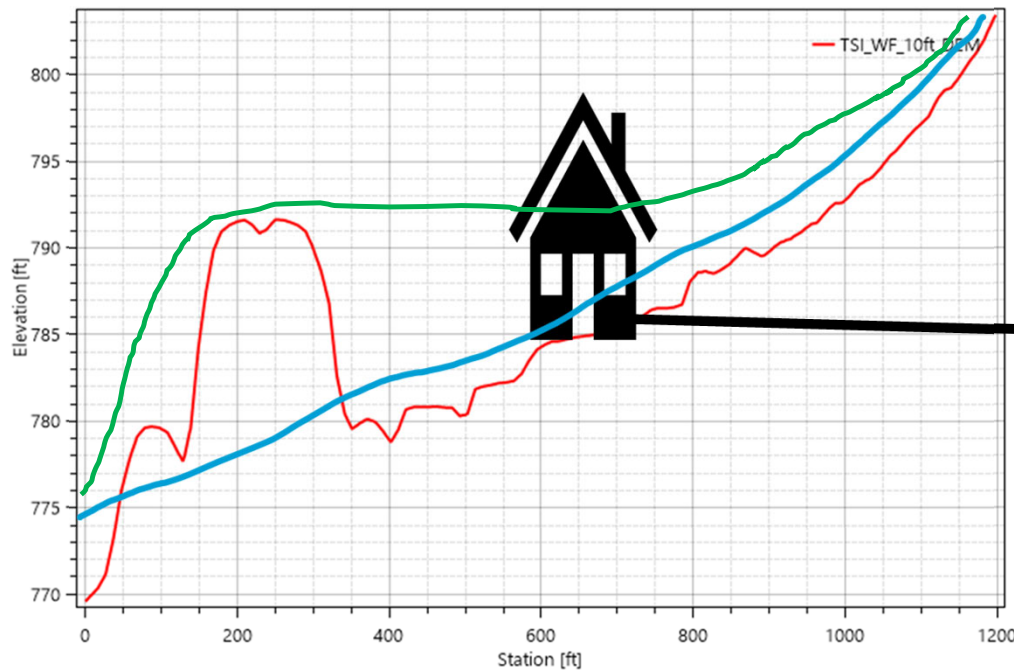
- BLE – Does not include railroad/roadway crossings



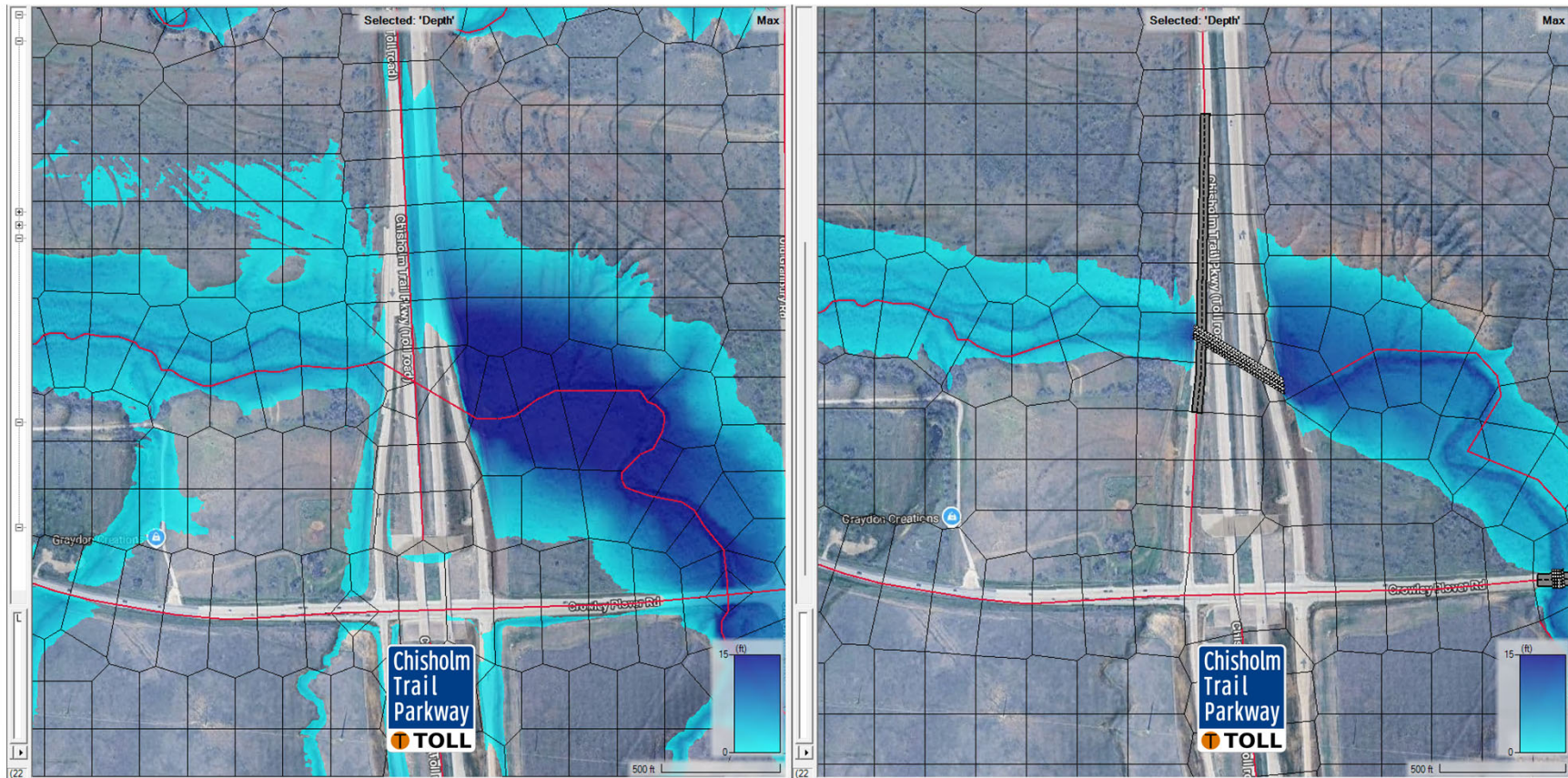
Model Enhancements – 1D Hydraulics

Addition of TxDOT Bridges/Embankments

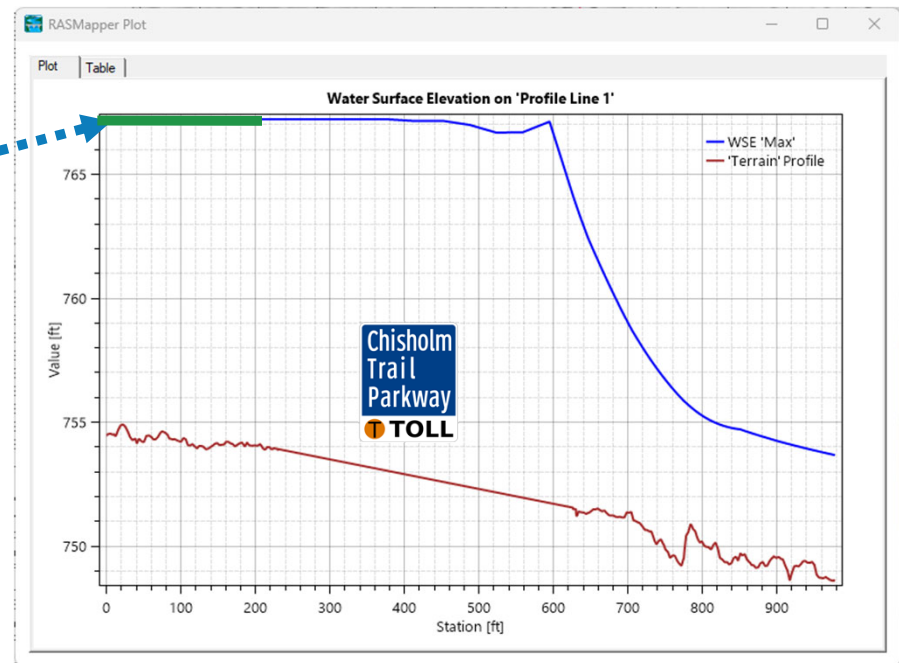
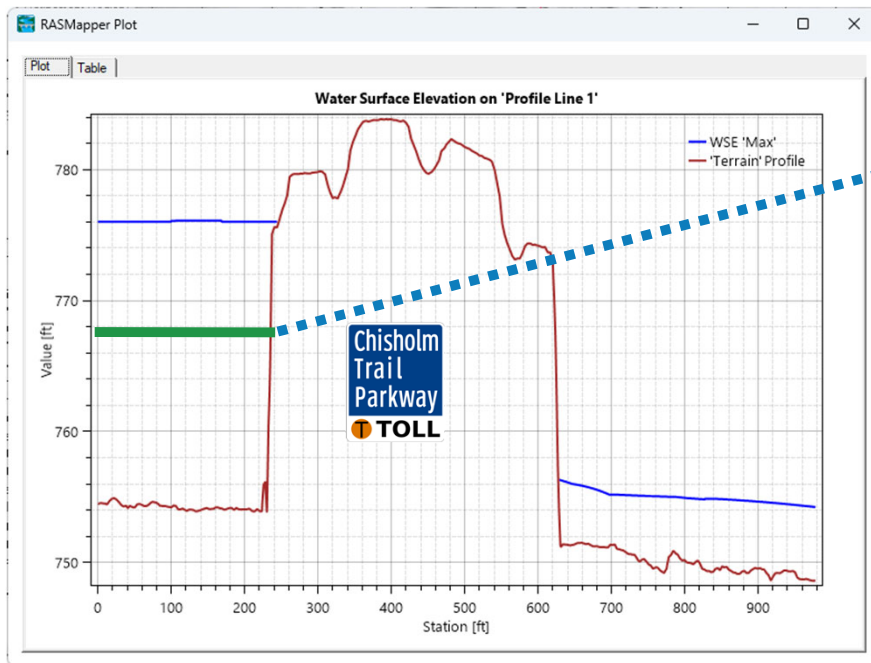
- BLE – Does not include railroad/roadway crossings
- 500-year elevation increased 10 feet



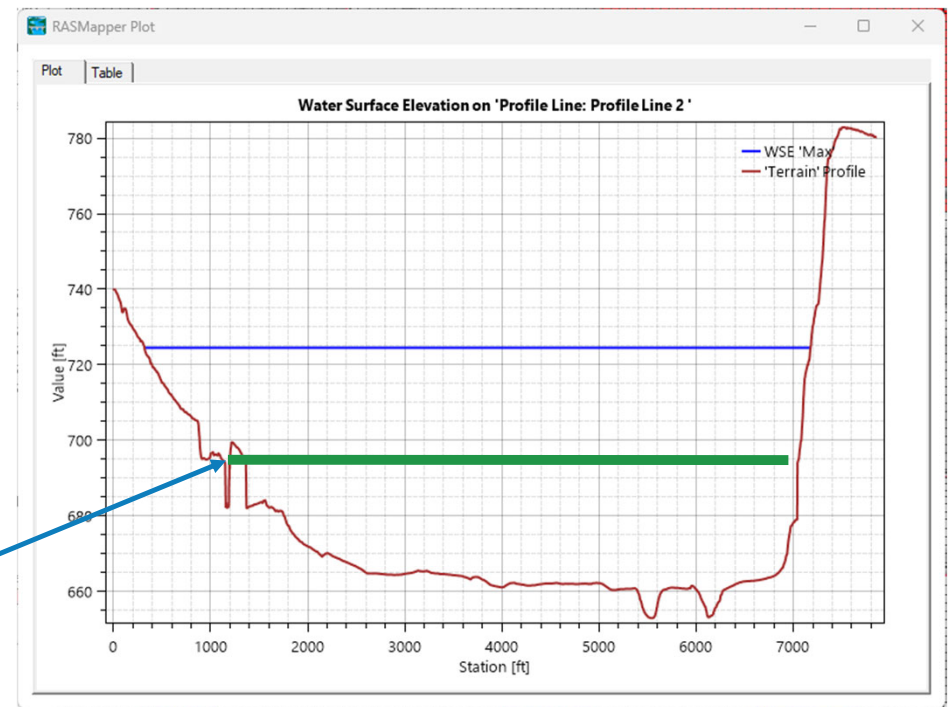
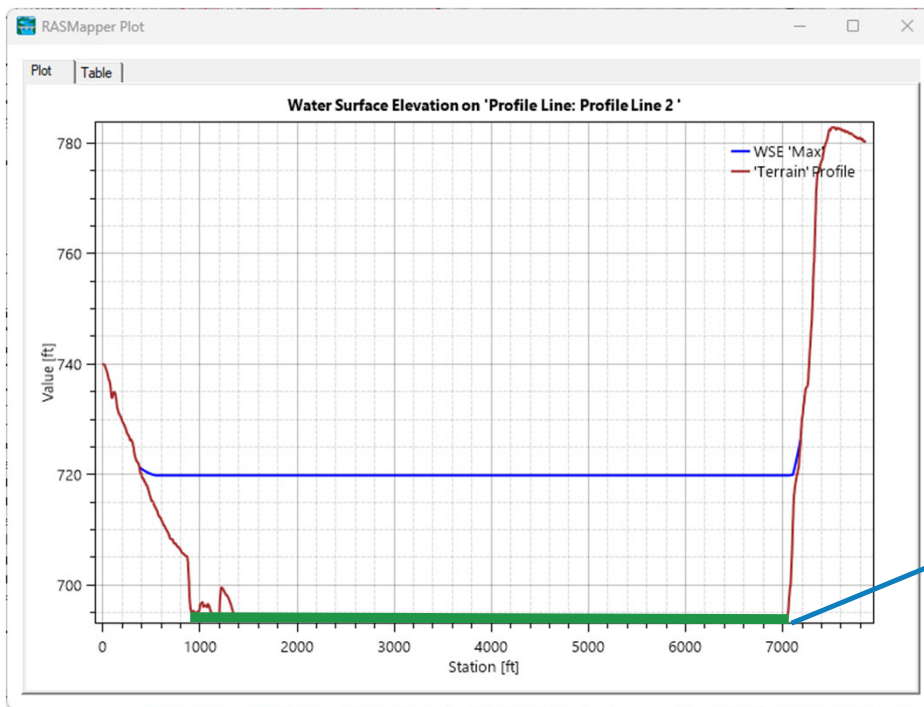
Model Enhancements – 2D Hydraulics



Model Enhancements – 2D Hydraulics



Model Enhancements – 2D Hydraulics



Model Enhancements – 2D Hydraulics

