



North Central Texas
Council of Governments

Future Valley Storage

September 2025



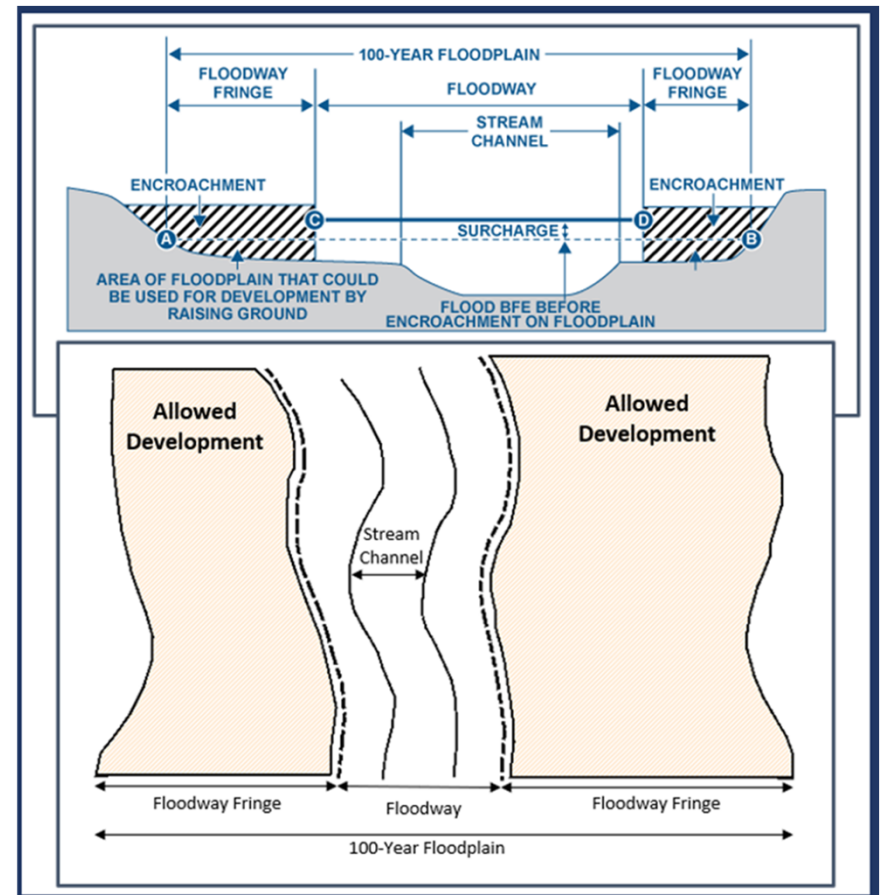
Funded by the Texas General Land Office,
Community Development Block Grant,
Disaster Recovery Program.



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

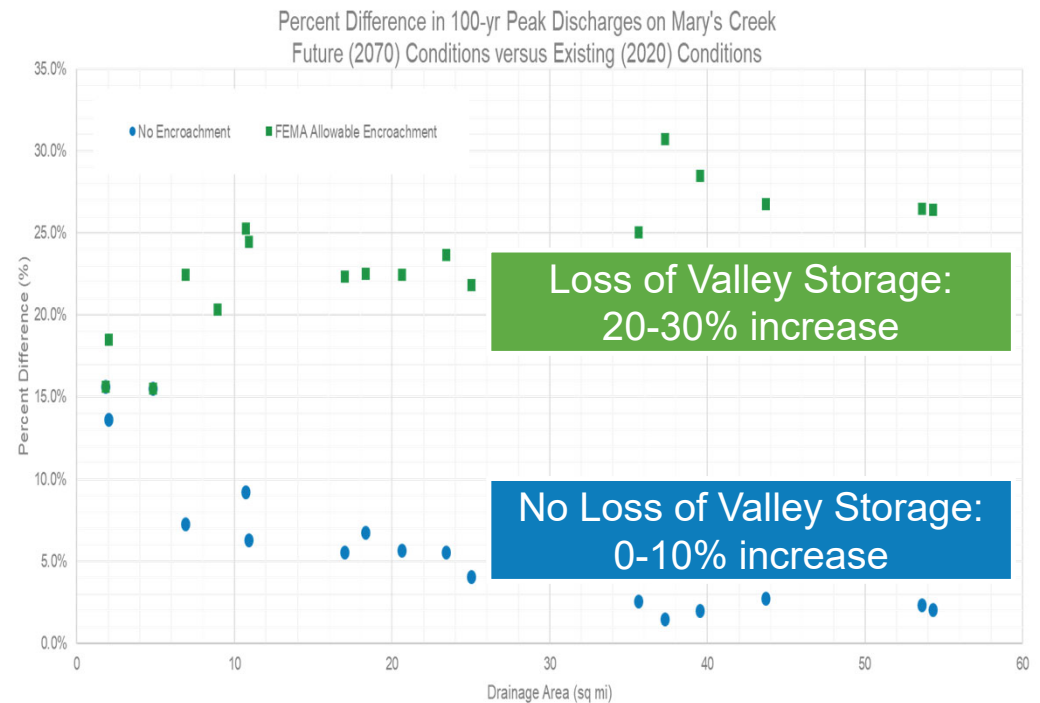
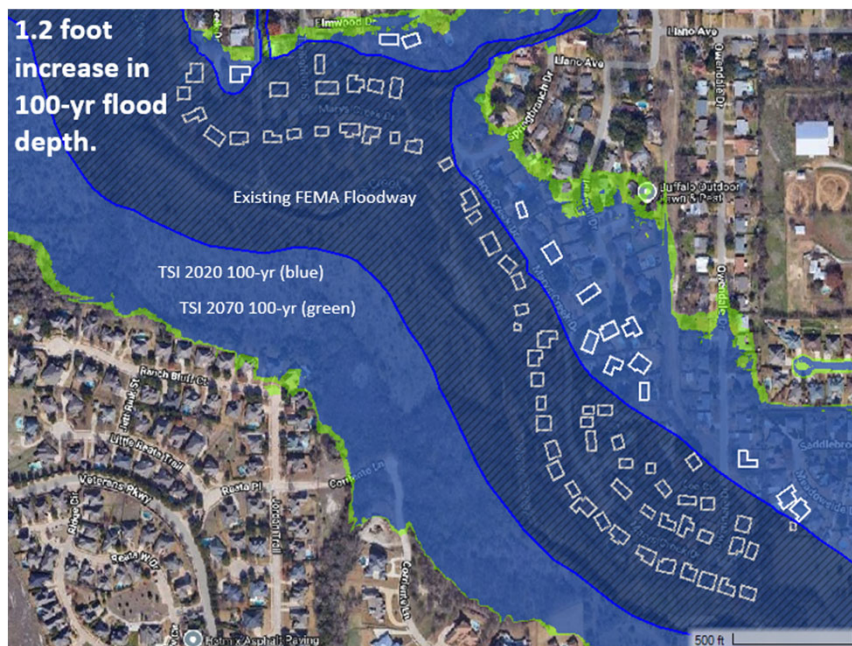
Preliminary Findings on Valley Storage

- **Definition** – The volume of water in a river's floodplain during a flood
- **Function** – Flood water storage...like a reservoir
- **Regulation** – FEMA NFIP
 - Development allowed within Floodway Fringe
- **Impacts of Valley Storage Loss**
 - Peak flow increases
 - Peak water surface elevation increases
 - Deeper and more frequent roadway overtopping
 - Shorter flood response times
 - Life safety threat



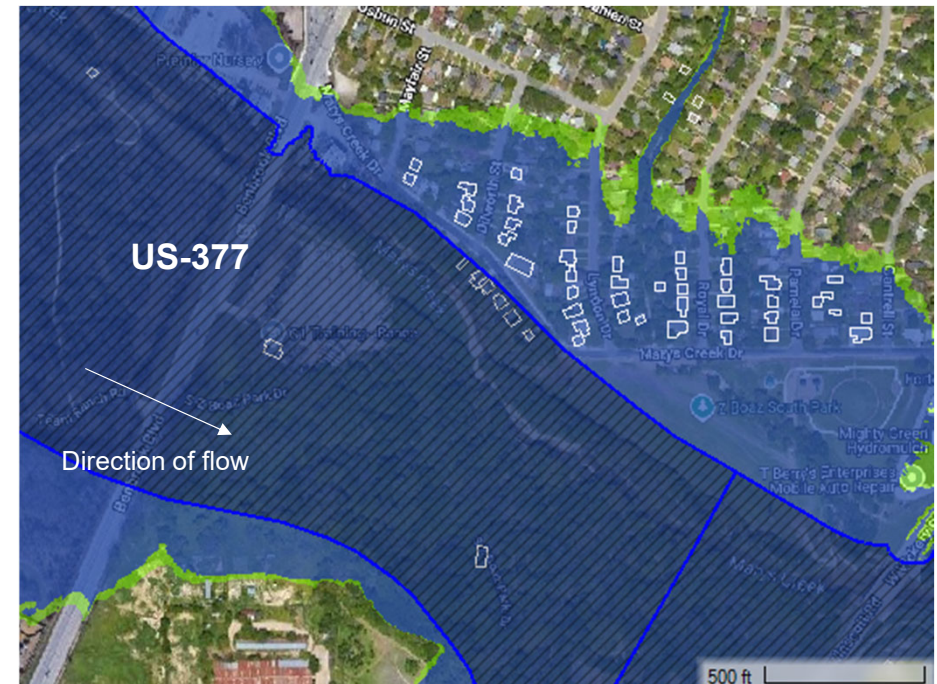
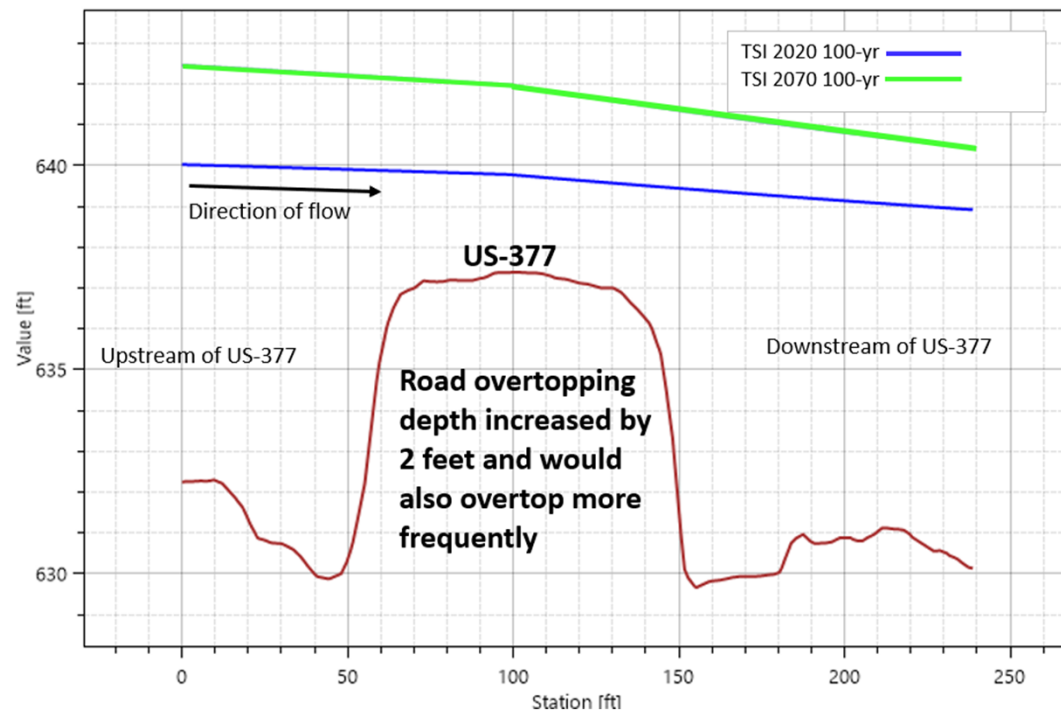
Impacts of Valley Storage Loss

- Peak flow increases
- Peak water surface elevation increases



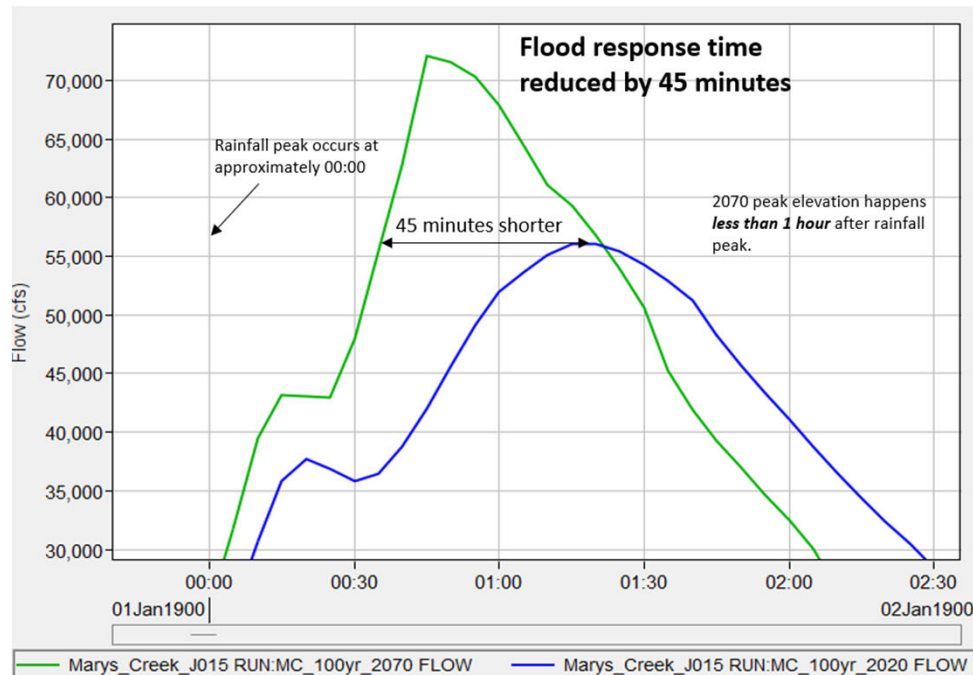
Impacts of Valley Storage Loss

- Deeper and more frequent roadway overtopping

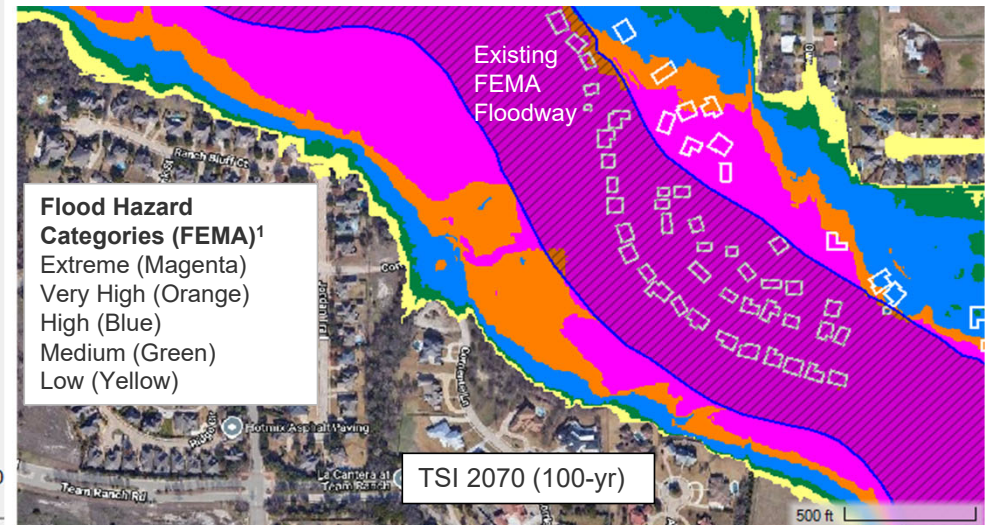


Impacts of Valley Storage Loss

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- ❖ 100-yr Flood Depths, **7-9 feet**
- ❖ 100-yr Flood Velocities, **7-10 ft/sec**



¹Federal Emergency Management Agency. Guidance for Flood Risk Analysis and Mapping: Flood Depth and Analysis Rasters. FEMA, Dec. 2024

Preliminary Findings on Valley Storage

• Impacts of Valley Storage Loss

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The infrastructure we've built may not have the same level of service/safety intended...



Photo courtesy of Tarrant Regional Water District