

## Flood Characteristics

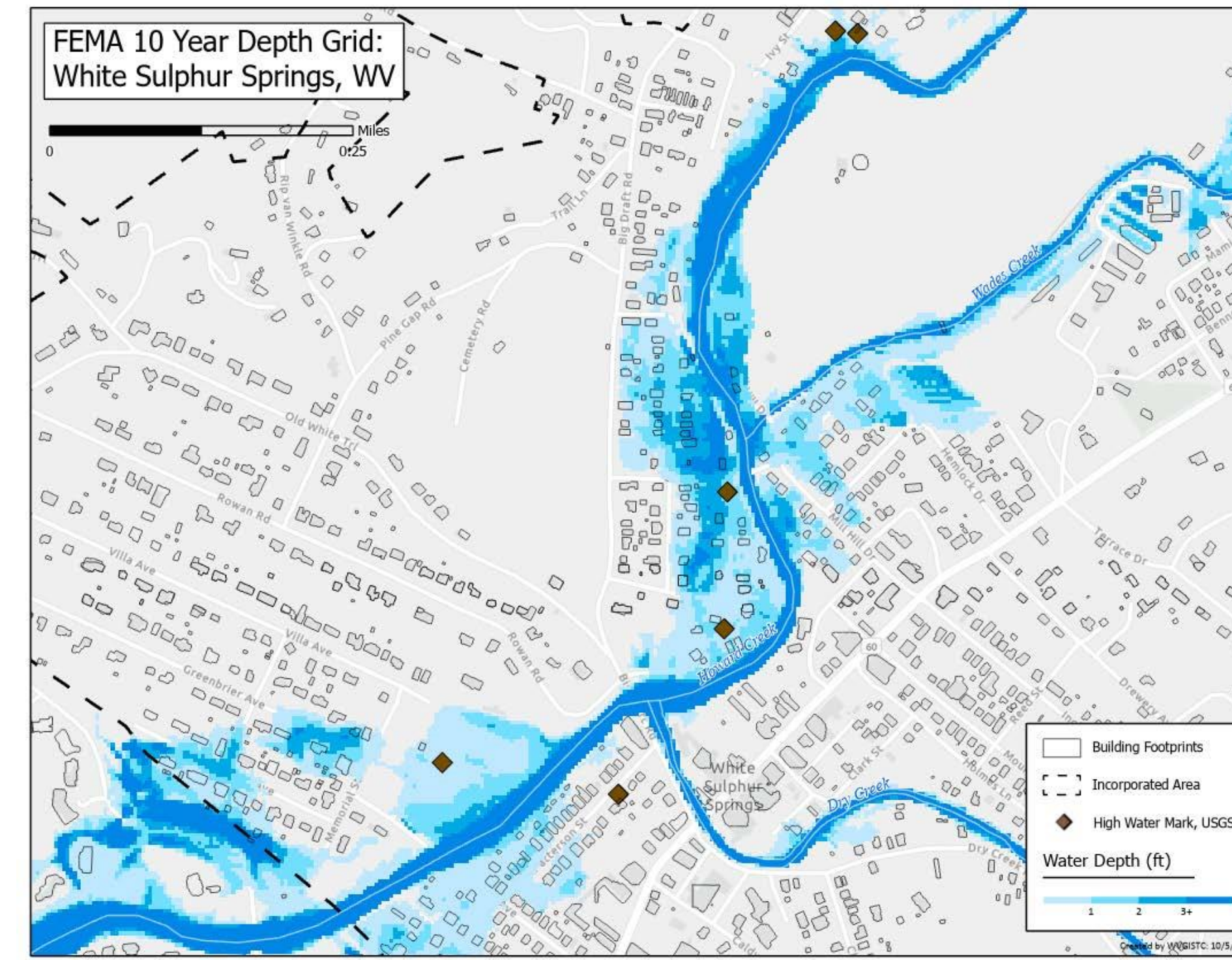
Category	Flood Characteristic	White Sulphur Springs	Rainelle
Frequency (new flood maps)	Probability that a flood of a specific size will be equaled or exceeded in any given year		
	FEMA Flood Models: 10-, 25-, 50-, 100-, 100+, and 500-year flood elevations. FEMA's 1%+ flood elevations measure how high the 100-year flood could be given the statistical uncertainties in flood modeling (upper 84-percent confidence limit).	See models	See models
Depth	First Street Foundation Flood Models: 5-, 20-, 100-, and 500-year flood elevations. Climate models based on 2052 or 30 years in the future.	See models	See models
	Flood depth or water surface elevation above the ground surface. Source USGS high-water marks.	6 feet	8 feet
Velocity	Speed at which the floodwaters are flowing	High	Moderate
Duration	Measure of how long water remains above normal levels	24 hours	72 hours
Rise and Fall	Floodwater that rises very quickly with little or no warning	Quick Rise	Quick Rise

Notes: Flood characteristics are based on the 2016 flood and FEMA's new flood studies

## 2016 Damage Video (White Sulphur Springs)



## FEMA Flood Model: 10-Year Flood Depth

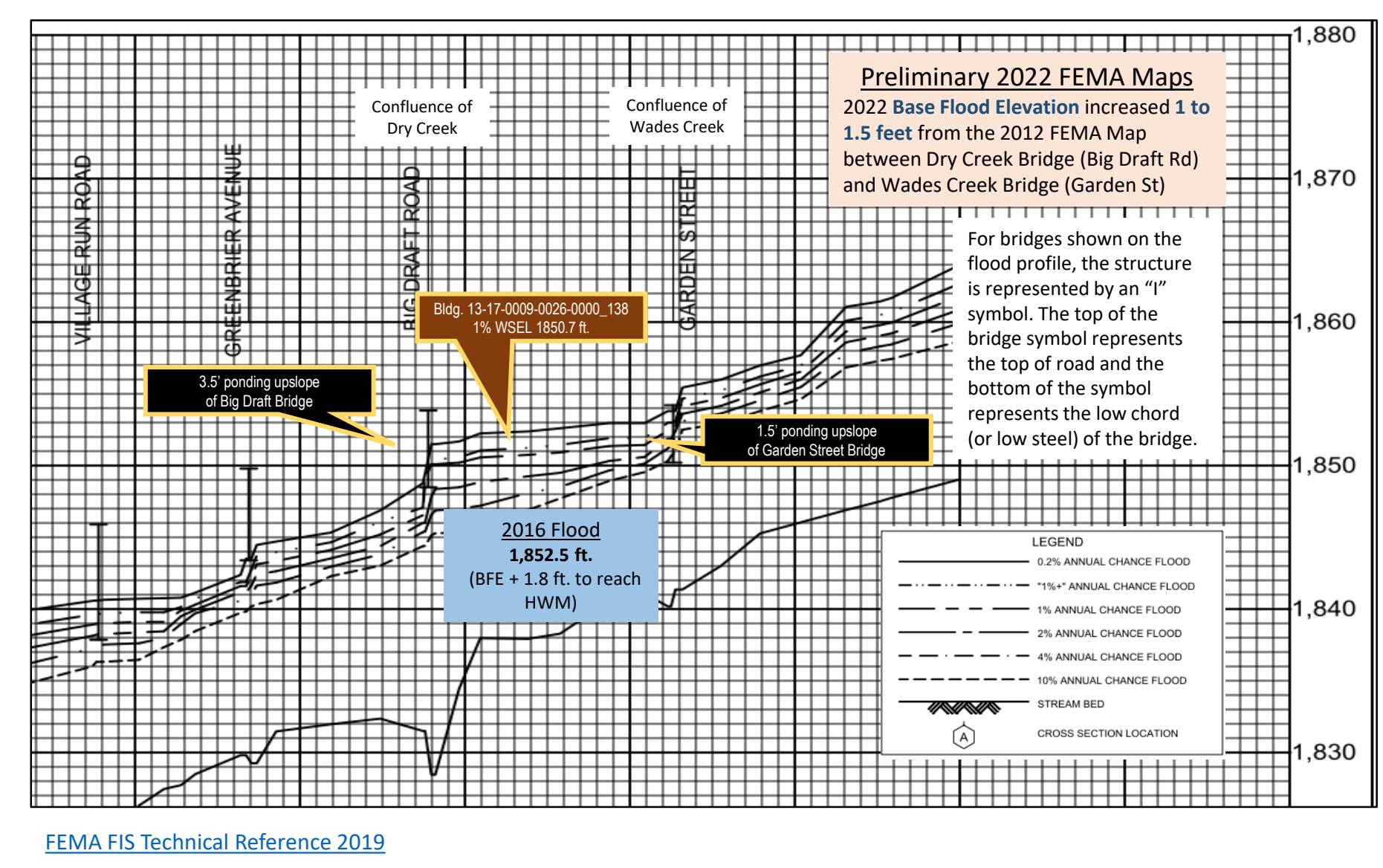


## FEMA 10% Annual Chance (10-year) White Sulphur Springs, WV

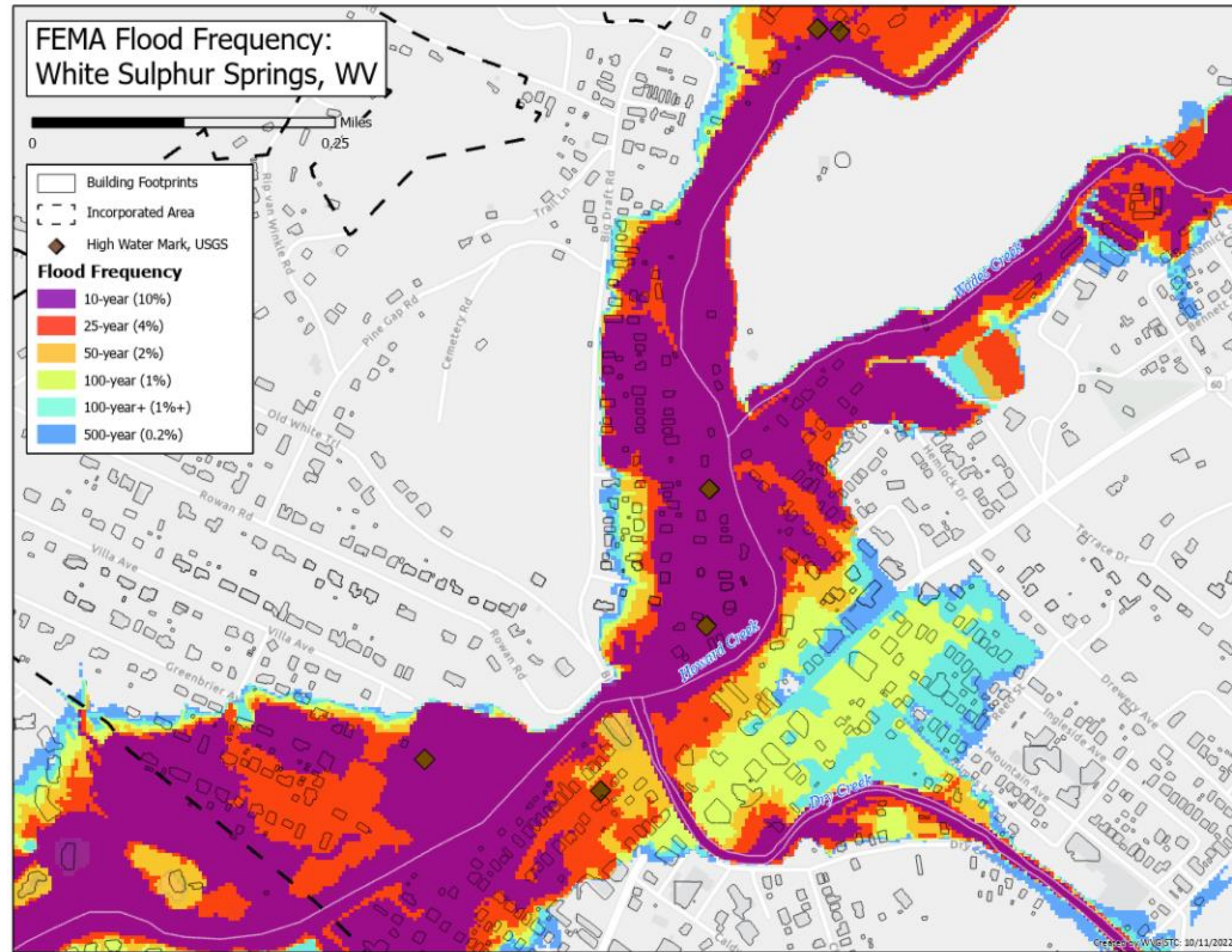


## Howard Creek Flood Study Profile

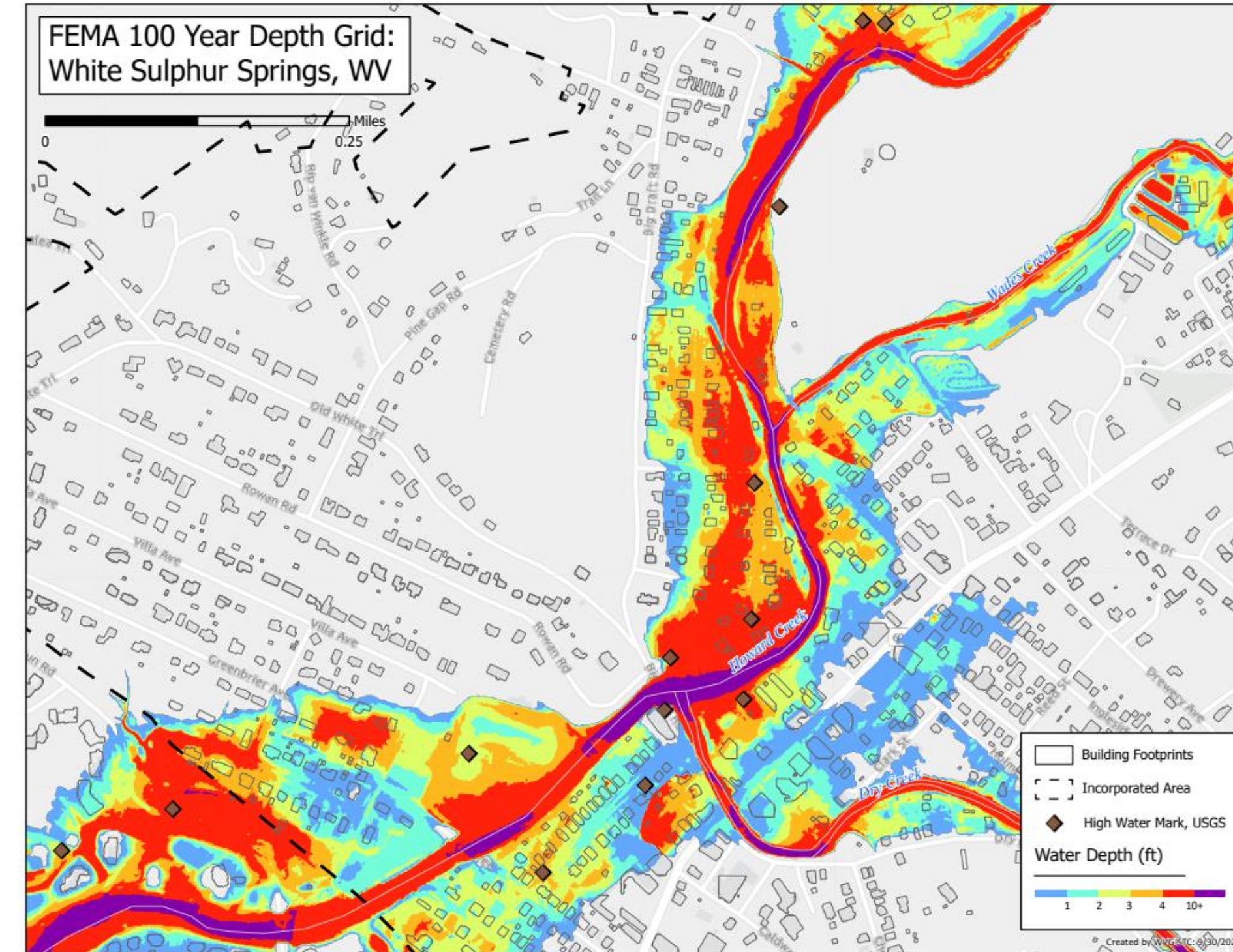
2022 Preliminary 1% Base Flood (100-Yr) Elevation 1850.7 ft for Building 13-17-0009-0026-0000\_138



## FEMA Flood Models: Likelihood and Magnitude



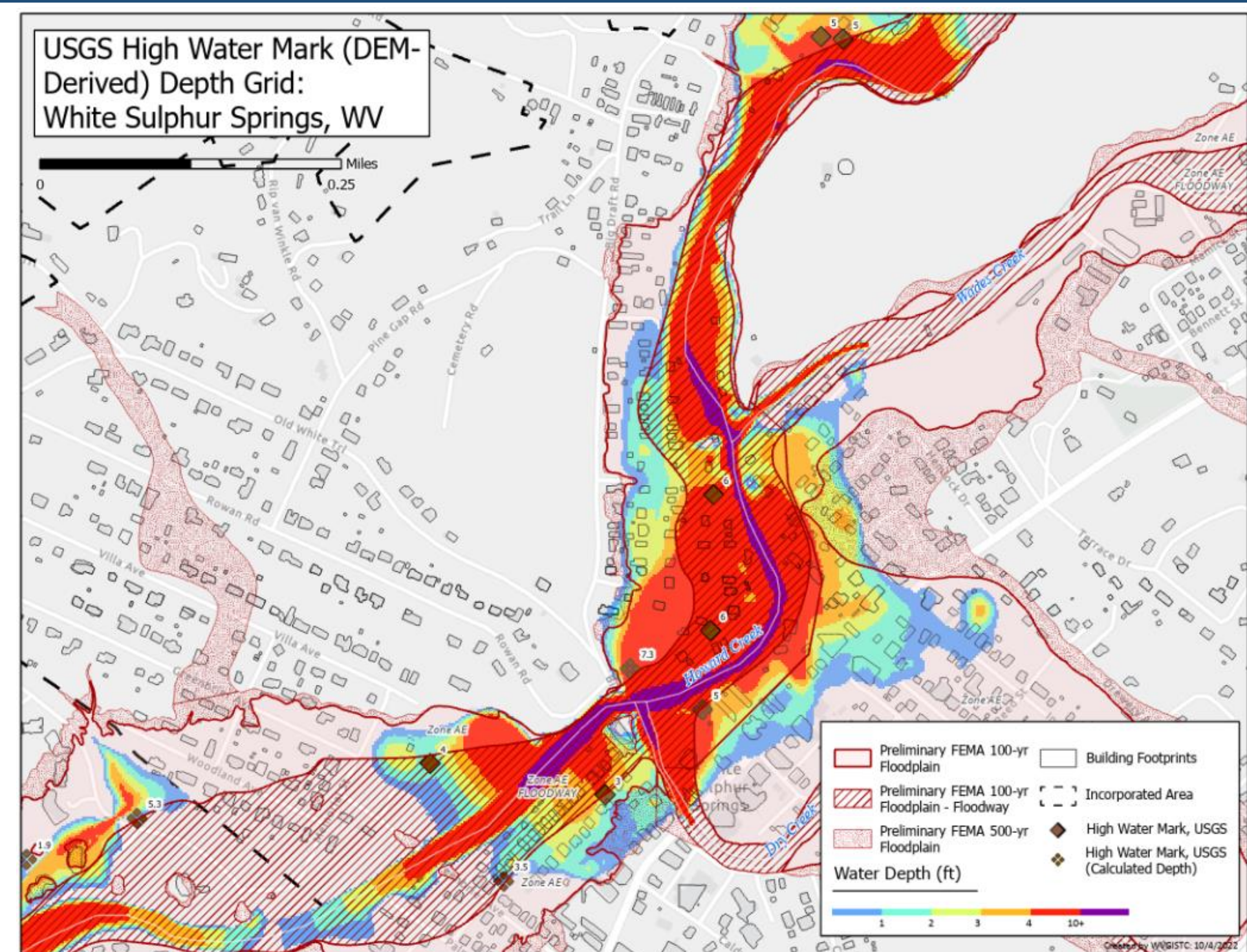
## FEMA Flood Model: 100-Year Flood Depth



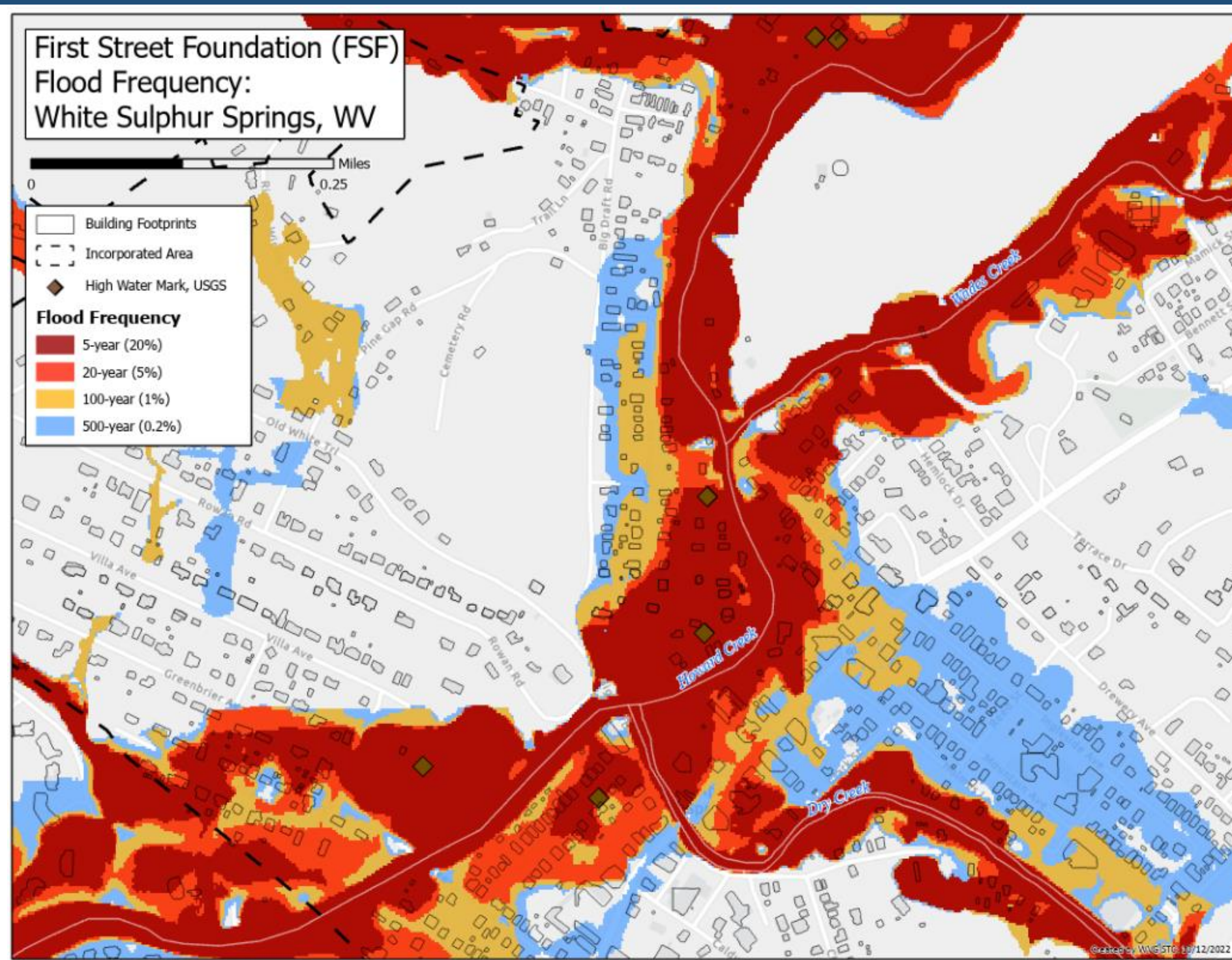
## FEMA 1% Annual Chance (100-year) White Sulphur Springs, WV



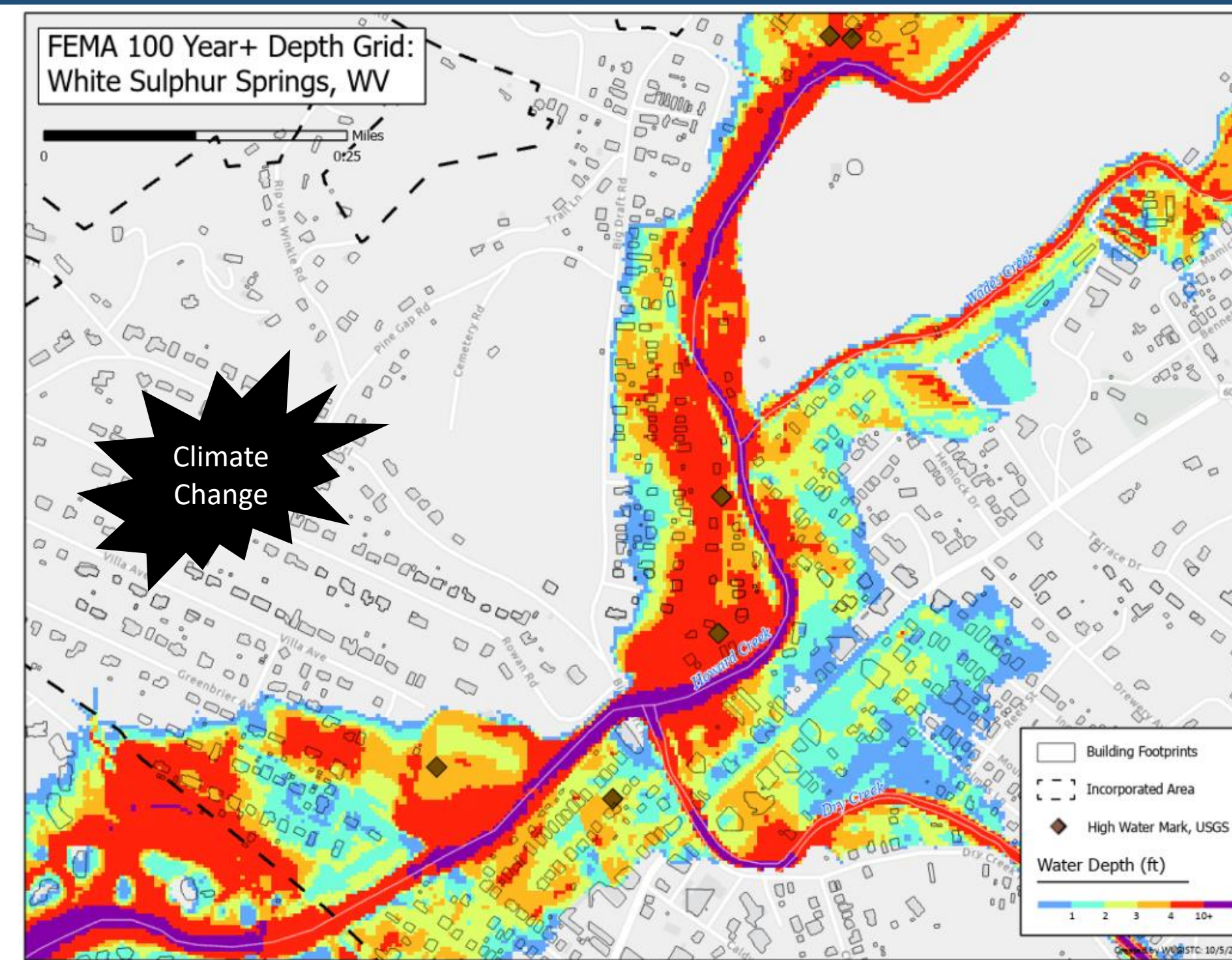
## USGS High Water Marks: 2016 Flood Depths



## FSF Flood Models: Likelihood and Magnitude



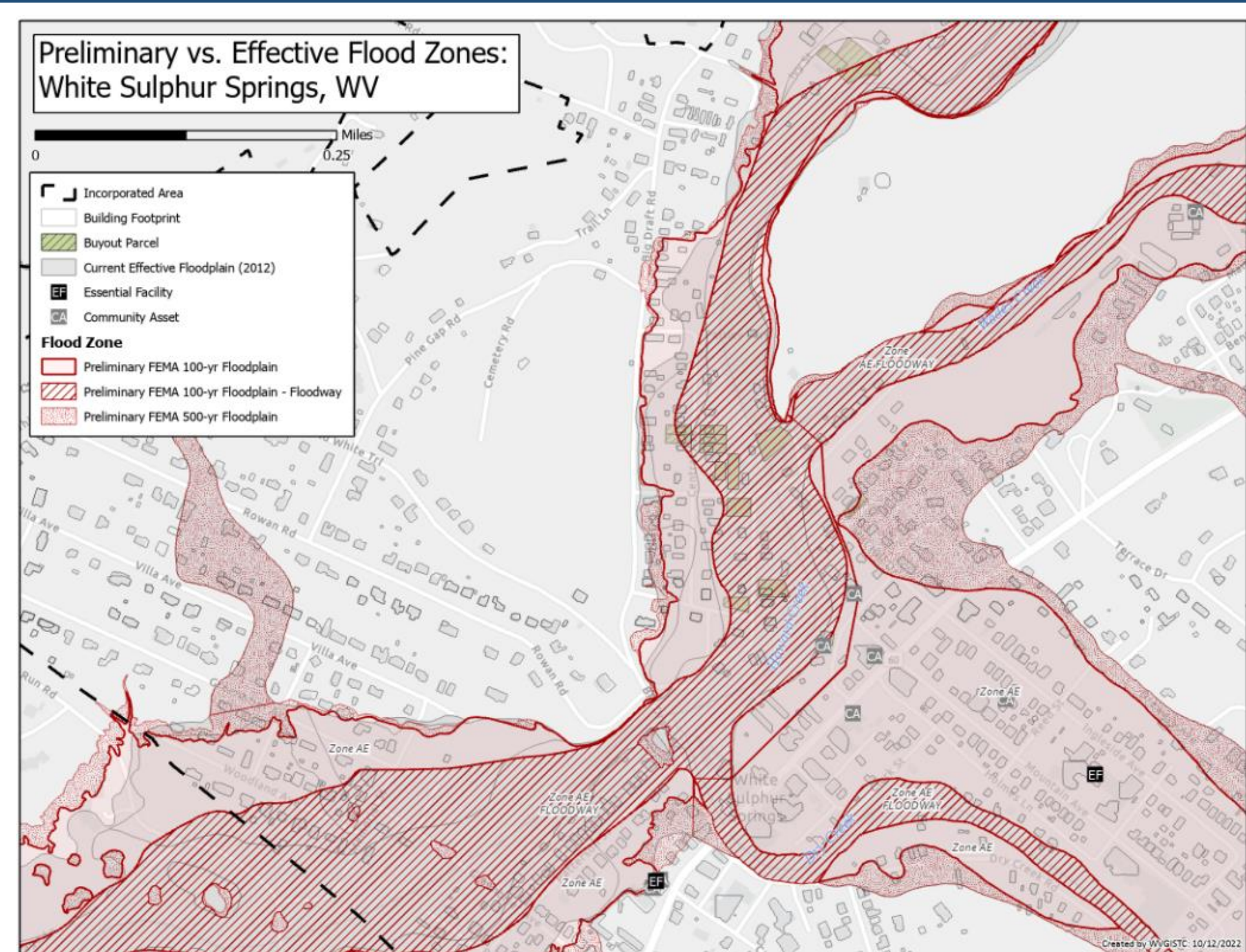
## FEMA Flood Model: 100-Year Plus Flood Depth



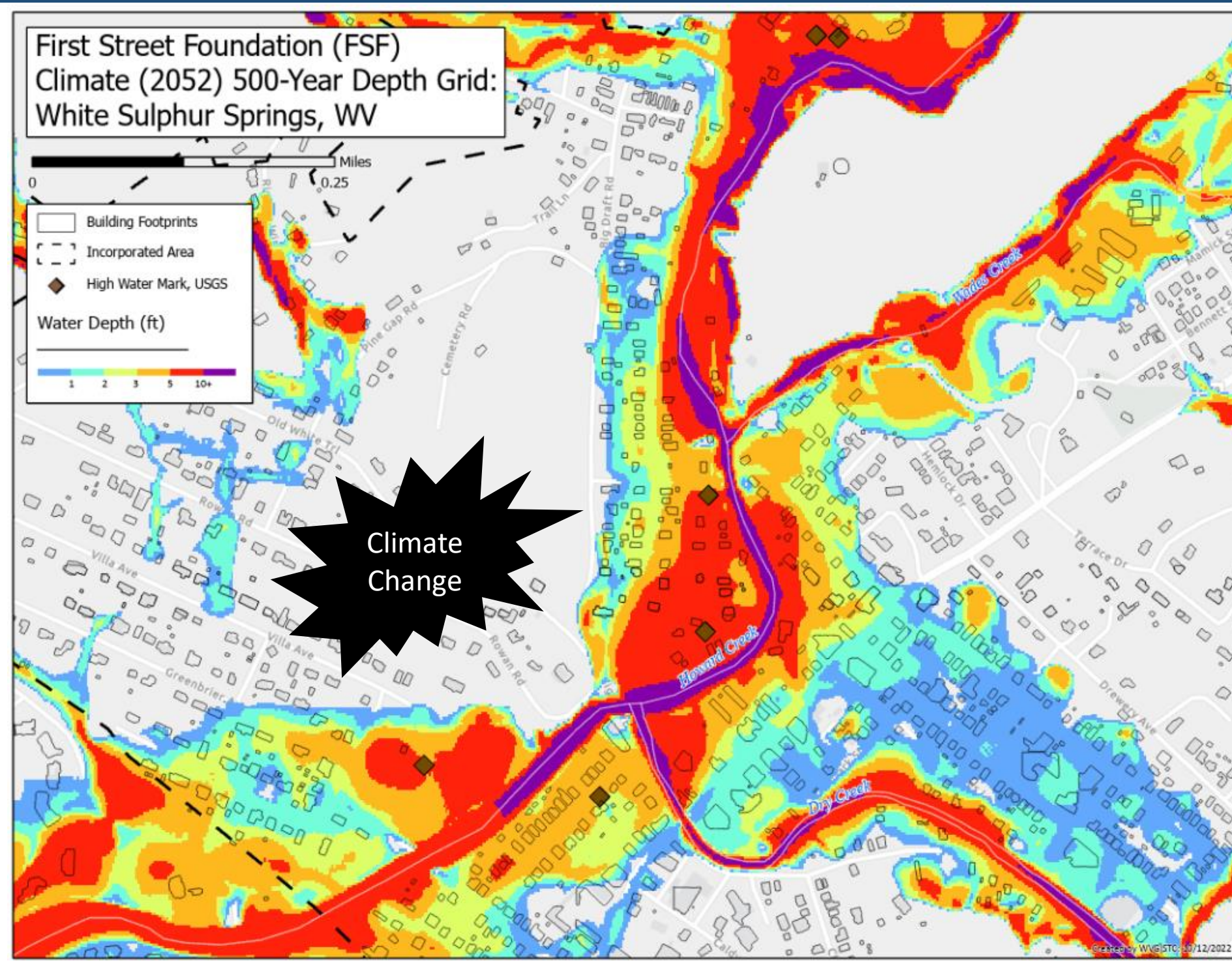
## FEMA 1%+ Annual Chance (100-year) White Sulphur Springs, WV



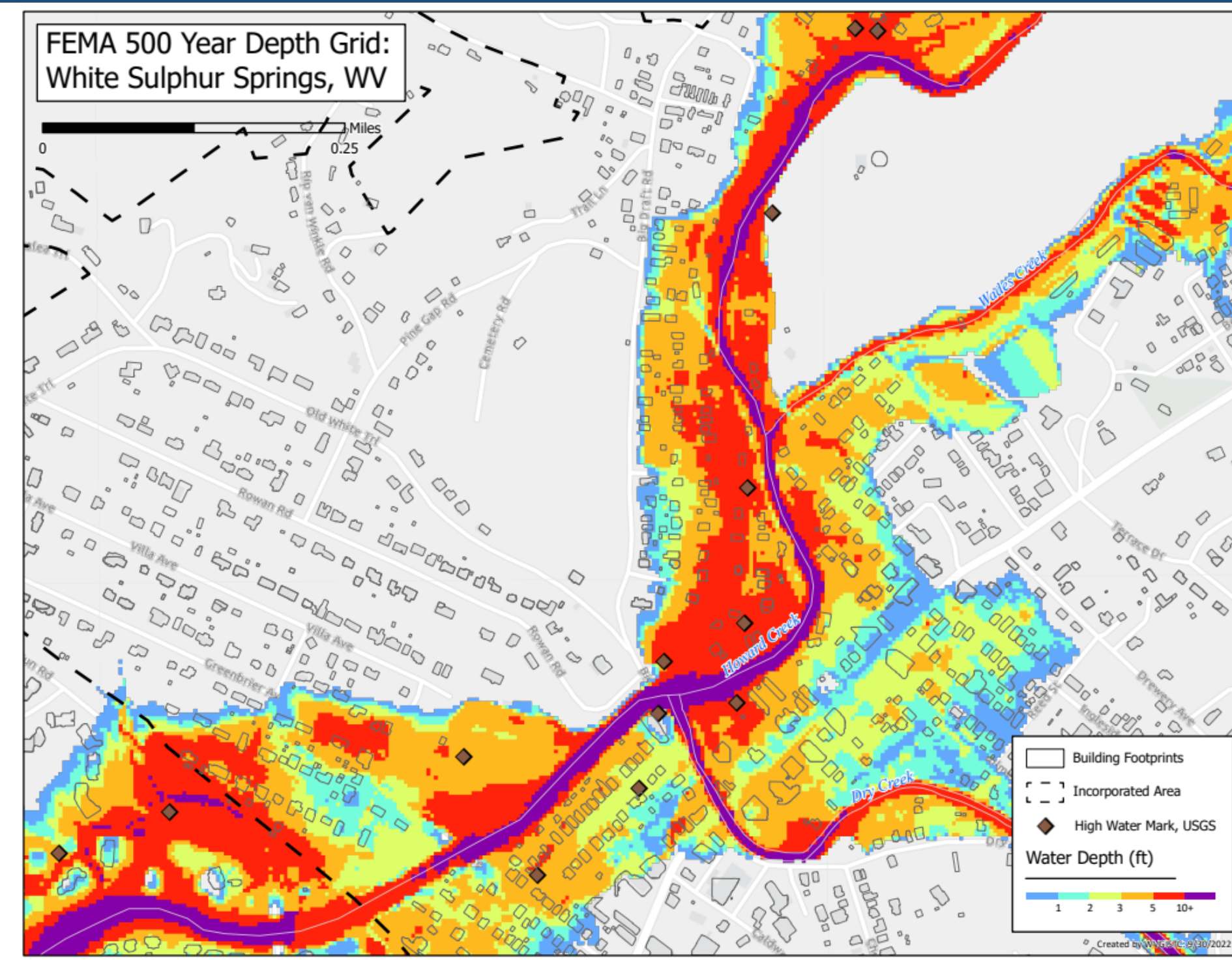
## Preliminary FEMA Flood Maps Effective 2023



## FSF Flood Model: 500-Year Flood Depth 2052



## FEMA Flood Model: 500-Year Flood Depth



## FEMA 0.2% Annual Chance (500-year) White Sulphur Springs, WV

