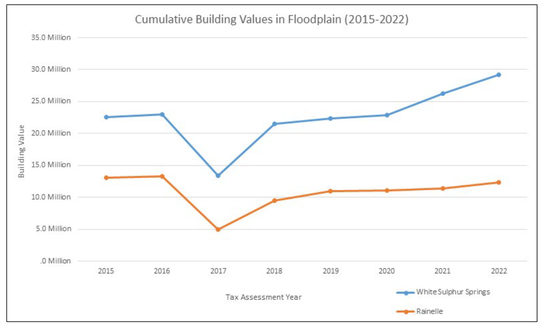
Mitigation Measures
White Sulphur Springs and Rainelle

Category	Mitigation Indicator	White Sulphur Springs	Rainelle
Mitigated Structures	Elevated Structures to Design Flood Elevation (DFE)	217	87
	Rehabilitated/Repaired Structures	394	278
	Unmitigated Low Value Structures	14	47
	Structures Removed (vacant parcel)	49	41
Open Space Preservation	Buyout Parcels (Deed Restricted)	16	18
	Community-Owned Vacant Parcels	66	88
	Area of Open Space Preservation (OSP)	5 Acres	3 Acres
	Ratio of Open Space Preservation (OSP to SFHA)	2.6%	4.5%
Building Value Recovery	Net Value 2016-2022 Tax Assessment Value	+ $6.1 Million	- $1.0 Million
Loss Avoidance 100-year Flood	Loss Avoidance by Elevating or Removing Structures (preliminary results)	$2.6 million	$2.3 million

Floodplain Building Value Recovery
White Sulphur Springs and Rainelle



COMMUNITY	2015	2016	2017	2018	2019	2020	2021	2022
Rainelle (n=326)	13.1 Million	**13.3 Million**	5.0 Million	9.4 Million	11.0 Million	11.1 Million	11.3 Million	12.3 Million
White Sulphur Springs (n=409)	22.6 Million	**23.0 Million**	13.4 Million	21.5 Million	22.4 Million	22.9 Million	26.2 Million	29.2 Million

Source: Tax assessment database. May not include values for tax exempt properties.

Flood Risk Mitigation In White Sulphur Springs

WV GIS Technical Center
May 2023

Unmitigated Example
in White Sulphur Springs

First Floor Height (FFH) BELOW FEMA 1-percent chance (100-yr) flood

First Floor BELOW 2016 HWM; 1%+,0.2-percent chance (500-yr) floods

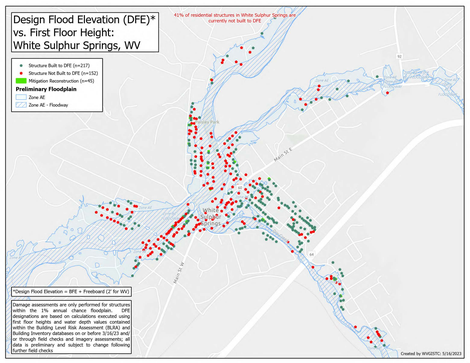
Building 13-17-0008-0139-0000_220

FLOOD DEPTHS: FEMA | First Street Foundation (FSF) | USGS 2016 Flood High Water Mark

Mitigation Measures (Continued)
White Sulphur Springs and Rainelle

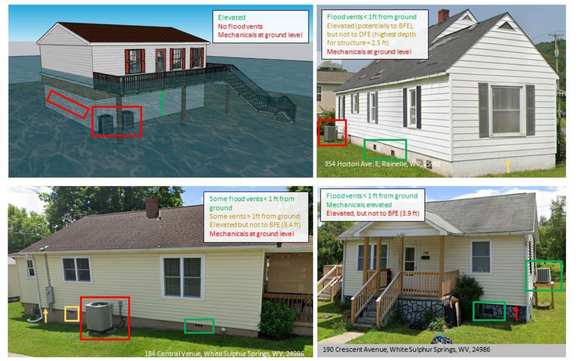
Category	Mitigation Indicator	White Sulphur Springs	Rainelle
Resiliency to Future Floods	Percent Residential Structures in 100-year floodplain elevated to Design Flood Elevation (DFE)	59%	35%
Higher Standards	Freeboard (safety elevation factor above BFE)	2 ft.	2 ft.
	Community Rating System (above min. requirements)	No	No
Floodplain Management	Incorporated Place a compacted floodplain management area to enforce floodplain ordinance	Yes	Yes
	Continuity of operations and immediate response to disasters	?	?
	Record keeping (permits, EC's, substantial damage)	Yes	?
Flood Insurance	Number of Policies 2023	67	36
Risk Communications	Flood Risk Disclosure Laws in West Virginia	F grade	F grade
	Outreach to property owners about changes to flood maps (mapped in/mapped out of SFHA)	Pending	Pending

Building Design Flood Elevation
White Sulphur Springs

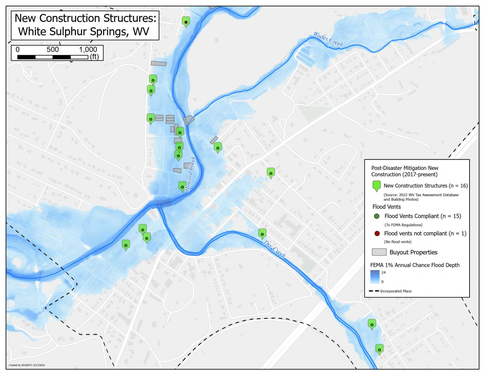


New Streamgages
White Sulphur Springs

Partial Mitigation Examples



Mitigated Properties
White Sulphur Springs



Mitigation Reconstruction Example
in White Sulphur Springs

First Floor Height (FFH) ABOVE 1-percent chance (100-yr) flood

First Floor BELOW 2016 HWM; 1%+,0.2-percent chance (500-yr) floods

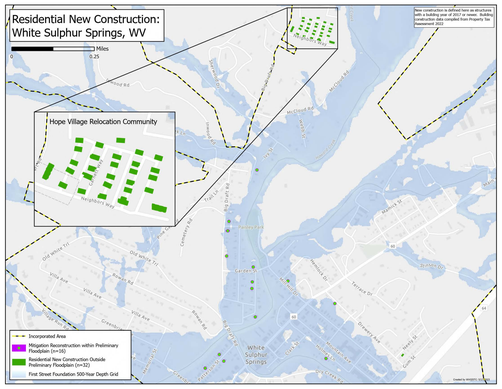
FLOOD DEPTHS: FEMA | First Street Foundation (FSF) | USGS 2016 Flood High Water Mark

Damage (2016 Flood) and Mitigation
Central Ave., White Sulphur Springs

Damage (2016 flood) and Mitigation:
White Sulphur Springs, WV

- Building REMOVED (Vacant Parcel)
- REPAIR of Substantially Damaged (>50%) Building
- Mitigation RECONSTRUCTION
- ACQUISITION or Buyout Property

Relocation Community
White Sulphur Springs



Examples of Properly Elevated Structures
in White Sulphur Springs

Building ID: 13-17-0009-0009-0000_148

Building ID: 13-17-0009-0009-0000_148

Building ID: 13-17-0008-0152-0000_195