








# Social Vulnerability Indicators

## White Sulphur Springs and Rainelle

Vulnerability Indicators		White Sulphur Springs	Rainelle	State Ratio	National Ratio
	Poverty Rate	14.4%	<b>37.0%</b>	17.3%	12.9%
	Unemployment Rate	21.4%	<b>33.6%</b>	23.8%	14.7%
	Vulnerable Ages Ratio	<b>41.7%</b>	<b>39.8%</b>	30.8%	28.3%
	Disability Ratio	17.8%	<b>26.9%</b>	18.7%	13.0%
	Population Growth Ratio	<b>-9.1%</b>	<b>-20.9%</b>	-3.2%	7.4%
	Renter-Occupied Ratio	<b>42.8%</b>	<b>43.0%</b>	26.8%	36.0%
	Housing Values Less than \$50K	3.9%	<b>37.5%</b>	16.9%	6.6%
	Housing Median Value	<b>\$125,700</b>	<b>\$59,400</b>	\$119,600	\$229,800

The red texts show more than 5% of difference, to the vulnerability side, from the state ratios.

# Description, Rationale, and Data Sources

Vulnerability Indicator	Description	Rationale	Data Source
<b>Poverty Rate</b>	Percentage of households with incomes below poverty level	The poor are less likely to have the income or assets needed to prepare for a possible disaster or to recover after it occurs (Cutter et al., 2003; Flanagan et al., 2011; Morrow, 1999; Thomas, 2017).	Census 2019 ACS 5-Year Estimates
<b>Unemployment Rate</b>	Percentage of families (two or more people residing together and related by birth, marriage, or adoption) with no workers in the past 12 months (from 2019)	In addition to income problems, unemployed persons lack benefit plans providing health cost assistance when injuries or deaths occur due to disasters (Brodie et al., 2006; Flanagan et al., 2011).	Census 2019 ACS 5-Year Estimates
<b>Vulnerable Ages Ratio</b>	Percentage of population younger than 15 or older than 65	Children and the elderly are generally more vulnerable to disasters such as flooding due to the lack of experience or physical and cognitive limitations to protect themselves (Cutter et al., 2003; Flanagan et al., 2011; Morrow, 1999).	Census 2019 ACS 5-Year Estimates
<b>Disability Ratio</b>	Percentage of civilian noninstitutionalized population with disabilities of independent living, self-care, ambulatory, cognitive, vision, or hearing difficulties	Disabled people are more vulnerable to natural hazards such as flooding (Cutter et al., 2003; Flanagan et al., 2011; Morrow, 1999).	Census 2019 ACS 5-Year Estimates
<b>Population Growth Ratio</b>	Percentage of population change from 2010 to 2020	Although rapid population growth in dense urban areas can contribute to the risk (Cutter et al., 2003) we believe population decrease can be a factor of social vulnerability in WV communities.	Decennial Census (DEC) of 2010 & 2020
<b>Renter-Occupied Ratio</b>	Percentage of renter-occupied residential units of the total occupied housing units	Low ratios of home ownership can indicate a community with a faltering economy and a population with less long-term commitment to the community. Renters generally have less ability or motivation to make their homes resistant structurally or buy flood insurance (Cutter et al., 2003; Morrow, 1999).	Census 2019 ACS 5-Year Estimates
<b>Housing Values Less than \$50K Housing Median Value</b>	The dollar values of owner-occupied residential units (Percentages of less than \$50K and median)	The value can be an indicator of building quality. Buildings of low quality cannot withstand flooding adequately and are more vulnerable. It can also be related to the personal wealth. Therefore, the physical and social vulnerabilities to floods are generally tied at this point (Flanagan et al., 2011; Morrow, 1999; Thieken et al., 2008).	Census 2019 ACS 5-Year Estimates

# Transportation



511 Southern WV  
@WV511South · Follow



This is the view along US 60 near the Greenbrier Sporting Club. Road remains CLOSED. Avoid travel in this area.



4:53 PM · Jun 23, 2016



Credit Courtesy Photo Alex Wiederspiel / WVMetroNews / WVMetroNews

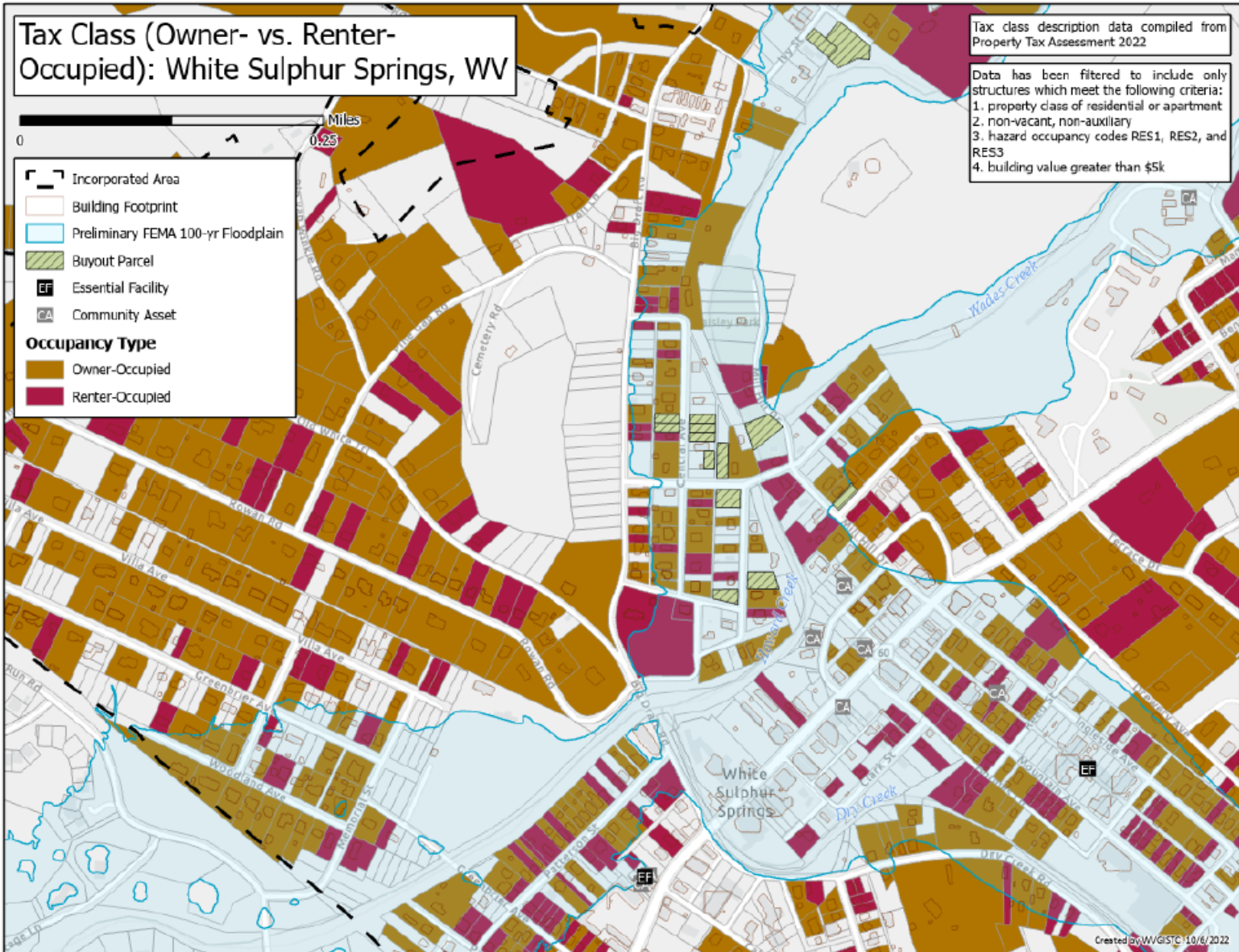
A portion of U.S. Route 60 washed away about 15 miles from Rainelle. As of Saturday morning, emergency crews were going door-to-door checking on the well-being of flood victims in western Greenbrier County.

One hundred twenty-three bridges were damaged, and five were destroyed. Floodwaters closed [250 roads were closed](#), and pavement washed out on 1,300 separate sites.

Source: [WV DOT Remembering the 2016 flood five years on Flood \(2021\)](#)

Source: [WV Public Broadcasting 2016](#)

# Owner versus Renter Occupied



# Relocation



A “prior owner” [search query](#) of the WV Property Assessment data shows that John Hutsepiller moved from 212 11<sup>th</sup> St. to 202 Chestnut Street in Grace Village, Rainelle. Eight new homes were built for flood survivors at Grace Village on two acres of land donated by a local dentist.

[Video testimony](#) by John Hutsepiller Jr. of home destroyed on 11<sup>th</sup> Street in Rainelle. He relocated to a new home in Grace Village.

## Media Links

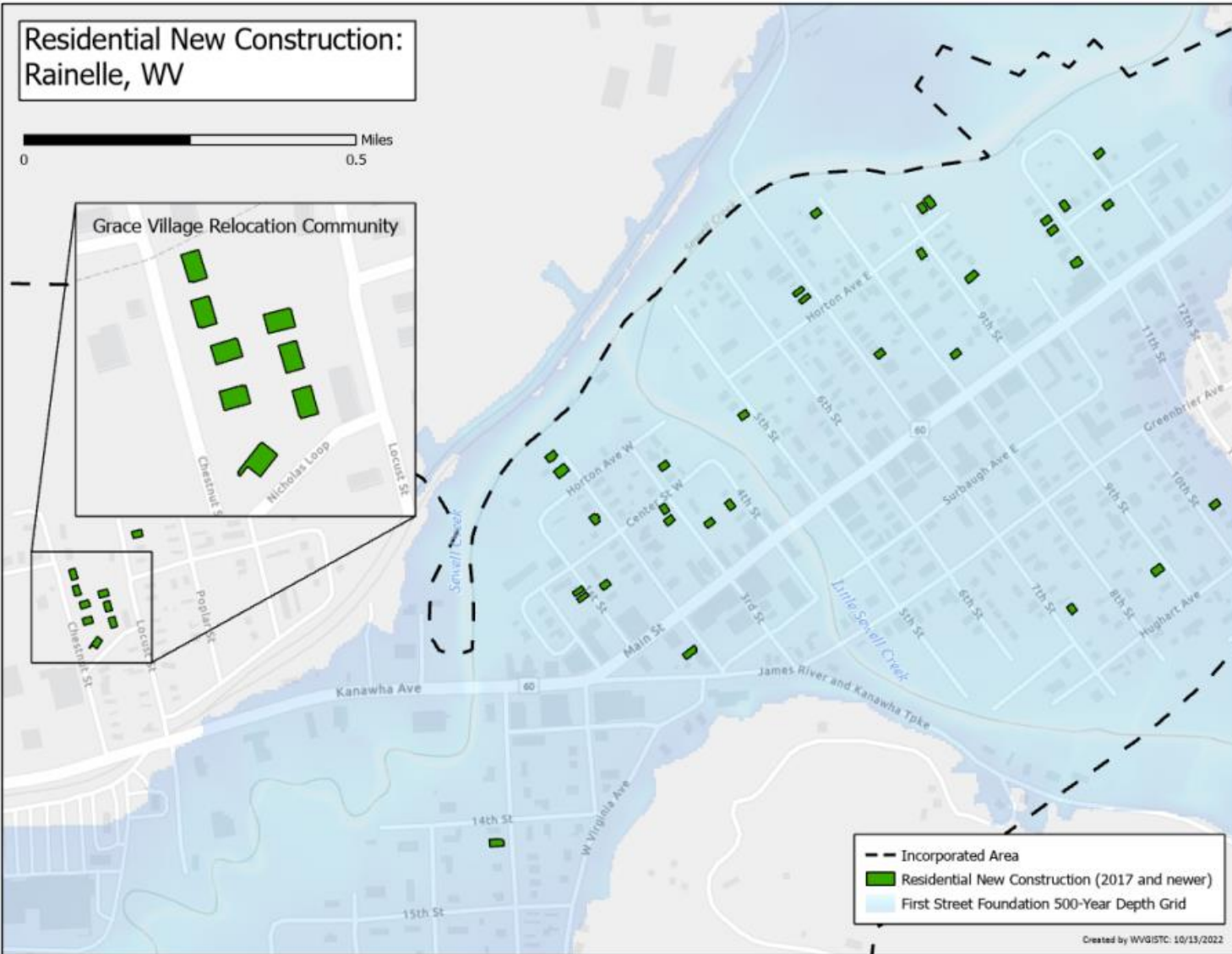
- [WV Press](#)
- [Metro News Grace Village 5 new homes](#)
- [Local Dentist Donates Land for Flood Victims](#)

# Rainelle Relocated Settlement

## Residential New Construction: Rainelle, WV

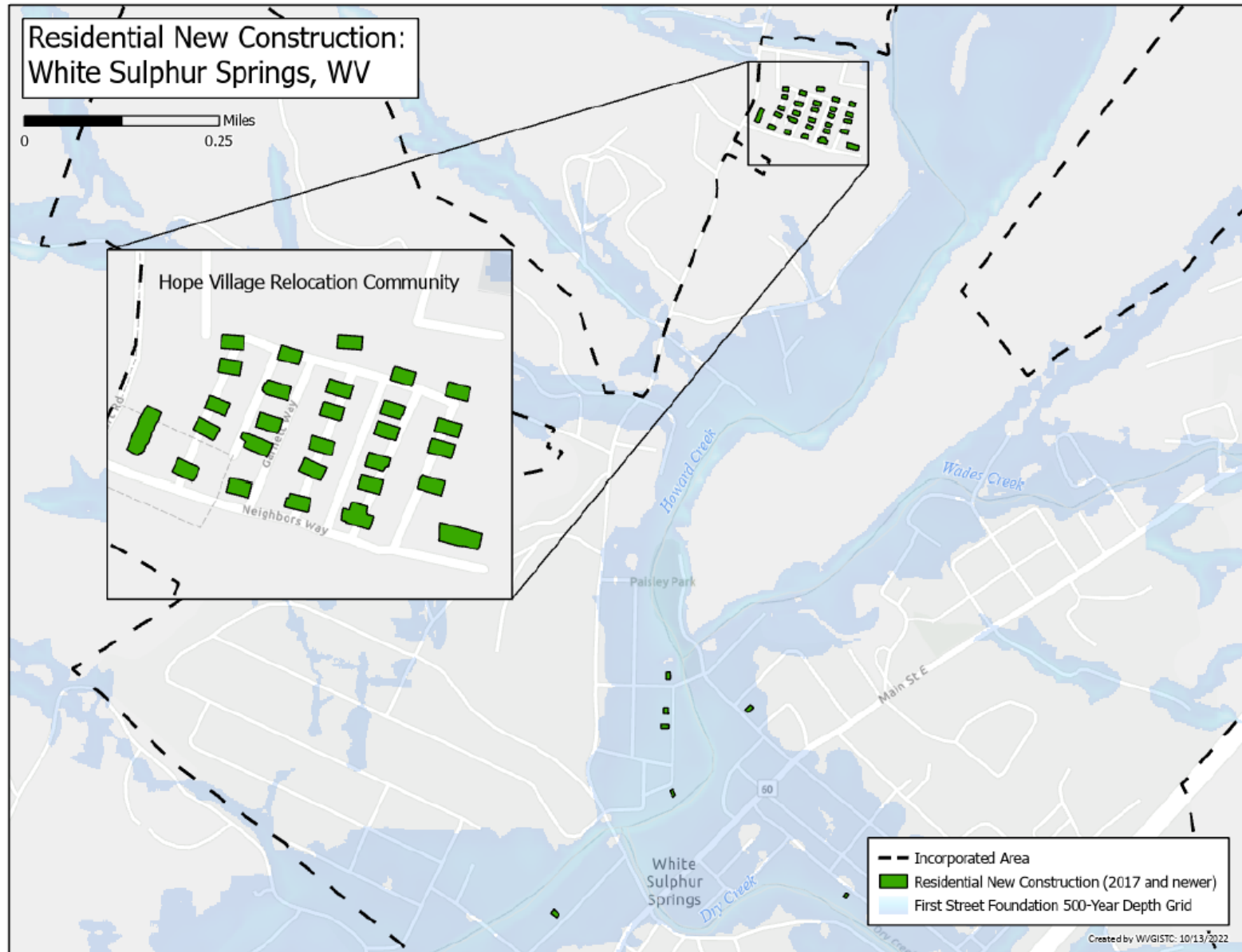
0 0.5 Miles

### Grace Village Relocation Community

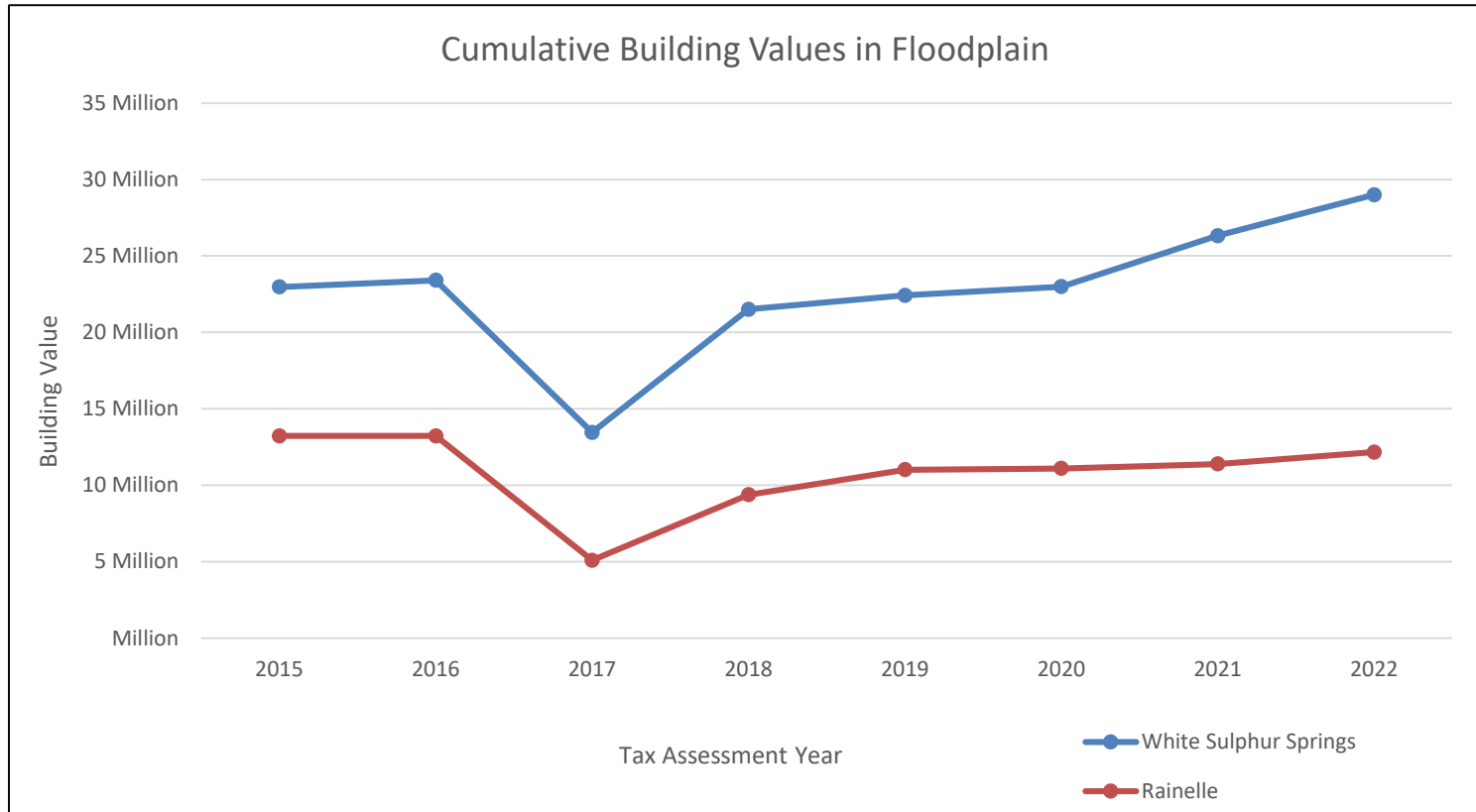


Maps are created from BUILDING YEAR of tax assessment data. White Sulphur Springs relocated flood survivors to 28 new homes in **Hope Village**. Although Rainelle built 8 new homes in **Grace Village** located outside the floodplain, the majority of the new construction was in the floodplain.

# WSS Relocated Settlements



# Floodplain Building Value (2015-22)



COMMUNITY	2015	2016	2017	2018	2019	2020	2021	2022
Rainelle (n=329)	13.2 Million	13.2 Million	5.1 Million	9.4 Million	11.0 Million	11.1 Million	11.4 Million	12.2 Million
White Sulphur Springs (n=417)	23.0 Million	23.4 Million	13.5 Million	21.5 Million	22.4 Million	23.0 Million	26.3 Million	29.0 Million

After the 2016 flood the Assessors Office marked flooded buildings at 10% of their market value, and then subsequent years verified and re-valued structures that were rebuilt or remodeled.