



Genesee Fire Rescue + WiRē project results

Wildfire Research (WiRē)

April 14, 2022 - Community presentation

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This project was conducted in partnership with Genesee Fire Rescue and received support from:

USDA Forest Service, Washington Office Fire and Aviation Management, University of Colorado

With additional support from the Rocky Mountain Research Station, Bureau of Land Management, U.S. Geological Survey

FINAL RESULTS PENDING



The Wildfire Research (WiRē) Approach



WiRē + Genesee Fire Rescue Rapid Assessments

Rapid Assessment training

- May 18, 2021 – virtual
- May 19, 2021 – in-person

Total Rapid Assessments = 1387

- Residential – 1340
- Non-residential – 47

(*As of November 5, 2021)



WiRē rapid wildfire risk assessment overview

13 attributes (4 categories)

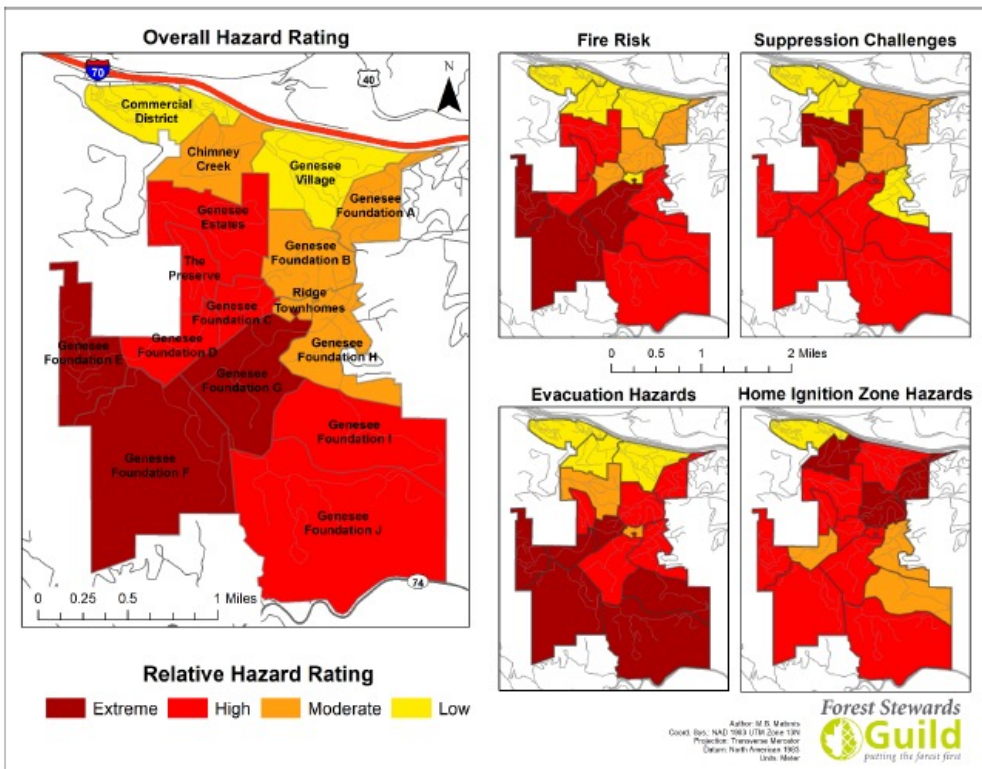
- Access
- Background conditions
- Defensible space
- Home ignition potential

	Risk attribute	Response categories	Attribute weight	Category score
Access	Address posting	Fully meets standard	1%	0
		Address sign is visible, but does not meet all standards		5
		Not posted/visible from the primary road		10
	Ingress/Egress	Two or more roads in/out	1%	0
		One road in/out		10
	Driveway clearance	Meets all driveway standards. Meets both height (at least 13.5') and width clearance (at least 20')	1%	0
		Meets one, but not both, standards (height or width)		5
		Does not meet either standard (height and width)		10
	Driveway length	Less than 150' long	1%	0
		150' or more with "adequate" turnaround		5
150' or more without "adequate" turnaround		10		

Background conditions	Distance to dangerous topography	More than 150'	5%	0
		50' - 150'		25
		Less than 50'		50
	Slope	Gentle - Less than 20%	2%	0
		Moderate - Between 20% and 45%		10
		Steep - Greater than 45%		20
	Adjacent fuels	Light - <description of local vegetation>	4%	10
		Medium - <description of local vegetation>		20
		Dense - <description of local vegetation>		40

	Risk attribute	Response categories	Attribute weight	Category score
Defensible space	Defensible Space	More than 100'	10%	0
		30' - 100'		50
		5' - 29'		75
		Less than 5'		100
	Other combustibles	More than 30' or no combustible items	8%	0
		5' - 30'		40
		Less than 5'		80

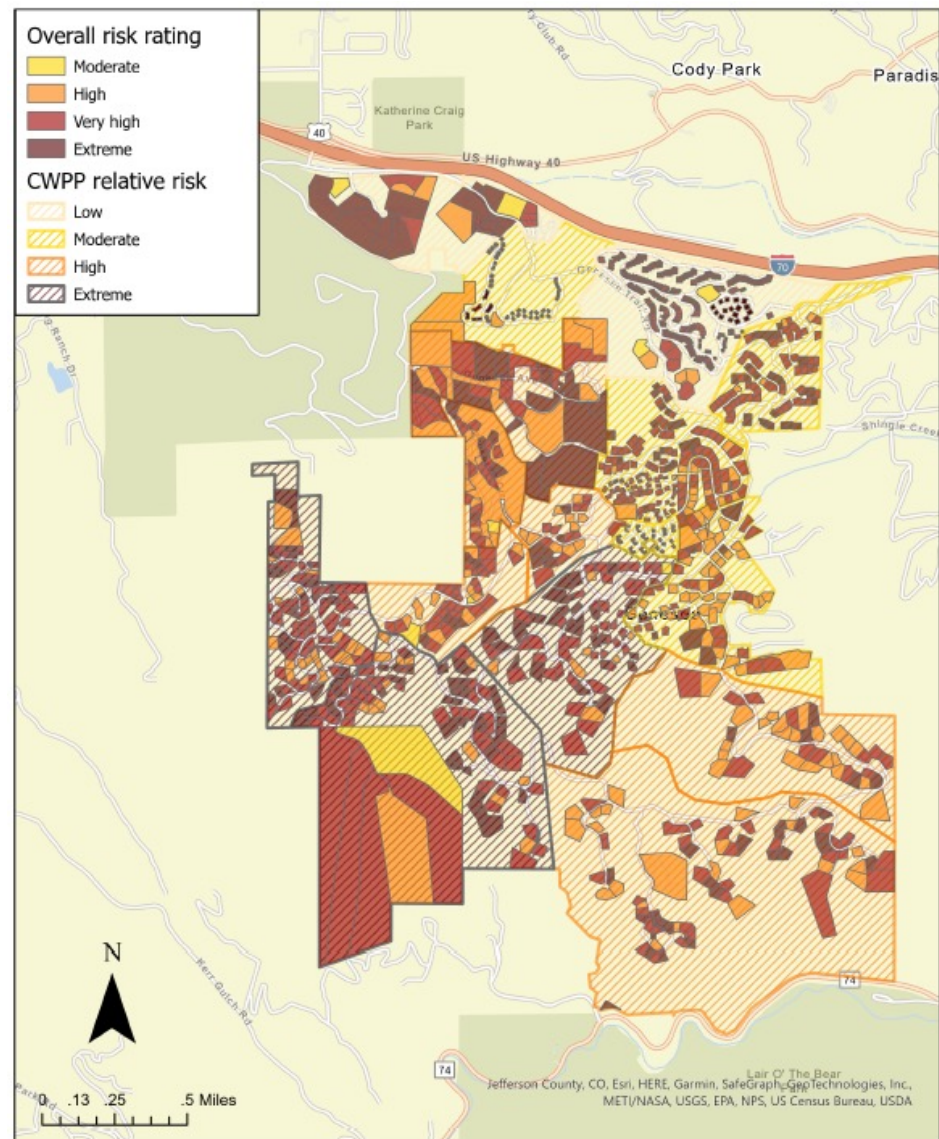
Home ignition potential	Roofing materials	Tile, metal, or asphalt shingles	30%	0
		Wood (shake shingles)		300
	Building exterior	Stucco, cement, brick, stone, or other noncombustible siding	7%	0
		Log or heavy timbers		35
		Wood or vinyl siding		70
	Combustible attachments	No combustible attachments	10%	0
		Combustible attachments present		100
	Proximity to adjacent homes	More than 100'	20%	0
		30' - 100'		50
		10' - 29' away		100
Less than 10'		200		



Genesee Fire Rescue service area shown by CWPP risk ratings + parcel risk ratings (n=1340)



WiRe + Genesee Fire Rescue
Data collected in 2021
Map produced by The Wildfire Research Center (WiRe)



WiRē + Genesee Fire Household survey

Living with Wildfire in the Genesee Fire Protection District in 2021



**GENESEE
FIRE RESCUE**

Entered survey responses: 584n = number of observations

Response rate: 45%

Blue numbers are percent responses (might not total to 100% due to rounding)

Red ALL CAPS are variable names

Please note: We encourage use of this survey instrument for applied, research, and/or publication purposes but request to be notified before any such use at: info@wildfireresearchcenter.org

* This project was funded by USDA Forest Service, Washington Office Fire and Aviation Management.

*All data received and processed as of January 31, 2022

*Document prepared February 4, 2022

- Survey timing
 - May 27, 2021 – Letter of Introduction
 - August 11, 2021 – 1st survey package
 - August 30, 2021 – Postcard reminder & thank you
 - September 30, 2021 – 2nd survey package
- Survey response rate
 - Overall: **44.9%** of households responded
 - 581 paired observations (survey + RA)
 - 759 risk assessment only
 - Total residential: 1340
 - Total commercial/other: 47

(*As of January 31, 2022)

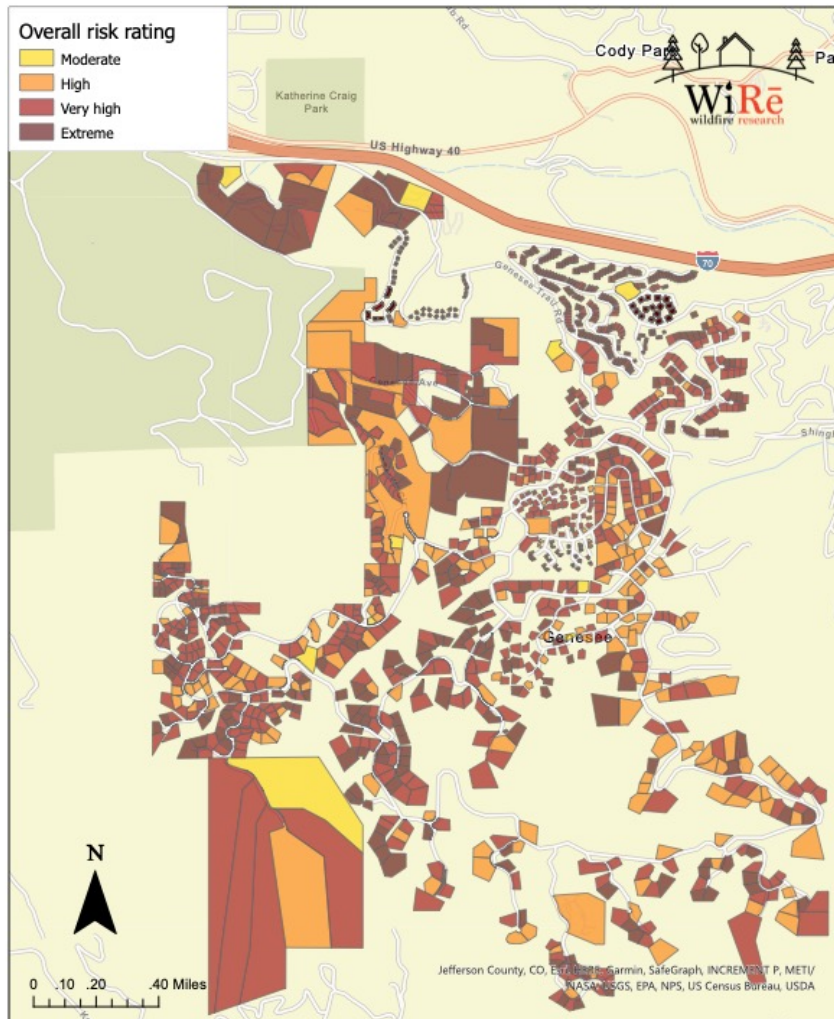
Response rate and overall risk by community

	Genesee Estates & Chimney Creek	Genesee Foundation, Ridge, & Preserve	Genesee Village	Entire study area
Response rate	37%	49%	35%	45%
Number of RAs	156	857	327	1,340
Number of paired risk assessment/household survey (RA/HS)	56	422	103	581

Response rate and overall risk by community

	Genesee Estates & Chimney Creek	Genesee Foundation, Ridge, & Preserve	Genesee Village	Entire study area
Response rate	37%	49%	35%	45%
Number of RAs	156	857	327	1,340
Number of paired risk assessment/household survey (RA/HS)	56	422	103	581
Overall RA risk rating (n=1340)				
Low	0%	0%	0%	0%
Moderate	0%	<1%	<1%	<1%
High	8%	20%	1%	14%
Very high	13%	52%	11%	38%
Extreme	79%	27%	87%	48%

Overall Risk Assessment Score Map



Respondents' Self-Assessment

RISKRATE (n=577)

3.13 Properties in your community are assessed for overall wildfire risk based on the items asked about in questions 3.1 – 3.12 above. What do you think is your Genesee FPD property's current overall wildfire risk rating? (Fill in one circle)

- 7% Low risk
- 55% Moderate risk
- 28% High risk
- 8% Very high risk
- 2% Extreme risk



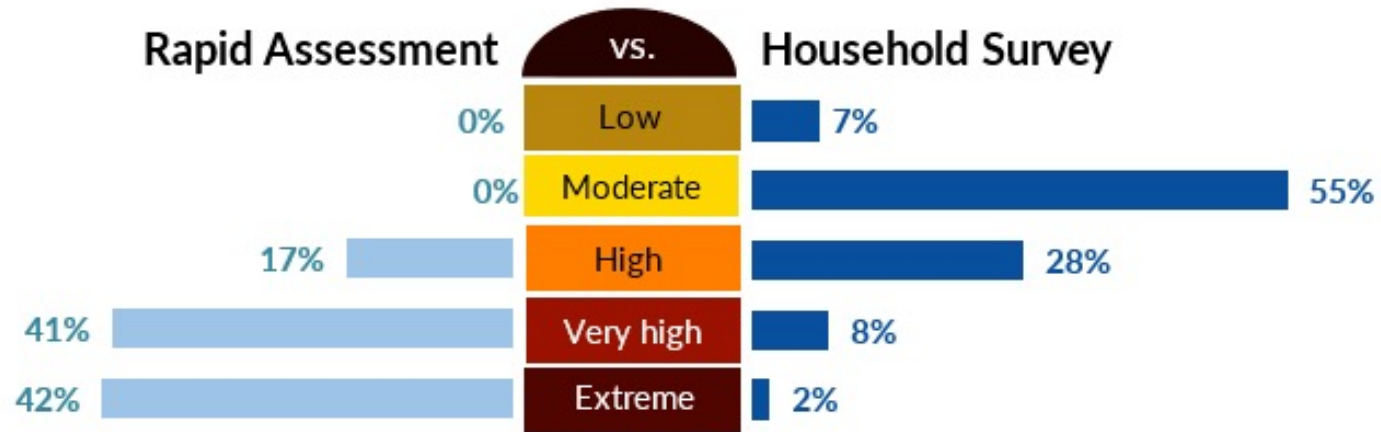
WiRē + Genesee Fire Rescue

Data collected in 2021

Map produced by The Wildfire Research Center (WiRē)

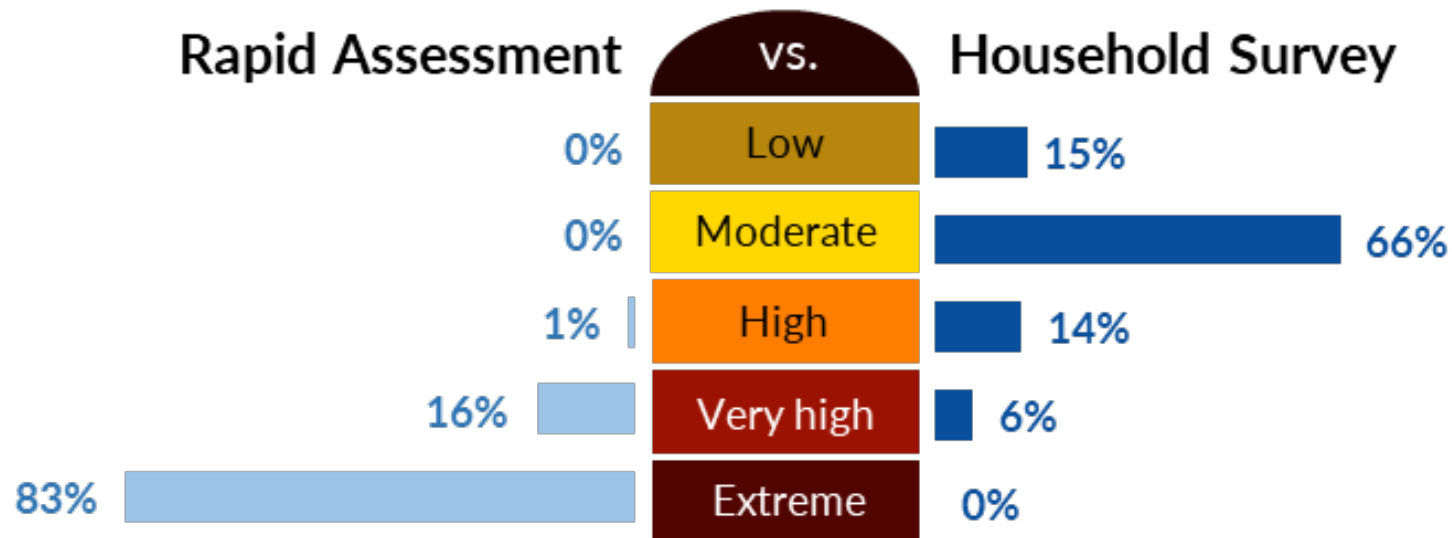
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Overall risk rating (n=574)

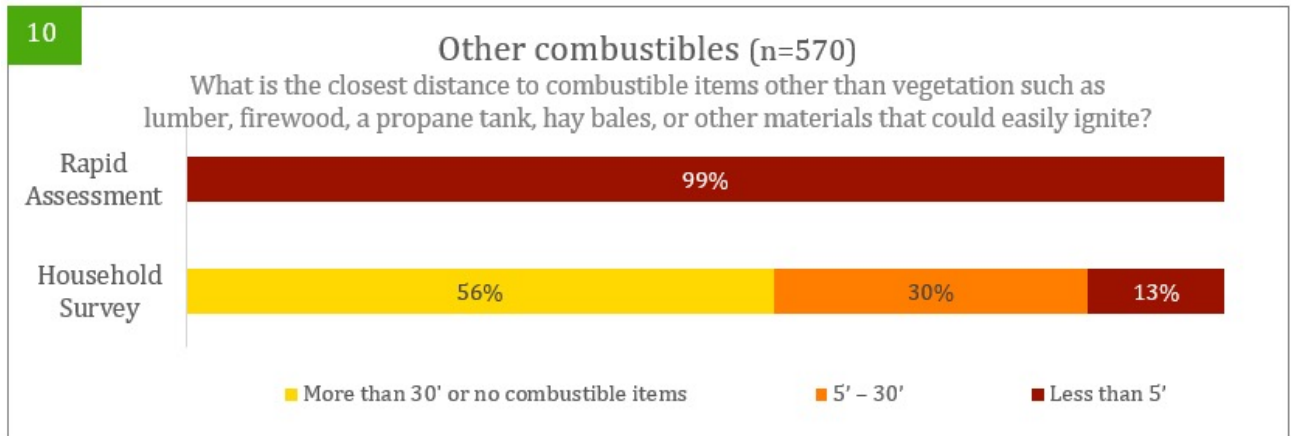
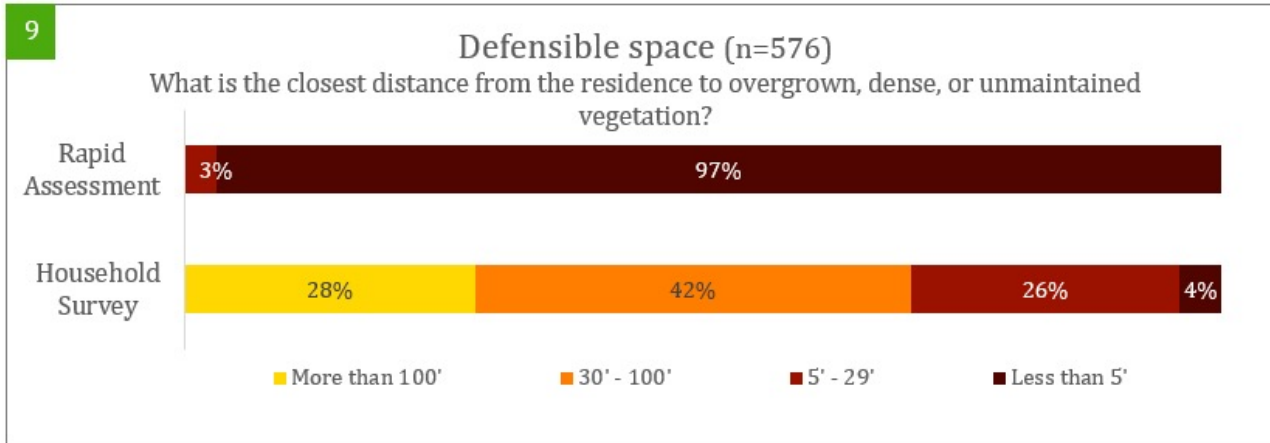


Respondents underestimate their risk compared to GFR ratings

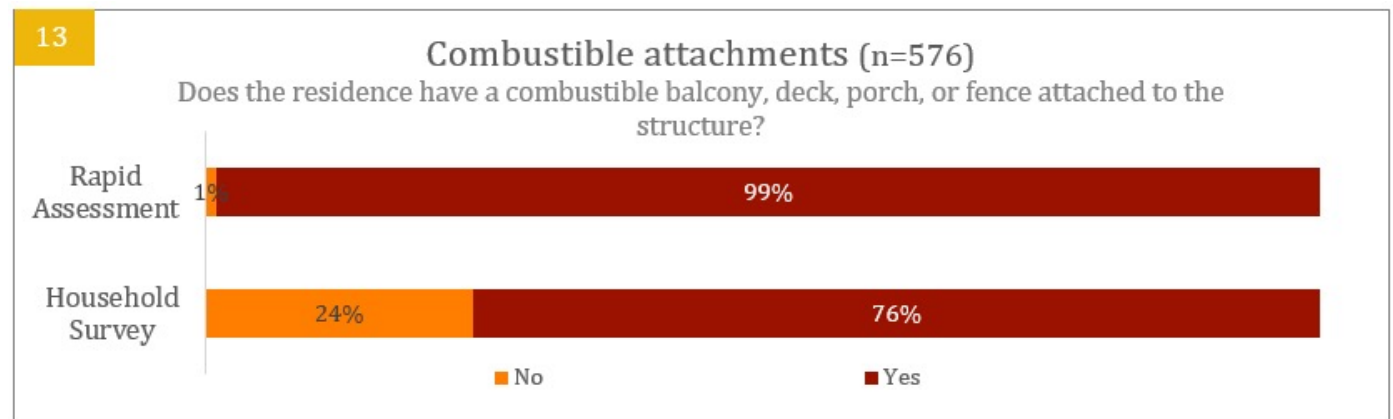
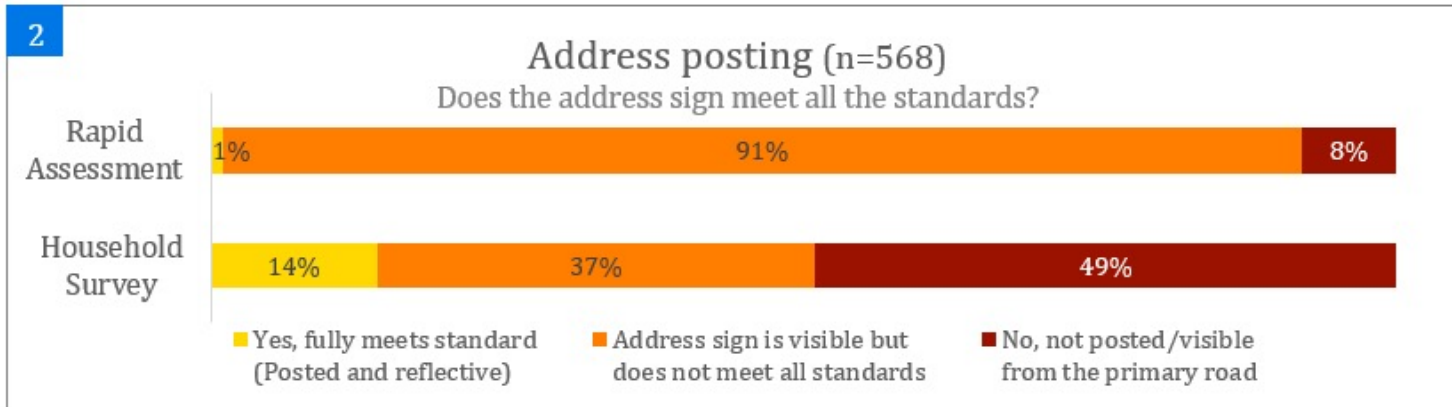
Risk Gap in Genesee Village, overall risk rating (n=102)



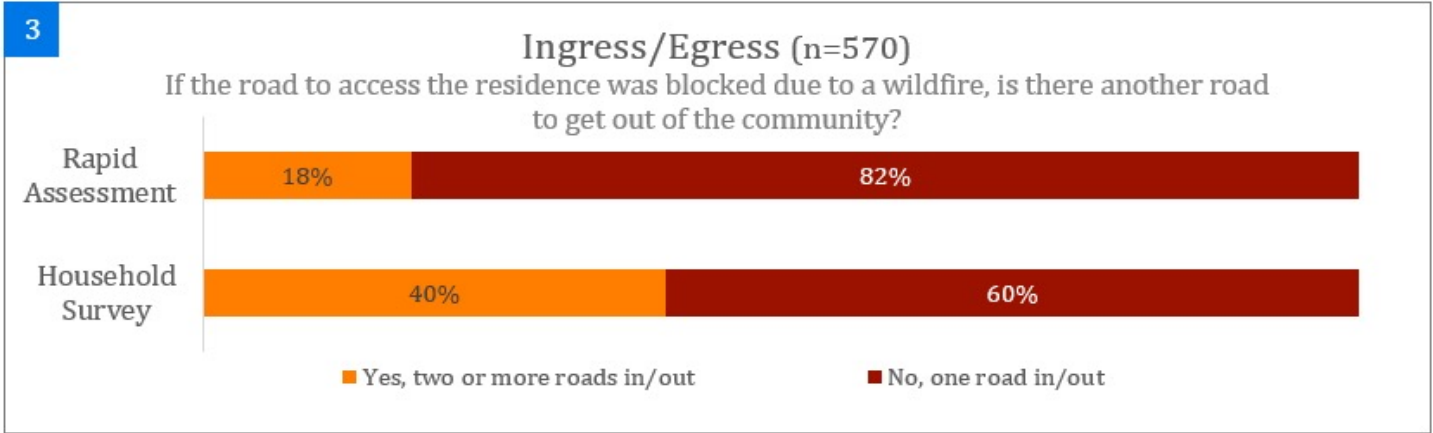
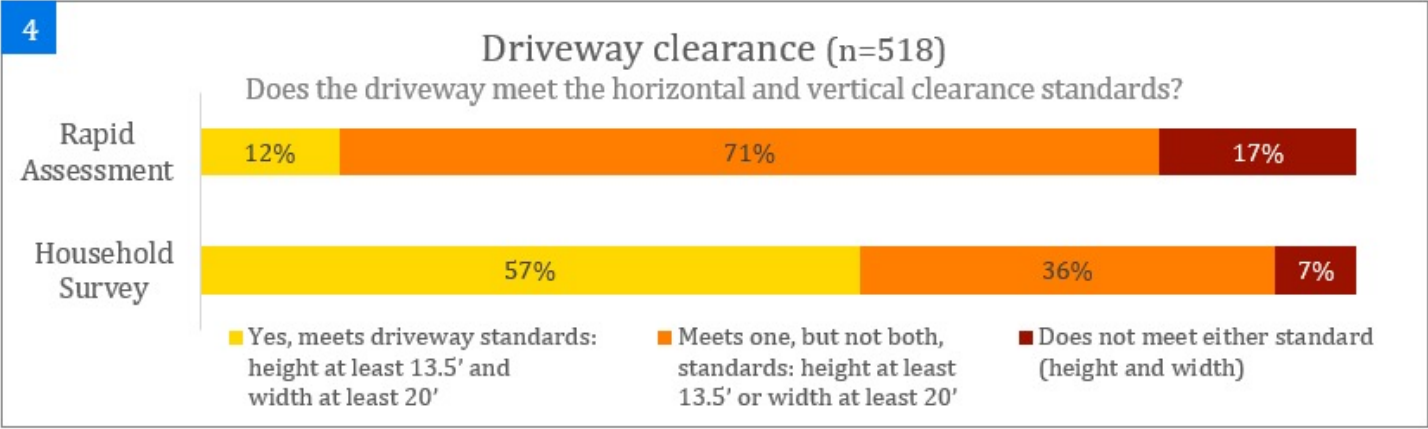
What's driving the risk gap?



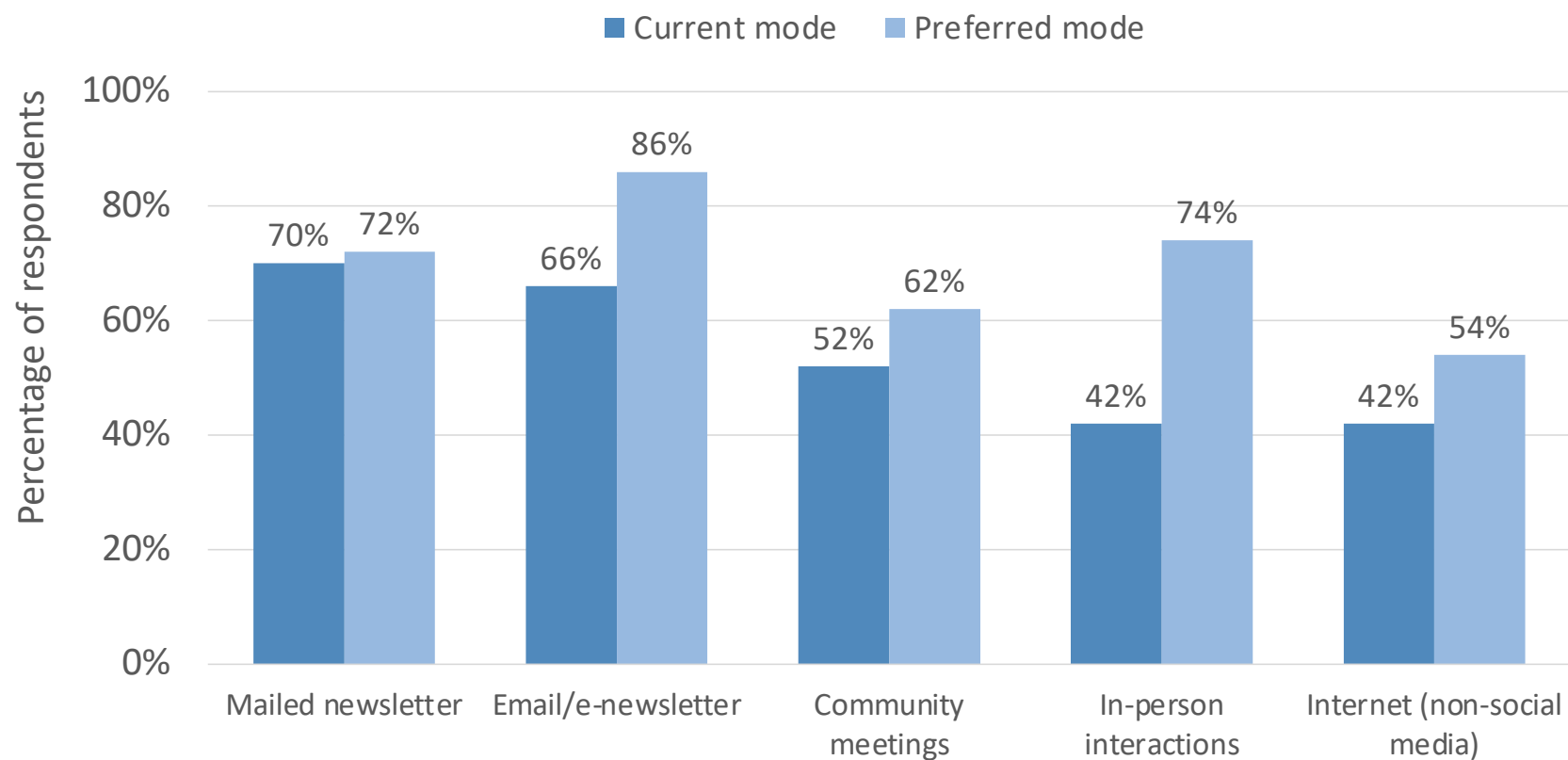
Additional drivers of the risk gap



Risk gap access attributes

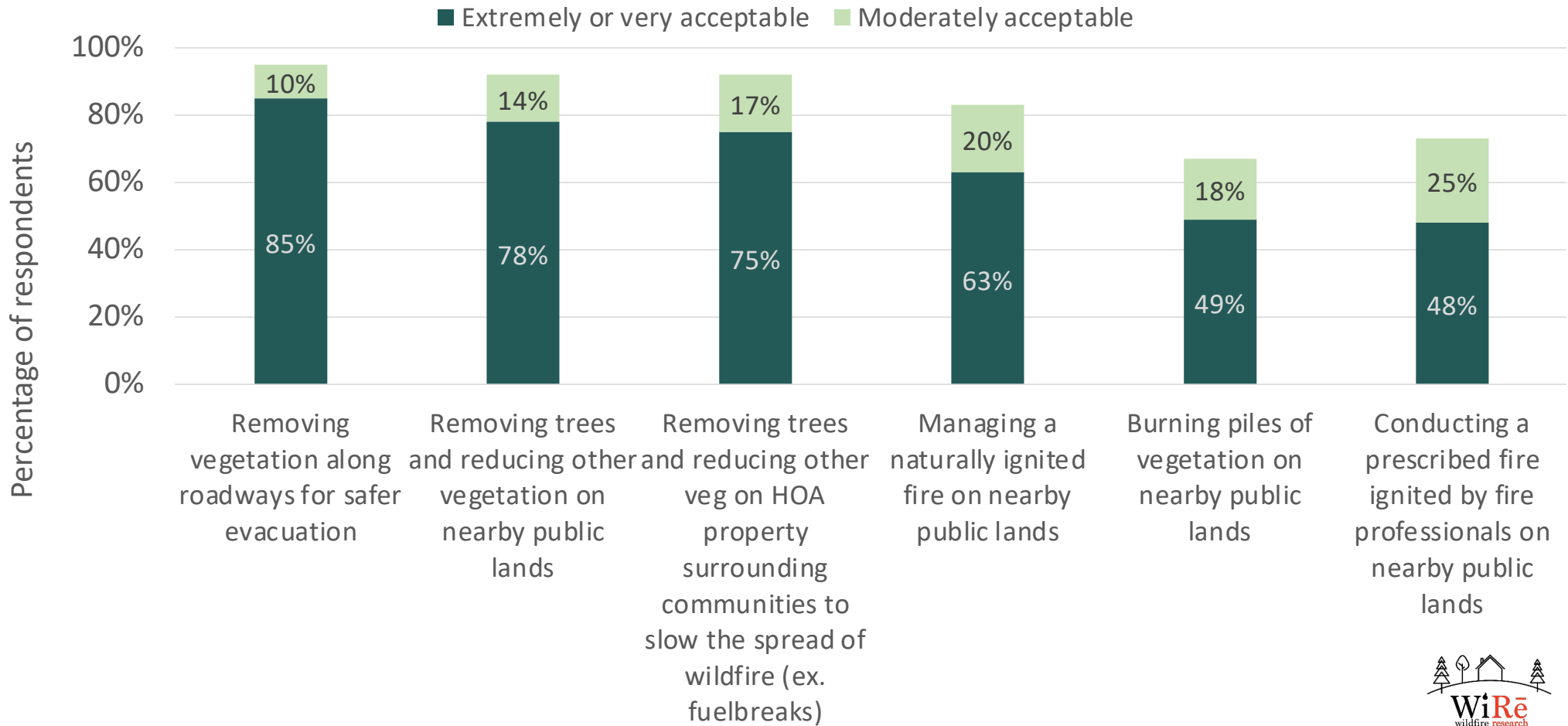


How do you currently & how would you like to receive information how to reduce wildfire risk on your property....

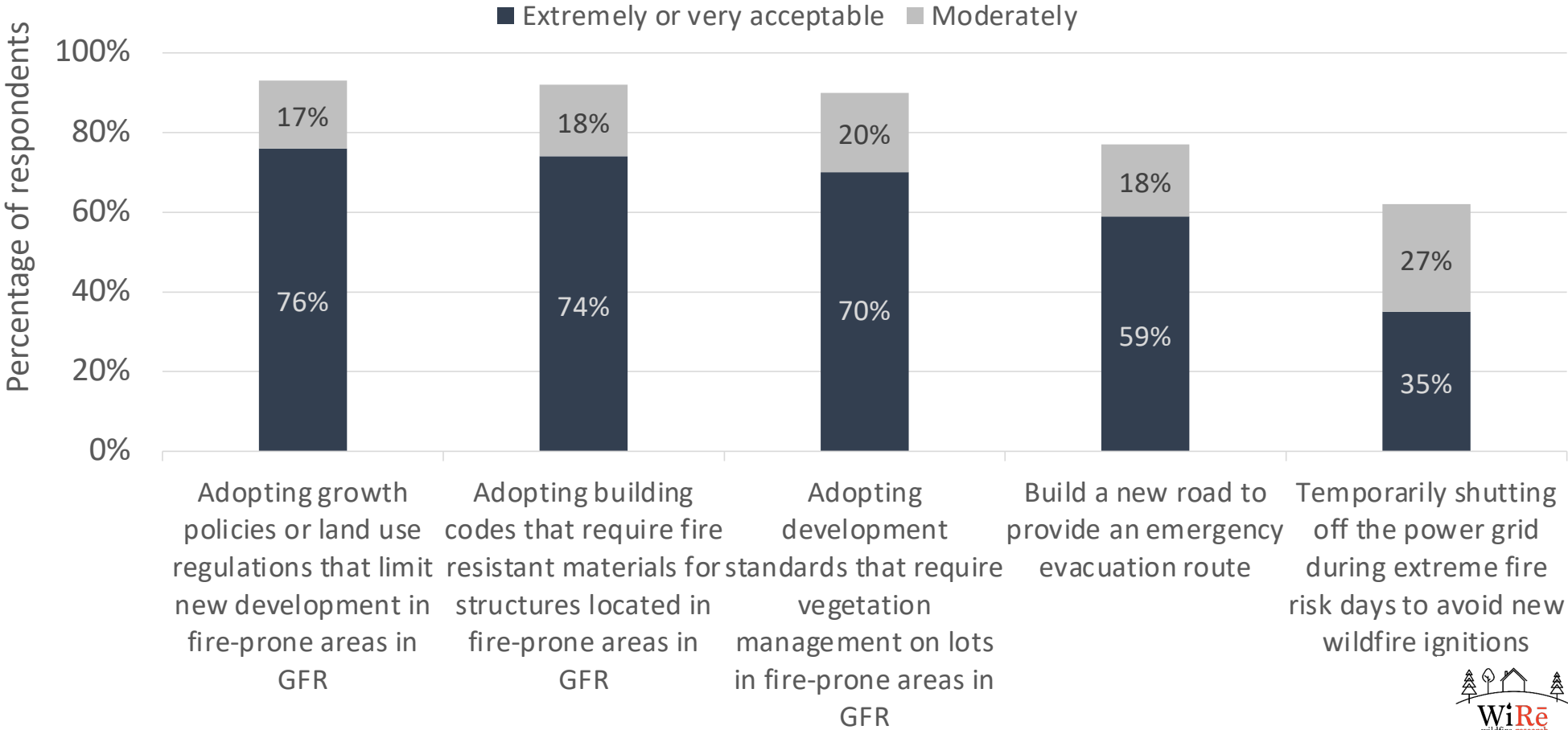


68% of respondents report that they have talked about wildfire issues with their neighbors.

How acceptable are the following approaches to reducing wildfire risk in Genesee FPD to you?

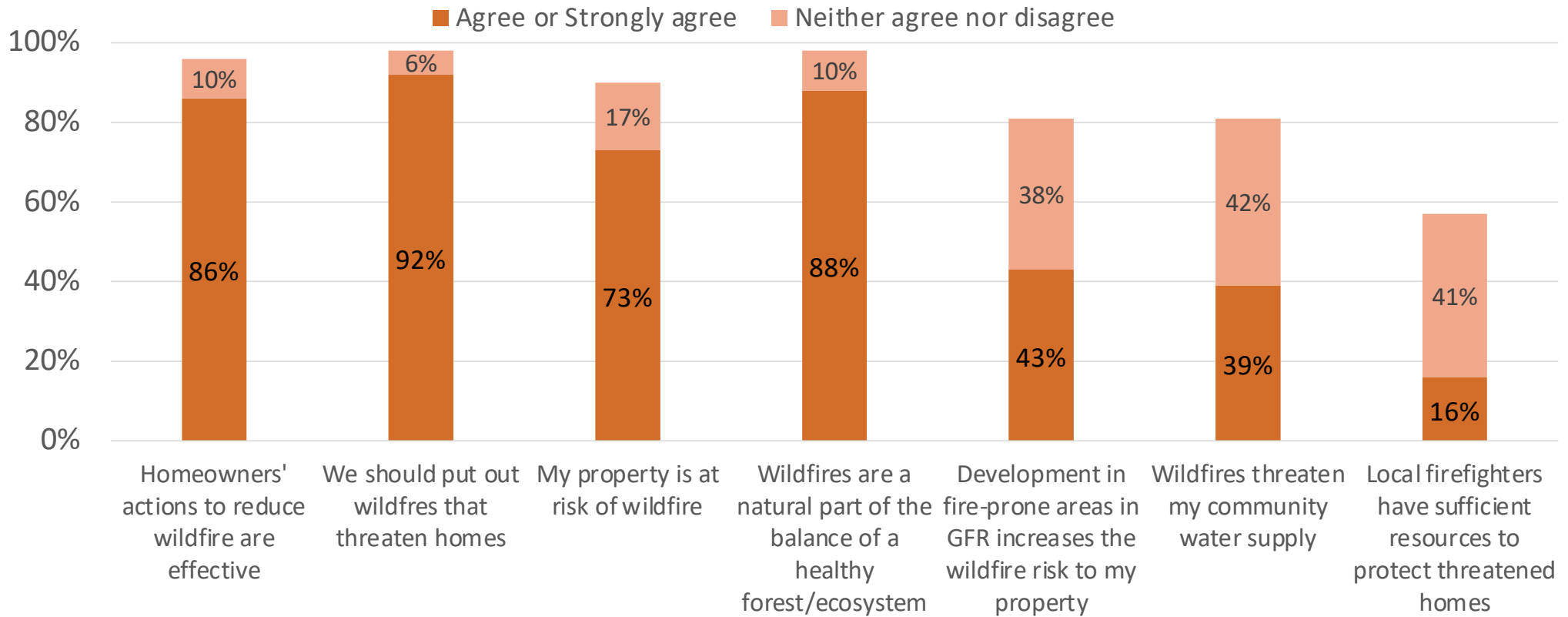


How acceptable are the following approaches to reducing wildfire risk in Genesee FPD to you?



Beliefs about wildfire

How much do you agree or disagree with the following statements...



Thank you!

Questions?

Resources:

Genesee Fire District

<https://geneseefpd.colorado.gov/>

<https://geneseefpd.colorado.gov/wire>

<https://geneseefpd.colorado.gov/wildfire-info>

<https://geneseefpd.colorado.gov/reflective-address-signs>

ddalton@geneseefire.org

WiRē: <https://wildfireresearchcenter.org/>

Wildfire Prepared Home Assessments: <https://www.wildfireprepared.com/>

Colorado State Forest Service: [THE HOME IGNITION ZONE](#)

