

Table 1. Damage State Description (Butte County GIS, 2021)








None	Minor	Extensive	Collapse
	 	 	 
<p>Surrounding Vegetation Burnt; No-Damage to Structure</p>	<p>Nonstructural Damage; Minor Structural Damage</p>	<p>Extensive Damage to Structure; Partially Collapsed</p>	<p>Complete Destruction</p>

Table 2. Demographic Characteristics

Characteristics	Percentage
Gender	Male: 60% Female: 40%
Age (Years)	18 – 29: 22.50% 30 – 39: 41.25% 40 – 49: 21.25% 50 – Older: 15.00%
Education	Less Than High School Degree: 5% High School Degree or Equivalent: 8.75% Some College but no Degree: 26.25% Associate Degree: 11.25% Bachelor’s Degree: 33.75% Master’s Degree: 13.75% PhD Degree: 1.25%
Employment	Employed, Working 1 – 39 Hours per Week: 31.25% Employed, Working 40 or More Hours per Week: 41.25% Not Employed: 27.5%
Ethnicity	Caucasian: 68.75% Latino or Hispanic: 8.75% Asian: 6.25% African American: 6.75% Native American/Hawaiian/Pacific Islander: 8.75% Other: 0.75%
Annual Household Income Before Taxes	Less Than \$24,999: 17.5% \$25,000 to \$49,999: 11.25% \$50,000 to \$74,999: 16.25% \$75,000 to \$99,999: 16.25% \$100,000 to \$124,999: 10% \$125,000 to \$149,999: 12.5% \$150,000 to \$199,999: 7.5% \$200,000 to \$249,999: 6.25% \$250,000 to \$299,999: 0.00% Over \$300,000: 2.5%

Table 3. Independent Variables that are Likely to Affect a Homeowner’s Decision to Take Proactive Actions

Independent Variable	Coded	Frequency
Property Type	Single Family House = 1	66.25%
	Other = 0	33.75%
Property Construction Material	Wood Frame = 1	62.50%
	Other = 0	37.50%
Property Value	<\$49,999 = 1	13.75%
	\$50,000-\$99,999 = 2	8.75%
	\$100,000-\$199,999 = 3	15.00%
	\$200,000-\$299,999 = 4	11.25%
	\$300,000-\$399,999 = 5	12.50%
	\$400,000-\$499,999 = 6	7.50%
	\$500,000-\$749,999 = 7	17.50%
	\$750,000-\$999,999 = 8	8.75%
	\$1,000,000-\$1,499,999 = 9	3.75%
	>\$1,500,000 = 10	1.25%
Remaining Mortgage Balance	<\$49,999 = 1	38.75%
	\$50,000-\$99,999 = 2	18.75%
	\$100,000-\$199,999 = 3	16.25%
	\$200,000-\$299,999 = 4	7.50%
	\$300,000-\$399,999 = 5	11.25%
	\$400,000-\$499,999 = 6	5.00%
	\$500,000-\$749,999 = 7	2.50%
Personal Belonging Value	<\$24,999 = 1	17.50%
	\$25,000 - \$49,999 = 2	13.75%
	\$50,000 - \$74,999 = 3	16.25%
	\$75,000 - \$99,999 = 4	10.00%
	\$100,000 - \$149,999 = 5	18.75%
	\$150,000 - \$199,999 = 6	6.25%
	\$200,000 - \$249,999 = 7	6.25%
	\$250,000 - \$349,999 = 8	3.75%
	\$350,000 - \$499,999 = 9	2.50%
	\$500,000 - \$749,999 = 10	1.25%
	>\$750,000 = 11	3.75%

Surrounding Satisfaction	Very Dissatisfied = 1	11.25%
	Somewhat Dissatisfied = 2	22.50%
	Neither Satisfied nor Dissatisfied = 3	27.50%
	Somewhat Satisfied = 4	18.75%
	Very Satisfied = 5	20.00%
Willingness to pay for Individual-Level Risk Reduction Actions (\$/Year)	<\$249 = 1	27.50%
	\$250-\$499 = 2	30.00%
	\$500-\$749 = 3	17.50%
	\$750-\$999 = 4	5.00%
	\$1,000-\$1,499 = 5	12.50%
	\$1,500-\$1,999 = 6	3.75%
	>\$2,000 = 7	3.75%
Willingness to pay for Community-Level Risk Reduction Actions (\$/Year)	<\$249 = 1	25.00%
	\$250-\$499 = 2	30.00%
	\$500-\$749 = 3	11.25%
	\$750-\$999 = 4	18.75%
	\$1,000-\$1,499 = 5	8.75%
	\$1,500-\$1,999 = 6	3.75%
	>\$2,000 = 7	2.50%
Whether Neighbors Adopted Mitigation Actions	Yes = 1	60.00%
	No = 0	40.00%
Willingness to Invest in Individual- and/or Community-Level Risk Reduction Actions	None = 1	17.50%
	Only one Type of the Actions = 2	40.00%
	Both Types of the Actions = 3	42.50%
Total Wealth Before Wildfire Attack	<\$ 49,999 = 1	22.50%
	\$50,000 - \$99,999 = 2	10.00%
	\$100,000 - \$199,999 = 3	18.75%
	\$200,000 - \$299,999 = 4	12.50%
	\$300,000 - \$399,999 = 5	2.50%
	\$400,000 - \$499,999 = 6	7.50%
	\$500,000 - \$749,999 = 7	10.00%
	\$750,000 - \$999,999 = 8	5.00%
	\$1,000,000 - \$1,499,999 = 9	6.25%
	\$1,500,000 - \$1,999,999 = 10	3.75%
	\$2,000,000 - \$2,999,999 = 11	0.00%

	>\$ 3,000,000 = 12	1.25%
Homeowner's Perceived Probability that a Wildfire Will Attack his/her Community in the Next 5 Years	0% = 1	2.50%
	0%-1% = 2	1.25%
	1% - 4% = 3	2.50%
	5% - 9% = 4	2.50%
	10% - 19% = 5	12.50%
	20% - 39% = 6	13.75%
	40% - 59% = 7	22.50%
	60% - 79% = 8	17.50%
	80% - 100% = 9	22.50%
Homeowner's Perceived Probability That his/her Property Will be Damaged by a Wildfire Event	Highly Unlikely = 1	3.75%
	Unlikely = 2	6.25%
	Neither Likely nor Unlikely = 3	35.00%
	Likely = 4	43.75%
	Highly Likely = 5	11.25%
Homeowner's Self-Assessment of Preparedness for Wildfire	1 (Poorly Prepared to Take Risk)	15.00%
	2	15.00%
	3	32.50%
	4	23.75%
	5 (Well Prepared to Take Risk)	13.75%
Entity who is Responsible for Paying for Wildfire Damage to House	Primarily Government = 1	8.75%
	Government > Homeowner = 2	12.50%
	Government = Homeowner = 3	18.75%
	Government < Homeowner = 4	23.75%
	Primarily Homeowner = 5	36.25%
Past Experience With Natural Hazards	Yes = 1	78.75%
	No = 0	21.25%

Table 4. Logistic Regression Results of Homeowners' Decisions About Home Strengthening

Variable	Estimated Coefficient	Wald Chi-Square	p-value
Intercept	0.5270	0.6111	0.5412
Homeowner's Age	-0.7946	-2.8978	0.0038
Homeowner's Willingness to Invest in Individual-Level Wildfire Risk Mitigation Actions	0.7825	3.0941	0.0020
Household Income	-0.4100	-2.1754	0.0296
Homeowner's Total Wealth	0.4382	2.5510	0.0107

Table 5. Logistic Regression Results of Homeowner's Decision About Defensible Space

Variable	Estimated Coefficient	Wald Chi-Square	p-value
Intercept	-1.2465	-1.9622	0.0497
Satisfaction With the Surrounding Environment	0.5221	2.6573	0.0079

Table 6. Logistic Regression Results of Homeowner's Decision to Purchase Homeowner Insurance

Variable	Estimated Coefficient	Wald Chi-Square	p-value
Intercept	-1.0227	-1.5580	0.1192
Homeowner's Mortgage Balance	0.8715	2.5757	0.0100
Neighbors' Proactive Actions	1.4021	2.1651	0.0304

Table 7. Linear Regression Results of Homeowner’s Decision About Dwelling Coverage Limit (95% Confidence)

Variable	Estimated Coefficient	t	p-value
Intercept	-0.8940	-1.543	0.128
Age	0.4260	2.519	0.014
Property Value	0.5231	5.558	<0.001
Household Income	0.2421	2.626	0.011

Table 8. Frequency Distribution of House Damage States: With and Without Individual-Level Wildfire Risk Reduction Actions

	Minor Damage	Major Damage	Destroyed
Without Mitigation (12.5%)	60%	0%	40%
With Mitigation (87.5%)	64%	14%	22%