Living with Wildfire in Larimer County, Colorado, 2007

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Abstract: The devastating impact of wildfire on residents living in fire prone areas has become an all too common media story in recent years. While significant efforts have been made to inform residents in fire prone areas of the risk, it is not clear to what extent property owners are taking action to reduce risk. Likewise, we know little about what factors are related to taking action to reduce risk. In an effort to explore these issues further and to better characterize the wildland urban interface (WUI) residents of Larimer County, Colorado, a general population survey of WUI residents was implemented. The survey was designed to provide information regarding knowledge, concern, and activities related to wildfire and wildfire risk mitigation. Survey results suggest that word had gotten out about wildfire risk as most survey respondents knew about the risk when they decided to purchase a home in a fire prone area. Likewise, survey respondents expressed concern that a wildfire would damage their home or property. Completing more wildfire risk mitigation actions was found to be related to first-hand experience with wildfire and perceptions of wildfire risk.

Introduction

Wildfire and its associated impacts on residents living in fire prone areas is a common story in the media during the wildfire season. Wildfire risk in areas such as the Rocky Mountain West is exacerbated by the influx of individuals choosing to live in the area that is most susceptible to wildfires, the wildland-urban interface (WUI). While significant efforts have been made to inform new and existing residents in WUI areas of the risk, it is not clear how the message has resonated with the target population. In Colorado, Larimer County has promoted concerted efforts to educate WUI residents about wildfire risk and the actions they need to take to reduce the risk of losing their home to a fire. A previous qualitative study of five Larimer County WUI communities suggested that all wildfire information sources were not the same and that study participants preferred the one-on-one information sharing with a wildfire specialist (Brenkert-Smith and others 2005, 2006). The study also suggested that homeowners’ decisions to mitigate wildfire risk were complex. Considerations included homeowners’ understanding of the biophysical characteristics of the landscape around their homes, the level of wildfire risk reduction activities on neighboring properties, and perceptions of the effectiveness of wildfire risk mitigation activities.

In an effort to explore these issues further and to better characterize the WUI residents of Larimer County, a general population survey of WUI residents was implemented. Baseline information about homeowners in the Larimer County WUI and their perspectives on wildfire risk and efforts to mitigate that risk will facilitate long-term monitoring and management practices. The survey was designed to provide information regarding knowledge, concern, and activities related to wildfire and wildfire risk mitigation among homeowners living in the Larimer County WUI. This report summarizes the study...
design, the characteristics of the survey respondents, and the wildfire mitigation actions they have taken. In an effort to better understand homeowners’ decisions to mitigate wildfire risk, we describe relationships between taking wildfire risk-reducing actions and other survey measures such as demographic characteristics of the respondents, their experience with wildfire, and sources of information about wildfire.

**Methods**

**The Survey**

A survey instrument was developed to provide information on WUI homeowners and their efforts to reduce the risk of loss related to wildfires. The survey was sponsored by Larimer County and the University of Colorado. A copy of the survey can be found in Appendix A. The survey had seven sections designed to collect information on where respondents live, their experience with wildfire, actions taken by the respondents to reduce wildfire risk, attitudes about wildfire, social interactions (2 sections), and demographic characteristics.

**Target Population and Sampling**

Geo-coded data from the Larimer County Assessor’s Office, GIS software, and Larimer County fire hazard maps were used to develop a target population of approximately 13,880 privately owned residential parcels that have some kind of building structure located on the property. From this sampling frame, a random sample of 1750 households was chosen.

**Data Collection**

The survey was administered to the sample of Larimer county residents in the summer of 2007. All potential participants were mailed a first class envelope with a letter of invitation to participate in the survey. Participants were given a choice of completing a web-based version of the survey or a paper survey. To participate on-line, respondents went to a web address provided in the letter of invitation. Those wanting to complete a paper survey returned a postage paid postcard that was included with the letter of invitation. They were sent a survey, a letter with instructions and thanks, and a postage paid envelope for returning the survey. A second mailing was sent to non-respondents approximately one week after the first mailing. A third and final mailing was sent to non-respondents approximately one week after the second mailing.

Participants who logged onto the website were able to complete the survey at their leisure. It took between 15 and 20 minutes for most participants to complete the survey. The survey log was checked regularly, and the addresses of those who had completed the survey were removed from the mailing list for the second and/or third mailings.

**Descriptive Results**

Of the 1750 initial letters that were mailed, 845 were not deliverable. Online surveys were completed by 205 households, and mail surveys were completed by 121 households. The overall response rate was 36% ([121 + 205] / 905). The responses to almost all of the survey questions were statistically similar between the online and mail surveys. Just four questions had response distributions that were statistically different between mail and online survey respondents: (a) number of people under the age of 18 living in the current residence, (b) race, (c) employment status, and (d) age. The results summarized in the rest of this report are based on analyzing the online and mail survey data together.

**Characteristics of the Survey Respondents**

Very few of the survey respondents were less than 24 years old (<1%) or over 75 years old (< 9%). The average age of the respondents was 57 years old. Slightly more males responded (55%) than females and almost all of the survey respondents identified “white” as their racial group (97%). Seventy-nine percent of the respondents were married. The respondents were well-educated with 30% having advanced degrees. Compared to 2007 U.S. Census data for Larimer County, the survey respondents were more educated than Larimer County, as a whole (70% of the study population were at least college graduates compared to 40% for Larimer County). However, median income appeared to be similar for the study population and Larimer County, as a whole, with a median household income around $50,000.

**Place of Residence**

While some WUI areas have many seasonal residents, that does not appear to be the case for the Larimer County WUI. Most survey respondents were full-time residents (89%). As might be expected, most of the part-time residents occupied their home in the Larimer WUI during the summer (97%). Few of the respondents (21%) expected to move within the next five years. There were very few renters among the survey respondents as 98% of the survey respondents owned their home and almost all of the survey respondents said they have homeowner’s or renter’s insurance (98%). Most households included pets (73%), but only 9% included income generating livestock. Land parcel sizes ranged from less than a quarter acre
to 750 acres. Most of the survey respondents (64%) live on land parcels that were over 2 acres in size.

**Neighbors**

In the survey section that asked about social interactions, respondents were also asked about the density of vegetation on their property and neighboring properties when they moved in and currently. Approximately 38% of the respondents said the vegetation on their property was dense when they moved in, compared to 16% who said the current vegetation was dense. Interestingly, 34% of the respondents said the neighboring properties were dense when they moved in and 28% said those properties currently had dense vegetation. In other words, survey respondents report reducing the vegetation density on their property, but they reported a smaller reduction in vegetation density on neighboring properties.

**Experience with Wildfire**

Very few survey respondents had first-hand experience with a wildfire on their property (2%). However, 75% had experienced a wildfire fewer than 10 miles away from their property. Likewise, 12% of the survey respondents had evacuated their current residence due to a wildfire and 23% had prepared to evacuate. Most respondents (77%) did not know anyone whose residence was lost or damaged due to a wildfire. However, most of the survey respondents (88%) said they were somewhat or very aware of wildfire risk when they bought their current residence.

**Attitudes Toward Wildfire**

We examined attitudes toward wildfire by considering respondents’ levels of concern about what might be damaged by a wildfire (Table 1). Concern was measured on a 5-point scale with 1 = not at all concerned and 5 = extremely concerned. The highest level of concern was expressed about wildfire damaging respondents’ homes (average rating = 3.12). Survey respondents also expressed a somewhat higher level of concern that a wildfire would damage public lands (average rating = 2.88) and that wildfire would damage their property or landscape (average rating = 2.92). Respondents were least concerned about their ability to earn income being affected by a wildfire.

Attitudes were also measured with 17 statements about wildfire. Respondents were asked to rate how strongly they agree or disagree with each statement (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) (Table 2). Responses tended to cluster around the middle of the scale (agree, neutral, or disagree) for the statement “Naturally occurring wildfire is not the problem, people who choose to live in fire prone areas are the problem.” Survey respondents seemed to understand that they are likely to experience a wildfire as 61% of the respondents disagreed or strongly disagreed with the statement that “A wildfire is unlikely to happen within the time period you expect to live here.” Likewise, survey respondents seemed to understand that their property is at risk of wildfire as 78% disagreed or strongly disagreed with the statement “Your property is not at risk of wildfire.” They also seemed to think that managing wildfire danger is their responsibility as 89% disagreed or strongly disagreed with the statement “Managing the wildfire danger is a government responsibility, not yours.”

**Perceptions of Wildfire Risk**

We asked respondents how much they think vegetation on their property and the physical characteristics of their house contribute to the chances of a wildfire damaging their property in the next five years (1 = does not contribute; 5 = major contributor). Twenty-seven percent of respondents said they thought vegetation on their property was a contributor or a major contributor to the chances of a wildfire damaging their property. Fewer respondents (21%) said they thought the physical characteristics of their house contributed to chances of a wildfire damaging their property.

<table>
<thead>
<tr>
<th></th>
<th>1 = Not at all concerned</th>
<th>20%</th>
<th>40%</th>
<th>20%</th>
<th>13%</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your house or other buildings on your property (n = 313)</td>
<td>7%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>13%</td>
<td>3.12</td>
</tr>
<tr>
<td>Your property/landscape (n = 309)</td>
<td>15%</td>
<td>20%</td>
<td>35%</td>
<td>17%</td>
<td>13%</td>
<td>2.92</td>
</tr>
<tr>
<td>Public lands near your home (n = 311)</td>
<td>19%</td>
<td>19%</td>
<td>28%</td>
<td>22%</td>
<td>12%</td>
<td>2.88</td>
</tr>
<tr>
<td>Your health or your family’s health (n = 313)</td>
<td>24%</td>
<td>28%</td>
<td>30%</td>
<td>10%</td>
<td>9%</td>
<td>2.53</td>
</tr>
<tr>
<td>Local water sources (n = 313)</td>
<td>33%</td>
<td>27%</td>
<td>21%</td>
<td>10%</td>
<td>9%</td>
<td>2.35</td>
</tr>
<tr>
<td>Your pets and/or livestock (n = 309)</td>
<td>38%</td>
<td>21%</td>
<td>22%</td>
<td>10%</td>
<td>9%</td>
<td>2.33</td>
</tr>
<tr>
<td>Your ability to earn income (n = 310)</td>
<td>59%</td>
<td>20%</td>
<td>12%</td>
<td>5%</td>
<td>4%</td>
<td>1.76</td>
</tr>
</tbody>
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Wildfire Risk Information Sources

Respondents were asked about two dimensions of wildfire risk information. They were asked about sources of information and confidence in the accuracy of the information source. Interestingly, the local fire department (49%) was the most frequently reported source of information about wildfire risk, and it was the information source with the highest rating with respect to confidence in the accuracy of the information. The second most commonly reported information source was the media (47%). However, survey respondents did not express much confidence in the accuracy of information about wildfire risk provided by the media. Neighborhood groups were reported as an information source by 33% of the survey respondents and were generally considered to provide accurate information. However, while “Neighbors, friends, or family members” was one of the more frequently reported information sources (30%), respondents expressed a relatively low level of confidence in the accuracy of information provided by those groups. Approximately 20% of respondents said they received information about reducing the risk of wildfire from the Colorado State Forest Service (24%), U.S. Forest Service (22%), and Larimer County (22%). All three of these information sources had high ratings in terms of confidence in the accuracy of information provided. In general the credibility of information sources was quite variable. Information sources that reach more homeowners such as newspapers, TV, and radio may not be particularly effective if homeowners do not have confidence in the accuracy of the information.

Taking Action

There are many actions a homeowner can take to mitigate the risk of wildfire, from thinning vegetation to installing a

<table>
<thead>
<tr>
<th>Table 2. Distribution of response to wildfire statements.</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>naturally occurring wildfire is not the problem; people</td>
</tr>
<tr>
<td>who choose to live in fire prone areas are the problem.</td>
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<tr>
<td>(n = 306)</td>
</tr>
<tr>
<td>With proper technology, we can control most wildfires</td>
</tr>
<tr>
<td>after they have started. (n = 305)</td>
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<tr>
<td>4%</td>
</tr>
<tr>
<td>Wildfires that threaten human life should be put out.</td>
</tr>
<tr>
<td>(n = 309)</td>
</tr>
<tr>
<td>Wildfires that threaten property should be put out.</td>
</tr>
<tr>
<td>(n = 308)</td>
</tr>
<tr>
<td>During a wildfire, saving homes should be a priority over</td>
</tr>
<tr>
<td>saving forests. (n = 307)</td>
</tr>
<tr>
<td>24%</td>
</tr>
<tr>
<td>Wildfires are a natural part of the balance of a healthy</td>
</tr>
<tr>
<td>forest/ecosystem. (n = 309)</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td>You do not need to take action to reduce the risk of loss</td>
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<tr>
<td>due to wildfire because the risk is not that great.</td>
</tr>
<tr>
<td>(n = 310)</td>
</tr>
<tr>
<td>You do not have the time to implement wildfire risk</td>
</tr>
<tr>
<td>reduction actions. (n = 306)</td>
</tr>
<tr>
<td>&lt;1%</td>
</tr>
<tr>
<td>You do not have the money for wildfire risk reduction</td>
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<td>actions. (n = 303)</td>
</tr>
<tr>
<td>3%</td>
</tr>
<tr>
<td>You do not need to act to reduce the risk of loss due to</td>
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<tr>
<td>wildfire because you have insurance. (n = 310)</td>
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<tr>
<td>1%</td>
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<tr>
<td>You live here for the trees and will not remove any of</td>
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<tr>
<td>them to reduce fire risk. (n = 308)</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>A wildfire is unlikely to happen within the time period</td>
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<tr>
<td>you expect to live here. (n = 308)</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>Managing the wildfire danger is a government</td>
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<tr>
<td>responsibility, not yours. (n = 309)</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>Actions to reduce the risk of loss due to wildfire are</td>
</tr>
<tr>
<td>not effective. (n = 307)</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>Your property is not at risk of wildfire. (n = 310)</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>You don’t take action to reduce the risk of loss due to</td>
</tr>
<tr>
<td>wildfire because if a wildfire reaches your property</td>
</tr>
<tr>
<td>firefighters will protect your home. (n = 308)</td>
</tr>
<tr>
<td>&lt;1%</td>
</tr>
<tr>
<td>You don’t take action because adjacent properties are</td>
</tr>
<tr>
<td>not treated leaving your actions ineffective. (n = 303)</td>
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<tr>
<td>1%</td>
</tr>
</tbody>
</table>
fire resistant roof. Based on Firewise recommendations and consultation with the Larimer County wildfire specialist, a list of 12 wildfire risk-reducing actions was included in the survey. Respondents were asked to circle the actions they had undertaken on their property. Only 5% of the survey respondents had not taken any of the actions. Therefore, it appears that wildfire risk mitigation is a matter of degree, not an all or nothing proposition. The action taken by the most respondents (71%) was “Mowed long grasses around the home to reduce wildfire risk.” Likewise, 70% of the survey respondents had installed a house number in a clearly visible place. Installing fire resistant siding on house or other buildings was the action taken least often (15%).

**Determinants of Mitigation Actions**

To better understand the factors related to mitigation levels, we examined the relationship between mitigation levels and other survey measures. We categorized respondents into groups based on the number of mitigation actions they reported implementing: low mitigators (implemented 0 to 4 measures), mid-level mitigators (5 to 9 measures), and high mitigators (10 or more measures). We then conducted contingency table analyses to look at the relationship between mitigation levels and other survey measures.

**Stated Considerations and Mitigation**

Respondents were asked how much of a consideration expense, time, physical difficulty, lack of information and likelihood of a fire on their property were in their decision to take action to reduce wildfire risk (1 = not a consideration to 5 = strong consideration). The perceived likelihood of a wildfire being on the property received the highest average response (mean rating = 3.42). Cost (mean rating = 2.87), physical difficulty (mean = 2.72), and time (mean = 2.63) had similar average ratings. Lack of information received the lowest mean score (mean = 2.13). However, low mitigators were more likely than mid-level or high mitigators to cite lack of information as a strong consideration when deciding to take action to reduce wildfire risk (Pearson’s chi-square = 12.693; p = 0.002). Likewise, financial expense was less likely to be a consideration for high mitigators compared to medium and low mitigators (Pearson’s chi-square = 5.333; p = 0.069).

**Demographic Characteristics and Mitigation**

With respect to age, we did not find that age quartiles and level of mitigation were related (Pearson’s chi-square = 9.474; p = 0.149). Likewise, despite the fact that women have been found to be more risk averse than men (Halek and Eisenhauer 2001), gender was not found to be significantly related to the level of mitigation (Pearson’s chi-square = 3.398; p = 0.183). Fifteen percent of respondents reported that financial expense was a strong consideration when deciding whether or not to take action to reduce risk, and we cannot reject the hypothesis that there is a relationship between income and level of mitigation (Pearson’s chi-square = 29.441; p = 0.009).

**Place of Residence and Mitigation**

We did not find evidence of a statistically significant relationship between lot size and mitigation levels (Pearson’s chi-square = 3.543; p = 0.170). Nor did we find a statistically significant relationship (Pearson’s chi-square = 1.985; p = .371) between level of mitigation and plans to move in the next five years.

**Experience with Wildfire and Mitigation**

Consistent with some of the research on other natural hazards, past experience with wildfire appeared to play a role in how many wildfire risk reduction actions homeowner completed. Respondents who had been evacuated or who had prepared to evacuate reported higher levels of mitigation (Pearson’s chi-square = 6.027; p = 0.049). However, second hand experience in the form of knowing someone who had been evacuated was not related to higher levels of mitigation (Pearson’s chi-square = 1.421; p = 0.491). While only eleven percent of the survey respondents were not aware of wildfire risk when they purchased their current residence, those who were aware had higher levels of mitigation (Pearson’s chi-square = 9.228; p = 0.010).

**Attitudes and Mitigation**

Of the seven items listed in Table 1 that could be affected in a wildfire, only one item was found to have a statistically significant relationship with mitigation level. Medium and high level mitigators expressed more concern about wildfire affecting public land near their home (Pearson’s chi-square = 8.002; p = 0.018). With respect to other attitude measures, respondents who took more mitigation measures seemed to clearly understand that homeowners have a role in reducing wildfire risk. When asked to rate their strength of agreement
on a 5-point scale (1 = strongly agree; 5 = strongly disagree) with a variety of statements about wildfire risk, we saw some interesting results. Compared to low mitigators, mid-level and high mitigators were more likely to disagree with the following statements:

- You do not need to take action to reduce the risk of loss due to wildfire because the risk is not that great.
- You do not have the time to implement wildfire risk reduction actions.
- You do not have the money for wildfire risk reduction actions.
- You do not need to act to reduce the risk of loss due to wildfire because you have insurance.
- A wildfire is unlikely to happen within the time period you expect to live here.
- Your property is not at risk of wildfire.
- You don't take action to reduce the risk of loss due to wildfire because if a wildfire reaches your property firefighters will protect your home.

It appears that individuals who undertake higher levels of wildfire risk reduction understand that they are at risk of losing their home to a wildfire and that the fire department may not be able to save their home.

**Perceptions of Wildfire Risk and Mitigation**

We examined the relationship between perceived contributors to wildfire risk and wildfire risk mitigation actions taken. The perception that vegetation on homeowner’s own property contributed a lot to the chances of a wildfire damaging their property was not related to mitigation level (Pearson chi-square = 1.376; p = 0.502). However, respondents who thought the physical characteristics of their property (other than vegetation) were a major contributor to the chances of wildfire damaging their property, were more likely to be mid-level or high mitigators (Pearson chi-square = 6.999; p = 0.030). Likewise, respondents who said they thought human activity was a major contributor to a wildfire starting on their property were more likely to be mid-level or high mitigators (Pearson chi-square = 11.765; p = 0.003) as were those who said the vegetation on their neighbors’ properties were major contributors.

**Wildfire Risk Information Sources and Mitigation**

Compared to the low mitigators, the mid-level and high mitigators were more likely to have received wildfire information from the local fire department, a neighborhood group, the Larimer County Wildfire Specialist, the Colorado State Forest Service, or the U.S. Forest Service.

**Expectations Related to a Wildfire Event**

The survey posed several questions about expectations and understandings of wildfire. Though the responses to those questions may not appear to be related to taking more mitigation action to reduce risk, they do shed some light on how survey respondents understand wildfire. For example, survey respondents were asked how likely they thought it would be that their home would be destroyed and that their trees and landscape would burn if a wildfire were to occur on their property. Only 33% of the respondents said they thought it was likely that their home would be destroyed, while 72% said they thought their trees and landscape would be destroyed. It appears that this disparity comes from the perception by 50% of the respondents said that if a wildfire were to occur on their property, the fire department would save their home. These expectations may be linked to attitudes reported earlier regarding wildfire management.

**Conclusions**

The results described in this report paint an interesting picture of Larimer County. The survey respondents represent a stable population in the sense that most were full-time residents who did not plan to move in the next five years. They were more educated than Larimer County, as a whole (70% of the study population were at least college graduates compared to 40% of Larimer County). However, median income appeared to be similar for the study population and Larimer County, as a whole.

It seems that word had gotten out about wildfire risk because most survey respondents knew about the risk when they decided to purchase a home in a fire prone area. Likewise, survey respondents were concerned that a wildfire would damage their home or property. Most realized that a wildfire is likely to occur while they live at their current residence; and most disagreed or strongly disagreed with the statement “Managing the wildfire danger is a government responsibility, not yours.” Very few of the respondents had first-hand experience with wildfire on their property.

However, concern and awareness about wildfire risk do not necessarily translate directly into taking action. While very few respondents had done nothing to mitigate the risk of wildfire
on their property, there appears to be room for taking more action. The action taken by the most respondents was “Mowed long grasses around the home to reduce wildfire risk.” Likewise, most of the survey respondents had installed a house number in a clearly visible place. Installing fire resistant siding on the house or other buildings was the action taken least often.

One of the goals of this study was to provide a better understanding of factors related to higher mitigation levels. We found that past experience with wildfire, in the sense of having been evacuated or prepared to evacuate, is related to higher mitigation levels. Likewise, the individuals who knew about wildfire risk when they purchased their home also had higher mitigation levels. We also found that homeowners who undertake higher levels of mitigation perceived a higher level of risk. High mitigation was also associated with getting information from the local fire department, a neighborhood group, the Larimer County Wildfire Specialist, the Colorado State Forest Service or the U.S. Forest Service. While many respondents said they got information about wildfire risk from general media sources, that information sources was not related to taking more action.

References


Appendix A. Survey Questions and Responses

Living with Wildfire in Colorado

ID (6 digits);
VERSION (n=326) 0=mail; 1=web; 37% mail; 63% web
COUNTY 0=Boulder; 1=Larimer;
Key: Red all caps are variable names
n= number of observations
Section 1: In the first section, we ask questions about where you live. If you own multiple homes, please answer the following questions with respect to the location where the survey was mailed. We refer to this home as your current residence.

Blue numbers are percent responses.

OWNRENT (n=315)
1. Do you own or rent your current residence? (Circle one number)
   98%  1  Own
   2%  2  Rent  In what year did you move into your current residence? RENTMOVE
   (n=5) mean=2003

TYPE1 (n=316)
2. Which of the following best describes your current residence? (Circle one number)
   98.1%  1  Single family home
   .6%  2  Condominium or townhouse
   .9%  3  Mobile home or trailer
   .3%  4  Apartment building

LIVERES (n=314)
3. Do you live in your current residence full time or part time? (Circle one number)
   90%  1  Full time  In what year did you assume full time residence? FULLTIME
   (n=190) mean=1995
   10%  2  Part time  What season(s) do you reside at your current residence? (Circle all that apply)
   (n=33)
   67%  1  Spring SPRING
   97%  2  Summer SUMMER
   76%  3  Fall FALL
   33%  4  Winter WINTER

YRBUILD (n=312)
4. In what year was your current residence originally built? (Fill in the blank)
   mean=1981 Year current residence was built

INSURE (n=317)
5. Do you have homeowner’s or renter’s insurance? (Circle one number)
   3%  1  No
   97%  2  Yes

6. Including yourself, how many people live in your current residence? (Fill in the blank)
   OVER18 (n=315) mean=2 Number of people over the age of 18 living in your current residence
   UNDER18 (n=197) mean=.43 Number of people under the age of 18 living in your current residence
PETS (n=315)
7. Do you have pets or non-income generating livestock at your residence?  (*Circle one number*)
   27% 1 No
   73% 2 Yes

LIVEST (n=315)
8. Do you have income generating livestock on this property?  (*Circle one number*)
   91% 1 No
   9%  2 Yes

LOTSIZE (n=315)
9. What size is your parcel?
   3%  1 Around ¼ acre or less (1/4 acre = 10,890 square feet)
   33% 2 ¼ acre to 2 acres
   64% 3 Larger than 2 acres→ How many acres is your lot? ACRES (n=192) mean=28

NEAREST (n=315)
10. What is the distance from your house to the nearest house or building that lies outside your property line?  (*Circle one number*)
   4%  1 Less than 25 feet
   22% 2 25 – 100 feet
   74% 3 More than 100 feet

MOVE1 (n=316)
11. Do you expect to sell your property or move away in the next five years?  (*Circle one number*)
   79% 1 No
   21% 2 Yes→ Why might you move?___________________________________
1. Since you have lived at your current residence, what is the closest a wildfire has come to your property? (Circle one number)
   2% 1 There has been a wildfire on your property → How many? NOFIRE (n=8) mean=1.14
   72% 2 Less than 10 miles
   20% 3 More than 10 miles away
   5% 4 Not sure

2. Has your current residence ever been damaged by a wildfire or smoke from wildfire? (Circle one number)
   97% 1 No
   3% 2 Yes

3. Have you ever been evacuated from your current residence due to a wildfire or threat of wildfire or received a reverse 911 call to prepare to evacuate? (Circle one number)
   65% 1 No
   12% 2 Yes, evacuated
   23% 3 Yes, prepared to evacuate

4. Have you ever faced a wildfire threat at a previous residence (in Colorado or elsewhere)? (Circle one number)
   84% 1 No
   16% 2 Yes

5. Do you personally know anyone who has been evacuated from her/his residence due to a wildfire? (Circle all that apply) (n=326); % reported is % circled
   KNOW1 41% 1 No, you don’t know anyone who was ever evacuated
   KNOW2 43% 2 Yes, you know someone who was evacuated in the last 5 years
   KNOW3 15% 3 Yes, you know someone who was evacuated more than 5 years ago.
6. Do you personally know anyone whose residence has been damaged or lost due to a wildfire? (Circle all that apply) (n=326); % reported is % circled

77% 1 No, you don’t know anyone whose residence has been damaged or lost due to a wildfire LOST1
14% 2 Yes, you know someone whose residence has been damaged or lost in the last 5 years LOST2
6% 3 Yes, you know someone whose residence has been damaged or lost more than 5 years ago LOST3

RISKAWAR (n=314)
7. How aware of wildfire risk were you when you bought or decided to rent your current residence or property? (Circle one number)

11% 1 Not aware
36% 2 Somewhat aware
52% 3 Very aware
1% 4 Don’t remember

PROPRISK (n=314)
8. Are there characteristics or features on your property that you think make it particularly susceptible to wildfire? (Circle one number)

46% 1 No
50% 2 Yes \(\rightarrow\) Please explain: _____________________________________
4% 3 Don’t know

In the following questions, please think of vegetation as any kind of plant, such as grasses, shrubs, and trees.

9. How much do you think the vegetation and building materials on your property contributed to the wildfire risk when you moved into your current residence? (Circle one number for each item)

<table>
<thead>
<tr>
<th></th>
<th>Did not contribute to wildfire risk</th>
<th>Contributed a lot to wildfire risk</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation on property when purchased or decided to rent VEGMOVE (n=313)</td>
<td>13% 13% 29% 14% 26% 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing, siding, or deck materials when purchased or decided to rent ROOFMOVE (n=311)</td>
<td>25% 14% 32% 10% 13% 6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. How much do you think each of the following factors contributes to the chances of a wildfire damaging your property in the next 5 years? *(Circle one number for each item)*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Does not contribute</th>
<th>Major contributor</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation on your property CONTRIB1 (n=314)</td>
<td>10%</td>
<td>20%</td>
<td>36%</td>
</tr>
<tr>
<td>Physical characteristics of your property other than vegetation (e.g., steep inclines) CONTRIB2 (n=314)</td>
<td>23%</td>
<td>20%</td>
<td>28%</td>
</tr>
<tr>
<td>Physical characteristics of your house or other buildings (e.g., roofing or siding) CONTRIB3 (n=314)</td>
<td>22%</td>
<td>21%</td>
<td>34%</td>
</tr>
<tr>
<td>Vegetation on your neighbors’ properties CONTRIB4 (n=311)</td>
<td>14%</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>Vegetation on nearby National Forest or National Park CONTRIB5 (n=310)</td>
<td>25%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>Vegetation on other nearby public land (e.g., Open Space or greenbelt) CONTRIB6 (n=309)</td>
<td>29%</td>
<td>11%</td>
<td>19%</td>
</tr>
<tr>
<td>Human activity CONTRIB7 (n=314)</td>
<td>8%</td>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>Weather-related natural starts (e.g., lightning) CONTRIB8 (n=311)</td>
<td>2%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>Availability of roads for you to exit community and emergency vehicles to enter community CONTRIB9 (n=313)</td>
<td>28%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>

11. How concerned are you about wildfire damaging or affecting the items listed below? *(Circle one number for each statement)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Not at all concerned</th>
<th>Extremely concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your house or other buildings on your property CONCERN1 (n=313)</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>Your health or your family’s health CONCERN2 (n=313)</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Your ability to earn income CONCERN3 (n=310)</td>
<td>59%</td>
<td>20%</td>
</tr>
<tr>
<td>Your pets and/or livestock CONCERN4 (n=309)</td>
<td>38%</td>
<td>21%</td>
</tr>
<tr>
<td>Your property/landscape CONCERN5 (n=309)</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Local water sources CONCERN6 (n=313)</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>Public lands near your home CONCERN7 (n=311)</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Other (please specify): CONCERN8 (n=44)</td>
<td>59%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Section 3: In this section, we are interested in the kinds of changes that have been made to your house, other buildings on your property, or the land surrounding your home. We are also interested in any changes you might have made to reduce wildfire risk.

% reported is % circled  
(n=326)

1. Since moving in, have you done any of the following on your property? *(Circle all that apply)*

1. Pruned limbs so lowest is 6-10 feet from the ground in within a 30 foot perimeter from your house or other buildings **LIMB30 51%**

2. Pruned limbs so lowest is 6-10 feet from the ground in the area 30-100 feet from your house or other buildings **LIMBGT30 37%**

3. Removed dead or overhanging branches in area within a 30 foot perimeter around your house or other buildings **BR30 62%**

4. Removed dead or overhanging branches in the area 30-100 feet from your house or other buildings **BRGT30 46%**

5. Thinned trees and shrubs within a 30 foot perimeter around house or other buildings **THIN30 48%**

6. Thinned trees and shrubs in area 30–100 feet from your house or other buildings **THINGT30 36%**

7. Installed a fire resistant roof **ROOF 46%**

8. Installed fire resistant siding on house or other buildings **SIDE 15%**

9. Installed screening over roof vents **SCREEN 22%**

10. Installed house number in clearly visible place **NUMBER 70%**

11. Cleared leaves and pine needles from the roof and/or yard to reduce wildfire risk **LEAVESF 57%**

12. Cleared leaves and pine needles from the roof and/or yard to improve the appearance of the property **LEAVES 45%**

13. Mowed long grasses around the home to reduce wildfire risk **MOWF 71%**

14. Mowed long grasses around the home to improve the appearance of the property **MOW 60%**

15. None of the above → Skip to Question 8 **NONE 5%**
2. Of the actions you reported taking in the previous question, please list the number of each item you undertook with wildfire risk reduction in mind. *(List the item numbers circled in Question 1 that were undertaken specifically for the purposes of reducing wildfire risk).*

**TIMEH (n=294)**
3. In the last twelve months, how much **time** would you estimate members of your household including yourself or anyone who may have helped you, have spent working on your **house or other buildings** on your property to reduce the chances of losing your home due to a wildfire? *(Circle one number)*
   - 21%  1    0 hours
   - 48%  2    1 – 20 hours
   - 12%  3    21 – 40 hours
   - 19%  4    more than 40 hours

**MONEYH (n=292)**
4. In the last twelve months, how much **money** would you estimate members of your household including yourself or anyone who may have helped you, have spent working on your **house or other buildings** on your property to reduce the chances of losing your home due to a wildfire? *(Circle one number)*
   - 57%  1    0 - $100
   - 24%  2    $101 - $500
   - 8%   3    $501 - $1000
   - 11%  4    $1001 or more

**TIMEP (n=294)**
5. In the last twelve months, how much **time** would you estimate members of your household including yourself or anyone who may have helped you, have spent working on your **property surrounding your home** to reduce the chances of losing your home due to a wildfire? *(Circle one number)*
   - 13%  1    0 hours
   - 50%  2    1 – 20 hours
   - 15%  3    21 – 40 hours
   - 23%  4    more than 40 hours

**MONEYP (n=291)**
6. In the last twelve months, how much **money** would you estimate members of your household including yourself or anyone who may have helped you, have spent working on your **property surrounding your home** to reduce the chances of losing your home due to a wildfire? *(Circle one number)*
   - 56%  1    0 - $100
   - 30%  2    $101 - $500
   - 7%   3    $501 - $1000
   - 8%   4    $1001 or more
INVEST (n=281)
7. Beyond the time and money reported in the previous four questions, are there any other significant investments (of time or money) that you made to your property (land or house) in order to reduce the risk of losing your home due to wildfire since you bought your property or started to rent?

73% 1 No
27% 2 Yes → Please explain:

EVACPLAN (n=307)
8. Do you currently have an evacuation plan in the event of a wildfire threatening your home or property? (Circle one number)

34% 1 No
66% 2 Yes

EMERPLAN (n=307)
9. Do you currently have any emergency plan for reducing the risk of losing your home due to a wildfire that you would implement in the event of a wildfire threatening your home? (e.g., cutting trees, mowing lawn, using fire retardant) (Circle one number)

58% 1 No
42% 2 Yes → Please explain:

10. When deciding whether to take action to reduce the risk of loss due to wildfire on your property, how much of a consideration is each of the following items? (Circle one number for each)

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Not a consideration</th>
<th>Strong consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial expense/ Cost of taken action</td>
<td>23% 12% 37% 13% 15%</td>
<td></td>
</tr>
<tr>
<td>Time it takes to implement actions</td>
<td>24% 18% 36% 14% 8%</td>
<td></td>
</tr>
<tr>
<td>Physical difficulty of doing the work</td>
<td>26% 17% 31% 12% 14%</td>
<td></td>
</tr>
<tr>
<td>Lack of specific information about how To reduce risk</td>
<td>45% 19% 20% 10% 6%</td>
<td></td>
</tr>
<tr>
<td>The likelihood of a wildfire being on your property</td>
<td>11% 10% 34% 18% 27%</td>
<td></td>
</tr>
</tbody>
</table>
11. From which of the following sources have you received information from about reducing the risk of wildfire? *(Circle all that apply)*

<table>
<thead>
<tr>
<th>Source</th>
<th>% Reported is % Circled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Local Fire Department</td>
<td>49%</td>
</tr>
<tr>
<td>2 Neighborhood group (homeowners group, local board, etc.)</td>
<td>33%</td>
</tr>
<tr>
<td>3 Neighbors, friends, or family members</td>
<td>30%</td>
</tr>
<tr>
<td>4 Media (newspaper, TV, radio, internet)</td>
<td>47%</td>
</tr>
<tr>
<td>5 County wildfire specialist</td>
<td>22%</td>
</tr>
<tr>
<td>6 Colorado State Forest Service</td>
<td>24%</td>
</tr>
<tr>
<td>7 U.S. Forest Service</td>
<td>22%</td>
</tr>
<tr>
<td>8 National Park Service</td>
<td>9%</td>
</tr>
<tr>
<td>9 Front Range Fuels Treatment Partnership</td>
<td>2%</td>
</tr>
<tr>
<td>10 Other → Please describe</td>
<td>15%</td>
</tr>
<tr>
<td>None of the above, you have not received any information about wildfire risk.</td>
<td>10%</td>
</tr>
</tbody>
</table>

12. How much confidence do you have in the accuracy of wildfire risk information provided by the following sources? *(Circle one for each group or person)*

<table>
<thead>
<tr>
<th>Source</th>
<th>No Confidence</th>
<th>A lot of confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local fire department</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Neighborhood group</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Neighbors, friends, or family Members</td>
<td>6%</td>
<td>22%</td>
</tr>
<tr>
<td>Media (newspaper, TV, radio, internet)</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Larimer County wildfire safety specialist</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Colorado State Forest Service</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>U.S. Forest Service</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>National Park Service</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Front Range Fuels Treatment Partnership</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Other:</td>
<td>22%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Section 4: In this section, we are interested in your perspectives and opinions about issues such as wildfire, wildfire management, and the environment. There are no correct or incorrect answers.

1. If there is a wildfire on your property, how likely do you think it is that the following would occur? *(Circle one number for each item)*

<table>
<thead>
<tr>
<th>Event</th>
<th>Not Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>You would put the fire out. LACT1(n=302)</td>
<td>23% 23%</td>
<td>27% 9% 18%</td>
</tr>
<tr>
<td>The fire department would save your home. LACT2(n=308)</td>
<td>8% 10%</td>
<td>32% 21% 29%</td>
</tr>
<tr>
<td>There would be some smoke damage to your home. LACT3(n=306)</td>
<td>5% 7%</td>
<td>32% 17% 40%</td>
</tr>
<tr>
<td>There would be some physical damage to your home. LACT4(n=305)</td>
<td>4% 14%</td>
<td>35% 17% 29%</td>
</tr>
<tr>
<td>Your home would be destroyed. LACT5(n=305)</td>
<td>21% 25%</td>
<td>29% 10% 15%</td>
</tr>
<tr>
<td>You would suffer financial losses due to the loss of business/income on your property. LACT6(n=265)</td>
<td>42% 15%</td>
<td>15% 5% 16%</td>
</tr>
<tr>
<td>Your trees and landscape would burn. LACT7(n=303)</td>
<td>3% 9%</td>
<td>23% 18% 47%</td>
</tr>
<tr>
<td>Your pets would be harmed (include non-income generating livestock). LACT8(n=263)</td>
<td>36% 21%</td>
<td>24% 7% 6%</td>
</tr>
<tr>
<td>You would suffer financial losses due to the loss of income generating livestock. LACT9(n=195)</td>
<td>66% 5%</td>
<td>5% 2% 1%</td>
</tr>
<tr>
<td>Your crops would be damaged or lost (including trees). LACT10(n=220)</td>
<td>42% 6%</td>
<td>13% 8% 16%</td>
</tr>
<tr>
<td>Your neighbors’ homes would be damaged or destroyed. LACT11(n=294)</td>
<td>8% 14%</td>
<td>36% 17% 24%</td>
</tr>
<tr>
<td>Your community water supply would be threatened. LACT12(n=269)</td>
<td>36% 22%</td>
<td>22% 5% 10%</td>
</tr>
<tr>
<td>The fire would spread to nearby public lands. LACT13(n=288)</td>
<td>16% 9%</td>
<td>22% 17% 33%</td>
</tr>
</tbody>
</table>
2. How much do you agree or disagree with the following statements about wildfire? *(Circle one number for each statement)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naturally occurring wildfire is not the problem; people who choose to live in fire prone areas are the problem. STATE1 (n=306)</td>
<td>7%</td>
<td>31%</td>
<td>25%</td>
<td>27%</td>
<td>10%</td>
</tr>
<tr>
<td>With proper technology, we can control most wildfires after they have started. STATE2 (n=305)</td>
<td>4%</td>
<td>32%</td>
<td>28%</td>
<td>30%</td>
<td>6%</td>
</tr>
<tr>
<td>Wildfires that threaten human life should be put out. STATE3 (n=309)</td>
<td>52%</td>
<td>42%</td>
<td>5%</td>
<td>1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Wildfires that threaten property should be put out. STATE4 (n=308)</td>
<td>30%</td>
<td>51%</td>
<td>15%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>During a wildfire, saving homes should be a priority over saving forests. STATE5 (n=307)</td>
<td>24%</td>
<td>41%</td>
<td>22%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>Wildfires are a natural part of the balance of a healthy forest/ecosystem. STATE6 (n=309)</td>
<td>40%</td>
<td>46%</td>
<td>8%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>You do not need to take action to reduce the risk of loss due to wildfire because the risk is not that great. STATE7 (n=310)</td>
<td>2%</td>
<td>6%</td>
<td>9%</td>
<td>44%</td>
<td>40%</td>
</tr>
<tr>
<td>You do not have the time to implement wildfire risk reduction actions. STATE8 (n=306)</td>
<td>&lt;1%</td>
<td>8%</td>
<td>15%</td>
<td>52%</td>
<td>24%</td>
</tr>
<tr>
<td>You do not have the money for wildfire risk reduction actions. STATE9 (n=303)</td>
<td>3%</td>
<td>14%</td>
<td>22%</td>
<td>44%</td>
<td>17%</td>
</tr>
<tr>
<td>You do not need to act to reduce the risk of loss due to wildfire because you have insurance. STATE10 (n=310)</td>
<td>1%</td>
<td>3%</td>
<td>5%</td>
<td>49%</td>
<td>42%</td>
</tr>
<tr>
<td>You live here for the trees and will not remove any of them to reduce fire risk. STATE11 (n=308)</td>
<td>2%</td>
<td>6%</td>
<td>17%</td>
<td>47%</td>
<td>27%</td>
</tr>
<tr>
<td>A wildfire is unlikely to happen within the time period you expect to live here. STATE12 (n=308)</td>
<td>2%</td>
<td>12%</td>
<td>25%</td>
<td>39%</td>
<td>22%</td>
</tr>
<tr>
<td>Managing the wildfire danger is a government responsibility, not yours. STATE13 (n=309)</td>
<td>2%</td>
<td>1%</td>
<td>7%</td>
<td>55%</td>
<td>34%</td>
</tr>
<tr>
<td>Actions to reduce the risk of loss due to wildfire are not effective. STATE14 (n=307)</td>
<td>2%</td>
<td>3%</td>
<td>11%</td>
<td>56%</td>
<td>29%</td>
</tr>
<tr>
<td>Your property is not at risk of wildfire. STATE15 (n=310)</td>
<td>2%</td>
<td>8%</td>
<td>12%</td>
<td>49%</td>
<td>29%</td>
</tr>
<tr>
<td>You don’t take action to reduce the risk of loss due to wildfire because if a wildfire reaches your property firefighters will protect your home. STATE16 (n=308)</td>
<td>&lt;1%</td>
<td>4%</td>
<td>8%</td>
<td>53%</td>
<td>34%</td>
</tr>
<tr>
<td>You don’t take action because adjacent properties are not treated leaving your actions ineffective STATE17 (n=303)</td>
<td>1%</td>
<td>5%</td>
<td>14%</td>
<td>53%</td>
<td>27%</td>
</tr>
</tbody>
</table>
3. How much do you agree or disagree with the following statements about the relationship between humans and the environment? *(Circle one number for each statement)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are approaching the limit of the number of people the earth can support. NEP1 (n=308)</td>
<td>26%</td>
<td>26%</td>
<td>20%</td>
<td>22%</td>
<td>6%</td>
</tr>
<tr>
<td>Humans have the right to modify the natural environment to suit their needs. NEP2 (n=308)</td>
<td>3%</td>
<td>18%</td>
<td>24%</td>
<td>42%</td>
<td>13%</td>
</tr>
<tr>
<td>When humans interfere with nature it often produces disastrous consequences. NEP3 (n=308)</td>
<td>24%</td>
<td>46%</td>
<td>18%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Humans are severely abusing the environment. NEP4 (n=308)</td>
<td>35%</td>
<td>35%</td>
<td>15%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>The earth has plenty of natural resources if we just learn how to develop them. NEP5 (n=308)</td>
<td>8%</td>
<td>31%</td>
<td>17%</td>
<td>32%</td>
<td>13%</td>
</tr>
<tr>
<td>Despite our special abilities humans are still subject to the laws of nature. NEP6 (n=308)</td>
<td>51%</td>
<td>46%</td>
<td>2%</td>
<td>&lt;1%</td>
<td>0%</td>
</tr>
<tr>
<td>Humans were meant to rule over the rest of nature. NEP7 (n=308)</td>
<td>4%</td>
<td>10%</td>
<td>16%</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>The balance of nature is very delicate and easily upset. NEP8 (n=308)</td>
<td>30%</td>
<td>44%</td>
<td>15%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Humans will eventually learn enough about how nature works to be able to control it. NEP9 (n=307)</td>
<td>1%</td>
<td>6%</td>
<td>19%</td>
<td>46%</td>
<td>29%</td>
</tr>
<tr>
<td>If things continue on their present course, we will soon experience a major ecological catastrophe. NEP10 (n=307)</td>
<td>24%</td>
<td>33%</td>
<td>24%</td>
<td>13%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Section 5: In this section, please think about the properties directly across the road or alley and those that share a property line with yours. The following questions refer to these properties or to those who live there as your neighbors. If you share a property line with public land or land without homes or other buildings include anyone who manages this land (e.g., land managers) among the neighbors you consider when answering the following questions.

1. How many of each of the following types of neighboring properties (properties that share a property line) do you have? *(Fill in the blanks)*
   - mean=2.65 Full time residential (owner occupied or rental) FTRES
   - mean=1.08 Seasonal/ part time residential (owner occupied or rental) PTRES
   - mean=.31 Vacant residence VACANT
   - mean=.23 Undeveloped private land UNDEV
   - mean=.54 Publicly managed land (e.g., National Forest, National Park, State owned land, county or community land) PUBLIC
   - mean=.30 Other *(Please specify)*: OTHER
   - mean=.01 Not sure what type of properties neighbor yours NOTSURE

2. How often do you interact with your neighbors (residents or land managers)? *(Circle all that apply)*

   % reported is % circled (n=326)
   - 14% 1 Daily INTER1
   - 40% 2 Weekly INTER2
   - 37% 3 Monthly INTER3
   - 19% 4 Yearly INTER4
   - 3% 5 Never → Skip to Question 5 INTER5

3. In general, how would you characterize the tone of these interactions? *(Circle all that apply)*

   (n=315)
   - 80% 1 Positive with most neighbors POSMOST
   - 11% 2 Positive with a few neighbors POSFEW
   - 5% 3 Negative with a few neighbors NEGF EW
   - <1% 4 Negative with most neighbors NEGMOST

   **TALKFIRE** (n=296)

4. Have you ever talked about wildfire issues with a neighbor? *(Circle one number)*

   29% 1 No
   71% 2 Yes

   **NACTION** (n=306)

5. Have any of your neighbors done anything to reduce the risk of wildfire on their property? *(Circle one number)*

   20% 1 No → Skip to Question 8
   57% 2 Yes → Please describe: ____________________________________________
   23% 3 Don’t know → Skip to Question 9
WHENNACT (n=175)
6. When did your neighbors undertake action(s) to reduce risk of wildfire on their property in relation to any actions you have undertaken? (Circle one number)
3% 1 I have not taken any action
7% 2 They took action before you did
23% 3 They took action after you did
1% 4 They plan to take action
45% 5 We took action around the same time
20% 6 Don’t know

WORKN (n=176)
7. Have you ever worked with any of your neighbors to reduce the risk of wildfire on your property or that of your neighbors? (Circle one number)
57% 1 No
8% 2 Yes, on your property
7% 3 Yes, on your neighbors’ properties
27% 4 Yes, on both

SLACKER (n=237)
8. Do you have any neighbors who are not taking action to address what you would consider sources of wildfire risk in the event of a wildfire (e.g., dense vegetation) on their property? (Circle one number)
33% 1 No
54% 2 Yes
14% 3 Don’t know

9. How would you describe the vegetation on your property and your neighbors’ properties? (Circle one number for each)

<table>
<thead>
<tr>
<th></th>
<th>Very Sparse</th>
<th>Very Dense</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you first moved into your house, the vegetation on your property was... VEG1 (n=306)</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Currently, the vegetation on your property is... VEG2 (n=307)</td>
<td>7%</td>
<td>27%</td>
</tr>
<tr>
<td>When you first moved in, the vegetation on most of the properties neighboring yours was... VEG3 (n=305)</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>Currently, the vegetation on most of the properties neighboring yours is... VEG4 (n=307)</td>
<td>3%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Section 6: Now, we want you to think beyond just your neighbors, to consider the people who live near you. We refer to this as your community in the following questions. This would be your immediate neighborhood, subdivision, or development. If you live in a more rural setting, think of the surrounding area that would best approximate a neighborhood, subdivision, or development.

% reported is % circled
(n=326)
1. How often do you participate in social groups or activities (e.g., potlucks, parties, book groups, etc.) with members of your community (this includes neighbors)? (Circle all that apply)
   1% 1 Daily SOC1
   11% 2 Weekly SOC2
   23% 3 Monthly SOC3
   44% 4 Yearly SOC4
   22% 5 Never SOC5

% reported is % circled
(n=326)
2. How often do you currently participate in community groups that make decisions about what happens in your community (e.g., home owner association, etc.)? (Circle all that apply)
   <1% 1 Daily COM1
   3% 2 Weekly COM2
   17% 3 Monthly COM3
   48% 4 Yearly COM4
   29% 5 Never → Skip to Question 4 COM5

LEADSOC (n=216)
3. Do you currently have a leadership role in any social or community groups? (Circle one number)
   72% 1 No
   28% 2 Yes

SOCIAL4 (n=307)
4. Since you bought or rented your property, has your community had any wildfire-related events or are there any organizations that address wildfire in your community (e.g., Firewise meeting, meetings with fire department about wildfire, community wildfire-awareness group or event)? (Circle one number)
   31% 1 No
   54% 2 Yes
   15% 3 Not Sure
**SOCIAL5 (n=306)**
5. Have you ever participated in any wildfire-related events or organizations (e.g., wildfire meeting, slash collection day) in your community? *(Circle one number)*

<table>
<thead>
<tr>
<th></th>
<th>1 No</th>
<th>2 Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>62%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

62% 1 No  →  Skip to Question 7
38% 2 Yes

**SOCIAL6 (n=116)**
6. Do you play a leadership role in any of the wildfire-related events or organizations mentioned in Questions 4 or 5 above? *(Circle one number)*

<table>
<thead>
<tr>
<th></th>
<th>1 No</th>
<th>2 Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>78%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

78% 1 No
22% 2 Yes

7. In your opinion, how much does each of the following contribute to the current wildfire danger in your community? *(Circle one number for each)*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Some</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build up of vegetation on public land. DANGER1 (n=302)</td>
<td>8%</td>
<td>10%</td>
<td>38%</td>
</tr>
<tr>
<td>The number of houses being built in your community. DANGER2 (n=305)</td>
<td>25%</td>
<td>17%</td>
<td>34%</td>
</tr>
<tr>
<td>Timber cutting practices. DANGER3 (n=299)</td>
<td>38%</td>
<td>17%</td>
<td>26%</td>
</tr>
<tr>
<td>Vandalism and/or arson. DANGER4 (n=302)</td>
<td>34%</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>Recreational use on public lands. DANGER5 (n=306)</td>
<td>18%</td>
<td>10%</td>
<td>32%</td>
</tr>
<tr>
<td>Natural processes (droughts, changes in vegetation over time, lightning, etc.). DANGER6 (n=307)</td>
<td>1%</td>
<td>2%</td>
<td>21%</td>
</tr>
<tr>
<td>Larger environmental changes such as global warming. DANGER7 (n=301)</td>
<td>18%</td>
<td>15%</td>
<td>29%</td>
</tr>
<tr>
<td>Diseases and pests (bark beetle, dwarf mistletoe) DANGER8 (n=304)</td>
<td>8%</td>
<td>9%</td>
<td>25%</td>
</tr>
<tr>
<td>Other <em>(please specify)</em>: DANGER9 (n=32)</td>
<td>6%</td>
<td>0%</td>
<td>22%</td>
</tr>
</tbody>
</table>
In this section, we ask about personal and household characteristics. As with all questions in this survey, your responses are completely confidential.

AGE (n=296)
1. What is your age? *(Fill in the blank)*
   mean=57 Years old

GENDER (n=304)
2. Are you? *(Circle one number)*
   55% 1 Male
   45% 2 Female

3. What is your racial or ethnic group? *(Circle all that apply)*
   1=circled; 0=not circled; % reported is % circled
   (n=302)
   97% 1 White RACE1
   1% 2 Black or African American RACE2
   3% 3 Hispanic RACE3
   9% 4 American Indian or Alaskan Native RACE4
   6% 5 Asian RACE5
   1% 6 Other RACE6

MARRY (n=298)
4. What best describes your current marital status? *(Circle one number)*
   79% 1 Now Married
   5% 2 Widowed
   11% 3 Divorced
   5% 4 Never Married

EDUC (n=301)
5. What is the highest grade or year of school you completed? *(Circle one number)*
   0% 1 Eighth grade or less
   1% 2 Some high school
   5% 3 High school graduate
   20% 4 Some college or technical school
   5% 5 Technical or trade school
   28% 6 College graduate
   12% 7 Some graduate work
   30% 8 Advanced Degree (M.D., M.A., M.S., Ph.D., etc.)
EMPLOY (n=300)
6. Which of the following best describes your current employment situation? *(Circle one number)*
   
   36%  1  Employed full time
   5%   2  Employed part time
   3%   3  Unemployed
   17%  4  Self-employed
   39%  5  Retired

INCOME (n=275)
7. Which of the following categories describes your household income? *(Circle one number)*
   
   6%   1  Less than $25,000
   10%  2  $25,000 - $34,999
   12%  3  $35,000 – $49,999
   24%  4  $50,000 - $74,999
   17%  5  $75,000 - $99,999
   14%  6  $100,000 - $124,999
   12%  7  $125,000 - $200,000
   6%   8  More than $200,000
Thank you for your help. Use the space below to write any comments.

Please return the survey in the enclosed envelope or if you lost the envelope, please return to:

Professor Nicholas Flores  
Institute of Behavioral Science  
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483 UCB  
Boulder CO 80309
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