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About RFF

Resources for the Future (RFF) is an independent, nonprofit research institution in Washington, DC. Its mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement. RFF is committed to being the most widely trusted source of research insights and policy solutions leading to a healthy environment and a thriving economy. The views expressed here are those of the individual authors and may differ from those of other RFF experts, its officers, or its directors.

About the Project

This report is the second in a series by researchers at Stanford University, Resources for the Future, and ReconMR examining American public opinion on issues related to climate change. Since 1997, Stanford University Professor Jon Krosnick has explored American public opinion on these issues through a series of rigorous national surveys of random samples of American adults, often in collaboration with RFF.

For the 2020 iteration of the Climate Insights survey, 999 American adults were interviewed during the 80-day period from May 28, 2020 to August 16, 2020.
This second installment of the Climate Insights 2020 report focuses on American public opinion regarding natural disasters such as inland flooding and wildfires—a very real threat to many Americans. The next installment in this series will address the political dynamics underpinning many Americans' views about climate change and policy.

This series is accompanied by an interactive data tool, which can be used to view specific data from the survey. Please visit www.rff.org/climateinsights or https://climatepublicopinion.stanford.edu/ for more information and to access the data tool, report series, blog posts, and more.

Note: Since 1997, Stanford University Professor Jon Krosnick has led surveys exploring American public opinion on issues related to global warming, human activity, government policies to address climate change, and more, through a series of rigorous national surveys of random samples of American adults. When this research program began, "global warming" was the term in common parlance. That term was used throughout the surveys over the decades and was always defined for respondents, so it was properly understood. In recent years, the term "climate change" has risen in popularity, so both terms are used in this report interchangeably. When describing survey question wordings and results, the term "global warming" is used in order to match the term referenced during interviews. Empirical studies have shown that survey respondents interpret the terms "global warming" and "climate change" to have equivalent meanings (Villar and Krosnick 2011).
Acknowledgments

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The data included in this report comes from sources with varying sharing policies. Please check the references for more information, and email krosnick@stanford.edu with any questions.
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Introduction

At the time of this writing, the Category 4 Hurricane Laura recently made landfall near the Texas-Louisiana border, two days after Tropical Storm Marco blew through the same area. Simultaneously, wildfires are raging across the American West, burning over one million acres and threatening tens of thousands of homes and other structures in California alone. From coast to coast, the threat of flood and fire is a real and persistent source of fear for millions of Americans.

According to natural scientists, climate change is intensifying natural disasters like wildfires and floods, making them increasingly devastating. In its Fifth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) detailed current and projected impacts of anthropogenic activity on climate changes and extreme weather events. In the executive summary of its region-specific examinations of North America, the IPCC Working Group 2 stated:

North America's climate has changed and some societally relevant changes have been attributed to anthropogenic causes (very high confidence). Recent climate changes and individual extreme events demonstrate both impacts of climate related stresses and vulnerabilities of exposed systems (very high confidence)...

Many climate stresses that carry risk—particularly related to severe heat, heavy precipitation, and declining snowpack—will increase in frequency and/or severity in North America in the next decades (very high confidence).

Global warming of approximately 2°C (above the preindustrial baseline) is very likely to lead to more frequent extreme heat events and daily precipitation extremes over most areas of North America, more frequent low-snow years, and shifts toward earlier snowmelt runoff over much of the western USA and Canada. Together with climate hazards such as higher sea levels and associated storm surges, more intense droughts, and increased precipitation variability, these changes are projected to lead to increased stresses to water, agriculture, economic activities, and urban and rural settlements.

As the world warms, the cost to Americans may also justify local and national efforts to adapt to damage exacerbated by climate change. For example, the spread of fire can be limited by reducing the amount of burnable materials in forests, whether it be through controlled burns or mechanical thinning (Scott et al. 2012). Federal and state governments could expand firefighting personnel to increase capacity to effectively limit the spread of fires. In flood-prone areas, governments can discourage or prevent people from building houses or other structures. After fires or floods, governments can help victims to recover through financial assistance or recovery programs. The government can implement these efforts and more through the use of taxpayer dollars.
The majority of these proposed policies are considered "adaptation policies," as they seek to change human behavior in response to climate change, instead of "mitigation policies" which would focus on curbing the effects of climate change itself. Although a few policies could be considered as mitigation—namely expanding firefighting personnel or removing dead vegetation—this report will use "adaptation policies" as a blanket term for proposed government action.

Whether governments should undertake such efforts—and how these efforts should be paid for—are matters on which the American public can and does express preferences. Policymakers may choose to take public sentiment into account if they have access to reliable measurements of the public's preferences, and this report describes new evidence gathered for exactly this purpose.

Americans have been living with the consequences of natural disasters for generations, and, as shown below, three in four Americans say they have personally observed effects of climate change. It is fully plausible that they may have policy preferences shaped by historical responses and their own experiences. But climate change puts a new spin on these disasters, because its existence, unchecked, foretells increases in both the frequency and severity of damaging events. This added dynamic raises the interesting possibility that Americans might be more supportive of government efforts to prevent damage from wildfires and floods and to assist people after a disaster if the question is framed in terms of the likely impact of climate change. We tested that possibility in the survey described in this report.

**Figure 1. Percentage of Americans who believe that they have seen effects of global warming**

![Percentage of Americans who believe that they have seen effects of global warming](chart)
As the world warms, the cost to Americans may also justify local and national efforts to adapt to damage exacerbated by climate change.
The hypothesis is in the spirit of social science research on "framing." Policies may be contextualized in various ways, and public reactions to the policy may be influenced by the choice of context. To date, the literature points to two types of framing: equivalency framing (Tversky and Kahneman 1981) and emphasis framing (Chong and Druckman 2007).

**Figure 2. Equivalency Framing and Emphasis Framing**

<table>
<thead>
<tr>
<th>EQUIVALENCY FRAMING</th>
<th>EMPHASIS FRAMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Under this policy, 90% of Americans will be employed.”</td>
<td>“Under this policy, 10% of Americans will be unemployed.”</td>
</tr>
<tr>
<td><strong>vs.</strong></td>
<td><strong>vs.</strong></td>
</tr>
<tr>
<td>“The new factory will create jobs for more than 500 Americans.”</td>
<td>“The new factory will pollute the river and damage ecosystems.”</td>
</tr>
</tbody>
</table>

Through equivalency framing, the same fact can be described in two different, equally true ways that emphasize different aspects of reality. For example, if a disease is expected to kill 600 people and administering a drug to those people will save 200 of those lives, it would be equally true to say that 400 people will not be saved by the drug (Tversky and Kahneman 1981). Such changes in framing have been shown to alter public opinion on an issue.

Emphasis framing effects occur when a policy or situation is described in ways that focus on different attributes (Kinder and Sanders 1990). For example, if a state government revokes the permit of a company that is producing an unlawful amount of methane, one legislator could say that the state is protecting public health and the environment. Meanwhile, a legislator who is against the revocation might argue that the state is interfering with production and putting jobs at risk. Two very different arguments can be made, and they differ in emphasis framing. Past work has shown that such emphasis framing can also alter people's opinions toward a policy (Kinder and Sanders 1990).

The survey experiment described here explored whether framing government policies regarding wildfires and floods in terms of climate change alters public support for those policies. Respondents were randomly assigned either to evaluate policies with no mention of climate change, or they were first told that natural scientists believe that climate change will make the damage from wildfires and floods more frequent and more profound. In reviewing these responses, we examined whether this emphasis framing increased the public's preferences for government policies to adapt to and mitigate the effects of these events on people and property.

In the context of this survey, we also sought to identify groups of people who may be more or less favorable toward such government policies. In addition to traditional demographic predictors of policy support and the role of respondents' belief about
the existence of climate change, we looked closely at how respondents’ support for policy was affected by their material self-interest. A great deal of theory, especially in economics, has portrayed people as rational actors pursuing their material self-interests (Kiewiet 1983; Kinder and Kiewiet 1981; Lewis-Beck and Paldam 2000). Rational choice theory suggests that people will support a public policy if they perceive that it will yield more economic benefits than costs to themselves (Downs 1957). However, research has shown that a person’s material self-interests have little impact when forming opinions about government policies. Instead, people focus on what they think is best for the most people affected by the policy—a style of reasoning called “sociotropic” (Lau and Heldman 2009; Sears and Funk 1990; Sears et al. 1980). We explored this notion by examining whether Americans’ support for policies to reduce wildfire and flood damage is affected by their perceptions of the effects they think climate change will have on them personally and on future generations.

We also explored another hypothesis previously discussed in this report series—that concern about the environment is a “luxury good” that people can only afford if they have taken care of their basic life needs (Maslow 1970). Princeton University psychology professor Elke Weber’s theory of a “finite pool of worry” (2015)—which posits that if people are fully consumed by worry about other issues, they will have little or no capacity to worry about climate change—is also particularly relevant to this discussion, particularly as worries about COVID-19, racial inequity, and countless other issues have surged in 2020.

We explored this issue by examining whether support for government policies to adapt to wildfires and floods might be diminished in social groups that are forced to focus on satisfying basic needs in Maslow’s hierarchy, such as lower-income individuals. Likewise, long-term political suppression and economic deprivation resulting from the social stratification are thought to have subjected people of color to substantial challenges in day-to-day living. These marginalized communities often face many different immediate worries, and if climate change is a far-off concern of less immediate relevance, Weber’s theory suggests that we will see less support in these groups for government focus on preventing effects of what might be perceived as relatively rare events. Instead, these groups might be more supportive of government efforts to assist them in the course of ordinary daily life on other, more immediate threats.
Respondents were randomly assigned to be asked a series of eight policy questions on wildfires (N=505) or seven policy questions on floods (N=495). Responses to the questions were combined, yielding an index that represents the average of the answers to the fires or floods questions. The policy support index ranged from 0 (meaning the least support) to 1 (meaning the most support) and was the primary dependent variable that we sought to explain.

Details about the methodology for collecting and analyzing the data are described in the Technical Report, downloadable under “Survey Methodology” at https://www.rff.org/climateinsights/about-climate-insights/.

We conducted statistical analyses to explore whether adding short phrases about climate change altered support for government action to address the effects of wildfires and floods.
Seven out of the eight wildfires policies were favored by a majority of respondents. The least popular policy was payment by the federal government to move people to safer places, with 47% of people favoring it. Nearly six in ten Americans favored prohibiting development near fire-prone areas (58%), and a similar number favored requiring people to purchase fire insurance (60%). More than three-quarters favored the following other policies: removing dead vegetation in forests (76%), helping Americans who lose their homes due to fires (79%), increasing the number of firefighters (85%), and requiring use of fire-resistant building materials (87%).

"People have an aversion to the government telling them where to live, or even giving incentives to move."

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We can see from these results that people have an aversion to the government telling them where to live, even when it’s proposed as an incentive rather than a requirement. People have more interest in government intervention to encourage fire prevention and help fight fires, but fewer people are interested in requirements that could place a burden on homeowners or restrict where people can live and work. Yet we still see that close to half of people support measures that would fundamentally change where humans spend time, like incentives to move or restrictions on development in disaster-prone areas. It’s clear that people are worried and deeply affected by these disasters.

—Ray Kopp, RFF Vice President for Research and Policy Engagement
All of the six policies related to floods were favored by a majority of respondents. Nearly six in ten Americans supported prohibiting development in flood-prone areas (57%). A similar number supported paying people to move to live in safer places (59%). Two-thirds supported requiring flood insurance (66%). More than three-quarters favored the following other policies: helping Americans who lose homes due to floods (77%), requiring new building codes to minimize flood damage (84%), and doing construction to encourage quicker water drainage (87%).

Figure 4. Percentage of Americans who favor flood adaptation policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Percentage Favoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prohibiting development in flood-prone areas</td>
<td>57%</td>
</tr>
<tr>
<td>Paying people to move</td>
<td>59%</td>
</tr>
<tr>
<td>Requiring flood insurance</td>
<td>66%</td>
</tr>
<tr>
<td>Helping those who lose homes</td>
<td>77%</td>
</tr>
<tr>
<td>New building codes</td>
<td>84%</td>
</tr>
<tr>
<td>Construction encouraging quicker water drainage</td>
<td>87%</td>
</tr>
</tbody>
</table>

EXPERT INSIGHT

Public policies often involve a tradeoff between fairness and cost-effectiveness. This is particularly true of natural disaster policies (including insurance programs and public investments to avoid future damage). Moreover, judgments about what is “fair” depend on the eye of the beholder. For example, a flood and fire insurance safety net to protect Americans from random acts of God and nature seems “fair” to most. On the other hand, that same policy is a subsidy to property owners (many of whom are relatively wealthy) who chose to build and live in high-risk areas, which may strike some as unfair. It is also not cost-effective since it, in effect, encourages increased property damage risks. But what about poor communities who may have little or no choice but to live in high-risk areas?

One interpretation of these survey results is that Americans’ views on natural disaster policy reflect both an appreciation of these “fairness options” and a desire to balance fairness and cost-effectiveness. The most striking result is the preference for those living in dangerous areas to pay for their own costs of preventing damage, rather than the US public as a whole (Figures 10 and 11). This is mirrored by very weak support for the federal government taking primary responsibility for reducing damages (Figures 7 and 8). Notably, mandatory fire and flood insurance requirements are favored by 60% and 66% of respondents, respectively. This option is likely to be particularly cost-effective, as it does not subsidize risk-taking, but rather allows insurance markets to price risks into the costs of property ownership.

—James Boyd, RFF Senior Fellow and Thomas Klutznick Chair in Environmental Policy
Overall, Democrats and Republicans support many of the same policies, with few instances of large gaps in support between the parties.

The figures below show that, while Democrats and Republicans support many of the same policies, Democrats tend to be more supportive of government intervention than Republicans, with Independents falling in the middle. Among the policy options presented, fire adaptation policy to remove dead vegetation in forests had near-equal support from all parties. Meanwhile, paying people to move away from fire-prone areas has the largest support gap across Democrats and Republicans.

Figure 5. Percentage of Americans who favor fire adaptation policies, by political party

Figure 6. Percentage of Americans who favor flood adaptation policies, by political party
A majority of Americans say that both the federal government and governments in wildfire-prone states should work together to reduce fire damage. More than two thirds of Americans (71%) believe that the federal government should be involved at some level, whether it be through sole action or through collaboration with state governments. Only 2% of Americans want the federal government to take sole responsibility, while 28% of Americans think affected states should be primarily responsible for preventative action.

People have similar opinions about responsibility for managing risk from floods. 72% of Americans want both federal and state governments to work together to reduce flood damage. Three-quarters of Americans (75%) believe that the federal government should be involved while 95% believe that flood-prone states should take responsibility. Only 3% of Americans believe that the federal government should be the primary actor, while 23% believe that the affected state should be the primary actor.

Most people favor federal government involvement in reducing wildfire and flood damage.
More than two-thirds of Americans say that the federal government should subsidize the cost of natural disaster insurance for impoverished families. 72% of respondents said that the government should provide funding for fire insurance while 68% said the same for flood insurance.

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The preference (68% in favor for floods, and 72% in favor for fires) to subsidize mandatory insurance for the poor is worthy of note, as it runs counter to the preference for those living in dangerous areas to pay their own way (Figures 10 and 11). Instead, it reflects an understanding and concern that poor communities often have fewer real estate choices and less ability to bear damage and insurance costs.

For the interested reader, RFF researchers have produced a variety of studies that provide deeper insight on the need to reform US flood and fire risks policies to make them both fairer and more cost-effective.

—James Boyd, RFF Senior Fellow and Thomas Klutznick Chair in Environmental Policy

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**Most Americans believe that the government should help low-income families pay for disaster insurance.**

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The survey’s finding of support for disaster insurance subsidies for poor families suggests that fairness concerns prompted by these policies may be on respondents’ minds. An ongoing RFF research project is investigating how wildfire risk affects households across the income distribution, to better understand to what degree the burden of wildfires is borne by poorer households.

As wildfires and flood impacts worsen under climate change, it will be important to find support for effective disaster policies that decrease damages in fair ways. Adaptation to climate change will come with a cost, but it is important that these costs be spent on effective and equitable strategies.

—Matthew Wibbenmeyer, RFF Fellow
The majority of Americans believe that people living in dangerous areas should foot the bill for preventing damage from fires and floods. More Americans (69%) believe that people living in wildfire-prone areas should pay for preventative measures, while fewer (62%) support the same for those at risk of flooding.

By comparison, 27% of Americans believe that all taxpayers should contribute to fire prevention, while 34% believe the same for flood prevention.¹

**Figure 10. Americans’ opinions on which taxpayers should pay for the cost of preventing damage from fires**

![Figure 10. Chart showing public opinion on tax responsibility for fire prevention.](chart)

**Figure 11. Americans’ opinions on which taxpayers should pay for the cost of preventing damage from floods**

![Figure 11. Chart showing public opinion on tax responsibility for flood prevention.](chart)

**EXPERT INSIGHT**

The survey results show that most Americans agree that federal and state governments should play a role in helping to adapt to and mitigate costly consequences of climate change such as wildfire and floods. However, they appear to be of two minds about who should bear the costs of these policies.

On the one hand, when asked whether people living in dangerous areas or all Americans should pay higher taxes to cover the cost of preventing damage from wildfires or floods, respondents overwhelmingly indicated that costs should be borne by people living in dangerous areas. On the other hand, the policies that earned the most support were not those that require action on the part of households, such as requiring homeowners to purchase fire or flood insurance or prohibiting development in risky areas. Rather, policies such as new building codes that make homes more fire or flood-resistant and government actions that lower risks, such as tree-thinning and removal of brush and investments in drainage improvements, garnered the highest levels of support.

Actions by homeowners, including policies that incentivize or restrict where they live, reduce exposure to disaster events—i.e. lower the number of people and properties located in harm’s way—and are the most effective way to reduce damages. But policies that affect where people live garnered the least support from survey respondents, especially paying people to move away from dangerous fire- or flood-prone areas. Only 41% of the survey respondents supported such a policy for fire and 52% for flood.

—Margaret Walls, RFF Senior Fellow
The majority of Americans believe that people living in dangerous areas should foot the bill for preventing damage from natural disasters.
Next, we turn to the experiment exploring whether framing fires and floods as tied to climate change altered public support for government intervention. We also look at other variables to determine which factors influence adaptation policy support. To analyze these data, we estimated the parameters of an ordinary least squares regression equation predicting the percent of adaptation policies that each respondent favored.

**Global Warming Attribution**

As a preface to the questions posed to respondents about fires and floods, some respondents were told that climate change is responsible for increasing the frequency and intensity of fires and floods. Those asked about wildfires were told the following: "Scientists who study wildfires believe that in the coming years, those fires will happen more often and will be more damaging because global warming has been causing the land and the air to be drier for long periods of time, so they burn more easily." Those asked about floods were told the following: "Scientists who study flooding believe that in the coming years, those floods will happen more often and will be more damaging because global warming is causing storms to be bigger, to last longer, and to do more damage." Other respondents were not told that natural scientists believe that climate change was affecting these disasters.

Compared to other respondents, individuals who were told that more severe fires or floods are linked to climate change reported increased support for adaptation policies.

**Figure 12. Support for adaptation policies among people who were and were not told that disasters could be attributed to global warming**

People who were told that climate change is causing more severe fires or floods were more likely to support adaptation policies.
Belief in the existence of climate change was also a predictor of support for adaptation policies. Respondents who believed that Earth has been warming over the past 100 years were more likely to support government adaptation efforts than were others, including among the individuals who were not told that global warming will make fires and floods more common and more devastating.

People who believe that global warming is happening are more likely to favor natural disaster adaptation policies.
To explore the impact of pocketbook considerations vs. sociotropic considerations, we assessed respondents' beliefs about how much climate change will hurt or help them personally and will hurt or help future generations. We assessed the degree to which these perceptions influenced policy support.

As expected, sociotropic considerations shaped the public's support for government adaptation efforts. Perceived high threat to future generations posed by climate change strongly and positively predicted policy support.

In addition, the belief that the respondent will be hurt by climate change also increased support for government adaptation efforts, but less strongly.

The difference between the impact of sociotropic vs. self-interest perceptions of harm was statistically significant.

Interestingly, perceiving that global warming will help future generations reduced support for adaptation policies marginally, whereas perceiving that global warming will help the respondent had no impact on policy support.

**Those who think climate change poses a high threat to future generations tend to be more supportive of adaptation policy measures.**
Believing that climate change will hurt future generations makes people far more likely to support adaptation policies. In fact, it's the single biggest predictor of support tested by this survey.
**Household Income**

Contrary to the luxury goods hypothesis, lower-income people (with income less than $35,000) were more likely to support government adaptation policies than people with incomes of $35,000 and more.

**Figure 16. Effect of household income on support for adaptation policies**

<table>
<thead>
<tr>
<th>Income Less than $35,000</th>
<th>Income $35,000 and more</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>25%</td>
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<tr>
<td>50%</td>
<td>50%</td>
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<tr>
<td>75%</td>
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<td>100%</td>
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**Political Ideology and Party**

When it comes to political ideology, the survey shows that conservatives are more likely to oppose government efforts to adapt to the effects of wildfires and floods than were moderates and liberals. Interestingly, after accounting for ideology, political party identification had no impact.

**Figure 18. Effect of political ideology and party on support for adaptation policies**

<table>
<thead>
<tr>
<th>Ideology</th>
<th>Liberal</th>
<th>Moderate</th>
<th>Conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
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<table>
<thead>
<tr>
<th>Political Party</th>
<th>Democrats</th>
<th>Independents</th>
<th>Republicans</th>
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</thead>
<tbody>
<tr>
<td>25%</td>
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</table>
Race and Ethnicity

Support for adaptation policies on wildfires and floods was markedly higher among people of color than among others. Hispanic and Black Americans were more likely than non-Hispanic, white Americans to favor government adaptation policies.

**Figure 17. Effect of race and ethnicity on support for adaptation policies**

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Percentage of Adaptation Policies Favored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>25%</td>
</tr>
<tr>
<td>Black</td>
<td>50%</td>
</tr>
<tr>
<td>White</td>
<td>75%</td>
</tr>
<tr>
<td>Other race</td>
<td>100%</td>
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**EXPERT INSIGHT**

Natural disasters do not affect everyone equally. The concept of environmental racism outlines the idea that environmental burdens, whether it be pollution exposure or inadequate infrastructure, disproportionately affects communities of color. In many cases, these groups have been pushed into undesirable and vulnerable locations across the country.

In the United States, perhaps one of the most stark examples of inequality in the face of a natural disaster is Hurricane Katrina. When the storm hit New Orleans in late August 2005, communities of color made up nearly 80% of the population in flooded neighborhoods (Allen 2007). The extensive damage in predominantly Black neighborhoods led to economic, health, and social repercussions that were felt for years after the storm.

Federal disaster policy often exacerbates environmental justice problems. For example, FEMA’s Individual Assistance Program, which provides aid to households after a disaster, has been shown to benefit wealthier households relatively more than poor households. Similar problems exist with government infrastructure investments, property buyouts, and other policies designed to lessen the impact of floods and other disasters—often the poor benefit less from these government programs.

—*Margaret Walls*, RFF Senior Fellow
**Male/Female**

Respondents who said they were female were more likely than respondents who said they were male to support adaptation efforts.*

**Figure 19. Effect of male/female response on support for adaptation policies**

![Graph showing the percentage of adaptation policies favored by male and female respondents.](image)

*Respondents were asked, "Are you male or female?"*

**Age, Education, and Region**

No differences were observed across age groups, education groups, or regions of the country in support for adaptation policies.
The Federal Government's Role

When asked which level of government should enact adaptation policies for fires and floods, a majority of respondents said that the federal government should play a role: 71% thought that wildfire adaptation policies should be done in part at the federal level (with 2% saying mainly the federal government, and 69% saying both the federal government and the state government) (Figure 7). Three-quarters of Americans (75%) wanted flood adaptation policies to be done at least partly by the federal government (with 3% wanting mainly the federal government, and 72% wanting both the federal government and the state government) (Figure 8).

People who saw climate change as a threat were more likely to support federal government involvement in adaptation policies, especially if they saw climate change as a high threat to future generations. Republicans were less likely than Independents and Democrats to endorse the federal government's role in these policies. Although there were some significant differences, Americans in different demographic groups were quite similar in their levels of support for how the federal government should enact those adaptation policies.

**Figure 20. Percentage Who Favor Federal Government Involvement in Adaptation Efforts by Subgroup**

- **Global Warming Threat Belief**
  - Will hurt future generations
  - Will help future generations
  - Will hurt respondent
  - Will help respondent

- **Political Party**
  - Democrats
  - Independents
  - Republicans

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**EXPERT INSIGHT**

The federal government can play an important role in the aftermath of a natural disaster, which a majority of Americans acknowledge. Due to the federal government’s size and budget, it has the ability to provide necessary resources, funding, and personnel to an overwhelmed state already reeling from the economic and social damages of a wildfire or flood. The federal government can also help prevent damages via, for example, infrastructure investments in levees and coastal barriers by the US Army Corps of Engineers, or via advance warning systems like the predictive models produced by NOAA’s National Hurricane Center.

— **James Boyd**, RFF Senior Fellow and Thomas Klutznick Chair in Environmental Policy

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When asked who should pay for the costs of fire and flood adaptation policies, a minority of respondents said that all taxpayers should foot a portion of these bills: 27% said the costs of fire adaptation policies should be borne by everyone in America, and 69% said that only the people living in fire-prone areas should bear the costs (Figure 10); 34% said the costs of floods adaptations policies should be paid for by everyone in America, and 62% said that people living in fire-prone areas should pay for the costs (Figure 11).

People who saw global warming as a threat to future generations were more likely to support all Americans being responsible to pay for adaptation policies. Liberals were more likely than moderates and conservatives to say that all Americans should pay for implementing these policies. Similar patterns appeared when examining public funding responsibility separately for fire policies and flood policies. Notably, respondents living in flood-prone areas did not prefer payment by the general public any more than people who do not live in such areas.

Figure 21. Percentage Favoring All Taxpayers to Pay for the Costs of Adaptation Policies by Subgroup

<table>
<thead>
<tr>
<th>Global Warming Threat Belief</th>
<th>Percentage Believing All Taxpayers Should Pay Adaptation Policy Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will hurt future generations</td>
<td>0% 25% 50% 75% 100%</td>
</tr>
<tr>
<td>Will help future generations</td>
<td>0% 25% 50% 75% 100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ideology</th>
<th>Percentage Believing All Taxpayers Should Pay Adaptation Policy Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal</td>
<td>0% 25% 50% 75% 100%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0% 25% 50% 75% 100%</td>
</tr>
<tr>
<td>Conservative</td>
<td>0% 25% 50% 75% 100%</td>
</tr>
</tbody>
</table>
This study yielded six main findings:

First, majorities, and sometimes large majorities of Americans, favor government efforts to protect people from future wildfire and flood damage through prevention and adaptation policies. This constitutes a strong signal to lawmakers that the public would be supportive of legislation passed along those lines.

Second, the survey’s framing experiment showed that informing respondents about the links of fires and floods to climate change increased public support for adaptation efforts by government. Respondents who believed in the existence of climate change were also more likely to support adaptation policies. Thus, public education about the existence of climate change and the role that it plays in intensifying wildfires and floods is likely to yield more support for adaptation efforts.

Third, the responses provide evidence that reinforces the broad conclusion that Americans are more driven by sociotropic reasoning than by the desire to protect their own pocketbooks when it comes to public policy. Although self-interest was a driver of public support for government adaptation policies, sociotropic beliefs were more consequential.

Fourth, people of color are no less supportive of government efforts focused on addressing the effects of wildfires and floods than white, non-Hispanic Americans. In fact, Black and Hispanic Americans were more supportive of such efforts than others. This appears to conflict with Weber’s "finite pool of worry" theory, which might predict lower support for climate-related actions and a preference for government to focus on other social issues faced by marginalized communities. But it may be because people in marginalized racial and ethnic groups disproportionately live in areas that are and will be more affected by climate change than others. Climate change may be a threatening issue to many of these groups—not a "luxury" concern. Support for adaptation policies appears to be greater among groups who may feel especially vulnerable to the impact of disasters.

Fifth, support for adaptation policies is stronger among lower-income individuals. Maslow suggests that only once all other needs are met can someone focus on "luxuries" like the greater good of society. The results of this survey suggest otherwise: lower income is a predictive marker for more support for government efforts to protect people from destructive wildfires and floods.

Lastly, Americans overwhelmingly favor the federal government to be involved in enacting fire and flood adaptation policies. However, most Americans prefer the people who live in fire and flood-prone areas to shoulder the costs of these policies.
References


