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Recommended Citation

Ahmed, Mufti Nadimul Quamar, Jennifer E. Givens, Peter D. Howe, and Jessica D. Ulrich-Schad. 2023. "Utahns' Perceptions of Climate Change and Disaster Vulnerabilities" Research Brief #2023-5. *Utah People and Environment Poll*.

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Utahns' Perceptions of Climate Change and Disaster Vulnerabilities

Mufti Nadimul Quamar Ahmed, Jennifer E. Givens, Peter D. Howe, & Jessica D. Ulrich-Schad

Climate change increases the frequency and severity of extreme weather events, making people more vulnerable in a variety of ways¹⁻². It is essential to determine if individuals believe they are susceptible to the effects of climate change in order to develop effective adaptation strategies.

Climate change has contributed to extreme weather occurrences in Utah in recent years. For instance, in the summer of 2022, there was a severe or extreme drought in all of Utah's counties³. Health effects of drought vary with intensity⁴ and can cause climate related deaths directly and indirectly, such as by worsening air quality which can increase cardiovascular and pulmonary disease⁵⁻⁸. According to most climate models, such events are likely to continue as temperature is expected to increase and snowpack to decrease in the western U.S. and Utah⁹. A recent statewide survey found that Utahns are concerned about various environmental and climatic issues including increased temperature, poor air quality, drought/lack of water etc¹⁰. Moreover, since 2020, more Utahns agree with the scientific consensus that human activities are causing climate change¹¹.

This research brief uses representative statewide survey data from the 2023 Utah People and Environment Poll ([UPEP](#)) to understand how Utah residents consider themselves vulnerable to climate change, how prepared they think they are for climate change, and if they believe they need to plan or prepare for climate change.

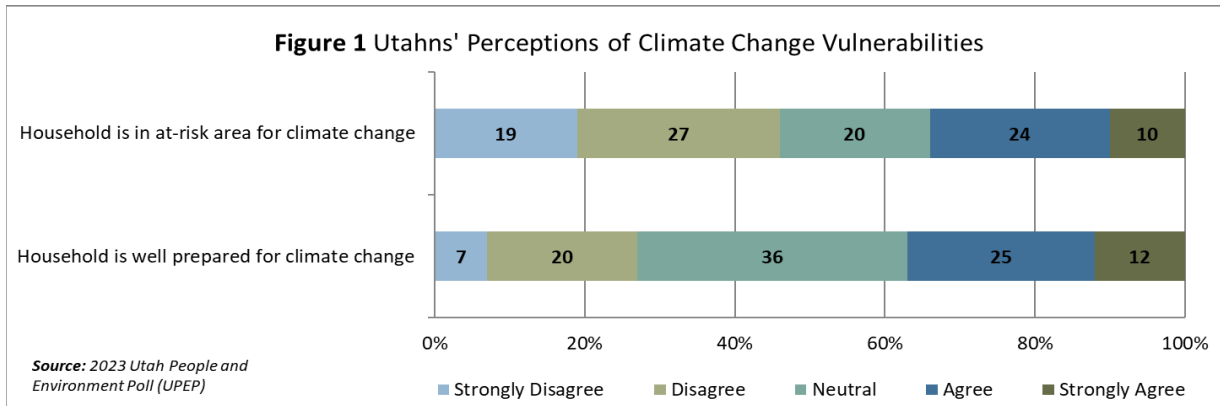
KEY FINDINGS

- In a 2023 statewide survey, 34% of Utah respondents agreed their household is in an at-risk area for climate change or extreme weather events. Thirty-seven percent reported that their household is well prepared for climate change.
- Utahns report high levels of disaster preparedness, with 80% of respondents saying they could afford food/shelter for at least a week if any disaster or climate change event happens and 91% having their own form of transport during evacuation.
- Some Utahns expressed a lack of agency to address climate change, with 19% believing there is nothing anyone can do to save them from the negative impacts of climate change and 11% believing that their household does not need to be prepared as climate change is in God's hands.



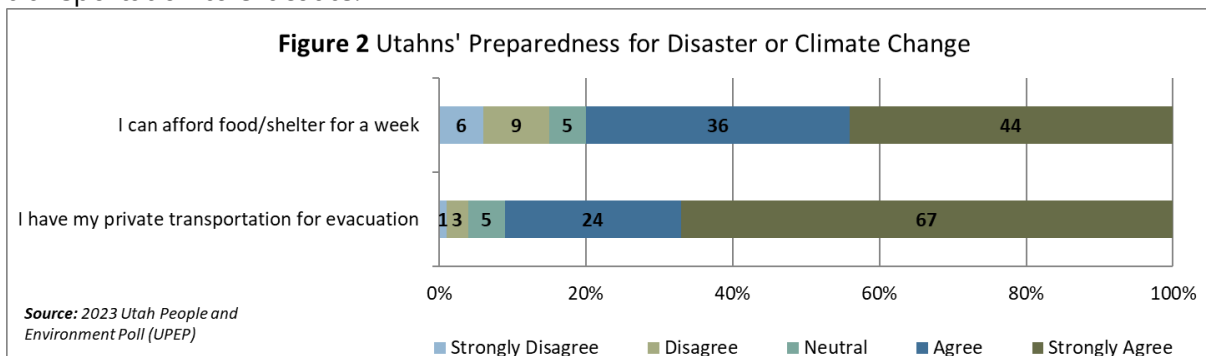
How do Utahns' Perceive their Vulnerabilities to Climate Change?

Survey respondents were asked if they think their household is in an at-risk area for climate change or extreme weather events and if they believe their household is well-prepared. As shown in Figure 1, 34% of respondents agreed or strongly agreed that their household is in an at-risk area for climate change, while nearly half (46%) either disagreed or strongly disagreed, and twenty percent were neutral. However, research shows climate change threatens all U.S. regions, and there will likely be more frequent, severe, and long-lasting droughts, particularly in the Southwest¹²⁻¹³. Figure 1 also illustrates that 37% of Utahns agreed or strongly agreed that their household is well-prepared, 27% do not feel their household is well-prepared, and 36% are neutral. This indicates that although almost one-third of the surveyed Utahns think that their household is in an at-risk area for climate change, a considerable number of Utahns perceived they are prepared.



How Prepared are Utahns for Disasters or Climate Change?

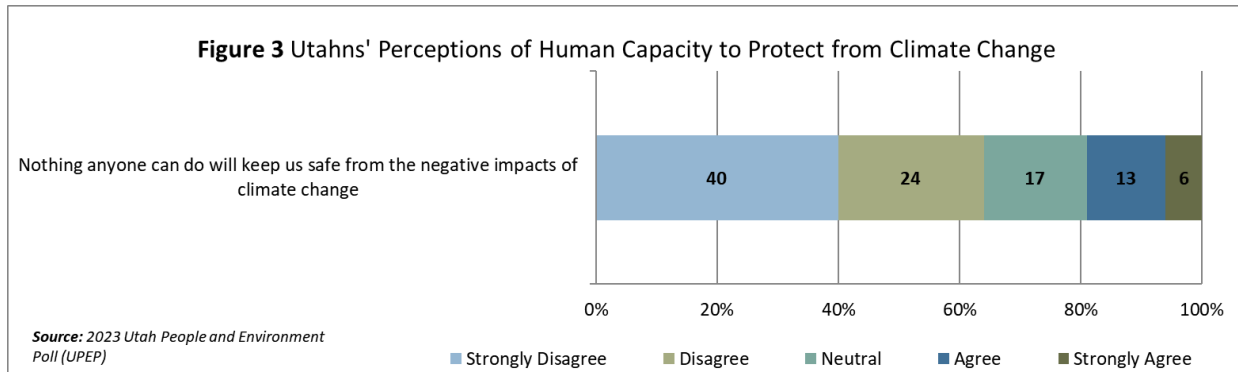
Figure 2 shows the degree to which Utah residents think they can afford food and shelter for a week and have access to their own transportation if disaster or climate events happen in their area. Eighty percent of respondents strongly agreed or agreed they could afford food and shelter and 91% strongly agreed or agreed they had access to private transportation to evacuate. Twenty percent indicated they would have issues affording food and shelter for a week in the face of disaster while only 9% indicated they would have issues accessing private transportation to evacuate.





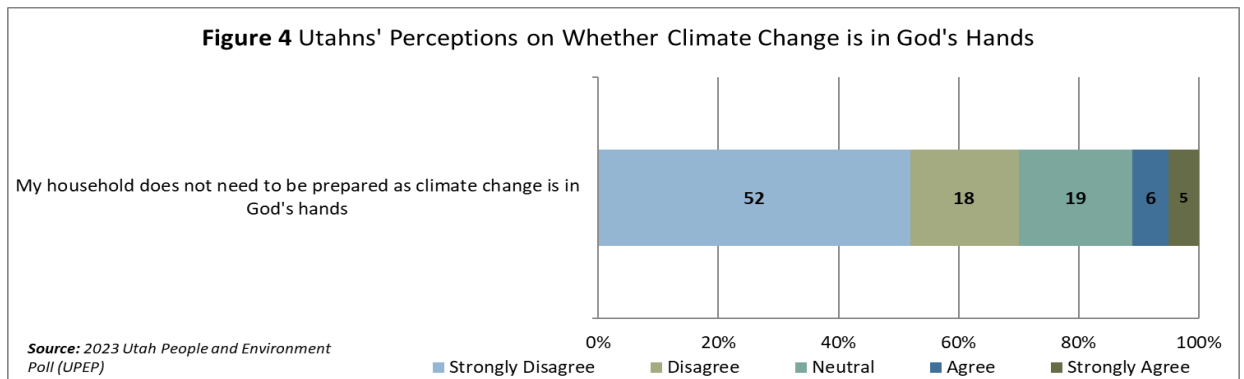
Do Utahns Think Humans Can Address Climate Change?

Survey respondents were asked how much they agree or disagree that there is nothing anyone can do to keep people safe from the negative impacts of climate change. Forty percent of Utahns strongly disagreed and 24% disagreed with this statement, indicating that most people think humans have the capacity to take action to protect people from climate change. However, some Utah residents either strongly agreed (6%) or agreed (13%) with the statement and believe that there is nothing anyone can do to keep them safe from the negative impacts of climate change. Seventeen percent of Utahns expressed a neutral position.



Do Utahns Believe that Climate Change is in God's Hands?

There is evidence that people sometimes consider climate change as the will of God¹⁴. The UPEP asked Utahns if they believe climate change is in God's hands. Figure 4 shows that 70% of the participants strongly disagreed or disagreed. However, 11% of the survey participants either strongly agreed or agreed their household does not need to be prepared because climate change is in God's hands, and 19% were neutral.





Conclusions

A considerable number of Utah respondents (34%) think their household is in an at-risk area for climate change. Future research could explore how well this matches up actual household risk, and might suggest a need for education and preparation campaigns. In addition, 27% of Utah respondents think their household is not well prepared for climate change. This indicates a need for climate adaptation programs and policymakers should emphasize resources for vulnerable Utah residents and take steps to improve their resiliency. Most Utahns think they could manage emergency food and shelter for at least a week and have their own means of transportation in the event of an evacuation. However, disaster management planners and policymakers should focus on the one in five households that cannot afford food and shelter for at least a week and the one in ten who do not have any means of private transportation for evacuation during a disaster or climate change events, in addition to preparing for longer timescale adaptation needs. Finally, a considerable number of Utah residents (19%) agreed that nothing could save them from the negative impacts of climate change, and 11% believed climate change is an act of God. This indicates Utah policymakers and religious leaders should consider the need for awareness and adaptation programs so that people can be aware of the human-induced causes and adverse effects of climate change and the ways that people and society can take action.

Data and Methods

In spring 2023, Utah State University (USU) faculty and students started the Utah People and Environment Poll, or UPEP, to track Utahns' perceptions on environmental issues of importance to the state to help inform policy to address environmental issues. A random sample of 3,750 households were contacted using postal mail to respond to the survey online or on paper. 441 individuals responded to the survey for a final total response rate of 12%. Weights for survey design and to adjust for age, education, and gender representation are applied. To access other briefs and learn more about the UPEP, please visit: <https://chass.usu.edu/sociology/canri/upep>

About CANRI

The Community and Natural Resources Institute, or [CANRI](#), produces and promotes interdisciplinary and applied social science and humanities research focused on challenges at the intersection of people and the environment in the Intermountain West.

Acknowledgments

Funding for the UPEP was provided by the USU College of Humanities and Social Sciences (CHaSS), the USU Mountain West Center for Regional Studies, and from CHaSS Alumni, Jorrien & Tiera Peterson, and their company [Made by Fell](#).

Suggested Citation

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