

# IDENTIFICATION AND COMMUNICATION OF CLIMATE CHANGE IMPACTS ON ROCK CLIMBING AND TRAIL SPORTS



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## PROBLEM

Widespread policy reform is required to implement the emissions reductions needed to protect the lives, livelihoods, and lifestyles threatened globally by climate change. Protect Our Winters (POW) is a non-profit organization that successfully mobilizes the winter sports community to engage in climate action through outreach campaigns and civic engagement, and seeks to become the most influential climate group in the U.S. by 2024. As part of its growth strategy, POW has identified rock climbing and trail sports (mountain biking, hiking, and trail running) as its next target audiences. However, to engage these communities in climate advocacy, POW requires a clear understanding of how climate change will impact these sport communities.

## OBJECTIVES

- I. Assess the impacts of climate change on the rock climbing and trail sports communities
- II. Explore opportunities for POW to expand its audience in 5 target states (AZ, CO, MT, NV, UT)

## POW'S MESSAGING STRUCTURE



*POW identified the rock climbing and trail sports communities as target audiences. We outlined how climate change will impact these communities, which POW will use to engage them in climate action.*

## FINDINGS - CLIMATE IMPACTS

Through a literature review and conversations with experts, we identified the current and projected impacts of climate change on the rock climbing and trail sports communities, as well as the significant economic contributions these sports have at the national, state, and local levels. These economic values and trends serve as proxies for potential economic losses, highlighting how climate change could negatively impact national, state, and local economies.

The climate impacts we identified can be grouped into three overarching categories outlined below: **decreased access to recreation**, **diminished recreation experience**, and **threats to health while recreating**. Cumulatively, these changes will compromise the mental health benefits that outdoor enthusiasts seek from outdoor recreation. Additionally, some of the impacts we identified, such as exposure to extreme heat and poor air quality, are expected to exacerbate existing inequities faced by marginalized communities as their participation in these sports increases.

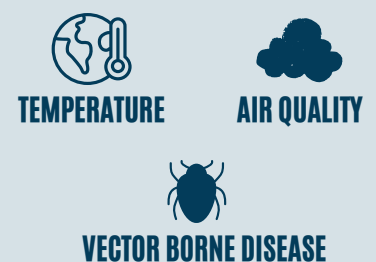
### ACCESS



### EXPERIENCE



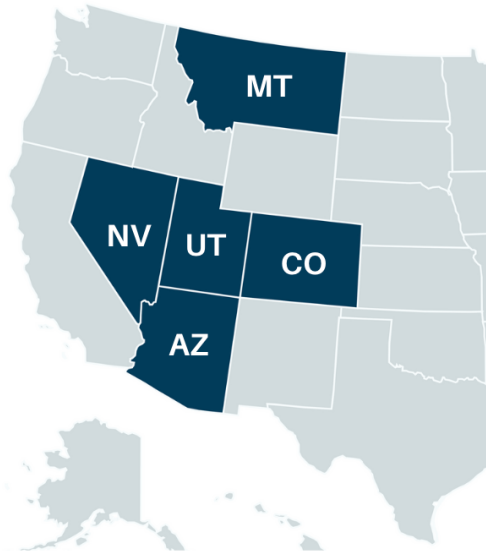
### HEALTH



*Relevant climate impacts and how they relate to decreased access, diminished overall experience, and threatened health.*

## FINDINGS - AUDIENCE EXPANSION

We analyzed POW's membership data to determine member distribution and found that existing membership is underrepresented in Arizona, presenting an important opportunity for audience expansion. We also used publicly-available proxy data to assess rock climbing and trail sports participation rates in POW's five target states. Our analysis estimated that sport participation in target states ranks as shown in the chart below. Though robust data was limited, this analysis suggests that POW has opportunities to create sport-specific messaging campaigns to grow its audience in its target states.



	Rock Climbing	Mountain Biking	Hiking+
#1	UT	UT	CO
#2	CO	MT	UT
#3	NV	CO	MT
#4	MT	AZ	AZ
#5	AZ	NV	NV

*Note: this analysis used proxy data sources that may not be indicative of total participation, but POW can use this framework in the future to perform a more thorough analysis. [Hiking+ refers to hiking, trail running, and other general trail use.]*

## RECOMMENDATIONS

We recommend that POW consider the following messaging to highlight climate impacts on the rock climbing, mountain biking, trail running, and hiking communities: **Climate change will increase barriers to recreational access.** POW's target audiences are united by a love for outdoor recreation, and climate change will reduce their access to places they love to recreate.

Publicly available data was not robust enough for our framework to identify the specific sports that POW should prioritize in each target state. Therefore, we recommend that POW (i) begin collecting detailed sport participation information from its members and (ii) advocate for large-scale data collection projects that clearly outline outdoor recreation participation rates at the state level. With this data, our analysis framework can demonstrate where and how POW should prioritize its audience expansion efforts.

## PROJECT IMPACT

Our work critically evaluates how climate change will impact the lifestyles and livelihoods of the rock climbing and trail sports communities and provides a data analysis framework for future audience characterization. POW will leverage this work to engage these communities in climate advocacy and expand its audience. This will help POW work towards its goal of becoming the most influential climate group in the U.S. by 2024 and advocate for systemic climate solutions at the federal, state, and local levels. Ultimately, this work will contribute to POW's mission of helping passionate people protect the places they love from climate change.