



Photo credit: Nathan Kelley

Increasing the Power of the Outdoor State: Identifying and Connecting Climate Change Impacts to Outdoor Sports Communities to Advance U.S. Climate Policies

A Bren Group Project | Winter 2021-Spring 2022



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OBJECTIVES

Protect Our Winters (POW) is a non-profit organization that advances non-partisan climate policies by organizing outreach campaigns to engage America's 50 million outdoor athletes (aka the "Outdoor State") to take civic action. POW has successfully mobilized winter-sports athletes into a cohesive, engaged stakeholder group by highlighting the direct threat that climate change poses to winter sports. POW now seeks to expand its influence by mobilizing two additional stakeholder groups, climbers and anglers, as climate advocates by highlighting the threats climate change poses to their recreation opportunities. The objective of this project is to analyze how climate change impacts the climbing and angling communities and identify priority regions of climbers and anglers where POW can amplify its climate advocacy messaging. This project will:

1. Perform a scientific literature review and interview members of POW's Science Alliance to understand how and where climate change will affect angling and rock climbing activities
2. Use geospatial modeling to identify where these effects are concentrated and analyze POW's member data to identify areas with high concentrations of climbers and anglers
3. Analyze POW's existing GIS data evaluating swing state districts won by small margins with POW's data on local climbing and angling access points (outdoor retail shops, climbing gyms, guiding outfitters) and economic impact to identify priority areas for future advocacy campaigns
4. Conduct focus group interviews with anglers and climbers to assess their motivations and potential barriers to civic engagement surrounding climate policy advocacy
5. Develop strategic, data-driven educational outreach materials based on POW's data on messaging strategies to target these athletes for civic engagement on climate policy in the U.S.

SIGNIFICANCE

POW builds support for climate advocacy. In 2015, nearly 200 countries committed to the Paris Agreement under the United Nations Framework Convention on Climate Change, which aims to slow the effects of climate change by drastically reducing greenhouse gas emissions.¹ In order to comply with its re-commitment to this agreement, the U.S. must reduce its emissions by 26 to 28 percent of 2005 levels by 2025.² Achieving this goal will require aggressive domestic climate action,³ which requires strong climate leaders and policies. POW has a successful track record of mobilizing support for climate policy: in 2019 they recruited 17,000 new advocates to take actions such as submitting public comments against drilling in the Arctic National Wildlife Refuge, mobilized 34,000 members to send emails to elected officials demanding climate action, and organized over 100 professional athletes, scientists, and outdoor industry brand leaders to attend congressional events and meetings advocating for climate legislation.⁴

POW seeks to strengthen its political impact. POW has successfully emphasized that climate change will result in warmer and shorter winters⁵ to mobilize winter-sports athletes to engage in civic action. However, POW's audience also includes a significant number of climbers and anglers, and as the impacts of climate change grow more widespread, POW now seeks to highlight the threats that climate change poses to these communities to broaden their political impact. For climbers, climate change will increase wildfires,⁶ which create hazardous air-quality conditions that make it difficult to climb⁷ and can block access to climbing locations.⁸ For anglers, more frequent droughts, severe heat waves, and altered precipitation patterns⁹ will shift major river flows and water resources, affecting fish biodiversity, habitat, and availability.¹⁰ To this end, POW requires a comprehensive scientific understanding of how and where climate change will affect these communities, a clear understanding of where these communities are concentrated, and an analysis of where these communities intersect with POW's priority regions for climate advocacy.

This project will provide data to inform POW's expansion. This project will conduct a comprehensive scientific literature review and interview members of POW's Science Alliance to identify how and where climate change will affect climbing and angling activities, analyze POW's existing member database and outdoor access database (outdoor retail shops, climbing gyms, guiding outfitters) to identify regions with high concentrations of climbers and anglers, and analyze POW's existing database on priority swing states and districts to identify politically important regions with high concentrations of climbers and anglers. Along with conducting focus groups to understand climber and angler barriers to climate action, this project will produce

a framework for targeting climbers and anglers as climate advocates in these high-priority regions. POW will use the deliverables produced by this project to inform outreach campaigns targeted at these anglers and climbers, increasing the organization's influence on climate policy in the U.S. and ultimately contributing towards achieving emissions targets in the Paris Agreement.

BACKGROUND

POW successfully engages the Outdoor State. POW focuses on catalyzing a cultural shift where members of the Outdoor State generate the political will necessary to impact elections and policy decisions at the thin margins needed to generate change. POW highlights how climate change will affect the ability of the Outdoor State to enjoy the outdoors, and uses social media channels, traditional media outlets, and their partners (athletes, scientists, creatives, and brands) to amplify this message and motivate their audience to take action.

POW's advocacy is rooted in science. The educational work and messaging behind POW's advocacy is firmly rooted in the scientific research performed by POW's Science Alliance, which consists of 10 leading scientists in climate-related fields, including Dr. James White, Director of the Institute for Arctic and Alpine Research (INSTAAR) and the founding Director of Environmental Studies Department at CU Boulder, and Dr. Kevin E. Trenberth, a senior scientist at the National Center for Atmospheric Research. The Science Alliance brings facts to the forefront of POW's messaging and climate advocacy, which helps its community understand and communicate scientific information to their peers. In addition to their science-based advocacy, POW's outreach and messaging campaigns are guided by a scientific understanding of what motivates outdoor enthusiasts.¹¹ This project will provide analyses that will be directly used for these targeted messaging campaigns.

How POW reaches their stakeholders. POW has built large audiences on Instagram (230,000+ followers), Facebook (100,000+ followers), and Twitter (25,000+ followers).¹² Altogether, POW's alliance members can collectively reach 24,909,928 followers. In 2019, POW's digital communications reached 5,049,306 voters through 134,440,300 media impressions and recruited 20,500 advocates through outdoor-focused educational campaigns, bringing visibility to climate issues.¹³ In the U.S. political arena, creating large, cohesive groups that take collective action can gain the attention of legislators and representatives, who are more likely to vote according to their perceived constituent opinions, which depends on constituent contact.¹⁴

How POW stakeholders influence policy. POW directly influences the U.S. political system through voter engagement. POW's 'Make a Plan to Vote' campaign secured commitments from approximately 40,000 people to prioritize climate policies with their vote¹⁵ and partnered with Strava to recruit 25,598 people to run or bike to polling places. POW mobilized its network to help pass the Colorado House Bill's 2019 19-1261 Climate Action Plan to Reduce Pollution, which "lays out an achievable pathway to meet the state's science-based climate targets of 26% by 2025, 50% by 2030% and 90% by 2050 from 2005 levels."¹⁶ These successes are a direct result of POW's targeting winter-sports athletes to engage in climate advocacy. This project will analyze the data necessary for POW to launch similar campaigns targeting the climbing and angling communities, increasing POW's influence on climate policy in the U.S.

EQUITY

POW is developing a long-term strategy to engage in collaborative work with climate organizations led by people of color, increase diversity in their alliances, promote inclusivity in the outdoors.¹⁷ POW is also onboarding a DEI consultant to ensure a stronger internal and external focus on environmental justice.

The Fourth National Climate Assessment has found that climate risks are "often highest for those that are already vulnerable, including low-income communities, some communities of color, children, and the elderly."¹⁸ By increasing the number of civically engaged stakeholders prioritizing non-partisan climate policies with their vote, this project will contribute to climate solutions that will directly benefit these vulnerable communities and work towards environmental justice.

AVAILABLE DATA

This project will make use of the following publicly available data:

- Peer-reviewed literature published by POW's Science Alliance of climate scientists, hydrologists, and economists, (e.g. Dr. Thomas Painter's research on Colorado River runoff¹⁹) to understand the impacts of climate change on climbing and angling activities
- Publicly available geospatial data on popular climbing and angling locations (Mountain Project, All Trails, FishAngler, State fishing licenses) to identify regions with high concentrations of climbers and anglers
- [Bureau of Economic Analysis](#) and [Outdoor Recreation Economic Report](#) data to quantify the economic impact (and thus political power) of climbing and angling communities in priority regions

In addition to this publicly available data, POW will provide the following data to analyze:

- POW's existing Customer Relationship Management database including zip codes, voter registration data, and engagement rates to identify regions with high concentrations of POW members
- POW's 2019 comprehensive GIS data evaluating swing states, including districts won by small margins, and database of local recreation access points (outdoor retail shops, climbing gyms, ski areas, guiding outfitters, and colleges) to identify priority areas for advocacy campaigns
- POW's 2018 Economic Impact Report²⁰ data, which used economic modeling software to quantify the economic impact of winter sports, to assess the economic impact of climbing/angling
- POW's [2019 Motivating Lifestyle Driven Advocacy study](#) data, which includes data on how person, place, climate, empowerment affect advocacy and engagement

POSSIBLE APPROACHES

- Conduct a scientific literature review and interviews with members of POW's Science Alliance to identify how climate change (e.g. wildfires, increased temperatures, shifting water resources) might qualitatively and quantitatively impact climbing and angling activities
- Analyze POW's member and geospatial data and publicly available datasets of climbers and anglers to identify areas with high concentrations of climbers and anglers, and quantify the economic impact of these climbing and angling communities
- Conduct focus groups with stakeholders and POW athletes to obtain qualitative data on these climbers and anglers' motivations and barriers to action
- Produce a GIS product to identify regions in POW's priority swing states with high concentrations of climbers and anglers that will be impacted by climate change to inform POW's outreach strategies
- Compile strategic communication and education materials for POW alliance members (athletes, scientists, creatives) to effectively message climate change impacts on climbing and angling

DELIVERABLES

In addition to the final written report, policy brief, poster, and oral presentation, deliverables may include:

- Fact sheets outlining current and potential impacts of climate change on climbing and angling
- GIS product identifying climbers and angler hotspots in POW's priority swing states and districts
- Report summarizing localized impacts of climate change on these regions
- Presentation toolkits/slide decks to inform POW alliance members (athletes, scientists, creatives, brands) outreach and advocacy campaign strategies to climbing and angling communities
- 10-20 page white paper containing current scientific literature on climate change effects, factsheets on climate change impacts on climbing and angling, and case studies/anecdotes/quotes about how climate change impacts the climbing and angling communities

INTERNSHIP

Protect Our Winters will commit up to \$12,000 in support of an internship position between June and October of 2021, which will depend on COVID restrictions and POW's Return to Work policy. However, POW will still provide a high level of engagement and professional development should the internship be remote.

CITATIONS

¹ Denchak, Melissa. *Paris Climate Agreement: Everything You Need to Know*. **National Resources Defense Council**. January 15, 2021.

<https://www.nrdc.org/stories/paris-climate-agreement-everything-you-need-know>

² Santoro, Helen. *The United States Will Rejoin the Paris Agreement. What's Next*. **Audubon**. December 8, 2020.

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⁴ Protect Our Winters. *2019 Annual Report*. **Protect Our Winters**. 2020.

https://protectourwinters.org/wp-content/uploads/2020/08/2019-POW-Annual-Report_Final.pdf

⁵ Peach, Sara. *How is climate change affecting winter in my region?* **Yale Climate Communications**. February 12, 2020. <https://yaleclimateconnections.org/2020/02/how-is-climate-change-affecting-winter-in-my-region/>

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⁷ Arvese, Amelia. *Is It Safe to Climb Outside When It's Smoky?* **Climbing**. August 31, 2020.

<https://www.climbing.com/news/is-it-safe-to-climb-outside-when-its-smoky/>

⁸ Johnson-Groh, Mara. *Under the Weather: Climate Change and the Future of Rock Climbing*. **Rock and Ice**. 2017. <https://rockandice.com/snowball/under-the-weather-climate-change-and-the-future-of-rock-climbing/>

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¹⁰ Kinsella, Steven. *Trout in Trouble: The Impacts of Global Warming on Trout in the Interior West*. **National Resources Defense Council Issue Paper**. July 2008.

<https://www.nrdc.org/sites/default/files/trout.pdf>

¹¹ Protect Our Winters. *Motivating Lifestyle Driven Advocacy*. **Protect Our Winters**. 2019.

<https://protectourwinters.org/motivating-lifestyle-advocacy/>

¹² Protect Our Winters. *2020 Strategic Plan*. **Protect Our Winters**. 2020. https://protectourwinters.org/wp-content/uploads/2019/12/POW-2020-strategic_plan.pdf

¹³ Protect Our Winters. *2020 Strategic Plan*. **Protect Our Winters**. 2020. https://protectourwinters.org/wp-content/uploads/2019/12/POW-2020-strategic_plan.pdf

¹⁴ Bergan, Daniel. *Constituent contacts can influence how legislators vote*. **London School of Economics, US Centre**. April 29, 2015.

<https://blogs.lse.ac.uk/usappblog/2015/04/29/constituent-contacts-can-influence-how-legislators-vote/>

¹⁵ Protect Our Winters. *2020 Strategic Plan*. **Protect Our Winters**. 2020. https://protectourwinters.org/wp-content/uploads/2019/12/POW-2020-strategic_plan.pdf

¹⁶ Colorado Energy Office. *GHG Pollution Reduction Roadmap*. **Colorado Energy Office**. January 14, 2021. <https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap>

¹⁷ Protect Our Winters. *2019 Annual Report*. **Protect Our Winters**. 2020. https://protectourwinters.org/wp-content/uploads/2020/08/2019-POW-Annual-Report_Final.pdf

¹⁸ U.S. National Climate Assessment. *Fourth National Climate Assessment: Chapter 1 Overview*. **U.S. National Climate Assessment**. November 23, 2018. <https://nca2018.globalchange.gov/chapter/1/>

¹⁹ TH Painter, JS Deems, J Belnap, AF Hamlet. (2010). Response of Colorado River runoff to dust radiative forcing in snow. *Proceedings of the National Academy of Sciences*. October 5, 2010 107 (40) 17125-17130; <https://doi.org/10.1073/pnas.0913139107>

²⁰ Protect Our Winters. *The Economic Contributions of Winter Sports in a Changing Climate*. **Protect our Winters and REI Co-op**. February 2018. <https://protectourwinters.org/wp-content/uploads/2019/12/POW-2018-economic-report.pdf>

BUDGET AND JUSTIFICATION

No additional funding is anticipated to complete the project, however, Protect Our Winters is committed to providing up to \$12,000 in support of the internship position and for the advancement of the project overall.

CLIENT LETTER OF SUPPORT

Please see the attached client letter of support.



To: Group Project Committee at The Bren School of Environmental Science & Management, University of California, Santa Barbara
From: Lindsay Bourgoine, Vice President of Programs & Operations, Protect Our Winters
Re: Letter of Support for Bren Group Project with Protect Our Winters

Today, Protect Our Winters is excited to express our support for the proposed student group project, "Increasing the Power of the Outdoor State: Identifying and Connecting Climate Change Impacts to Outdoor Sports Communities to Advance U.S. Climate Policies." We believe this potential project will provide critical value for our organization's effectiveness in recruiting climate advocates to push for systemic policy change at both the state and federal level. This work is imperative in recruiting advocates from the 50 million Americans that identify as outdoor enthusiasts for the purposes of adding them to the existing environmental base to win on the margins on climate issues. Recruiting even a percentage of this community could make the difference on key policies and political actions at a time of critical need for action.

Protect Our Winters commits to providing necessary coordination, guidance, available data, and support to the students, as well as providing opportunities for both mentorship and professional development. Additionally, if costs exceed the \$1300 budget allocated by USCB, additional costs will not be a barrier to the completion of the project. If our project is selected, we are happy to provide students with timely access to the data available as outlined in the proposal. While we have no publication restrictions, we would require a confidentiality agreement for access to our membership data given it includes personal information. We do not see this as an impediment to the project, merely a formality to ensure privacy.

As an organization, we commit to providing a paid internship for one student, with payment made directly to the student. The internship location will be dependent on COVID restrictions and POW's Return to Work policy, however, many of our staff are remote regardless and therefore we see the same level of engagement and professional development possible with a remote opportunity. We are committed to providing up to \$12,000 in support of this position and for the advancement of the project overall.

We are honored to be considered for work with Bren School graduate students and we look forward to your review of the attached proposal. Please do not hesitate to reach out to us with any questions regarding our proposal and/or support of the project. Thank you for your time and your consideration.

All the best,

A handwritten signature in black ink, appearing to read "Lindsay Bourgoine", with a long horizontal flourish extending to the right.

Lindsay Bourgoine
Vice President, Programs & Operations
Protect Our Winters