

PETER D. HOWE

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APPOINTMENTS

CURRENT

Assistant Professor of Human-Environment Geography, Department of Environment and Society, S.J. and Jessie E. Quinney College of Natural Resources, Utah State University (2013–present)

Faculty Associate, Ecology Center, Utah State University

Faculty Associate, Center for Society, Economy, and the Environment, Utah State University

Research Affiliate, Yale Program on Climate Change Communication, Yale University

PREVIOUS

Postdoctoral Associate, School of Forestry and Environmental Studies, Yale University (2012–2013)

EDUCATION

- 2012 Ph.D. in Geography, The Pennsylvania State University
Dissertation: *Fingerprints of Global Warming on Public Perceptions and Beliefs*
- 2009 M.S. in Geography, The Pennsylvania State University
Thesis: *Hurricane Risk Perceptions and Preparedness among Florida Business Owners*
- 2007 B.S. in Geography & Certificate in Geographic Information Science, Arizona State University
B.A. in Political Science & Certificate in International Studies, Arizona State University
Graduate of the Barrett Honors College, *summa cum laude*
Thesis: *Imparting the Waters: Discourse Geographies of an Arizona Water Rights Settlement*

REFEREED PUBLICATIONS

*student author; IF: 2017 Journal Impact Factor

- 2018 Zhang, Baobao, Matto Mildenerger, **Peter D. Howe**, Jennifer Marlon, Seth Rosenthal, and Anthony Leiserowitz. “Quota sampling using Facebook advertisements can generate nationally representative opinion estimates” Forthcoming in *Political Science Research and Methods*.

Cutler, Matthew J., Jennifer R. Marlon, **Peter D. Howe**, and Anthony Leiserowitz. “The influence of political ideology and socioeconomic vulnerability on perceived health risks of heat waves in the context of climate change.” *Weather, Climate, and Society* 10:731-746. doi: 10.1175/WCAS-D-17-0105.1. <https://doi.org/10.1175/WCAS-D-17-0105.1> (IF: 2.59)

Olson-Hazboun, Shawn*, **Peter D. Howe**, and Anthony Leiserowitz. “The influence of extractive industry activities on public support for renewable energy policy.” *Energy Policy* 123:117-126. doi: 10.1016/j.enpol.2018.08.044 <https://doi.org/10.1016/j.enpol.2018.08.044> (IF: 4.04)

- Howe, Peter D.** 2018. “Perceptions of seasonal weather are linked to beliefs about global climate change: evidence from Norway.” *Climatic Change* 148(4):467–80. doi: 10.1007/s10584-018-2210-6 <https://doi.org/10.1007/s10584-018-2210-6> (IF: 3.54)
- Zhang, Baobao, Matto Mildenerger, Sander van der Linden, Jennifer R. Marlon, **Peter D. Howe**, and Anthony Leiserowitz. 2018. “Experimental effects of climate messages vary geographically.” *Nature Climate Change* 8:370-374. doi:10.1038/s41558-018-0122-0 <https://www.nature.com/articles/s41558-018-0122-0> (IF: 19.18)
- Thaker, Jagadish, **Peter D. Howe**, Anthony Leiserowitz, and Edward Maibach. 2018. “Collective efficacy and trust in government influence public engagement with climate change-relate water conservation policies.” *Environmental Communication*. doi:10.1080/17524032.2018.1438302. <https://doi.org/10.1080/17524032.2018.1438302> (IF: 1.41)
- Boudet, Hilary, Chad M. Zanooco, **Peter D. Howe**, and Christopher E. Clarke. 2018. “The effect of geographic proximity to unconventional oil and gas development on public support for hydraulic fracturing.” *Risk Analysis* 38(9):1871-1890. doi:10.1111/risa.12989. <https://doi.org/10.1111/risa.12989> (IF: 2.90)
- Howe, Peter D.** 2018. Modeling geographic variation in disaster preparedness across U.S. states and metropolitan areas.” *The Professional Geographer* 70(3):491-503. doi:10.1080/00330124.2017.1416301. <https://doi.org/10.1080/00330124.2017.1416301> (IF: 1.28)
- Olson-Hazboun, Shawn* and **Peter D. Howe**. 2018. “Public opinion on climate change in the United States: trends, factors, and implications for rural America.” Albrecht, D. (ed) *Approaches to Address Climate Change at the Local Level*. New York: Routledge.
- Marlon, Jennifer R., Sander van der Linden, **Peter D. Howe**, Anthony Leiserowitz, S. H. Lucia Woo, and Kenneth Broad. 2018. “Detecting local environmental change: the role of experience in shaping risk judgments about global warming” *Journal of Risk Research*. doi:10.1080/13669877.2018.1430051. <https://doi.org/10.1080/13669877.2018.1430051> (IF: 1.34)
- 2017 Beckage, Brian, Louis Gross, Sara Metcalf, Eric Carr, Katherine Lacasse, Jonathan Winter, **Peter D. Howe**, Nina Fefferman, Asim Zia, Ann Kinzig, and Travis Franck. 2017. “Linking models of human behavior and climate alters projected climate change.” *Nature Climate Change* 8:79-84. doi:10.1038/s41558-017-0031-7. <https://doi.org/10.1038/s41558-017-0031-7> (IF: 19.18)
- Mildenerger, Matto, Jennifer R. Marlon, **Peter D. Howe**, and Anthony Leiserowitz. 2017. “The spatial distribution of Republican and Democratic climate and energy opinions at state and local scales.” *Climatic Change* 145:539-548. doi:10.1007/s10584-017-2103-0. <https://doi.org/10.1007/s10584-017-2103-0> (IF: 3.54)
- Kaufmann, Robert K., Michael L. Mann, Sucharita Gopal, Jackie A. Liederman, **Peter D. Howe**, Felix Pretis, Xiaojing Tang, and Michelle Gillmore. 2017. “The spatial heterogeneity of climate change: an experiential basis for skepticism.” *Proceedings of the National Academy of Sciences* 114(1):67-71. doi:10.1073/pnas.1607032113. <http://www.pnas.org/content/114/1/67> (IF: 9.66)
- 2016 Mildenerger, Matto, **Peter D. Howe**, Erick Lachapelle, Leah Stokes, Jennifer R. Marlon, and Timothy Gravelle. 2016. “The distribution of climate change public opinion in Canada.” *PLoS One* 11(8): e0159774. doi:10.1371/journal.pone.0159774. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0159774> (IF: 2.81)
- Thaker, Jagadish, Xiaoquan Zhao, Anthony Leiserowitz, **Peter D. Howe**, and Edward Maibach. 2016. “The role of collective efficacy in climate change adaptation in India.” *Weather, Climate, and Society* 8:21-34. <http://journals.ametsoc.org/doi/abs/10.1175/WCAS-D-14-00037.1> (IF: 2.59)
- 2015 Lee, Tien Ming, Ezra Markowitz, **Peter D. Howe**, Chia-Ying Ko, and Anthony Leiserowitz. 2015. “Predictors of public climate change awareness and risk perception around the world.” *Nature Climate Change* 5:1014-1020. doi:10.1038/nclimate2728. <http://dx.doi.org/10.1038/nclimate2728> (IF: 19.18)

- Howe, Peter D.**, Matto Mildenberger, Jennifer Marlon, and Anthony Leiserowitz. 2015. "Geographic variation in opinions on climate change at state and local scales in the USA." *Nature Climate Change* 5:596-603. doi: 10.1038/nclimate2583. IF: 17.18. <http://dx.doi.org/10.1038/nclimate2583> (IF: 19.18)
- Chakreeyarat Saengavut, Voravee*, **Peter D. Howe**, and Mark W. Brunson. 2015. "Localized risk perception of wildland fire hazard" *Proceedings of the 13th International Wildland Fire Safety & 4th Human Dimensions of Wildland Fire Conference*.
- Vuylsteke, Gabrielle*, Johanna Mathieu, and **Peter D. Howe**. 2015. "Environmental and economic benefits of non-disruptive demand response as a function of consumer information sharing." *Proceedings of the 47th North American Power Symposium*. doi: 10.1109/NAPS.2015.7335134. <http://dx.doi.org/10.1109/NAPS.2015.7335134>
- 2014 **Howe, Peter D.**, Hilary Boudet, Anthony Leiserowitz, and Edward W. Maibach. 2014. "Mapping the shadow of experience of extreme weather events." *Climatic Change* 127:381-389. doi: 10.1007/s10584-014-1253-6. <http://link.springer.com/article/10.1007%2Fs10584-014-1253-6> (IF: 3.54)
- Howe, Peter D.**, Jagadish Thaker, and Anthony Leiserowitz. 2014. "Public perceptions of rainfall change in India." *Climatic Change* 127:211-225. doi: 10.1007/s10584-014-1245-6. <http://link.springer.com/article/10.1007/s10584-014-1245-6> (IF: 3.54)
- 2013 **Howe, Peter D.** and Anthony Leiserowitz. 2013. "Who remembers a hot summer or a cold winter? The asymmetric effect of beliefs about global warming on perceptions of local seasonal climate conditions in the U.S." *Global Environmental Change* 23:1488-1500. doi: 10.1016/j.gloenvcha.2013.09.014. <http://www.sciencedirect.com/science/article/pii/S0959378013001660> (IF: 6.37)
- Howe, Peter D.**, Ezra Markowitz, Tien Ming Lee, Chia-Ying Ko, and Anthony Leiserowitz. 2013. "Global perceptions of local temperature change." *Nature Climate Change* 3:352-356. doi: 10.1038/nclimate1768. <http://www.nature.com/nclimate/journal/v3/n4/abs/nclimate1768.html> (IF: 19.18)
- Howe, Peter D.**, Brent Yarnal, Alex Coletti, and Nathan J. Wood. 2013. "The Participatory Vulnerability Scoping Diagram: deliberative risk ranking for community water systems." *Annals of the Association of American Geographers* 103:343-352. doi: 10.1080/00045608.2013.754673. <http://www.tandfonline.com/doi/abs/10.1080/00045608.2013.754673> (IF: 2.80)
- Alex Coletti, **Peter D. Howe**, Brent Yarnal, and Nathan J. Wood. 2013. "A support system for assessing local vulnerability to weather and climate." *Natural Hazards* 65:999-1008. doi: 10.1007/s11069-012-0366-3. <http://link.springer.com/article/10.1007/s11069-012-0366-3> (IF: 1.90)
- 2012 Hillmer-Pegram, Kevin C., **Peter D. Howe**, Howard Greenberg, and Brent Yarnal. 2012. "A geographic approach to facilitating local climate governance: from emissions inventories to mitigation planning." *Applied Geography* 34:76-85. doi: 10.1016/j.apgeog.2011.11.001. <http://www.sciencedirect.com/science/article/pii/S0143622811002062> (IF: 3.12)
- 2011 **Howe, Peter D.** 2011. "Hurricane preparedness as anticipatory adaptation: a case study of community businesses." *Global Environmental Change* 21:711-720. doi: 10.1016/j.gloenvcha.2011.02.001. <http://www.sciencedirect.com/science/article/pii/S0959378011000239> (IF: 6.37)
- 2009 **Howe, Peter D.** 2009. "Newsworthy spaces: the semantic geographies of local news." *Aether: the Journal of Media Geography* 4:23-61. http://130.166.124.2/~aether/pdf/volume_04/howe.pdf

GRANTS

"CAREER: Location-aware social science for adaptation: modeling dynamic patterns in public perceptions and behavior" (PI). National Science Foundation: Geography and Spatial Sciences Program & Decision, Risk, and Management Sciences Program (NSF BCS-1753082), 2018-2023 (\$538,323)

“Advancing high-resolution multilevel regression and poststratification models of American climate opinion” (PI). Yale Program on Climate Change Communication, 2017-2018 (\$11,772)

“NRT: Graduate Climate Adaptation Research that Enhances Education and Responsiveness of Science at the Management-Policy Interface (Grad-CAREER)” (Senior Personnel). National Science Foundation Research Traineeship program (NSF DGE-1633756), 2016-2021 (\$2,952,344)

“Collaborative Research: Multi-scale Modeling of Public Perceptions of Heat Wave Risk” (PI). National Science Foundation: Decision, Risk, and Management Science program (NSF SES-1459903), 2015-2018 (\$376,525)

“Climate Change Perspectives for Utah: Citizen Attitudes and Food Security” (Co-PI). Utah Agricultural Experiment Station, 2015-2020 (\$180,766)

“Testing a high-frequency survey tool to model risk perceptions and disaster preparedness” (PI). Utah State University: Research Catalyst Grant, 2015 (\$6,700)

“Climate Change Hydrology and Landscapes of America’s Heartland: A Coupled Natural Human System” (Co-I). National Science Foundation sub-award via Southern Illinois University, 2014-2016 (\$86,507)

“Modeling the Geographic Response of U.S. Agriculture to Climate Change” (Co-PI). USU Office of Research and Graduate Studies, 2014-2016 (\$18,000)

“Doctoral Dissertation Research: Fingerprints of Global Warming on Worldwide Public Attitudes.” National Science Foundation, Geography and Spatial Sciences Program DDRI, 2011-12 (\$6,130)

“Fingerprints of Global Warming on Public Attitudes: Modeling Perception and Response to Long-Term Environmental Hazards.” Association of American Geographers: Dissertation Research Grant, 2011 (\$500)

REPORTS, WORKING PAPERS & DATA SETS

2018 Jennifer R. Marlon, Peter D. Howe, Matto Mildenerger, and Anthony Leiserowitz. 2018. “Yale Climate Opinion Maps – US 2018: online tool, interactive maps, and data.” Research dataset. Yale University and Utah State University. <http://climatecommunication.yale.edu/visualizations-data/ycom-us-2018>

Howe, Peter D., Jennifer R Marlon, Xinran Wang, and Anthony Leiserowitz. 2018. “Working paper: Neighborhood-level risk perceptions of extreme heat events across the U.S.”. SocArXiv. April 27. doi:10.17605/OSF.IO/UN7ZG. <http://doi.org/10.17605/OSF.IO/UN7ZG>

Howe, Peter D., and Johanna L. Mathieu. 2018. “Age and Perceived Benefits Are Associated with Willingness to Participate in an Electric Load Control Program.” SocArXiv. July 9. doi:10.31235/osf.io/rpg46. <https://dx.doi.org/10.31235/osf.io/rpg46>

Howe, Peter D., Jennifer E. Givens, and D. Layne Coppock. 2018. “Utahns’ Perspectives on Air Pollution: Results from a 2017 Statewide Survey.” Logan, UT: Utah State University. https://works.bepress.com/peter_howe/53/.

Howe, Peter D. “Household disaster kit maps: interactive maps and data.” 2018. Research dataset. Utah State University. Web maps: <http://www.peterhowe.org/disaster-kit-maps/> Data: <https://doi.org/10.15142/T3FK9N>

2017 Mildenerger, Matto, Jennifer R. Marlon, Peter D. Howe, Xinran Wang, and Anthony Leiserowitz. 2017. “Partisan Climate Opinion Maps 2016: online tool, interactive maps, and data.” Research dataset. University of California Santa Barbara, Yale University, and Utah State University. <http://climatecommunication.yale.edu/visualizations-data/partisan-maps-2016/>

- Jennifer R. Marlon, Peter D. Howe, Matto Mildenerger, and Anthony Leiserowitz. 2017. “Yale Climate Opinion Maps – US 2016: online tool, interactive maps, and data.” Research dataset. Yale University and Utah State University. <http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016>
- 2016 Boudet, Hilary S., Chad M. Zanoocco, Peter D. Howe, and Christopher Clarke. 2017. “Proximity to Development and Public Support for Hydraulic Fracturing.” SSRN Scholarly Paper ID 2893307. Rochester, NY: Social Science Research Network. <https://papers.ssrn.com/abstract=2893307>
- Howe, Peter D. 2016. “Geographic variation in disaster preparedness across U.S. states and metropolitan areas.” SSRN Scholarly Paper ID 2830690. Rochester, NY: Social Science Research Network. <http://ssrn.com/abstract=2830690>
- Lachapelle, Erick, Leah Stokes, Jennifer Marlon, Peter Howe, and Matto Mildenerger. February 25, 2016. “What do Canadians think about climate change? Introducing the Canadian Climate Change Opinion Maps.” Climate Access. <http://www.climateaccess.org/blog/what-do-canadians-think-about-change>
- Mildenerger, Matto, Peter D. Howe, Erick Lachapelle, Leah Stokes, Jennifer R. Marlon, and Timothy Gravelle. 2016. “The Distribution of Climate Change Public Opinion in Canada.” SSRN Scholarly Paper ID 2732935. Rochester, NY: Social Science Research Network. <http://papers.ssrn.com/abstract=2732935>
- Mildenerger, Matto, Peter D. Howe, Erick Lachapelle, Leah Stokes, Jennifer R. Marlon, and Timothy Gravelle. 2016. “Canadian Climate Opinion Maps: online tool, interactive maps, and data.” Research dataset. Université de Montréal, University of California Santa Barbara, Utah State University, and Yale University. <http://www.umontreal.ca/climat/engl/index.html>
- 2015 Howe, Peter D., Matto Mildenerger, Jennifer R. Marlon, and Anthony Leiserowitz. 2015. “Yale Climate Opinion Maps: online tool, interactive maps, and data.” Research dataset. Yale University and Utah State University. <http://environment.yale.edu/poe/v2014/>
- Howe, Peter D., Matto Mildenerger, and Jennifer R. Marlon. 2015. “What Do Americans Think about Climate Change at the State and Local Level?” Scholars Strategy Network Key Findings Brief. <http://www.scholarsstrategynetwork.org/content/what-do-americans-think-about-climate-change-state-and-local-level>
- 2014 Howe, Peter D., Matto Mildenerger, Jennifer R. Marlon, and Anthony Leiserowitz. 2014. “Geographic Variation in U.S. Climate Change Opinion at State and Local Scales.” SSRN Scholarly Paper ID 2515649. Rochester, NY: Social Science Research Network. <http://papers.ssrn.com/abstract=2515649>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, Seth Rosenthal, Jennifer Marlon, and Peter Howe. 2014. *Extreme weather and climate change in the American mind: November, 2013*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/extreme-weather-public-opinion-november-2013>
- 2013 Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the Columbus, Ohioan mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-columbus-ohioan-mind/>
- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the San Franciscan mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-san-franciscan-mind>
- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the American mind: a focus on California, Colorado, Ohio, and Texas*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-american-mind-focus-on-california-colorado-ohio-and-t>

- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the Texan mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-texan-mind>
- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the Ohioan mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-ohioan-mind>
- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the Californian mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-californian-mind>
- Leiserowitz, Anthony, Geoff Feinberg, Peter Howe, and Seth Rosenthal. 2013. *Climate change in the Coloradan mind*. Yale University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/climate-change-in-the-coloradan-mind>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2013. *Americans' actions to limit global warming in April 2013*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/Behavior-April-2013>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2013. *Public support for climate and energy policies in April 2013*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/Climate-Policy-Support-April-2013>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2013. *Americans' global warming beliefs and attitudes in April 2013*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/Climate-Beliefs-April-2013/>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2013. *Extreme weather and climate change in the American mind: April 2013*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate-communication/article/extreme-weather-public-opinion-April-2013/>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2013. *Global warming's six Americas in September 2012*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate/publications/Six-Americas-September-2012>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2012. *Americans' actions to limit global warming in September 2012*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate/publications/Behavior-September-2012/>
- 2012 Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2012. *Public support for climate and energy policies in September 2012*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate/publications/Policy-Support-September-2012/>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2012. *Americans' global warming beliefs and attitudes in September 2012*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate/publications/Climate-Beliefs-September-2012/>
- Leiserowitz, Anthony, Edward Maibach, Connie Roser-Renouf, Geoff Feinberg, and Peter Howe. 2012. *Extreme weather and climate change in the American mind*. Yale University and George Mason University. New

- Haven, CT: Yale Project on Climate Change Communication. <http://environment.yale.edu/climate/publications/extreme-weather-public-opinion-September-2012/>
- 2011 Hillmer-Pegram, Kevin C. and Peter D. Howe. 2010. *The Centre Region greenhouse gas pilot project*. Report to the Pennsylvania Department of Environmental Protection. Edited by Brent Yarnal and Howard Greenberg. Centre Region Council of Governments and Borough of State College.
- 2010 Solis, Patricia *et al.* 2011. *Climate change and hazards in the Americas: international interdisciplinary research directions and opportunities*. Washington, DC: Association of American Geographers. <http://www.aag.org/galleries/project-programs-files/ClimateChangeHazards2010.pdf>
- Broad, Garrett, Donovan Campbell, Tim Frazier, Peter Howe, Felipe Murtinho, and Humberto Reyes Hernandez. 2010. "The visualization of slow-developing hazards: influencing perceptions and behaviors to facilitate adaptation." White Paper. National Science Foundation: Pan-American Advanced Studies Institute for the Integration of Climate Change and Hazards in the Americas.
- 2009 Howe, Peter D. 2009. *Centre Region greenhouse gas emissions inventory: Centre Region climate change action plan phase I*. Edited by Brent Yarnal and Howard Greenberg. Department of Geography, The Pennsylvania State University.

PRESENTATIONS

INVITED TALKS

- 2018 "Downscaling' social survey data: Spatial models to map public perceptions and behaviors." March 2018. National Health Security Preparedness Index Think Tank on Index Measures for Local Jurisdictions. Washington, DC.
- 2017 "Public opinion about climate change: new findings." November 2017. Utah State University Department of Plants, Soils, and Climate seminar series.
- "What do your neighbors think about climate change? Modeling public opinion from the national to county level." November 2017. Demography seminar series, Utah State University Department of Sociology, Social Work, and Anthropology.
- "What do your neighbors think about climate change? The geography of climate opinions, behaviors, and support for mitigation." April 2017. Logan City, Utah Climate Science Conversations Series.
- "Personal experience and climate change: accounting for motivated reasoning." January 2017. Utah State University Department of Environment and Society Seminar. Logan, UT.
- 2016 "Downscaling public perceptions of climate change and hazards: a new method to generate high-resolution social data." October 2016. Global Land Project Third Open Science Meeting. Beijing, China.
- "Understanding the landscape of public attitudes about climate change." October 2016. Restoring the West Conference. Logan, UT.
- "What do your neighbors think about climate change? The geography of environmental risk perceptions and behaviors in the U.S." October 2016. Utah Valley University Earth Science Seminar. Orem, UT.
- 2015 "Local, national, and global geographies of climate change perceptions." September 2015. Utah State University Quinney College of Natural Resources Seminar. Logan, UT.
- "How do you define a heat wave? Mapping and modeling experience and risk perceptions of extreme heat in the U.S." July 2015. National Center for Atmospheric Research Regional Climate Research Section. Boulder, CO.

- “What your neighbors think about climate change: the geography of perceptions, beliefs, & behaviors in the U.S.” April 2015. Integrated Network for Social Sustainability annual conference. Oregon State University–Cascades, Bend, OR.
- “Geographic Variation in U.S. Climate Change Opinion at State and Local Scales.” February 2015. University of Utah Department of Geography Colloquium. Salt Lake City, UT.
- 2014 “Perceptions of seasonal climate and climate change in Norway: evidence for motivated reasoning.” November 2014. Norwegian Citizen Panel Conference. Bergen, Norway.
- “What your neighbors think about climate change: modeling perceptions and beliefs from the national to local scale.” March 2014. Utah State University Department of Environment and Society Seminar. Logan, UT.
- “The role of local weather and climate in public perceptions of climate change: Recent research and big questions.” January 2014. NIMBioS-SESYNC working group on human risk perception and climate change, National Institute for Mathematical and Biological Synthesis, University of Tennessee. Knoxville, TN.
- 2013 “Beliefs about global warming may bias perceptions of local climate.” February 2013. Politics, Environments, and Markets Seminar, School of Forestry and Environmental Studies, Yale University. New Haven, CT.
- 2012 “Perceptions of local temperature change: cross-national survey evidence.” May 2012. Center for Research on Environmental Decisions (CRED), Columbia University. New York, NY.

CONFERENCE PRESENTATIONS

- 2018 Howe, Peter D. “Geographic and temporal variation in public perceptions of air pollution in Utah.” June 2018. International Symposium for Society and Resource Management (ISSRM). Salt Lake City, UT.
- Howe, Peter D., Jennifer Marlon, and Anthony Leiserowitz. “Perceived risk of extreme heat varies across states, counties, and neighborhoods.” April 2018. American Association of Geographers (AAG) Annual Meeting. New Orleans, LA.
- 2017 Howe, Peter D., Jennifer Marlon, and Anthony Leiserowitz. “Modeling short-term variation in risk perceptions of extreme heat hazards in the U.S.” March 2017. American Association of Geographers (AAG) Annual Meeting. Boston, MA.
- Marlon, Jennifer, Peter D. Howe, and Anthony Leiserowitz. “Mapping Climate Change and Heat Wave Risk Perceptions in the U.S.A.” March 2017. American Association of Geographers (AAG) Annual Meeting. Boston, MA.
- 2016 Howe, Peter D. “Modeling geographic variation in risk perceptions as a component of social vulnerability to extreme heat hazards in the U.S.” March 2016. American Association of Geographers (AAG) Annual Meeting. San Francisco, CA.
- 2015 Howe, Peter D. “Mapping climate opinion across the U.S.” October 2015. Building Public & Political Will for Climate Action conference. Yale University, New Haven, CT.
- Howe, Peter D. “How do you define a heat wave? Mapping subjective perceptions of extreme heat and heat-related health risks in the U.S.” April 2015. Association of American Geographers (AAG) Annual Meeting. Chicago, IL.
- Kennedy, Chris, Peter Howe, Anthony Leiserowitz, Jennifer Marlon, and Matto Mildeberger. “Predicting climate change activism by linking survey data to a national voter registration database.” April 2015. Midwest Political Science Association 2015 Conference. Chicago, IL.

- 2014 Howe, Peter D. “Public perceptions of extreme heat vulnerability in the U.S.” December 2014. Society for Risk Analysis Annual Meeting. Denver, CO.
- Howe, Peter D., Jagadish Thaker, and Anthony Leiserowitz. “Perceptions of changes in local precipitation, extreme events, and monsoon variability in India.” April 2014. Association of American Geographers Annual Meeting (AAG) Annual Meeting. Tampa, FL.
- Howe, Peter D. “Communicating climate change through personal experience: insights from social science.” March 2014. Intermountain Sustainability Summit. Ogden, UT.
- 2013 Marlon, Jennifer, Peter D. Howe, Matto Mildenerger, and Anthony Leiserowitz. “Downscaling U.S. public opinion about climate change and the ‘Six Americas’ to states, cities, and counties.” December 2013. American Geophysical Union Fall Meeting. San Francisco, CA.
- Thaker, Jagadish, Peter D. Howe, and Anthony Leiserowitz. “Perceptions of changes in rainfall and extreme events among the Indian public.” October 2013. Fourth National Research Conference on Climate Change. Indian Institute of Technology, Chennai, India.
- Howe, Peter D. and Hilary Boudet. “Perceptions of extreme weather events: evidence from climate-related hazards around the U.S.” June 2013. International Symposium on Society and Resource Management (ISSRM). Estes Park, CO.
- Howe, Peter D., Ezra Markowitz, Tien Ming Lee, Chia-Ying Ko, and Anthony Leiserowitz. “Global perceptions of local temperature change.” April 2013. Association of American Geographers Annual Meeting (AAG). Los Angeles, CA.
- 2012 Coletti, Alex, Peter D. Howe, and Brent Yarnal. “Merging local experience with outcomes of past events in risk assessments and resilience planning.” September 2012. American Water Works Association Water Security and Emergency Preparedness Conference. St. Louis, MO.
- Ezra M. Markowitz, Tien Ming Lee, Peter D. Howe, Chia-Ying Ko, and Anthony Leiserowitz. “Who worries about climate change? A cross-national, multilevel study.” August 2012. American Psychological Association (APA) Annual Convention. Orlando, FL.
- Howe, Peter D., Ezra M. Markowitz, Tien Ming Lee, Chia-Ying Ko, and Anthony Leiserowitz. “Detection of climate change through local climate experience: a cross-national analysis.” August 2012. American Psychological Association (APA) Annual Convention. Orlando, FL.
- Howe, Peter D. and Ezra Markowitz (co-chairs). “Psychological factors shaping the perception of climate change.” Symposium. August 2012. American Psychological Association (APA) Annual Convention. Orlando, FL.
- Howe, Peter D. “Detection of climate change through individual experience: a cross-national analysis.” February 2012. Association of American Geographers (AAG) Annual Meeting. New York, NY.
- Yarnal, Brent, Peter D. Howe, and Alex Coletti. “Deliberative risk ranking for community water systems.” February 2012. Association of American Geographers (AAG) Annual Meeting. New York, NY.
- Baum, Seth, Peter D. Howe, and Kaitlin Butler. “Perceptions of mitigation behaviors: is food choice overlooked?” February 2012. Association of American Geographers (AAG) Annual Meeting. New York, NY.
- 2011 Howe, Peter D. “Detection of climate change through individual experience.” December 2011. Society for Risk Analysis Annual Meeting. Charleston, SC.

- Kaitlin A. Butler, Seth D. Baum and Peter D. Howe. "Perceptions of mitigation behaviors: Is food choice overlooked?" Poster. November–December 2011. Behavior, Energy and Climate Change Conference. Washington, DC.
- Howe, Peter D. "Detection of local climate change through personal experience: a preliminary international assessment." June 2011. Climate Change in the American Mind / Yale Project on Climate Change Communication workshop. New Haven, CT.
- Baum, Seth D., Peter D. Howe, and Kaitlin Butler. "Perceptions of mitigation options: is food choice overlooked?" Poster. May 2011. Center for Research on Environmental Decisions (CRED) Annual Meeting, Columbia University. New York, NY.
- Howe, Peter D. "Experiencing the climate: using environmental context to interpret long-term risk perceptions." April 2011. Association of American Geographers (AAG) Annual Meeting. Seattle, WA.
- Hillmer-Pegram, Kevin C., Brent Yarnal, Howard Greenberg, and Peter D. Howe. "Connecting climate science and climate policy via community participation: the Centre Region Greenhouse Gas Pilot Project." April 2011. Association of American Geographers (AAG) Annual Meeting. Seattle, WA.
- Yarnal, Brent, Peter Howe, and Alex Coletti. "Developing and testing a vulnerability assessment support system." April 2011. Association of American Geographers (AAG) Annual Meeting. Seattle, WA.
- Broad, Garrett M., Donovan Campbell, Peter Howe, Tim Frazier, Felipe Murtinho, and Humberto Reyes Hernandez. "Visualization of slow-developing hazards: influencing perceptions and behaviors to facilitate adaptation planning." February 2011. Western States Communication Association, 82nd Annual Convention. Monterey, CA.
- Frazier, Tim G., Felipe Murtinho, Garrett Broad, Donovan Campbell, Peter Howe, and Humberto Reyes Hernandez. "Visualization of slow-developing hazards: influencing perceptions and behaviors to facilitate adaptation planning." January 2011. American Meteorological Society 91st Annual Meeting. Seattle, WA.
- 2010 Howe, Peter D. "The Climate Perception Project: testing the effect of local climate on global warming risk perceptions." Poster. December 2010. Society for Risk Analysis Annual Meeting. Salt Lake City, UT.
- Broad, Garrett, Donovan Campbell, Tim Frazier, Peter Howe, Felipe Murtinho, and Humberto Reyes Hernandez. "Visualization of slow-onset hazards: influencing perceptions and behaviors, facilitating adaptation planning." June 2010. Pan-American Advanced Studies Institute: Integrating Research on Climate Change and Hazards in the Americas. Panama City, Panama.
- Howe, Peter D. "Spatial dynamics of risk perception and adaptation to hurricane hazards: a case study of Florida businesses." Poster. May 2010. World Universities Network Global Challenge Workshop: Adapting to Climate Change. University Park, PA.
- Howe, Peter D. "Spatial dynamics of risk perception: implications for vulnerability research." April 2010. Association of American Geographers (AAG) Annual Meeting. Washington, DC.
- Coletti, Alex, Peter D. Howe, Nathan Wood, and Brent Yarnal. "Architecture definition of a vulnerability assessment support system software web service." Poster. April 2010. Association of American Geographers (AAG) Annual Meeting. Washington, DC.
- Howe, Peter D. "Social geography of risk: which approaches?" Panel session. April 2010. Association of American Geographers (AAG) Annual Meeting. Washington, DC.
- 2009 Howe, Peter D. "Relationship of hurricane hazard proximity to risk perception and preparedness." Poster. December 2009. Society for Risk Analysis Annual Meeting. Baltimore, MD.

- Howe, Peter D. "Perceptions of hurricane risk among Florida business owners and managers." March 2009. Association of American Geographers (AAG) Annual Meeting. Las Vegas, NV.
- Howe, Peter D. "Hurricane risk perceptions and preparedness among business owners." February 2009. No)Boundaries Graduate Conference, The Pennsylvania State University. University Park, PA.
- 2008 Howe, Peter D. "Spatial distributions of news coverage in a metropolitan area: correlations with income and population." April 2008. Association of American Geographers (AAG) Annual Meeting. Boston, MA.
- Howe, Peter D. "Media coverage of municipalities in a metropolitan area." March 2008. No)Boundaries Graduate Conference, The Pennsylvania State University. University Park, PA.
- 2007 Howe, Peter D. "Imparting the waters: discourse geographies of an Arizona water rights settlement." Poster. April 2007. ASU Celebrating Honors Symposium. Tempe, AZ.
- Peterson, Arianne S., Peter D. Howe, Margaret White, Dave White, and Elizabeth Corley. "Expert perspectives on science, politics, and water management in Phoenix." Poster. February 2007. American Association for the Advancement of Science (AAAS) Annual Meeting. San Francisco, CA.
- 2006 Peterson, Arianne S., Peter D. Howe. "Expert perspectives on science, politics, and water management in Phoenix." Poster. January 2006. Central Arizona–Phoenix Long Term Ecological Research Project (CAP–LTER) Annual Symposium. Tempe, AZ.

TEACHING AND ADVISING

UTAH STATE UNIVERSITY

- Climate Adaptation Science 6889: Environmental Risks and Decision Making (Fall 2017)
- Geography 4400/6400: Natural Hazards and Society (Spring 2016, 2018)
- Geography 6900: Climate and Society (Spring 2015)
- Geography 4210: Geography of Utah (Spring 2014, 2015, 2017)
- Geography 1800: Introduction to Geographic Information Science (Fall 2013–2017)

PENN STATE UNIVERSITY

- Geography 333: Human Dimensions of Natural Hazards (Spring 2011, Spring 2012)
- Teaching Assistant, Geography 30: Geographic Perspectives on Sustainability and Human–Environment Systems (Fall 2008)
- Co-Instructor, Geography 333: Human Dimensions of Natural Hazards (Spring 2008)

GRADUATE & HONORS STUDENT SUPERVISION

- Brittany Lester (PhD, Environment and Society, anticipated 2021)
- Emily Esplin (MS, Geography, anticipated 2018)
- Kirsten Goldstein (MS, Geography, anticipated 2019)
- Yajie Li (PhD, Environment and Society, anticipated 2019)
- Karen Mendenhall, (Master of Natural Resources, 2018)
- Forrest Schoessow (MS, Geography, 2018)
- Amy Rohman (Undergraduate honors thesis, 2013)

GRADUATE STUDENT COMMITTEES

Abiodun Atoloye (PhD, Nutrition and Food Science, in progress)
 Tegen Baker (PhD, Environment and Society, in progress)
 Lauren Dupey (PhD, Environment and Society, in progress)
 Alexi Lamm (PhD, Environment and Society, in progress)
 Emily Skill (MS, Environment and Society, in progress)
 Emily Wilkins (PhD, Environment and Society, in progress)
 Hongchao Zhang (PhD, Environment and Society, in progress)

Temis Taylor (PhD, Environment and Society, 2018)
 Shawn Olson-Hazboun (PhD, Sociology, 2017)
 Curtis Gray (PhD, Ecology, 2017)
 Lisa Green (MS, Geography, 2017)
 Mikey Kettinger (MFA, Art and Design, 2017)
 Peter Robertson (PhD, Environment and Society, 2016)
 Jenna Williams (MS, Political Science, 2015)
 Voravee Chakreeyarat (PhD, Human Dimensions of Ecosystem Science and Management, 2015)
 Ashley D'Antonio (PhD, Human Dimensions of Ecosystem Science and Management, 2015)

AWARDS

EXTERNAL AWARDS AND HONORS

Warren J. Mitofsky Innovators Award, American Association for Public Opinion Research (AAPOR), 2018 (shared with Anthony Leiserowitz, Matto Mildemberger, and Jennifer Marlon)

Fellow, Enabling the Next Generation of Hazards & Disasters Researchers Fellowship Program, National Science Foundation, 2014-2016

Selected participant in the DISCCRS VIII Symposium (Dissertations Initiative for the Advancement of Climate Change Research); Supported by the National Science Foundation and National Aeronautics and Space Administration. Colorado Springs, CO: October 12-19, 2013

Finalist, J. Warren Nystrom Dissertation Award, Association of American Geographers (2013)

SRA Student Travel Grant, Society for Risk Analysis (2011)

Honorable Mention, Gilbert F. White Thesis Award, AAG Hazards Specialty Group (2011)

Selected participant in the Institute for Integration of Research on Climate Change and Hazards in the Americas. Supported by the National Science Foundation Pan-American Advanced Studies Institute. Panama City, Panama: June 14-25, 2010

Stanley Brunn Student Paper Award, Association of American Geographers: Communication Geography Specialty Group (2008)

National Merit Scholar, National Merit Scholarship Corporation (2003)

National Merit Scholarship, Barrett Honors College, Arizona State University (2003-07)

INTERNAL AWARDS AND HONORS

Notable New Grant Award, Utah State University Office of Research and Graduate Studies (2016)

E. Willard Miller Award in Geography (Ph.D. level), Penn State University (2010, 2011)

AAG Conference Travel Award, Department of Geography, Penn State University (2008, 2009, 2010, 2011, 2012)

Ruby S. Miller Academic Enrichment Award, Department of Geography, Penn State University (2008, 2009, 2010)

E. Willard Miller Award in Geography (M.S. level), The Pennsylvania State University (2009)

National Science Foundation Fellowship Application Incentive Award, Penn State University (2008)

Anne C. Wilson Graduate Research Fellowship, College of Earth and Mineral Sciences, Penn State University (2007)

University Graduate Fellowship, Penn State University (2007-09)

AAAS Conference Travel Grant, Barrett Honors College and the Center for Biology and Society, Arizona State University (2007)

Phi Beta Kappa Honor Society; Gamma Theta Upsilon Honor Society; Pi Sigma Alpha Honor Society
Honors Thesis Improvement Grant, Barrett Honors College, Arizona State University (2006-07)

Dean's Circle Scholarship, School of Geographical Sciences, Arizona State University (2006)

OTHER RESEARCH ACTIVITIES

Working group participant, "Integrating human risk perception of global climate change into dynamic earth system models." National Socio-Environmental Synthesis Center (SESYNC) and National Institute for Mathematical and Biological Synthesis (NIMBioS). Sponsored by the National Science Foundation (2014–17)

Consulting Research Scholar, Gallup Inc. (2011–13)

Graduate Research Assistant, "Developing and Testing a Multi-Hazard Vulnerability Assessment Support System (VASS)." Sponsored by NOAA Sectoral Applications Research Program (2010–11)

Graduate Research Assistant, "Centre Region Climate Change Action Plan project." Sponsored by the Pennsylvania Department of Environmental Protection (Summer 2009)

Graduate Research Assistant, Rock Ethics Institute and The Leonhard Center for the Enhancement of Engineering Education (Spring 2009)

Investigator, Penn State Survey on Climate Change Values, Penn State Laboratory for Public Scholarship and Democracy (Spring – Fall 2008)

Graduate Research Assistant, "Increasing Community Resilience to Future Hurricane Storm Surge: Collaborative Decision Support in Sarasota, Florida." Sponsored by NOAA Sectoral Applications Research Program (Summer 2008)

Undergraduate Research Assistant (National Science Foundation REU), Decision Center for a Desert City, Arizona State University (Fall 2005–Spring 2007)

Research Fellow, Department of Political Science, Arizona State University (Fall 2005)

ACADEMIC SERVICE

PROFESSIONAL SERVICE

Session track organizer and chair, "Perceptions, experiences, and responses to climate-related extreme events." American Association of Geographers Annual Meeting (2017).

Gilbert F. White thesis and dissertation award reviewer, AAG Hazards, Risks, and Disasters Specialty Group (2016-2018)

Review panelist, National Science Foundation (2016, 2017)

Ad hoc reviewer, National Science Foundation (2013-2016)

Ad hoc reviewer, Department of Homeland Security (2017)

Ad hoc reviewer, National Oceanic and Atmospheric Administration (2015)

Review panelist, Department of Homeland Security (2014)

Manuscript reviewer:

Annals of the Association of American Geographers

Bulletin of the American Meteorological Society

Climatic Change

Environmental Communication

Environmental Politics

Environmental Practice

Environmental Sociology

Journal of Environmental Studies and Sciences

European Journal of Social Psychology

Futures

Geoforum

The Geographical Journal

Journal of Geography and Natural Disasters

Global Environmental Change

International Journal of Environmental Research and Public Health

Natural Hazards

Nature Climate Change

Political Science Research and Methods

Proceedings of the National Academy of Sciences

Risk Analysis

Seismological Research Letters

Singapore Journal of Tropical Geography

Social Science Quarterly

Society and Natural Resources

United States Geological Survey

Weather, Climate, and Society

Member, Scholars Strategy Network: outreach to policymakers, citizens associations, and the media

<https://scholars.org/scholar/peter-howe> (2015-present)

UNIVERSITY SERVICE

Ecology Center Faculty Advisory Board (2016–present)

University Honors Program admissions reviewer (2017)

Sociology of Environment and Technology Faculty Search Committee, Department of Sociology, Social Work, and Anthropology (2015-16)

One Day University faculty instructor for middle school students in GIS (2013-14)

COLLEGE SERVICE

Computing Infrastructure Committee, Quinney College of Natural Resources (2014–present)

Faculty co-advisor, Gamma Theta Upsilon geography honor society, Zeta Pi chapter (2014–present)

Undergraduate Research Grants Committee, Quinney College of Natural Resources (2014–2017)

Chair, GIS Lecturer Search Committee, Quinney College of Natural Resources (2014)

DEPARTMENTAL SERVICE

Human-Environment Interactions Faculty Search Committee, Department of Environment and Society (2018-19)

Graduate admissions committee, Department of Environment and Society (2017–present)

Geospatial Analysis Faculty Search Committee, Department of Environment and Society (2016–2017)

Geography curriculum committee, Department of Environment and Society (2015–16)

Faculty undergraduate advisor in Geography (GIS), Department of Environment and Society (2015–2018)

Human-Environment Interactions Faculty Search Committee, Department of Environment and Society (2014-15)

Environment and Society Department Head Search Committee, Quinney College of Natural Resources (2013-14)

Faculty undergraduate advisor in Geography, Department of Environment and Society (2014-15)

Utah System of Higher Education Geography Major Committee (2014-15)

Graduate Program Committee, Penn State Department of Geography (2010-11)

Co-organizer, 4th Annual noBoundaries Interdisciplinary Graduate Conference, Penn State (2009)

Founder, Geogresearch.org: an online survey platform for geographers (2008-12)

Graduate Technology Committee, Penn State Department of Geography (2008-09)

Co-organizer, 3rd Annual noBoundaries Interdisciplinary Graduate Conference (2008)