

Sara Nawaz, PhD (she/her)

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Squamish, British Columbia, Canada

Interdisciplinary social scientist researching social dimensions of novel climate and environmental technologies, with a focus on ocean-based carbon dioxide removal. ~10 years of research and work experience on climate change, environment, governance, and social impacts.

Professional experience

Jan 2023—present	Director of Research , Institute for Carbon Removal Law and Policy, American University, Washington, DC, US
Apr 2023—present	Adjunct Professor , Institute for Resources, Environment and Sustainability (IRES), UBC, Vancouver, BC, Canada
Jul 2023—present	Research Affiliate , Institute for Science, Innovation and Society, University of Oxford, Oxford, UK
Oct 2021—Jan 2023	Postdoctoral Fellow , Institute for Science, Innovation and Society, University of Oxford, Oxford, UK
Sep 2021—Jan 2023	Postdoctoral Fellow , Institute for Resources, Environment and Sustainability (IRES), UBC, Vancouver, BC, Canada
Sep 2017—Aug 2021	Research Assistant (various appointments), UBC, Vancouver, BC, Canada
Sep 2016—Aug 2017	Independent Social-environmental Consultant , Washington, DC, US
Sep 2014—Jun 2016	Social Impact Assessment Consultant , Environmental Resources Management, Washington, DC, US
Sep 2013—Sep 2014	Research Analyst , World Resources Institute, Washington, DC, US
Apr—Aug 2013	Research Assistant , Oxford Martin Commission, Oxford, UK

Education

Doctor of Philosophy (PhD) , Resources, Environment, and Sustainability University of British Columbia (UBC), Vancouver, British Columbia, Canada	2017—2021
Master of Philosophy (MPhil) , Development Studies University of Oxford, Oxford, UK	2011—2013
Bachelor of Arts (BA) , major: Economics, minor: Public Policy Swarthmore College, Swarthmore, Pennsylvania, US	2007—2011

Peer-reviewed publications

Nawaz, S., Lezaun, J., Valenzuela, J., and Renforth, P. (2023) Broaden Research on Ocean Alkalinity Enhancement to Better Characterize Social Impacts. *Environmental Science and Technology*. <https://doi.org/10.1021/acs.est.2c09595>

Nawaz, S., Satterfield, T., and St-Laurent, G. P. (2023) Public evaluations of four approaches to ocean-based carbon dioxide removal. *Climate Policy*. <http://doi.org/10.1080/14693062.2023.2179589>

- Satterfield, T., **Nawaz, S.** and St-Laurent, G. P. (2023) Exploring public acceptability of direct air carbon capture with storage: climate urgency, moral hazards and perceptions of the 'whole versus the parts.' *Climatic Change*, 176(14). <https://doi.org/10.1007/s10584-023-03483-7>
- Nawaz, S.**, Satterfield, T. & Phurisamban, R. (2022) Does 'precision' matter? A Q study of public interpretations of gene editing in agriculture. *Science, Technology and Human Values*. <https://doi.org/10.1177/01622439221112460>
- Nawaz, S.**, & Satterfield, T. (2022) On the nature of naturalness? Theorizing 'nature' for the study of public perceptions of novel genomic technologies in agriculture and conservation. *Environmental Science and Policy*, 136, 291-303. <https://doi.org/10.1016/j.envsci.2022.06.008>
- Nawaz, S.**, & Satterfield, T. (2022). Climate solution or corporate co-optation? US and Canadian publics' views on agricultural gene editing. *PLoS ONE*, 17(3 March), e0265635. <https://doi.org/10.1371/journal.pone.0265635>
- Hagerman, S., Satterfield, T., **Nawaz, S.**, St-Laurent, G. P., Kozak, R., & Gregory, R. (2021). Social comfort zones for transformative conservation decisions in a changing climate. *Conservation Biology*, 35(6), 1932–1943. <https://doi.org/10.1111/cobi.13759>
- Gregory, R., Kozak, R., Peterson St-Laurent, G., **Nawaz, S.**, Satterfield, T., & Hagerman, S. (2021). Under pressure: conservation choices and the threat of species extinction. *Climatic Change*, 166(1–2), 1–21. <https://doi.org/10.1007/s10584-021-03102-3>
- Nawaz, S.**, Satterfield, T., & Hagerman, S. (2021). From seed to sequence: Dematerialization and the battle to (re)define genetic resources. *Global Environmental Change*, 68, 102260. <https://doi.org/10.1016/j.gloenvcha.2021.102260>
- Nawaz, S.**, & Kandlikar, M. (2021). Drawing lines in the sand? Paths forward for triggering regulation of gene-edited crops. *Science and Public Policy*, 48(2), 246–256. <https://doi.org/10.1093/scipol/scab014>
- Nawaz, S.**, Klassen, S., & Lyon, A. (2020). Tensions at the boundary: Rearticulating 'organic' plant breeding in the age of gene editing. *Elementa: Science of the Anthropocene*, 8(1), 34. <https://doi.org/10.1525/elementa.429>

Publications in review

- Satterfield, T., **Nawaz, S.**, and Boettcher, M. Social considerations and best practices for engaging publics on ocean alkalinity enhancement.
- Goldberg, D., **Nawaz, S.**, Lavin, J., and Slagle, A. Upscaling DAC hubs with wind energy and CO₂ mineral storage: considerations for meeting Paris removal targets.
- Nawaz, S.**, and Satterfield, T. Towards just, responsible, and socially viable carbon removal: Lessons from offshore DACCS.

Other writing

- Nawaz, S. "Improving community engagement on carbon removal: Initial reflections and recommendations." May 10, 2023. <https://illumine.com/illuminevoices/improving-community-engagement-on-carbon-removal-initial-reflections-and-recommendations>

Service

Expert Governance Reviewer, Frontier Climate	2022—present
Science Advisor, Carbon to Sea Initiative	2023—present
Science Advisor, Ocean Visions' Nutrient Fertilization Suitability Analysis	2023—present
Committee member, IRES Director Search Committee, UBC	Mar—May 2022
Co-president, IRES Student Society, UBC	Jul 2018—Jun 2019
Co-Leader, Oxford Global Food Security Forum, University of Oxford	Jun 2012—Jun 2013
Organizer, Women in Development Forum, University of Oxford	Feb 2013
Writing Associate, The Writing Center, Swarthmore College	Sep 2008—May 2011

I have served as a reviewer for the *Journal of Environmental Management, Agriculture and Human Values*, and *Elementa: Science of the Anthropocene*.

Grants, Fellowships, and Awards

Nominee for Social Sciences, UBC, CGS/ProQuest Distinguished Dissertation Award (2022)
 Freda Pagani Outstanding Thesis Award for UBC IRES (2022)
 UBC Four-Year Fellowship (2017-21) & UBC International Tuition Award (2017-21)
 ERM Service Excellence Award (2015)
 ERM Star Award (2015)
 Oxford Department of International Development Fieldwork Award (2012)
 Swarthmore Lucretia Mott Graduate Fellowship (2011—2013)
 Swarthmore Foundation Grant (2011)
 Swarthmore College Writing Associate Fellowship (2008—2011)
 Swarthmore College Quadir Summer Research Fellowship (2009)

Conference and workshop presentations and guest lectures

Panel on “Elevating Social Science, Partnership, and Ethics in Ocean-based Carbon Dioxide Removal”. Capitol Hill Ocean Week (CHOW). Online. June 2023.
 “Incorporating social considerations for ocean iron fertilization field studies.” Exploring Ocean Iron Solutions workshop. Moss Landing, California. May 2023.
 “Making carbon removal more just, equitable and socially acceptable.” Massachusetts State Senate Committee on Global Warming and Climate Change. Online. April 2023.
 Panel on “Responsible CDR governance in practice.” Ocean Visions Biennial Summit. Online/Miami, Georgia. April 2023.
 Panel on marine CDR, hosted by the Foundation for Climate Restoration. Online. March 2023.
 “Survey design with analysis in mind.” Co-led with Erika Gavenus. Resources, Environment and Sustainability (RES) 504 seminar: Survey Design in Interdisciplinary Environmental Research. Vancouver, BC. October 2022.
 “Testing the waters: Expert imaginaries of marine CDR.” Earth Systems Governance 2022 Conference, Toronto/online. October 2022.
 “Engineering carbon removal: New technologies and social considerations.” RES 520 seminar: Climate Change: Science, Technology and Sustainable Development. Online. March 2022.
 “Rearticulating ‘organic plant breeding’ in the age of gene editing?” Co-presented with Susanna Klassen. Organic Seed Grower’s Conference. Online. February 2022.

“Social comfort zones in a transforming climate.” American Association of Geographers Annual Meeting. Online. April 2021.

“Beyond naturalness? Social dimensions of gene editing in agriculture.” Institute for Resources, Environment and Sustainability Student Symposium. Online. April 2021.

“Beyond ‘precision’: A Q-method study on public perceptions of gene editing and gene drives for agriculture.” Conference on Gene Editing in Agriculture and Food. Online. October 2020.

“Owning seeds, owning sequences?” RES 507 seminar: Human Technological Systems. Vancouver, BC. February 2020.

“From seed to sequence: Making sense of debates over the dematerialization of agricultural genetic resources.” Canadian Anthropology Association/American Anthropology Association Annual Meeting. Vancouver, BC. November 2019.

Languages | Spanish (Working proficiency).

Software | R, Qualtrics, NVivo.