

WA Climate Assembly
Learning Session 2
Tuesday, January 19, 6:00pm-8:00pm
Presenter Materials

The presenters have provided their bios, summaries of their presentations, and additional educational materials in advance of their presentations. Review of these materials is optional, but recommended.

Table of Contents

Dr. Amy Snover	
Climate Change and Climate Impacts in WA State	2
Dr. Kristie Ebi	
The Intersection of Climate Change and Health	4
Dr. Deb Morrison	5
Climate Education and Climate Justice Education	5
Dr. Claire Richards	
Health Impacts of Power Outages and Extreme Weather	6
Hester Serebrin	
Clean and Just Transportation	6

Dr. Amy Snover

Director, Climate Impacts Group

University Director, NW Climate Adaptation Science Center

EarthLab | College of the Environment | University of Washington

Expert Presenter

Climate Change and Climate Impacts in WA State

About Dr. Snover:

Dr. Amy Snover is the Director of the University of Washington Climate Impacts Group, the University Director of the Northwest Climate Adaptation Science Center and Affiliate Associate Professor in the UW School of Marine and Environmental Affairs. She leads the Climate Impacts Group's efforts to provide the fundamental scientific understanding, data, tools and technical support necessary for managing the climate risks facing the people, communities, and ecosystems of the Pacific Northwest. She works with a broad range of decision makers to develop science-based climate risk management strategies, identify research priorities and build climate resilience. Dr. Snover was recognized as a White House Champion of Change for Climate Education and Literacy in 2015 and served as co-convening lead author for the Third US National Climate Assessment and lead author of the ground-breaking 2007 guidebook, *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments*. Dr. Snover has a B.A. in Chemistry *magna cum laude* from Carleton College and a Ph.D. in Analytical/Environmental Chemistry from the University of Washington.

Presentation summary:

This presentation will outline current scientific understanding of how climate change will affect Washington's communities, economy and ecosystems. I'll describe changes that have already been observed in the region and how the region's climate is anticipated to change in the future under different scenarios of future greenhouse gas emissions. I'll describe the consequences of these expected local changes in climate for the physical and natural environment of Washington state, and the risks these changes pose for coastal and inland communities, our built environment, natural-resource dependent communities and important ecosystems. I'll describe the important roles today's actions play in determining how costly the local impacts of climate change will ultimately be – today's actions both affect how much and how fast climate will change *and* how prepared we are to weather its unavoidable impacts.

Optional additional materials:

- [Fourth National Climate Assessment Northwest Overview](#) - this overviews climate impacts on the Northwest specifically. This site is highly recommended for your review
- [Shifting Snowlines & Shorelines](#) succinct brief describing The Intergovernmental Panel on Climate Change's *Special Report on the Ocean and Cryosphere* and implications for Washington state
- [No Time to Waste](#) succinct brief describing covers The Intergovernmental Panel on Climate Change's *Special Report on Global Warming of 1.5°C*, along with implications for Washington state
- More detailed reports (but presented in easy-to-skim bulleted format) of climate impacts in WA
 - [State of Knowledge: Climate Change in Puget Sound](#)
 - [State of Knowledge: Climate Impacts & Adaptation in Washington State](#)
- [Interactive sea level rise data visualizations](#) for Washington's coasts.
- [Tribally-focused climate change data tool](#)
- Other science-based resources for information about local climate impacts & risks:
 - University of Washington [Climate Impacts Group](#)
 - [Northwest Climate Adaptation Science Center](#)

Dr. Kristie Ebi

University of Washington

Expert Presenter

The Intersection of Climate Change and Health

About Dr. Ebi:

Kristie L. Ebi (Ph.D., MPH) is Professor in the Center for Health and the Global Environment at the University of Washington. She has been conducting research and practice on the health risks of climate variability and change for nearly 25 years, focusing on understanding sources of vulnerability; estimating current impacts and future health risks; designing adaptation policies and measures to reduce the risks of climate change in multi-stressor environments; and estimating the health co-benefits of mitigation policies. She has supported multiple countries in Central America, Europe, Africa, Asia, and the Pacific in assessing their vulnerability and

implementing adaptation measures. She has been an author on multiple national and international climate change assessments. She has more than 200 publications and has edited four books on aspects of climate change.

Presentation summary:

Climate variability and change are altering weather patterns, including changes in the frequency and intensity of heatwaves, flooding, and other extreme weather and climate events. Climate change also is altering exposures that affect the numbers of cases from infectious diseases and other climate-sensitive health outcomes. Projected health risks of climate change result from the interaction of these hazards with the extent of exposure, the vulnerability of those exposed, and the capacity of families, communities, and health systems to prepare for and manage the consequences of exposures. Other factors, such as education, discrimination, and access to healthcare, determine the magnitude of the impact. Undertaking vulnerability, capacity, and adaptation assessments, and developing health adaptation plans, are critical processes to increase preparedness to protect and promote health and well-being as the climate continues to change.

Dr. Deb Morrison

University of Washington

Expert Presenter

Climate Education and Climate Justice Education

About Dr. Morrison:

Deb Morrison (Learning Scientist) is deeply engaged in research-practice partnership efforts around equity and justice in STEM learning contexts, particularly with respect to furthering climate justice. This work is done through a cultural lens centered on differential participation within and across varied communities of practice and seeks to disrupt oppressive structures limiting participation. Deb has taught middle school science and is particularly interested in content intersecting with environmental literacy, justice, and sustainability. She is passionate about working with educators in practice and has undertaken such efforts in a wide variety of contexts and content domains. Deb earned a B.S. in Geography at the University of Victoria, a M.S. in Plant Sciences and Environmental Sciences at the University of Western Ontario, and a Ph.D. in Curriculum and Instruction – Science Education at the University of Colorado at Boulder. More about Deb can be found at www.debmorrison.me

Optional additional materials:

- [Principles educators use in thinking about teaching climate](#)
- [Principles educators use in thinking about teaching energy](#)
- [Climate Toolkit: A resource manual for science and action](#)
- Communicating about climate change
 - Yale Climate Communications work - <https://climatecommunication.yale.edu/>
 - Center for Climate Change Communication - <https://www.climatechangecommunication.org/>
- [National Center for Climate Education - Climate Change](#)
- [NAACP Environmental and Climate Justice](#)
- [Drawdown Learn](#)

Dr. Claire Richards

Washington State University

Expert Presenter

Health Impacts of Power Outages and Extreme Weather

About Dr. Richards:

Claire Richards, PhD, RN is a loving mother of a five-year-old and an Assistant Professor at the Washington State University College of Nursing in Spokane, WA. Claire is a member of the Washington Physicians for Social Responsibility Climate Action Task Force and the Alliance of Nurses for Healthy Environments climate change and policy working groups. Claire's research focuses on the quality of care for patients with serious illnesses and their families. In noticing the impact of climate change on her patient population, as well as her own community and family, she expanded the focus of her work to include environmental drivers of health outcomes, such as power outages. Claire is a graduate of University of California, Berkeley (B.S. Chemistry), Duke University (BSN) and University of Washington (PhD in Nursing Science). Claire additionally completed a post-doctoral fellowship in Health Services at the Department of Veterans Affairs in Seattle.

Presentation summary:

This presentation will introduce the relationship between climate change, extreme weather, and power outages, their health impacts and potential prevention strategies. It will additionally describe how social determinants of health can worsen these health impacts.

Hester Serebrin

Transportation Choices Coalition

Expert Presenter

Clean and Just Transportation

About Hester:

Hester's decade-long love affair with walking to work drew her to TCC, where everyone has an "alternative" commute and everyone works hard for policies that support pedestrians, bicyclists, and bus riders. After 10 years in the private sector, Hester ditched the corporate ladder and started climbing a nonprofit one instead: She first volunteered at TCC, then interned, and then worked as a contract employee before finally taking the Policy Analyst and then Policy Director positions. She has a Master's in Public Administration from the University of Washington Evans School of Public Policy and Governance. Hester sits on the Washington State Transportation Commission.

Presentation summary:

This presentation shows how we can take a more holistic approach to climate mitigation in transportation by centering equity and other co-benefits. Reviews the legislative priorities from the Climate Alliance's Clean and Just Transportation table.

Optional additional materials

- About our Clean & Just table:
<https://waclimatealliance.org/clean-just-transportation/>
- [Clean & Just Transportation – State Revenue Recommendations](#)
- [Clean & Just Transportation – Local Revenue Recommendations](#)
- [Clean & Just Transportation – Investment Recommendations](#)
- [TCC 2021 Legislative agenda](#)