Motivating Local Action to Address Climate Impacts and Build Resilience Panelist Biographies

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Panel 1: Climate and Data Science for Hazard Mitigation and Resilience at the Local Level

Dr. Victoria Keener is a Senior Research Fellow at the East-West Center, the Lead Principal Investigator of the NOAA Pacific Regional Integrated Sciences & Assessments (www.PacificRISA.org) program, and is the Lead Author of the Hawaii and Pacific Islands chapter of the 4th US National Climate Assessment. Dr. Keener also serves as the Chair of the City & County of Honolulu Climate Change Commission, which provides science-based recommendations to the Mayor and City Council. She earned a PhD in Agricultural & Biological Engineering from the University of Florida, specializing in hydro-climatological research. Dr. Keener leads an interdisciplinary research team of social and physical scientists that aims to reduce Pacific Islands' vulnerability to climate change by translating research into actionable knowledge and working with a variety of stakeholders at the local, state, and regional level. Projects include producing downscaled climate and hydrological projections to estimate future water availability; assessing stakeholders' decision-support needs and their capacity to use seasonal forecasts; impacts of climate and health on migration; and ecosystem service valuation and modeling.

Mark Shafer is an Associate Professor at the University of Oklahoma's Department of Geography and Environmental Sustainability and is Director of the Southern Climate Impacts Planning Program (SCIPP), a NOAA RISA Team for the South Central U.S. His research interests focus upon natural hazards, particularly on communication between the scientific community and policy makers in planning for and managing societal response to extreme events and climate change. Mark received a PhD in Political Science and an MS in Meteorology from the University of Oklahoma and a BS in Atmospheric Sciences from the University of Illinois-Urbana.

Aashka Patel is a Resilience Specialist at FernLeaf Interactive. Combining her background in applied climate science, decision support and environment resource management, Aashka works closely with municipal and regional governments and private-sector partners to deliver actionable climate vulnerability assessments to inform adaptation and resilience planning. She facilitates workshops to identify, prioritize and operationalize resilience and adaptation strategies. Aashka also leads FernLeaf's efforts to embed social equity as a cornerstone of all resilience and adaptation work. Her past work as a researcher for Carolinas RISA revolved around tailoring climate projections and assessments for water resources and environmental decision making. She received a Master's in Earth and Environmental Resource Management from University of South Carolina in 2011.

Art DeGaetano is a Professor in the Department of Earth and Atmospheric Sciences at Cornell. He is also the director of the NOAA Northeast Regional Climate Center (NRCC). Art has been a Principal Investigator on The ClimAID Integrated Assessment for Effective Climate Change Adaptation Strategies in New York, an author of the Climate Ready Boston report and a contributor to the 2018 National Climate Assessment. Art's recent research focusses on past and future changes in rainfall extremes in the Northeast.

Art serves as a climate editor for the Bulletin of the American Meteorological Society. He received a Ph.D. focusing on Climatology and Horticulture from Rutgers University in 1989.

Panel 2: Translating Data for Motivating Local Resilience Action

Abigail Sullivan is an assistant professor with Boston University's Department of Earth and Environment. She is an environmental social scientist, and her research focuses on unpacking the dynamics of institutions and collective action in aquatic and terrestrial social-ecological systems. By analyzing factors that influence collective action in communities facing environmental change, she provides insights into how people can optimally design institutions for adaptation to environmental change. She has explored a variety of human-environment issues, including the complexities of emerging issues in community forestry in Nepal, climate change adaptation in the Colorado River Basin, and aquatic invasive species in midwestern U.S. lakes. She received her Ph.D. in environmental social science from Arizona State University in 2016, an MS in ecology and environmental science from the University of Maine, and a BS in environmental science from Unity College.

Dr. Jennifer Helgeson is a Research Economist and the Associate Program Manager for the Community Resilience Program at the National Institute of Standards and Technology. Her research interests are focused around survey assessments and economic analyses that consider behavioral aspects and approaches to dealing with environmental issues. Dr. Helgeson's research revolves around resilience to hazards (shocks and stressors) in the built environment, with consideration for cost-effectiveness of community- scale mitigation and adaptation efforts.

At present, Dr. Helgeson is a member of the National Construction Safety Team (NCST) Technical Investigation of Hurricane Maria and its impacts on Puerto Rico. As part of her business resilience research, Dr. Helgeson leads a primary data collection effort in partnership with NOAA. This study focuses on decision-making processes for small- and medium-sized businesses in response to complex event impacts from natural hazards and COVID-19 impacts.

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.

Tancred Miller is the Policy & Planning Section Chief for the Division of Coastal Management, and leads the division's work on building local government capacity for climate hazards resilience. In 2020, he lead a team that created the NC Resilient Coastal Communities Program, which provides funds to local governments for resilience planning and implementation. He manages the land use planning program, which provides direction and support to local governments, as well as grant funding for beach and waterfront access. He also manages the division's rule and policy development functions, bringing scientists and stakeholders together with the NC Coastal Resources Commission to continuously improve regulations for coastal development. He sits on Governor Cooper's Climate Change Interagency

Council, which was created to fulfill the Governor's Executive Order 80 directives. He holds a Bachelor's degree in Business Administration from Morehouse College in Atlanta, and a Masters in Coastal Environmental Management from Duke University.

TJ McDonald has worked in Emergency Management since 1995. He is responsible for the Seattle Hazard Identification and Vulnerability Analysis (SHIVA) and most of the technology used in Seattle Emergency Operations Center. In his role overseeing the SHIVA, Mr. McDonald interacts with numerous stakeholders in the scientific, business, non-profit, and government communities to understand the consequences of natural and human caused hazards on the Seattle community. He enjoys synthesizing large amounts of technical and historic information into concise analyses for decision makers and the public.

McDonald got his start in emergency management as a Peace Corps volunteer in the State of Chuuk, Micronesia during 1990's Typhoon Owen and the recovery that followed. In 2005, he deployed to Louisiana to assist the State of Louisiana in its recovery from Hurricane Katrina. He has been a part of every major emergency response in Seattle since 1995.

Mr. McDonald has a background in urban planning and has a Master of City and Regional Planning degree from Cornell University.

Panel 3: Environmental Justice and Impacts of Historical Inequities: Lessons for Climate Adaptation and Resilience

Cate Mingoya serves as Groundwork USA's Director of Capacity Building. Originally from Queens, New York, Cate earned her B.A. in Biology from Reed College in Portland, Oregon, and returned east to teach middle school science at traditional public and charter schools in The Bronx and in Brownsville, Brooklyn. She went on to earn a Master of City Planning from MIT and has served as the Director of Policy and Program Development for the Commonwealth of Massachusetts's Division of Public Housing and Rental Assistance. In her current role, Cate provides equitable development technical assistance for those looking to transform brownfields into community assets. Cate also leads Groundwork USA's Climate Safe Neighborhoods partnership, a five-city partnership, to reduce heat and flooding related risks in neighborhoods with histories of institutional, race-based housing discrimination.

David B. Abraham, PhD. specializes in sustainable development and the development of performance indicators for urban development. He is a certified and skilled research specialist with experience in community development; master planning, transportation planning, and sustainability planning. As Principal Investigator for the Houston Sustainability Indicators Project (HSI), he developed a procedure and methodology for a robust program to monitor sustainable development in the Houston, Texas area. His team developed a web-based management tool, the Houston Sustainability Indicators Quality of Life Atlas, capable of monitoring key urban performance indicators for Houston, and analyzing trends and correlations between indicators. This tool is capable of supporting the development of short term and long range policy implications. The HSI database serves as a resource for various local government departments, elected officials, and local neighborhood organizations for urban sustainability projects.

Following a model of integrative science for building a comprehensive indicators dataset, the HSI database brought together a robust collection of different datasets including: raster data from the National Land Cover Database (NLCD) developed by the U.S. Geological Survey; Greenhouse Gas emissions inventory from the Vulcan Project based at Arizona State University; Continuous cover of National Ambient Air Quality Standards (NAAQS) from the Environmental Protection Agency; Business agglomeration analysis and monitoring growth in primary businesses from InfoUSA; Local and State

administrative data on voting performance, waste management, parks development, and capital improvement projects; Decennial Census and American Community Survey socio-economic data is also included.

Dr. Abraham has presented findings from the HSI Project throughout the US and internationally in Ireland, Barbados, Brazil, Canada and Portugal. Under Dr. Abraham's guidance, the research provides hands on learning opportunities for students in various academic units at Rice University, including the Department of Statistics, the Professional Science Masters Program, the Health Sciences Program, the Masters of Global Affairs Program and the Jones School of Business.

Rose Whitehair has over 16 years of experience managing large-scale incidents including wildfires, hazardous chemical response, droughts, floods, and the current COVID-19 pandemic response. Her experience includes managing and closing out multi-million-dollar federal projects. She has been assisting clients with deciphering FEMA, CAA, ARP & and the Treasury (Office of the Inspector General (OIG) COVID interim federal fund guidance.

Most recently, Ms. Whitehair served as the State Coordinator Officer/Recovery Unit Manager and Emergency Operations Center (EOC) Director for the New Mexico Department of Homeland Security (NM DHSEM) where she assisted with activating and operating the State of New Mexico's EOC and established protocols for all emergency support functions. She has assisted with providing testimony to the U.S. Congress and created correspondence to the White House for disaster requests and declarations including the recent COVID-19 pandemic.

Additionally, as the former Director of the Navajo Nation Department of Emergency Management, Ms. Whitehair brings invaluable experience with tribal-state-federal coordination. The Navajo became the First Tribe in Arizona, and only the second in the nation, to get aid directly from the Federal government via a Stafford Act Declaration. She was inducted as one of the first Native Americans into the International Women in Homeland Security and Emergency Management Hall of Fame. She served as Tribal Advisor to the National Domestic Preparedness Council and volunteers with Team Rubicon.

Her maternal clan is To'ahedliini' (Water Flows Together) which traces back 16 generations to Window Rock, Navajo Nation.

Scott Gabriel Knowles is a Professor in the Graduate School of Science and Technology Policy at KAIST, the Korea Advanced Institute of Science and Technology. He is a historian of disaster worldwide. He focuses on the historical processes that make disasters possible, and the application of history to reduce future disasters. Since March of 2020 Knowles has hosted #COVIDCalls every weekday, a live podcast discussion of the COVID-19 pandemic.

Knowles is the author/editor of six books—including The Disaster Experts: Mastering Risk in Modern America (University of Pennsylvania Press, 2011); and most recently Legacies of Fukushima: 3.11 in Perspective (co-edited with Kyle Cleveland Ryuma Shineha, University of Pennsylvania Press, 2021)

His work on the history of risk and disaster has appeared in Daedalus, Anthropocene Review, Natural Hazards Observer, New York Times, Washington Post, Huffington Post and other venues.

Panel 4: Reactive and Proactive Local Actions and Data Translation for Decision Makers

Tonya Graham is the Executive Director of the Geos Institute and the Director of its ClimateWise Initiative. She has taken a lead role in developing the concept of Whole Community Resilience, which takes a holistic approach to addressing climate change impacts and develops solutions that are both

ecologically sound and socially equitable. She and her ClimateWise team help community leaders understand likely future conditions, determine vulnerabilities, and develop strategies to address them that care for both people and nature.
In 2019, she and her ClimateWise team launched Climate Ready Communities, an “assisted do-it-yourself" climate resilience planning program that provides affordable assistance to small, mid-sized, and/or under-resourced communities nationwide. She is a co-author of A Practical Guide to Building Climate Resilience, a free, step-by-step planning guide which serves as the foundation for the Climate Ready Communities program.

She serves as a City Councilor in her hometown of Ashland, Oregon, and as Council Liaison to the City's Wildfire Safety Commission, Climate Policy Commission, Conservation and Climate Outreach Commission, and Rogue Valley Transportation District. Through her work with the City of Ashland, she has presented on local climate action a the League of Oregon Cities' annual member conference. Tonya holds a B.S. in Biophysical Environmental Studies from Northland College and a M.A. in Community Development from Goddard College.

Ann C. Phillips is the Special Assistant to the Governor for Coastal Adaptation and Protection for the State of Virginia. Prior to joining the administration, she worked to address sea level rise and climate impact on national security at the regional, national and international level, and chaired the Infrastructure Working Group for the Old Dominion University-convened Hampton Roads Sea Level Rise Preparedness and Resilience Intergovernmental Pilot Planning Project.

Preceding her work on climate impact and sea level rise, Ann served nearly 31 years on active duty. She had the honor to commission and command USS MUSTIN (DDG 89) and to command Destroyer Squadron 28. Her final Flag command was as Commander, Expeditionary Strike Group TWO, including all the Amphibious Expeditionary Forces on the East Coast of the United States.
Ann earned a Master of Business Administration from The College of William and Mary - Mason School of Business, in 2016. She is a graduate of the University of North Carolina at Chapel Hill. In addition, she is a certified Chesapeake Bay Landscape Professional, Level 2.

Chad Berginnis joined the staff of the Association of State Floodplain Managers (ASFPM) in 2011. Since 1993, his work has focused on floodplain management, hazard mitigation, and land use planning at the state, local and private sector levels. As a state official, Chad worked in the Ohio Floodplain Management Program and was Ohio’s State Hazard Mitigation Officer. As a local official, he administered planning, economic development and floodplain management programs in Perry County, Ohio. In the private Sector, he was the national Practice Leader in hazard mitigation for Michael Baker Jr. Inc. Chad has served in an ASFPM volunteer leadership capacity for over a decade as ASFPM as Insurance Committee Chair, Mitigation Policy Committees’ Coordinator, Vice Chair, and Chair. He has a Bachelor of Science in Natural Resources from Ohio State University.

Harriet Festing is Co-Founder and Executive Director of Anthropocene Alliance (Aa) a Florida-based nonprofit. Aa is the nation’s largest coalition of frontline communities fighting for climate and environmental justice. Harriet’s background includes milking cows in rural Dorset, establishing the first network of farmer’s markets in England, and place-making advocacy in New York. From 2004-10, she worked for UK government on climate change and sustainable development. Immediately prior to founding Aa, Harriet undertook ground-breaking research and advocacy on urban flooding. When Harriet is not working with climate disaster survivors, she is tending a large, demonstration garden comprised of more than a hundred species of Florida native plants.