

## APPENDIX 1: RV9 FULL WORKSHOP AGENDA

### Pre-workshop event:

*Reciprocity of Knowledge*

Tuesday, September 28th

11:00 - 1:00 Mountain Time

Instructor: Dr. Michelle Montgomery

### Day 1: Wednesday, September 29, 11:00AM--4:00PM Mountain Time

#### Theme: Indigenous and Place-based Methodologies

11:00: Opening Ceremony and Prayer - Rev. M. Kalani Souza and Elder Hank Fergerstrom

11:15: Welcome to the 9th Annual Rising Voices Workshop and Workshop Overview

11:30: Keynote Presentation - Dr. Robin Wall Kimmerer

12:15: *Break*

12:30: Panel #1: *Centering Justice in Indigenous and Place-based Methodologies*

Speakers: Dr. Deborah McGregor, Dr. Margaret Redsteer, Jackie Qataliña Schaeffer; Moderator: Paulette Blanchard

1:30: *Break*

1:45: World cafe meet & greet conversations

Participants will select breakout rooms to engage in conversations with representatives from various organizations, programs, and networks to learn about their programming.

2:15: Working Groups Breakout #1 Centering Justice in Indigenous and Place-Based Methodologies

Description: Working group discussions will explore why it is important and how to center justice in intercultural collaborations that engage Indigenous and place-based methodologies. Discussions will focus on examples and experiences related to the working group topic (Community relocation/site expansion, Energy systems, Food systems, Health, Phenology, Water systems).

3:30: Reflections from working groups

4:00: Closing remarks: Wrap-up Day 1; What's coming up next

5:30-7:00: The Annual Bob Gough Public Symposium, "Climate Change is Inevitable, Adaptation is

Optional"

- Bob Gough Award for Climate Justice in Action
- Discussion with climate justice leaders featured in the documentary film, INHABITANTS, which follows five Native American Tribes across deserts, coastlines, forests, and prairies as they restore their traditional land management practices. Speakers include:

Rev. M. Kalani Souza, Pres. Chris Caldwell, Dr. Michael Kotutwa Johnson, Anna Palmer (filmmaker), Costa Boutsikaris (filmmaker); Moderator: Colleen Cooley

## **Day 2: Thursday, September 30, 11:00AM--4:00PM Mountain Time**

### **Theme: Intergenerational Research Practices**

11:00: Welcome to the Day - Ava Hamilton

11:10: Recap of Day 1/Process Day 2

11:15: Poster "walk"

Participants will "walk" around to different breakout rooms and discuss posters with the presenters.

12:00: *Break*

12:15: World cafe meet and greet

Participants will select breakout rooms to engage in conversations with representatives from various organizations, programs, and networks to learn about their programming.

12:45: Panel #2: *Centering Justice in Intergenerational Research Practices*

Speakers: Papalii Dr. Tusi Avegalio (Doc Tusi), Leroy Harris, Cheyenne Lurvey, Chief Shirell Parfait-Dardar, Devon Parfait, Dr. Daniel Wildcat, Annalise Guthrie; Moderator: Jasmine Neosh

2:00: *Break*

2:15: Working Groups Breakout #2 Centering Justice in Intergenerational Research Practices

Description: Working group discussions will explore why it is important and how to center justice in intercultural collaborations that engage intergenerational research practices. Discussions will focus on examples and experiences related to the working group topic (Community relocation/site expansion, Energy systems, Food systems,

Health, Phenology, Water systems).

3:30: Reflections from working groups

4:00: Closing remarks: Wrap-up Day 2; What's coming up next

5:30-7:30: Arts event

Presenters will share stories, short films, artwork, music, poetry, and more

### **Day 3: Friday, October 1, 11:00AM--4:00PM Mountain Time**

#### **Theme: Indigenous Data Sovereignty**

11:00: Welcome to the Day - Kukuya Margarita Noguera-Vidal

11:10: Recap of Day 2/Process Day 3

11:15: Keynote - Dr. Dominique David-Chavez

12:00: Panel #3 Centering Justice in Indigenous Data Sovereignty

Speakers: Dr. Stephanie Russo Carroll, Andrew Martinez, James RattlingLeaf, Sr.;  
Moderator: Bill Thomas

1:00: *Break*

1:15: World cafe meet and greet

Participants will select breakout rooms to engage in conversations with representatives from various organizations, programs, and networks to learn about their programming.

1:45: Working Groups Breakout #3 Centering Justice in Indigenous Data Sovereignty

Description: Working group discussions will explore why it is important and how to center justice in intercultural collaborations that engage Indigenous data sovereignty. Discussions will focus on examples and experiences related to the working group topic (Community relocation/site expansion, Energy systems, Food systems, Health, Phenology, Water systems).

3:00: Reflections from working groups

3:30: Closing reflections

3:50: Closing ceremony - Rev. M. Kalani Souza and Elder Hank Fergerstrom

## APPENDIX 2: POSTER “WALK”

### Poster 01

**Title: Creating the Right Relationship with Mother Earth: The Mycelium Healing Project**

**Author(s):** Zuza Bohley, Education director for Promotores Verdes; Beverly Castañeda, AmeriCorps VISTA; James Wieser, practical mycologist; Bryce Lynn, City of Denver horticulturist

**Abstract:** The Mycelium Healing Project is based on creating a reciprocal relationship with Mother Earth. Observing and working with mycelium we learn about mutualistic relationships which allow us as people to embrace being part of nature rather than APART from nature. Rather than centering around our human needs we feel it is important to observe and ask what Mother Nature needs from us.

Beverly Castañeda shares about the Mycelium Healing Project that connects science, indigenous self care and healing, a City of Denver horticulturist and community action - all mitigating climate change and pollution together. Mycelium infused forest patches save pine trees suffering from recycled irrigation water in NE Denver, establish biodiverse ecosystems for the trees and save the city money. Promotores Verdes educates and engages the surrounding communities to build forest patches for ailing trees and thus becoming agents of change, creating a healthier environment for themselves and generations to follow.

### Poster 02

**Title: Climate Literacy and Energy Awareness Network (CLEAN)**

**Author(s):** Kathryn Boyd (CIRES Education & Outreach), Anne Gold (CIRES Education & Outreach), Frank Niepold (NOAA Climate Program Office), Gina Fiorile (CIRES Education & Outreach), Alicia Christensen (CIRES Education & Outreach), Sean Fox (Science Education Resource Center), Monica Bruckner (Science Education Resource Center), Tamara Ledley (Science Educator), Karin Kirk (Freelance Science Writer)

**Abstract:** The CLEAN collection (cleanet.org) contains 700+ free, online, peer-reviewed, NGSS aligned, and ready-to-use educational resources for teaching about climate and energy including activities, lab demonstrations, visualizations, and videos which are easily searchable through various tags. CLEAN partners with climate scientists and educators to help review educational resources for our collection. CLEAN also provides pedagogical support for teaching climate and energy topics through background knowledge pages, a professional development toolkit, and a professional learning community to help educators with many aspects of teaching climate. Our toolkit includes professional development such as teaching guides, webinars, newsletters, elementary teaching resources, resources on the National Climate Assessment, Spanish translations of climate information, and culturally relevant teaching resources that weave climate literacy principles with regional Indigenous Knowledges.

### Poster 03

**Title: Advancing the Voice Of Tribal Space Sovereignty; To Monitor Cobell Resources, Climate And Habitat Change**

**Author(s):** Dan Hawk, Inter-tribal Space Agency / United First Nations Planetary Defense

**Abstract:** It is presupposed the Cobell v. Salazar lawsuit placed Native Americans on the International Traffic and Arms Regulation (ITAR) list in a failed attempt to keep us from monitoring our tribal resources. After six decades of space oppression, we exercise our right of self-determination to monitor our resources, habitat, and climate change from space. Tribal sovereignty does not end with Earth

Observation but extends to the Skyworld.

In 2040 space will be a trillion-dollar business and tribes have been excluded from that Skyworld economic benefit to support the Artemis Program. Governments do not want us in space, the evidence. We were placed on the ITAR list. Yet, space sovereignty is key to our future and existence as a people. While NASA creates an Office of Tribal Affairs the United Nations states indigenous equal access to space is a human rights issue. Indigenous peoples are The New Face of Space.

#### **Poster 04**

**Title: Western Redcedar Dieback as an Indicator of the Effects of Climate Change on Cultural Resources and Tribal Communities**

**Author(s):** Joey Hulbert, Washington State University

**Abstract:** Western redcedar is a culturally important tree species in the Pacific Northwest, but recent longer and hotter droughts may be causing dieback regionally. Western science research is underway to study the link between the dieback and environmental parameters, but more convergence is needed to center justice and understand the impacts on communities. If the dieback of redcedar is indeed driven by climate change, it may provide a unique example and tool to communicate the effects of climate change in (and on) our communities and inspire more action.

#### **Poster 05**

**Title: Where The Seafloor Melts: A Worldview**

**Author(s):** Joan Lederman, artist, Earth citizen

**Abstract:** As a potter in Woods Hole MA, center for ocean, Earth, climate and biological sciences, I was gifted some deep-sea sediment. This poster presents a sequence about making pots glazed with sea-muds that point to their planetary stories. The poster's style bridges tactile drawing to digital photos – representing a stretch among ways of knowing. Investigating samples from global sources brought me into an ever-present mindset of wonderment about how we creatures walk the surface of a rock-ball floating on a molten core. Rivers of water above, rivers of magma below.

As a white woman elder, my experience of indigenous values has been learned from native peoples of many countries. As apprentice to diverse cultural influences, I've learned respect, reverence and humility. Belonging is a big issue for me as I wander among people using highly specialized and technological methods while I seek wisdom and justice borne within reciprocity.

#### **Poster 06**

**Title: Nā Kilo o Makani Pāhili Wali: Microbial Observations of a Storm Event in a Tropical Estuary**

**Author(s):** Becca Lensing<sup>1,2</sup>, Kiana Frank<sup>2,3,§</sup>, Camilla Tognacchini<sup>3</sup>, Mikela Branco<sup>2</sup>, Keahi Pi'iohi'a<sup>4</sup>, Kinohi Pizarro<sup>4</sup>, Keli'iahonui Kotubetey<sup>4</sup>, Mirielle Lopez-Guzman<sup>2</sup>, Carly Capeluzzo<sup>6</sup>, Chatham Callan<sup>6</sup>, C. Aka Beebe<sup>2,3</sup>, Yoshimi Rii<sup>7</sup>, Margaret McManus<sup>3</sup>, and Rosanna Alegado<sup>1,2,3,5</sup>

#### **Affiliations:**

1 Marine Biology Graduate Program, University of Hawai'i at Mānoa (UHM), Honolulu, HI

2 Center for Microbial Oceanography Research & Education, UHM, Honolulu, HI

3 Department of Oceanography, UHM, Honolulu, HI

4 Paepae o He'eia, Kaneohe, HI 96744

5 Hawai'i Sea Grant College Program, UHM, Honolulu, HI

6 Oceanic Institute of Hawai'i Pacific University

7 He'eia National Estuarine Research Reserve, Kāne'ohe, Hawai'i

§ current: Pacific Biosciences Research Center, UHM, Honolulu, HI

**Abstract:** Climate change will increase the frequency and intensity of storms (1) and increase the incidence of algal blooms and pathogen outbreaks (2). However, the consequences of these changes for tropical estuaries and fisheries have received little attention (3), and the extent to which microbial community dynamics vary during weather events remains unknown for tropical island systems. Sampling at He'eia Fishpond captured the shift in physicochemical and microbial communities before, during, and following Tropical Storm Wali. Analysis of biogeochemistry and microbial DNA sequencing reveal shifts between pre-storm, storm, and post-storm communities. Post-storm communities more closely resembled pre-storm communities but sustained a fraction of storm-introduced taxa. Results indicate that storm Wali likely decreased primary productivity in the estuary. These results provide the first field evidence of microbial community resiliency following a storm event in a tropical estuary and suggest larger impacts to marine productivity, food web dynamics, and biogeochemical cycles.

References:

1. Michener, W.K., Blood, E.R., Bildstein, K.L., Brinson, M.M. and Gardner, L.R., 1997. Climate change, hurricanes and tropical storms, and rising sea level in coastal wetlands. *Ecological Applications*, 7(3), pp.770-801.
2. Moore, S.K., Trainer, V.L., Mantua, N.J., Parker, M.S., Laws, E.A., Backer, L.C. and Fleming, L.E., 2008, November. Impacts of climate variability and future climate change on harmful algal blooms and human health. In *Environmental Health* (Vol. 7, No. S2, p. S4). BioMed Central.
3. Ghosh, A. and Bhadury, P., 2019. Exploring biogeographic patterns of bacterioplankton communities across global estuaries. *MicrobiologyOpen*, 8(5), p.e00741.

## Poster 07

**Title:** Taino Indigenous Gathering: Peace Alliance for Unity!

**Author(s):** Kukuya Margarita Noguerras-Vidal

**Abstract:** The Taino Indigenous Gathering: Peace Alliance for Unity is a call to the Taino People to identify the Taino people of Borike and in the Lesser and Greater Antilles and to request the sharing of your communities' visions and projects; to initiate the creation of a collective of Taino Indigenous Tribes of the Caribbean in order to establish a stronghold that will preserve and protect our identity, teachings and tradition for present and future generations; based on our collective efforts of unification we call in mutual respect and care for one another; sharing of our Indigenous ways, inducing our spirituality, experiences, knowledge and creativity; begin the creation of a digital archive to store this information in order to ensure the continuity of our Tradition for all generations, align and share the spiritual-ancestral teachings with each other, between us and with the youth in order that they may safeguard ancestral knowledge; share Taino ancestral teachings with our communities to empower each other; opening our sensitivity to our Earthmother, will be our guide to building our resilience in order to be prepared to deal with climate changes and protect our families, homes and communities; becoming students of our ecosystem will help us to understand environmental and climate changes that are already happening on the land, region and world; and join knowledge with other indigenous communities worldwide in collaboration with the scientific world and those who are working to safeguard the ecosystem of the planet.

## Poster 08

### **Title: Blued Trees And Fire Tigers; Strategically Resisting Pre-emptive Ecocide In Environmental Warfare**

**Author(s): Aviva Rahmani**, PhD, Affiliate Institute for Arctic and Alpine Research, University of Colorado at Boulder, Virtual Resident with Arts Cabinet, UK

**Abstract:** Justice demands accountability for ecocide and the assertion of Earth justice. In two projects, which evolved from observing the functions of natural and anthropogenic systems in a time of flux, the work created experimental models. That allowed deeper insight into how artifacts of Western culture, such as painting, musical composition and legal strategies might intersect with environmental science and community needs. *The Blued Trees Symphony* explored what ownership for the common good means during the Anthropocene era, leveraging satellite data, case studies and performance art to support Earth rights and resist environmental warfare. In *Fire Tigers*, supported by Arts Cabinet, UK and in collaboration with Olivia Haas, fire was embodied in an iconic metaphor to observe fire as alpha predator seeking prey relationships. This allowed us to differently witness patterns of global fire regimes and “hear” the Fire Tiger’s silent anguish; experiencing habitat massacres.

## Poster 09

### **Title: Oil Field and Smelter Brown Field Site Phytoremediation**

**Author(s): Cynthia Sanders**, College of the Muscogee Nation

**Abstract:** Industry’s interaction with nature can lead to the development of a recognized environmental concern (rec). Recs are areas identified for safety and the need for immediate clean up. Okmulgee has nearby brownfield sites that were formerly used in petroleum and metal fabrication. Phytoremediation is an environmental clean-up technique which utilizes botanical vegetation to remove any potential pollutants from the area. For this study, the second year focused on uptake of heavy metals (zinc cadmium, and lead), DNAPL and LNAPL compounds. Obtainment of both Phase I and Phase II analysis has been conducted for each brownfield site. Chemical analysis using soil coring, and water screenings from the site was compared to the willow trees and river cane biomass site analysis. River cane and willow have root systems which allow for growth expansion into the water table and alluvial sources.

## Poster 10

### **Title: Climate Change Education and Stewardship through Multiple Knowledge Systems**

**Author(s): Elena Sparrow**<sup>1</sup>, Katie Spellman<sup>1</sup>, Malinda Chase<sup>2,3</sup>, Christina Buffington<sup>1</sup>, Bonnie Murray<sup>4</sup>, Kenji Yoshikawa<sup>5</sup>, Gregory Kahoe<sup>6</sup>, Javier Fochesatto<sup>7</sup>

<sup>1</sup>University of Alaska Fairbanks International Arctic Research Center; <sup>2</sup>Association of Interior Native Educators; <sup>3</sup>Alaska Climate Adaptation Science Center; <sup>4</sup>NASA Langley Research Center Office of STEM Engagement; <sup>5</sup>University of Alaska Fairbanks Institute of Northern Engineering; <sup>6</sup>University of Alaska Fairbanks School of Education; <sup>7</sup>University of Alaska Fairbanks College of Natural Science & Mathematics

**Abstract:** To make climate science learning meaningful and relevant for students and communities we work with in Alaska and beyond, our approach to climate change education centers on justice, equity, diversity and inclusion. We use multiple knowledge systems, a culturally responsive curriculum that is founded on Indigenous Elder values and knowledge shared at Elder Academy Camps, written by Alaska Interior Native Educators, and expanded with Global Learning and Observations to Benefit the Environment (a community science program) and other NASA resources. We also use best teaching

practices that are student-centered and place-based. This intergenerational learning and teaching ensure a place at the table for each participant and provide a way to build trusting relationships among participants: formal and informal educators, community members, course facilitators, invited experts-Elders and scientists, and, for youth and/or adults to take action related to climate change in their communities. We share research and stewardship project examples.

**Poster 11**

**Title: Social Impacts of the Gold King Mine Spill on the Animas-San Juan River Watershed Communities**

**Author(s): Jack D. Turner**, The Animas Community Listening and Empowerment Project (ACLEP)

**Abstract:** Following the Gold King Mine (GKM) spill, members of the Durango community mobilized to form a loose coalition, called ACLEP. The mission of ACLEP is to provide public spaces for sharing stories of community well being related to the GKM spill. The ultimate goal of ACLEP is to promote a shared understanding of the common values, as well as recognition of differences based on economic, social and cultural histories. To that end, paying attention to the well-being of the community is as important as studying the physical data of an environmental disaster. Conditions do not return to “normal” when normal no longer exists, whether due to the impacts of colonization, economic exploitation, or continued environmental degradation, as observed with climate change. Therein, lies our new understanding of community health, one in which economic, environmental, sociological, psychological and spiritual conditions are equally considered alongside the physical data and their interpretation.

**APPENDIX 3: WORLD CAFÉ MEET AND GREET**

<b>Organization hosting World Café discussions</b>	<b>Description</b>
<b>AGU's Thriving Earth Exchange</b> (Haley McKey, Natasha Udu-Gama)	The American Geophysical Union’s Thriving Earth Exchange connects communities with scientists and supports them as they work together to tackle local challenges related to sustainability, climate resilience, environmental health, natural hazards and much more.
<b>AIHEC - American Indian Higher Education Consortium</b> (Althea Walker, Grace Mukupa, Daphne Littlebear, Kathy Isaacson, Al Kuslikis, Russell Hoffman)	AIHEC provides leadership and influences public policy on American Indian and Alaska Native higher education issues through advocacy, research, and programmatic initiatives; promotes and strengthens Indigenous languages, cultures, communities, lands, and tribal nations; and through its unique position, serves member institutions and emerging TCUs.
<b>Americas for Conservation + the Arts</b> (Zuza Bohley)	Americas for Conservation + the Arts (AFC+A) is an environmental organization, Latina-led and founded nonprofit, committed to powering inclusive environmental and cultural workspaces. We do this through our award winning main programs.
<a href="#">CitSci.org</a> (Stacy Lynn, Colorado State U.; Greg	CitSci facilitates tracking of environmental and social variables that are of interest to communities around the globe. We make it possible for you to focus on your

<p>Newman, Colorado State U.; Aramati Casper, Colorado State U.; Kennedy Rubert-Nason, U. of Maine, Fort Kent)</p>	<p>science and data collection, rather than having to focus on technology development. This allows you to get started sooner and at lower cost. We would love to partner with anyone interested in guiding our ability to serve diverse users and a broad spectrum of projects and disciplines.</p>
<p><b>CLEAN - the Climate Literacy and Energy Awareness Network</b> (Katie Boyd)</p>	<p>CLEAN (cleanet.org) hosts a collection of climate teaching resources that is also hosted on NOAA as the Climate.gov climate education database. We provide teaching resources such as videos and activities which are all peer-reviewed by scientists and educators. CLEAN also has pedagogical support for educators including climate science background pages with Spanish translations, teaching guides, webinars, newsletters, resources on the National Climate Assessment, and culturally relevant teaching resources that weave climate literacy principles with regional Indigenous Knowledges.</p>
<p><b>College of the Muscogee Nation</b> (Cynthia Sanders)</p>	<p>We are a tribal college. Engagement of student and indigenous community members in research directly involves community needs and local area climate change.</p>
<p><b>Current and future Arctic community vulnerabilities to sea-ice change</b> (Laura Lundrum, UCAR; Julio Postigo, Indiana University)</p>	<p>We wish to build a team (Arctic community members, organizations, academics) to explore the impacts of rapidly changing sea ice conditions on Arctic communities, how these changes interact with social and economic threats, and how the socio-economic and other contexts of the communities affect their vulnerabilities to both. We would like to identify ways that scientific products could better serve communal means. We hope to develop a team that may co-produce a research design to address community needs in a rapidly changing Arctic.</p>
<p><b>GLOBE @UCAR</b> (Skye Yost)</p>	<p>Since our founding on Earth Day 1994, the Global Learning and Observations to Benefit the Environment (GLOBE) Program has been providing students and the public worldwide with the opportunity to meaningfully contribute to our understanding of the Earth system and global environment.</p>
<p><b>Hawai'i Sea Grant Center for Integrated Knowledge Systems (CIKS)/Kūlana Noi'i</b> (Katy Hintzen, Rosie Alegado, Sara Kahanamoku)</p>	<p>CIKS serves as a collaborative hub coordinating among Hawai'i Sea Grant faculty, extension agents, and community partners who work on projects that engage multiple knowledge systems. The Kūlana Noi'i provides guidance for building and sustaining long-term relationships between researchers and communities in the Hawaiian Islands. The Kūlana Noi'i is not intended as a compliance standard or checklist for achieving reciprocal community-research partnership. Instead, this document serves as a starting point for deeper conversation and lays out a set of ideas, values, and behaviors that when applied alongside hard work can build more just and generative relationships between researchers and communities.</p>
<p><b>Indigenous Phenology Network</b> (Brian Miller, Katie Jones, Alyssa Rosemartin, Maraya Ben-Joseph,)</p>	<p>The Indigenous Phenology Network is a grassroots organization whose participants are interested in understanding phenology on lands and species of importance to native peoples. The group is focused on building relationships, ensuring benefit to indigenous communities, and integrating indigenous and western knowledge systems.</p>

<p><b>Indigenous Speakers Series</b> (Michelle Montgomery PhD, enrolled Haliwa Saponi/descendant Eastern Band Cherokee, University of Washington Tacoma; Ciarra Greene MS, Nez Perce, Sapóoq'is Wíit'as Consulting; and Misty Peacock PhD, Salish Sea Research Center)</p>	<p>The Indigenous Speaker Series provides a platform for Indigenous discussions about living (working, studying and educating) in modern society while honoring our longstanding relationship and responsibility to our homelands, communities, and ancestors. The Series is a monthly webinar series featuring dialogues about Indigenous people's cultural and traditional lived experiences. The Series has drawn in over 1,600 participants from across the world to engage in discussion about climate, traditional food sovereignty, cultural and traditional practices, human health, all with foundations in sustainability, resilience, and dedication to future generations.</p>
<p><b>IPCCWG - Indigenous People's Climate Change Working Group</b> (Dr. Daniel Wildcat, Paulette Blanchard)</p>	<p>The IPCCWG was formed through a coalition of tribal colleges, with the goals of: Preparing future generations of Indigenous geoscience professionals, educators, and a geoscience literate Indigenous workforce; Ensuring that indigenous tribal knowledge of landscapes and climates are valued, used and incorporated into our tribal exercise of geoscience education and research; Establishing a collaborative effort between federal agencies, tribes and tribal colleges in order to make sure geoscience education and research opportunities for Indigenous Peoples are integrated and coordinated.</p>
<p><b>ITEP - Institute for Tribal Environmental Professionals Tribes and Climate Change Program</b> (Kelsey Morales, Nikki Cooley, Karen Cozzetto)</p>	<p>The Institute for Tribal Environmental Professionals established its Tribes &amp; Climate Change Program (TCCP) in 2009 to provide support and be responsive to the needs of tribes that are preparing for and currently contending with climate change impacts. Development of the program is guided by an advisory committee that includes tribal environmental and natural resource professionals who are actively working on climate change issues.</p>
<p><b>National Climate Assessment - US Global Change Research Program</b> (Allyza Lustig, USGCRP; Rachael Novak, BIA)</p>	<p>The Global Change Research Act mandates that the US Global Change Research Program prepare and submit to the President and the Congress a quadrennial assessment, referred to as the National Climate Assessment (NCA)</p>
<p><b>NEON - National Ecological Observatory Network</b> (Katie Jones, Paula Mabee, Kate Thibault, Claire Lunch, Kirsten Ruiz, Rommel Zulueta)</p>	<p>The National Science Foundation's National Ecological Observatory Network (NEON) is a continental-scale observation facility operated by Battelle and designed to collect long-term open access ecological data to better understand how U.S. ecosystems are changing.</p>
<p><b>NSF - National Science Foundation</b> (Colleen Strawhacker, Office of Polar Programs)</p>	<p>The National Science Foundation supports fundamental research and education in all the non-medical fields of science and engineering. The Office of Polar Programs supports world-class arctic and antarctic science through grants to researchers across the U.S. and by providing polar facilities and operational</p>

	support.
<b>Native FEWS Alliance</b> (Kathy Isaacson, AIHEC; Al Kuslikis, AIHEC)	The Native FEWS Alliance is an "alliance of alliances" that significantly broadens the participation of Native American students in Food, Energy, and Water Systems education and careers to address critical challenges facing their communities.
<b>NIDIS - NOAA's National Integrated Drought Information System</b> (Crystal Stiles)	NIDIS is a multi-agency partnership that coordinates drought monitoring, forecasting, planning, and information at national, state, and local levels across the country.
<b>North Central Climate Adaptation Science Center</b> (Stefan Tangen)	The North Central Climate Adaptation Science Center is a partnership between the US Geological Survey, the University of Colorado Boulder and five consortium partners. The NC CASC fosters innovative and applied research in support of tribal, federal, state, and local natural resource management and decision-making.
<b>Olohana Foundation</b> (Maraya Ben-Joseph)	The Olohana Foundation is a 501(c)(3) non-profit organization based in Hawaii. We work with communities to co-build resilience and adaptation strategies to climate change through projects that intersect food, energy, water, and knowledge systems.
<b>SOARS @ UCAR</b> (Kadidia Thiero, Marissa Vara)	Significant Opportunities in Atmospheric Research and Science (SOARS) is an undergraduate-to-graduate bridge program designed to broaden participation of historically marginalized communities in the atmospheric and related sciences.
<b>Southcentral Climate Adaptation Science Center</b> (April Taylor, Cynthia Naha, Yvette Wiley)	The tribal engagement program of the SC CASC offers workforce development, building capacity and research partnerships.
<b>Southeast Climate Adaptation Science Center</b> (Aranzazu Lascurain)	The Southeast Climate Adaptation Science Center (SE CASC) is part of a network of 9 Climate Adaptation Science Centers managed by the U.S. Geological Survey National Climate Adaptation Science Center. We work with natural and cultural resource managers to gather the scientific information and build the tools needed to help fish, wildlife, ecosystems and people adapt to the impacts of changing climate.
<b>Southwest Climate Adaptation Science Center</b> (Althea Walker, Sarah LeRoy, Amber Pairis, Kris Metzger)	The Southwest Climate Adaptation Science Center (SW CASC) was established in 2011 to provide objective scientific information, tools, and techniques that land, water, wildlife, and cultural resource managers and other interested parties can apply to anticipate, monitor, and adapt to climate change impacts in the southwestern United States.
<b>University of Alaska Fairbanks (UAF) International Arctic</b>	The mission of IARC is to foster Arctic research to help the nation and the world understand, prepare for, and adapt to the pan-Arctic impacts of climate change. IARC's work happens everywhere on Native Lands and its faculty, staff and

<b>Research Center (IARC)</b> (Elena Sparrow, UAF; Katie Spellman, UAF; Bonnie Murray, NASA Langley Research Center Office of STEM Engagement)	students are working on cultivating a culture of inclusion, equity and respect, starting from a Diversity and Inclusion Working Group and incorporating these principles into IARC's Strategic Plan and in projects.
<b>University of California Davis Center for Regional Change</b> (Sarina Rodriguez)	Center for Regional Change does research that makes actionable change in our communities and regions of North and Central California.

## APPENDIX 4: RV9 ORGANIZERS AND SPEAKERS' BIOGRAPHIES

### WORKSHOP PLANNING COMMITTEE



**Paulette Blanchard** (Absentee Shawnee & Kickapoo) is currently a PhD candidate in the department of Geography at the University of Kansas, and 2018-2020 Diversity and Inclusion Fellow with University Corporation for Atmospheric Research. Her current work addresses Indigenous science and science education, Indigenous led environmental movements and activism. She incorporates Indigenous Feminist methodologies, ethics, protocols, and philosophies into her geographic framework. Her work includes social, climate, and reproductive justice for Indigenous Peoples and other intersectional and marginalized populations. She has interests in how and why science education influences Native students to stay or leave academic and science spaces, as well as how mentoring contributes to their success. Paulette holds a Master of Arts in Geography from the University of Oklahoma and a Bachelor of Arts in Indigenous & American Indian Studies from Haskell Indian Nations University. Her work addresses the challenges and opportunities that Indigenous Peoples face in relation to climate change and climate justice.



**Patrick Freeland** *Honor, Pride, and Respect*. These values serve as the foundation to a worldview of knowledge in plural – transdisciplinary understanding and holistic experience – in order to promote proactive change through community-based collaboration. Patrick Austin Freeland, Hvtvltvlke Mvskoke (Wind Clan, Muscogee Creek Nation of Oklahoma) is a graduate of Haskell Indian Nations University and Purdue University, learning of the interrelations of American Indian, Alaska Native, and Indigenous Peoples' adaptation to climate change and preservation of tribal and cultural sovereignty. Through commitment-to-action, Patrick centers his work ethic and civic engagement through intergenerational knowledge-sharing and through the utilization of interdisciplinary sciences, arts, and engineering, as a means to improve human and environmental health, social advancement, and intercultural understanding through reconciliation. Patrick's research and professional development have centered on climate change adaptation and mitigation, noncognitive development in education, and advancement of plural knowledge and

conscientiousness. Patrick, a lifelong learner, continues to develop skills in organizational development, program management, social knowledge systems, and intergovernmental policy, as well as strategic planning, assessment, and evaluation. Ultimately in practice, Patrick incorporates an adaptive management style supported by collaboration with an interpersonal focus on healing and peace-making.



**Katie Jones**, (Amskapi Pikanii - Southern Piegan, Blackfeet) is a plant ecologist at the National Ecological Observatory Network (NEON) in Boulder, Colorado where she supports field sampling and data product development for plant biomass measurements and phenology observations for the NEON Observatory. Katie holds an MS in Botany and Plant Pathology from Oregon State University and a BS in Environmental Science from The Evergreen State College. As a member of Rising Voices, Katie seeks to learn from a community of Indigenous and Western scientists, honor complimentary knowledge systems and promote diverse perspectives in climate change research and adaptation planning.



**Heather Lazrus** is a Project Scientist in the Mesoscale and Microscale Meteorology Laboratory at the National Center for Atmospheric Research in Boulder, Colorado. Heather is an environmental anthropologist and uses the theories and methods in the anthropological toolkit to investigate the cultural mechanisms through which all weather and climate risks are perceived, experienced, and addressed. Heather focuses on the interface between extreme weather and climate change and works closely with colleagues from diverse disciplines. Her research contributes to improving the utility of weather forecasts and warnings, reducing social vulnerability to atmospheric and related hazards, and understanding community and cultural adaptations to climate change. Heather has worked extensively in Tuvalu, New Zealand and the United States. Heather obtained a PhD in Anthropology from the University of Washington in 2009. Dr Lazrus is the Principle Investigator and co-director of the Rising Voices Center for Indigenous and Earth Sciences at NCAR.



**Julie Maldonado** is the Associate Director for the Livelihoods Knowledge Exchange Network (LiKEN), a non-profit, link-tank for policy-relevant research toward post-carbon livelihoods and communities. In this capacity, she serves as co-director of the Rising Voices Center for Indigenous and Earth Sciences. Dr. Maldonado is also a lecturer in the University of California-Santa Barbara's Environmental Studies Program. As a public anthropologist, Julie is an author on the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> US National Climate Assessments. Her recent book, *Seeking Justice in an Energy Sacrifice Zone: Standing on Vanishing Land in Coastal Louisiana*, emerged from years of collaborative work with Tribal communities in coastal Louisiana experiencing and responding to repeat disasters and climate chaos.



**Dr. Katie Spellman** was born and raised in Alaska. She has dedicated her career to the interface of social justice and science and has found the overlap for her passion in both areas through climate change education and research. Katie received her bachelor's in Biology from Whitman College in Walla Walla, WA. She worked in homeless services and co-founded a street newspaper with members of the homeless community in Tacoma, Washington before returning home to Fairbanks to pursue a Masters and Ph.D. in Biological Sciences at

UAF. In between the two graduate degrees, she worked as the ecological education program director at the Center for Alaskan Coastal Studies, in Homer, Alaska. Her research is split evenly between plant ecology and education research, with public engagement in and access to the scientific process as a unifying theme in both areas. Her ecological research focuses on how a warming climate influences boreal and tundra plant communities through non-native species introductions, changes in phenology, and wildfire. Her education research investigates the effectiveness of different climate change learning strategies and science engagement models. She collaborates regularly with students, teachers, and community members across Alaska (currently in more than 35 communities) and in 122 countries around the globe to address climate change issues and increase access to science at local and global scales.



**Althea Walker** is currently the Tribal Climate Adaptation Science Liaison for the American Indian Higher Education Consortium at the Southwest Climate Adaptation Science Center. She is a descendant of the Nez Perce, Hopi, and Gila River people and is an enrolled member of the Gila River Indian Community. Althea is a Certified Public Manager and Leadership in Energy & Environmental Design (LEED) Green Associate. She holds a Bachelor of Science in Environmental & Resource Management & Master of Science in Environmental Technology Management from Arizona State University. Her career has focused on environmental protection, green building, zero waste planning, community engagement, and climate change adaptation planning.

Her work in these areas have included analyzing the impacts of dam operation and climate change on Columbia River salmon and lamprey migration and integrating Indigenous knowledge into climate change adaptation planning. She is a Sequoyah Fellow (lifetime member) of the American Indian Science & Engineering Society (AISES) and an editorial board member of the AISES magazine, Winds of Change. She is a steering committee member for the Indigenous Foods Knowledges Network, a board member for the hipéexnu' kii'u núun wisíx Inc., and most recently became an advisor to the Climate Science Alliance whose mission is to safeguard natural and human communities in the face of climate change. Althea previously worked for the Gila River Indian Community where she was the Environmental Education & Outreach Specialist.



**Aara'L Yarber** is a PhD candidate in Meteorology and Atmospheric Science at The Pennsylvania State University. She is an inaugural 2017-2019 Diversity and Inclusion fellow for the University Corporation for Atmospheric, an ADVANCEGeo contributor, and a member of the HBCU Climate Change Consortium. Her current work uses WRF-Chem, the Weather Research and Forecasting model coupled with chemistry, to examine the chemical composition of air pollution in West Africa and its relationship to adverse health outcomes. She holds a MS in Meteorology and Atmospheric Science from Penn State and a BS in Physics from Howard University.

## RECIPROCITY OF KNOWLEDGE EVENT



**Dr. Michelle Montgomery** (enrolled Haliwa Saponi/descendant Eastern Band Cherokee) is an Associate Professor of American Indian Studies and Ethnic, Gender, and Labor Studies in the School of Interdisciplinary Arts and Sciences at the University of Washington, Tacoma. She is also the Assistant Director for the Office of Undergraduate Education, the Indigenous Curriculum and Community advisor for the School of Education and Interim Director for Undergraduate Program in the Department of Bioethics and Humanities School of Medicine. Dr. Montgomery's scholarship focuses on Indigenizing and decolonizing the climate justice narrative through the Indigenous Speaker Series, environmental ethics connected to Indigenous Peoples' identities, and eco-critical race theory to eliminate racial and environmental oppression.

## ARTIST



**Pamela Beans** is from Pilot Station, Alaska. She is Yupik and her Yupik name is "Inuik." She is going for her bachelors degree in Native studies and leadership.

## WORKSHOP EVALUATORS



**K. Malulani Castro** (Kānaka 'Ōiwi & Borinqueño, he/him/his/they/them/their's) is a recent graduate of the University of Maryland, Baltimore County and is currently enrolled as a PhD student in the School for Environment and Sustainability at University of Michigan. Malu's research is broadly focused on evaluation theory and methods. Specifically, Malu is interested in Indigenous evaluation theory and methods as they relate to the reification of governance structures in programs, organizations, communities, and other polities (e.g., nation states, Tribal governments).



**Angélica De Jesús** is a mother and doctoral student studying the social dimensions of knowledge and environmental science at Michigan State University. She is interested in the impacts of settler-colonial forest management on food and other eco-systems in the Caribbean and is passionate about a global and critical climate justice. After nearly a decade working and listening as a researcher, creative, and curious learner in various institutional and informal contexts, Angélica is excited to continue working alongside Black and Indigenous feminist thinkers, community members, and family to honor and highlight powerful lineages of traditional ecological knowledge in the Caribbean.

## KEYNOTE - CENTERING JUSTICE IN INDIGENOUS AND PLACE-BASED METHODOLOGIES



**Robin Wall Kimmerer** is a mother, scientist, decorated professor, and enrolled member of the Citizen Potawatomi Nation. She is the author of *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*, which has earned Kimmerer wide acclaim. Her first book, *Gathering Moss: A Natural and Cultural History of Mosses*, was awarded the John Burroughs Medal for outstanding nature writing, and her other work has appeared in *Orion*, *Whole Terrain*, and numerous scientific journals. She tours widely and has been featured on NPR's *On Being* with Krista Tippett and in 2015 addressed the general assembly of the United Nations on the topic of "Healing Our Relationship with Nature." Kimmerer lives in Syracuse, New York, where she is a SUNY Distinguished Teaching Professor of Environmental Biology, and the founder and director of the Center for Native Peoples and the Environment, whose mission is to create programs which draw on the wisdom of both indigenous and scientific knowledge for our shared goals of sustainability. As a writer and a scientist, her interests in restoration include not only restoration of ecological communities, but restoration of our relationships to land. She holds a BS in Botany from SUNY ESF, an MS and PhD in Botany from the University of Wisconsin and is the author of numerous scientific papers on plant ecology, bryophyte ecology, traditional knowledge and restoration ecology. She lives on an old farm in upstate New York, tending gardens both cultivated and wild.

## PANEL #1: CENTERING JUSTICE IN INDIGENOUS AND PLACE-BASED METHODOLOGIES



**Dr. Deborah McGregor** (Anishinaabe) is from Whitefish River First Nation, Birch Island, Ontario. At York University, she is joint faculty with Osgoode Hall law and Environmental Studies & Urban Change and is Canada Research Chair in Indigenous Environmental Justice. Professor McGregor's research has focused on Indigenous knowledge systems and their various applications in diverse contexts including environmental and water governance, environmental justice, health and environment, climate change and Indigenous legal traditions. She remains actively involved in a variety of Indigenous communities, serving as an advisor and continuing to engage in community-based research and initiatives and has been at the forefront of Indigenous environmental justice and Indigenous research theory and practice. She is co-editor of *Indigenous research: Theories, practices, and relationships, Indigenous Peoples and*

*Autonomy: Insights for a Global Age*, the Anishinaabewin conference proceedings series. Her current projects focus on "Indigenous Environmental (In)Justice: theory and practice" and "Indigenizing self determined climate change futures". Her work has been shared through the IEJ project website <https://iejproject.info.yorku.ca/> and UKRI International Collaboration on Indigenous research <https://www.indigenous.ncrm.ac.uk/>.



**Dr. Margaret Redsteer** is an Assistant Professor at the University of Washington, Bothell where she teaches climate change adaptation policy, natural hazards and human disasters, and environmental issues. Her research focuses on the linkages of climatic and earth surface processes related to wind erosion, sand and dust storms, as well as how climate variability and land use have affected the traditional livelihoods of Indigenous people.



**Jackie Qataliña Schaeffer**, an Iñupiaq from Kotzebue, Alaska, is the Community Development Manager at the Alaska Native Tribal Health Consortium. For a decade she has worked across Alaska holistically infusing indigenous knowledge into a variety of sectors she has experience in, including comprehensive planning, energy, housing, water security, and sanitation and climate change adaptation for rural communities.

Qatalina received her fashion degree from the American College in London, Residential Space Planning certificate and studied Interior Design at the Art Institute of Pittsburgh. Qataliña currently sits on the NANA Regional Corporation Board of Directors, Alaska Institute for Climate & Energy board, Koniag Broadcasting Corporation board, RCAC board, Kikiktagruk Inupiat Corporation shareholder, and a tribal member of the Native Village of Kotzebue. Qataliña loves her traditional subsistence activities and sharing them with her six children and seven grandchildren. She currently resides in Palmer, Alaska.

**Moderator: Paulette Blanchard** (see bio above with Planning Committee)

**PANEL #2: CENTERING JUSTICE IN INTERGENERATIONAL RESEARCH PRACTICES**



**Papali'i Dr. Tusi Avegalio (Doc Tusi)**, was raised traditionally by extended family on coastal villages in the Samoan Islands. He entered college in the US as a scholarship recipient in 1968. He served in multiple capacities from village elem/secondary classroom teacher in American Samoa, Research Fellow at the East West Center, Adjunct faculty to the Japanese American Institute of Management Science, Associate Professor of Business on faculty, and current Director of the multi-national award-winning University of Hawaii Pacific Business Center Program. He is an advocate for the weave of indigenous

wisdom, values of aloha and spirituality with modern science, knowledge, and technology. A weave that incorporates the ancient wisdoms of symbiosis and synergies that are naturally restorative and regenerative vs the conventional extractive degenerative models applied throughout the region incessantly putting biodiverse, fragile eco systems and cultures at risk. He was conferred the *Papalii* title in 1980 as a senior heir of the ancient Malietoa Talavou (warrior king) line of Samoa.



**Chief Shirell Parfait-Dardar** is the Traditional Chief of the Grand Caillou/Dulac Band of Biloxi Chitimacha-Choctaw in Louisiana. Shirell is the mother of four wonderful children. She is the wife of Isle de Jean Charles Tribal Citizen Dale Dardar, an Ordained Minister of the Universal Life Church, a Traditional Dressmaker and Clothing Designer/small business owner, becoming the first Native American business owner in the Historic Downtown District of Houma, LA. She is one of the founding members of the First People's Conservation Council of Louisiana and is currently seated as the Secretary. She was

also one of the advisors to LA H.B.660 – Act #102, establishing the Native American Commission and was elected the first Native American Chairwoman of the Louisiana Governor's Office of Indian Affairs Native American Commission, and is a Musician in her spare time. Much of Shirell's working hours are dedicated to Tribal Federal Acknowledgement efforts and serving her Tribal Citizens and the Community

Residents within her Tribal Territory in Terrebonne Parish, Louisiana. She is an active advocate for coastal restoration and preservation, development and utilization of alternative energy sources, community resiliency, education and human rights. Her favorite quote is an ancient American Indian proverb: "Make mine enemy brave and strong, so that if defeated, I will not be ashamed."



**Devon Parfait** is the future chief of Grand Calliou/Dulac Band of the Biloxi-Chitimacha-Choctaw and currently a Geoscience major at Williams College. Devon enjoys living in the moment, and interacting with people. He is involved in the geoscience student advisory committee (GSAC) and is the student representative for the Marine and coastal science division of the Geologic Society of America. He is also an Allison Davis research fellow at Williams, in which he studies how his tribe and other tribal communities in southeast Louisiana are disproportionately impacted by coastal land loss, both physically and

socioeconomically and often shares his story and research by presenting across the country. Devon also often works with Native youth from around the world mentoring them and providing professional development through the NYCALC program.



**Daniel Wildcat**, Ph.D., is a professor at Haskell Indian Nations University in Lawrence, Kansas, and an accomplished scholar who writes on Indigenous knowledge, technology, environment, and education. He founded the Haskell Environmental Research Studies Center, with colleagues from the Center for Hazardous Substance Research at Kansas State University. Wildcat helped design a four-part video series entitled *All Things Are Connected: The Circle of Life* (1997), which dealt with the land, air, water, biological, and policy issues facing Native nations. A Yuchi member of the Muscogee Nation of Oklahoma, Wildcat formed the Indigenous Peoples Climate Change Working Group, a tribal-college-centered network of individuals and organizations working on climate change issues. In 2008, he helped organize the Planning for Seven Generations climate change conference sponsored by the National Center for Atmospheric Research. He is the author of *Red Alert! Saving the Planet with Indigenous Knowledge* (2009).



**Annalise Guthrie** ᏈᏊᏊ/Osiyō/Hello, my name is Annalise, I am a citizen of Cherokee Nation and recently graduated from Haskell Indian Nations University with my BS in Environmental Science in Spring 2020. Currently, I am an aspiring PhD student at the University of Kansas in the Ecology and Evolutionary Biology Department studying the biogeochemistry of deep soils. I am interested in linking anthropogenic disturbances, precipitation, and deep soil dynamics to contribute to a better understanding of rapid global ecosystem changes that are still to be realized in the Anthropocene. Because the consequences of climate change have the capacity to govern the future of indigenous culture and the places they inhabit, being successful in my field exceeds academic or career ambitions and is an inherent and personal

responsibility.



**Jasmine Neosh** (Menominee) is a student at the College of Menominee Nation. She is a former Northeast Climate Science Center Undergraduate Fellow and the only undergraduate in the inaugural Forge Fellows cohort (NY). Jasmine holds an Associate degree in Natural Resources and is pursuing her Bachelor's degree in Public Administration.



**Cheyenne Lurvey** is General Manager Phoenix Carbon LLC and has been working with Tcom systems for over 15 years.



**LCDR (Navy Retired) Leroy Harris, FAAMA Founder and CEO of HITmethods Inc.**, a Certified Service-Disabled Veteran Owned strategic management consulting firm specializing in healthcare capacity building, disaster preparedness & response, global health security, informatics & technology management, and business transformation planning. He is a highly motivated senior professional with over 30 years of diverse experience in healthcare management & operations, information technology & informatics, and disaster management and response. employs innovative approaches towards developing sustainable solutions for the international underserved communities while providing humanitarian assistance - primarily through the empowerment of

locally driven ideas and knowledge transfer that contributes to our philosophy of “working ourselves out of a job”

## **KEYNOTE - CENTERING JUSTICE IN INDIGENOUS DATA SOVEREIGNTY**



**Dr. Dominique David-Chavez.** Mabrika! I am a multi-cultural Caribbean Indigenous (Taíno/Arawak) research scientist, educator, mentor, learner, mother, and community member. I currently serve as Assistant Professor of Indigenous Natural Resource Stewardship in the Department of Forest and Rangeland Stewardship at Colorado State University where I lead the Indigenous Land and Data Stewards interdisciplinary research lab, and work in partnership with the Collaboratory for Indigenous Data Governance. In my scholarship and practice I hold an intergenerational commitment towards supporting culturally grounded community members, including youth, elders, educators, and farmers as researchers, restoring pathways for knowledge

regeneration with the original stewards of Indigenous knowledge systems and lands in which they are embedded. My work supports Indigenous governance in environmental research and decision-making; community-based climate resilience research in the Caribbean islands and Western U.S., and Indigenous science education. My academic training includes a PhD in Human Dimensions of Natural Resources and B.S. in Earth Sciences.

### PANEL #3 CENTERING JUSTICE IN DATA SOVEREIGNTY



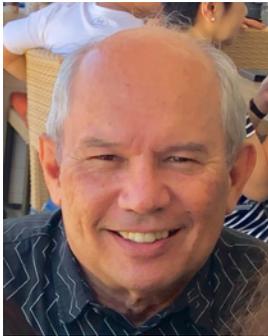
**Dr. Stephanie Russo Carroll** is Ahtna, a citizen of the Native Village of Kluti-Kaah in Alaska, and of Sicilian-decent. She is Assistant Professor of Public Health and Associate Director for the Native Nations Institute at the University of Arizona. Her interdisciplinary research group, the Collaboratory for Indigenous Data Governance develops research, policy, and practice innovations for Indigenous data sovereignty. Her research, teaching, and engagement seek to transform institutional governance and ethics for Indigenous control of Indigenous data, particularly within open science, open data, and big data contexts. Stephanie co-edited the book *Indigenous Data Sovereignty and Policy* and led the publication of the CARE Principles for Indigenous Data Governance. Stephanie co-founded the US Indigenous Data Sovereignty Network, and co-founded and chairs the Global Indigenous Data Alliance (GIDA). She Chairs the Indigenous Data Working Group for the IEEE P2890 Recommended Practice for Provenance of Indigenous Peoples' Data.



**Andrew Martinez** is citizen of the Salt River Pima Maricopa Indian Community. He is also Diegueno/lipay with ties to the Mesa Grande Band of Mission Indians in San Diego County. He graduated from the University of Arizona in the Business Management program at the Eller College of Management with a double minor in American Indian Studies and Government and Public Policy. Andrew has assisted Dr. Stephanie Russo Carroll in her work in the Indigenous data sovereignty arena for the last five years. This work began with organizing and presenting at the first ever Indigenous Open Data Summit at the International Open Data Conference in Spain. For the last three years Andrew and Stephanie have worked to identify pathways to bring the Indigenous data sovereignty framework into the American Geological Union sphere. In 2019 Andrew was selected to be a member of the AGU Voices for Science Policy Track. As a member of Voices for Science program Andrew's goal was to broaden the scope of our audience and introduce non-Indigenous community members, academics, and policy makers to the Indigenous data sovereignty framework. Also, In 2019 Martinez co-authored "Indigenous Data Governance: Strategies from United States Native Nations" with Stephanie and now Dr. Desi Rodriguez-Lonebear.



**James RattlingLeaf, Sr.** is a Research Associate at the Cooperative Institute Research Environmental Sciences, University of Colorado-Boulder as well a Co-Principal Investigator, North Central Climate Adaptation Science Center. He specializes in developing programs that utilize the interface between Indigenous People's Traditional Knowledge and Western Science. He has over 25 years' experience serving as a cross cultural/broker resource to Federal Government, Higher Education Institutions and Non-Profits to developing, maintaining positive on-going working relationships with federally and non-federally recognized Indian tribes, Tribal College and Universities and Tribal Communities.



**Bill Thomas** is the Senior Advisor for Islands, Indigenous and International Issues for the National Oceanic and Atmospheric Administration's Office for Coastal Management. His areas of focus include indigenous engagement around climate and its implications for local, regional and national security across the Pacific, Caribbean and continental US.

**BOB GOUGH PUBLIC SYMPOSIUM**



**Rev. M. Kalani Souza**, University of Hawai'i National Disaster Preparedness Training Center/Olohana Foundation, Born US occupied territory of Hawaii 1956. Witnessed; civil rights movement, continued racism, political nepotism, rampant corruption, marketplace manipulation by corporate authoritarianism, escalating crime rates, de-escalating human rights. Survived Watergate, Disco, 1984, TK 2000, 9/11, and now January 6; Not dead yet.



**Christopher M Caldwell**, President College of Menominee Nation, is an enrolled member of the Menominee Indian Tribe of Wisconsin. He has over 25 years of technical, administrative, and leadership experience working for various Menominee tribal institutions and federal agencies dedicated to sustainable forestry and natural resources management. In 2012 he started as Director of the Sustainable Development Institute (SDI) at the College of Menominee Nation (CMN) where he led applied research, education, outreach, and practical applications centered on indigenous sustainability. In 2020 he served as Interim President of the College until his permanent appointment to President in July 2021. His education includes degrees from College of

Menominee Nation (AAS in Sustainable Development, 2001), University of Wisconsin Madison (B.S. Natural Resources, 2004), and University of Wisconsin Green Bay (M.S. Environmental Science and Policy, 2014). He is currently a Ph.D. student in Environment and Resources through the UW Madison Nelson Institute where he is focused on Indigenous research methodologies as a way to understand and advance the SDI theoretical model of sustainability, which is based on the Menominee sustainable forestry experience.



**Dr. Michael Kotutwa Johnson**, a member of the Hopi Tribe in Northern Arizona, serves as the Native American Agriculture Fund's (NAAF) Program Officer. Dr. Johnson holds a Ph.D. in Natural Resources from the University of Arizona. Previously, Dr. Johnson was a Natural Resource District Conservationist assigned to the Hopi Reservation for the Natural Resource Conservation Service (NRCS) of the United States Department of Agriculture (USDA). Throughout his academic and professional career, Dr. Johnson has given extensive lectures on Hopi dryland farming— a practice of his people for over two millennia. Dr. Johnson has also published scholarly papers on

Indigenous conservation and agriculture-related issues. He has recently been asked to co-author the Indigenous chapter for the National Climate Assessment Five to be released in 2023.



**Colleen Cooley** is Diné, originally from the communities of Blue Gap and Shonto, Arizona on the Navajo Nation. Her curious mind and innate connection to the lands and waters led her to earning a Master's Degree in Climate Science & Solutions from Northern Arizona University in 2012. Colleen is also an advocate and raft guide on the San Juan River, a community organizer, a facilitator, an amateur photographer, and a volunteer for the Flagstaff Mountain Film Festival (FMFF) and Colorado River Days.



**Costa Boutsikaris, Co-Director/Cinematographer/Editor-** Costa is a New York-based director and cinematographer. In 2015 he released his first feature documentary entitled *INHABIT: A Permaculture Perspective*. In 2016 it took home the Audience Choice Award at The Environmental Film Festival At Yale and the Princeton Environmental Film Festival and won Best In Theme at the *Wild & Scenic Film Festival*. **Anna Palmer, Co-Director/Producer-** Anna is a climate change and adaptation specialist with M.S. and B.A degrees in Environmental Studies. She has

experience conducting climate change research, designing adaptation plans, and teaching vulnerability assessment concepts with tribal communities in the Southwest through her work affiliated with the Native Waters on Arid Lands (N WAL) project funded by the U.S. Department of Agriculture. Anna's also an environmental educator and producer of media surrounding the impact of climate change on tribal communities.

## APPENDIX 5: WORKSHOP PARTICIPANTS

The participants' list is based on the names listed in the zoom sign-on, for those who participated during at least some portion of the workshop.

Dorothy Aguilera-Black Bear  
Rosie Alegado  
Maggie Allen  
E.R. Alvarez  
Kelsey Amos  
Kristen Aponte  
Papalii Dr. Tusi Avegalio (Doc Tusi)  
DeLois Babiker  
Suzanne Baker  
Monica Barra  
Charlotte Basham  
Nora Elicerio Beckemeyer  
Samuel Bel-Nono  
Tishanna Ben  
Maraya Ben-Joseph  
Carson Benn  
Rebecca Blackwood  
Paulette Blanchard  
Roxanne Blanchard-Gagné  
Zuza Bohley

Scott Boswell  
Costa Boutsikaris  
Sam Bower  
Katie Boyd  
Cam Brinkworth  
Brent Brooks  
Kate Browne  
Jessica Brunacini  
Jerry Bryan  
Ann Busche  
Debra Butler  
Peggy Cabrera  
Christopher Caldwell  
Olivia Cameron  
Shosha Capps  
Emma Garcia Cardwell  
Mark Carey  
Courtney Carothers  
Stephanie Russo Carroll  
Aramati Casper  
Michael Chang  
Terry Chapin

Priyanka Chatterjee  
Yifan Cheng  
Jess Cherofsky  
Karletta Chief  
Evelyn Christian Ronning  
Callum Cintron  
Heather Cole  
Sharon Collinge  
Lisa Colombe  
Michele Companion  
Lisa Naas Cook  
Colleen Cooley  
Nikki Cooley  
Faith Cooper  
Suzanne Cooper  
Maria Correia  
Sofi Courtney  
Karen Cozzetto  
Dara Craig  
Samantha Cramer  
Buffy Curtis  
Lisely Curtis  
Kate Darby  
Dominique David-Chavez  
Chris Davis  
Angélica De Jesús  
Dianne Deauna  
Hayes Devaney  
Clarissa Dixon  
Megan Donahue  
Jamie Donatuto  
Rene Dubay  
Aurora Elmore  
Fred Eningowuk  
Frieda Eningowuk  
Mary Erdman  
Carin Farley  
Adama Faye  
Hank Fergerstrom  
Yvonne Fish  
Shannon Francis  
Alexis Frasz  
Patrick Freeland  
Nancy Frost  
Ángel Garcia Jr.  
Alison Gardell  
Gregg Garfin  
Adriana Garriga-Lopez  
Omar Gates  
Erica Gavenus  
Katie Gavenus  
Don Gianniny  
Shanny Spang Gion  
Gail Goulet  
Ciarra Greene  
Peter Griffith

Corrie Grosse  
Karen Grosskreutz  
Jessie Grossman  
Zoltan Grossman  
Annalise Guthrie  
Kara Haas  
Marilyn Hajer  
Nathalie Hamel  
John Hamer  
Ava Hamilton  
Austin Reed Harris  
Leroy Harris  
Sharon Hausam  
Dan Hawk  
Ava Heller  
Doug Herman  
Nicole Herman-Mercer  
Karina Herrera  
Adelheid Herrmann  
Katy Hintzen  
Russell Hoffman  
Marika Holland  
Rebecca Hollender  
Emily Horton  
Joey Hulbert  
Brian Humphrey  
Nizhooni Hurd  
Lesley Iaukea  
Briana Ingermann  
Kathy Isaacson  
Linda Ishem  
Marcia Ishii  
Stephen Jackson  
Mary Beth Jäger  
Nicole James  
Anne Jenner  
Nathan Jessee  
Dave Johnson  
Michael Kotutwa Johnson  
Noor Johnson  
Susan Johnson  
Annie Jones  
Katie Jones  
Sara Kahanamoku  
David Kane  
Robin Wall Kimmerer  
Melanie Kirby  
Marda Kirn  
Fritz Klasner  
Stefanie Krantz  
Al Kuslikis  
Laura Landrum  
Lonyx Landry  
Natasha LaRose  
Libby Larson  
Aranzazu Lascurain

Chelsey Nakita Laurencin  
Heather Lazrus  
Joan Lederman  
Ariel Leger  
Becca Lensing  
Elizabeth Lenz  
Sarah LeRoy  
Evelyn Lewis  
Bryce Linn  
Clinton Little  
Daphne Littlebear  
Allie Long  
Jonathan Long  
Diana Lopez  
Mia Lopez  
Laura Lukes  
Claire Lunch  
Cheyenne Lurvey  
Allyza Lustig  
Rebecca Lybrand  
Kathy Lynn  
Stacy Lynn  
Paula Mabee  
Erin MacDonald  
Julie Maldonado  
Sally Manning  
Elizabeth Marino  
Adela Nieves Martinez  
Andrew Martinez  
Ada McDaniel  
Deborah McGregor  
Haley McKey  
Heather McMillen  
Dylan McNamara  
Shannon McNeeley  
Erica Meier  
Aminda Menjivar  
Kris Metzger  
Mike Mezzacapo  
Renee Millard-Chacon  
Brian Miller  
Linda Molnar  
Kate Kerman Monadnock  
Melonee Montano  
Caroline Montgomery  
Michelle Montgomery  
Shannon Moore  
Kelsey Morales  
Gary Morishima  
Amber Moulton  
Melissa Moulton  
Grace Mukupa  
Alejandro Murillo  
Bonnie Murray  
Cynthia Naha  
Eileen Nalley

Claire Nave  
Adjaratou Aidara-Ndiaye  
Laura Nelson  
Jasmine Neosh  
Christina Laree Newhall  
Greg Newman  
Sheilah Nicholas  
Emmanuel Nti-asante  
Rachael Novak  
Paula Pace  
Amber Pairis  
Stephanie Paladino  
Anna Palmer  
Hannah Panci  
Cheryl Panik  
Devon Parfait  
Shirell Parfait-Dardar  
Pua'ala Pascua  
Randy Peppler  
Mary Ann Percy  
Simona Perry  
Shandin Pete  
Kristina Peterson  
Maggie Picard  
Amy Pilling  
Pah-tu Pitt  
Stefania Pizzirani  
Erin Posthumus  
Julio Postigo  
Stephanie Powell  
Noelani Puniwai  
Bob Rabin  
Claire Rafferty  
Aviva Rahmani  
Sanjay Rajan  
Judith Daxootsu Ramos  
James Rattling Leaf, Sr.  
Bridget Ray  
Margaret Redsteer  
Gretchen Reinhardt  
Jacqueline Rigley  
Shimi Rii  
Hoku Rivera  
Liz Robinson  
Sarina Victoria Erica Rodriguez  
Joannie Romero  
Carlina Rose  
Alyssa Rosemartin  
Kennedy Rubert-Nason  
Kirsten Ruiz  
Adele Ruosi  
Alyssa Samoy  
Anastasia Sanchez  
Colleen Sanders  
Cyntha Sanders  
Patricia Sanders

Corrie Santos  
Oral Saulters  
Marie Schaefer  
Jackie Qataliña Schaeffer  
Tim Schneider  
Robby Callahan Schreiber  
Melissa Schutten  
Steven Semken  
Michelle Sevilla  
Justine Shapiro-Kline  
Eileen Shea  
Caitie Sheban  
Sarah Sherman  
Jack SimHayKin  
Julie Simpson  
Sara Smith  
M. Kalani Souza  
Elena Sparrow  
Katie Spellman  
Ben Starkhouse  
Mark Stege  
Susan Sterrett  
Jason Stewart  
Crystal Stiles  
Taylor Stinchcomb  
Colleen Strawhacker  
David Strich  
Diamond Tachera  
Stefan Tangen  
Karen Takemoto  
Jean Tanimoto  
Ramsay Taum  
April Taylor  
Darius Taylor

Cathy Techtmann  
Yemaya Thayer  
Kadidia Thiero  
Bill Thomas  
Tina Tourtillott  
Jack Turner  
Matthew Tuten  
Natasha Udu-gama  
Lailani Upham  
Ryan William Vachon  
Marissa Vara  
Shelly Vendiola  
Marie Venner  
Jamie Vickery  
Kukuya Margarita Noguerras-Vidal  
Althea Walker  
Itzel Flores Castillo Wang  
Naia West  
Andrea Whiteplume  
John Wiener  
James Wieser  
Daniel Wildcat  
Yvette Wiley  
Betsy Wilkening  
Alex Kimball Williams  
Emily Williams  
Cambria Wilson  
Joseph Gazing Wolf  
Aara'L Yarber  
Mai Yasue  
Kimberly Yazzie  
Darcy Yogi  
Raechel Youngberg  
Sharon Ziegler-Chong