

2017 NORTHWEST CLIMATE CONFERENCE

Tacoma Conference Center | October 9-11, 2017

MONDAY October 9, 2017

6:30 PM

EVENING RECEPTION (Open to the Public) ROOM 315, 316, 317

TUESDAY October 10, 2017

8:30 AM

OPENING PLENARY Ballroom

8:30 AM

Opening comments from **Joe Casola**, *Conference Chair, UW Climate Impacts Group*
 Welcome from **Mayor Marilyn Strickland**, *Mayor of Tacoma*
 Blessing from **Connie McCloud**, *Puyallup Tribal Elder*

9:00 AM

Morning Keynote - Sea-level Rise: Dealing With the Expected and Avoiding the Extreme
Richard Alley, *Pennsylvania State University*

9:45 AM

BREAK

10:00 AM

CONCURRENT SESSIONS

	Agriculture	Terrestrial & Aquatic Ecosystems 1	Communications 1	Pacific Northwest Climate/Hydrology 1
ROOM	315	316	317	318
10:00 AM	Introduction	Introduction	Introduction	Introduction
10:10 AM	Climate Change: Are the Tools Available What Agricultural Professionals Need? Sonia Hall , <i>Washington State University</i>	Long-term Persistence of Aspen in Snowpack-Dependent Ecosystems Alec Kretchum , <i>Portland State University</i>	Applying Social Science to Overcome Communication Challenges Gwen Shaughnessy , <i>The Baldwin Group</i>	Climate Impacts Assessments for Regional Governments in Southwestern British Columbia Using High-Resolution Statistical Downscaling Trevor Murdock , <i>University of Victoria</i>
10:30 AM	A Research Network Approach for Provincial Agriculture Climate Change Adaptation in British Columbia Jason M Lussier , <i>BC Agricultural Climate Adaptation Research Network</i>	The Connection Between Climate and Declining Forest Health in the Western United States David Bell , <i>USDA Forest Service PNW Research Station</i>	Using Story Project Methods to Engage with Partners and Communicate Climate Risks Emily York , <i>Oregon Health Authority</i>	Extreme Precipitation and Snowpack: Model and Observations Naomi Goldenson , <i>University of Washington</i>

TUESDAY, OCTOBER 10 (continued)

TUESDAY, OCTOBER 10 (continued)				
	Agriculture (Rm 315)	Terrestrial & Aquatic Ecosystems 1 (Rm 316)	Communications 1 (Rm 317)	Pacific Northwest Climate/Hydrology 1 (Rm 318)
10:50 AM	Making Climate Projections Useful for Growers Clark Seavert , <i>Oregon State University</i>	Refugia from Drought and Mountain Pine Beetle in a Whitebark and Lodgepole Pine Ecosystem Jennifer Cartwright , <i>U.S. Geological Survey</i>	Teaching Climate Science in Rural Communities Tamara Neuffer , <i>Stillaguamish Tribe</i> & Chrys Bertolotto , <i>Snohomish County WSU Extension</i>	Atmospheric Rivers, Climate Change, and the Howard Hanson Dam Michael Warner , <i>U.S. Army Corps of Engineers</i>
11:10 AM	Development of a Pacific Northwest Biochar Atlas: Translating the Results of Biochar Studies into Usable Information for Growers Kristin Trippe , <i>U.S. Department of Agriculture</i>	Mechanistic Modeling of Bark Beetle Outbreaks to Assess the Influences of Climate Change Jeffrey A. Hicke , <i>University of Idaho</i>	Let's Talk about Climate Change: Creating an App to Spark Meaningful Conversation Michelle Tigchelaar & Judy Twedt , <i>University of Washington</i>	Increasing Hydrologic Drought Severity in the Northwestern US Mountain Rivers: Causal Influences and Implications for Drought Projections Charles Luce , <i>U.S. Forest Service</i>
11:30 AM	LUNCH (provided)			
12:30 PM	Infrastructure 1	Terrestrial & Aquatic Ecosystems 2	Equity/Human Health	Pacific Northwest Climate/Hydrology 2
ROOM	315	316	317	318
12:30 PM	Introduction	Introduction	Introduction	Introduction
12:40 PM	Flood Risk Management in Washington State: How Can We Make it More Resilient? Haley Kennard , <i>University of Washington</i>	Connecting Today's Climates to Future Analogs to Facilitate Species Movement Under Climate Change Caitlin Littlefield , <i>University of Washington</i>	Climate Atlas—Mapping Climate Impacts on Vulnerable Populations in Seattle Christopher Wierzbicki , <i>Futurewise</i>	New Snow Metrics for Decision Support Anne Nolin , <i>Oregon State University</i>
1:00 PM	Integrating Climate Change Considerations Into Public Works Project Planning and Design in Snohomish County Andrea Martin , <i>Cascadia Consulting</i> & Manuela Winter , <i>Snohomish County Public Works</i>	The Northwest as a Hotbed of Innovation in Conserving Climate-Connectivity—The Ability of Landscapes to Accommodate Species Range Shifts Meade Krosby , <i>UW Climate Impacts Group</i>	Stay Safe in the Heat: Research and Response in Seattle's International District and Rainier Valley Neighborhoods Robin Pfohman , <i>Seattle and King County Public Health</i>	Impacts of Glacier Recession on Pacific Northwest Water Resources Erin Whorton , <i>U.S. Geological Survey</i>

TUESDAY, OCTOBER 10 (continued)

	Infrastructure 1 (Rm 315)	Terrestrial & Aquatic Ecosystems 2 (Rm 316)	Equity/Human Health (Rm 317)	Pacific Northwest Climate/Hydrology 2 (Rm 318)
1:20 PM	<p>Increasing Resilience for Washington State Contaminated Sites - Conducting a Vulnerability Assessment and Development of an Adaptation Strategy</p> <p>Scott O'Dowd, <i>Washington Department of Ecology</i></p>	<p>Can We Conserve Wetlands Under a Changing Climate? Mapping Wetland Hydrology Across and Ecoregion and Developing Climate Adaptation Recommendations</p> <p>Meghan Halabisky, <i>University of Washington</i></p>	<p>Managed Retreat as a Strategy for Climate Change Adaptation in Small Communities: Public Health Implications</p> <p>Andrew L. Dannenberg, <i>University of Washington</i></p>	<p>Understanding Climate Impacts on the Rate and Extent of Glacier Loss in the Olympic Mountains</p> <p>Justin Pflug, <i>University of Washington</i></p>
1:40 PM	<p>Building Coastal Resilience in the Pacific Northwest: Comparing Co-produced Coastal Adaptation Strategies in Tillamook County, OR and Grays Harbor County, WA</p> <p>Janan Evans-Wilent, <i>Oregon State University</i></p>	<p>How Do Trees Know When to Stop Growing?</p> <p>Connie Harrington, <i>USDA Forest Service</i></p>	<p>Enjoining Warming: Using the Law to Mitigate Climate Change</p> <p>Sean Munger, <i>Rose Law Firm</i></p>	<p>Accelerated Snow and Glacier Melt in Washington State from Black Carbon Deposition</p> <p>Susan Kaspari, <i>Central Washington University</i></p>
2:00 PM	BREAK			
2:30 PM	Coastal & Marine Ecosystems 1	Terrestrial & Aquatic Ecosystems 3	Human Health	Communications 2
ROOM	315	316	317	318
2:30 PM	<p><i>Special Session</i></p> <p>Technical Tools for Improving Sea Level Rise Risk Assessment in Washington State</p> <p>Ian Miller, <i>Washington Sea Grant & Collaborators</i></p>	<p><i>Special Session</i></p> <p>Developing Climate-Smart Strategies to Conserve Species and Habitats Through Vulnerability Assessments</p> <p>Lisa DeBruyckere, <i>Creative Resource Strategies</i>; Jill Hardiman, <i>U.S. Geological Survey</i>; Tom Iverson, <i>Yakama Nation Fisheries</i>; Scott Hauser, <i>Upper Snake River Tribes Foundation</i>; Sean Finn, <i>Great Northern Landscape Conservation Cooperative</i></p>	<p><i>Special Session</i></p> <p>Use of Meteorological Data to Strengthen Public Health Surveillance of Risk and Disease, Response and Prevention</p> <p>Marnie Boardman, Jerry Borchert, Hanna Oltean, & Elizabeth Dykstra, <i>Washington State Department of Health</i>; Edward Kasner, <i>UW/ Washington State Department of Health</i></p>	<p><i>Special Session</i></p> <p>Communicating About Climate Change with Clarity & Impact: A Hands-On Opportunity to Enhance Your Climate Communications</p> <p>Heidi A. Roop, <i>UW Climate Impacts Group</i>; Kavita Heyn, <i>Portland Water Bureau</i>; Jamie Stroble, <i>King County</i></p>
4:00 PM	BREAK			

TUESDAY, OCTOBER 10 (continued)

AFTERNOON PLENARY Ballroom

4:15 PM

Afternoon Keynote - Valuing Climate Damages: Policy Needs, Scientific Challenges, and a Path Forward
Kevin Rennert, *Resources for the Future*

4:15 PM

4:50 PM

Regional Climate Collaborative Launch
 Facilitated by **Steve Adams**, *Institute for Sustainable Communities*

5:30 PM

RECEPTION & POSTER SESSION (see list of accepted posters)

WEDNESDAY, OCTOBER 11, 2017

8:30 AM

OPENING PLENARY Ballroom

Plenary Special Session

8:30 AM

Climate Resiliency Planning: Turning Science into Action
 Facilitated by **Gretchen Greene**, *Maul Foster & Alongi*

9:45 AM

BREAK

CONCURRENT SESSIONS

10:00 AM

**Working Across
Boundaries 1**

Tribal

Infrastructure 2

**Pacific Northwest
Climate/Hydrology 3**

ROOM

315

316

317

318

10:00 AM

Introduction

Introduction

Introduction

Introduction

10:10 AM

Community-led Planning,
Resilience, and Adaptation
on San Juan Island

**Katie Fleming & Nora Ferm
Nickum**, *Friends of the San
Juans*

Salmon and Sagebrush: The
Shoshone-Bannock Tribes
Collaborative Approach to
Adaptation Planning

Wayne Crue, *Shoshone-Bannock
Tribes* & **Sascha Petersen**,
Adaptation International

Applied Sea Level Rise
Science for Road Realignment
and Design in San Juan
County

Jim Johannessen, *Coastal
Geologic Services*

Stream Restoration to Buffer
Climate Change Impacts on
Baseflows in the Upper
Columbia Basin

Susan E. Dickerson-Lange,
Natural Systems Design

10:30 AM

Roadmap to Recovery:
Climate Change and
Ecosystem Recovery in
Puget Sound

Jennifer Pouliotte, *Puget
Sound Partnership*

Coastal Climate Change in SE
Alaska: The ShoreZone Data
Base and Observations and
Experiences of Local Residents

Linda Kruger, *USDA Forest
Service*

Collaborating with The
Netherlands on Climate
Resiliency for Highways

Carol Lee Roalkvam,
*Washington Department of
Transportation*

Stillaguamish Watershed
Summer Flow Response to
Regional Climate Variability:
Implications for Salmon
Productivity

Frank Leonetti, *Snohomish County
Public Works*

WEDNESDAY, OCTOBER 11 (continued)

10:00 AM	Working Across Boundaries 1 (Rm 315)	Tribal (Rm 316)	Infrastructure 2 (Rm 317)	Pacific Northwest Climate/ Hydrology 3 (Rm 318)
10:50 AM	Learning From a Capacity-Based Approach to Adaptation Monitoring and Evaluation Johanna Wolf , <i>BC Ministry of Environment</i>	A Climate Change Assessment of Vegetation, Fire, and Ecosystem Services for Tribal Lands in the Pacific Northwest Michael Case , <i>University of Washington</i>	Olympia's Sea Level Rise Response Plan Andy Haub , <i>City of Olympia</i>	Climate Change and Water Scarcity: The Potential for Social Responses and Institutional Resiliency in the Pacific Northwest William Jaeger , <i>Oregon State University</i>
11:10 AM	Measuring the Progress of Adaptation Made by State Agencies in Washington Joe Casola , <i>UW Climate Impacts Group</i>	Cultivating Tribal Capacity for Climate Change Adaptation Don Sampson , <i>Affiliated Tribes of Northwest Indians</i>	Future Tidal Wetlands of Oregon Under Six Sea Level Rise Scenarios: Impacts, Locations, Priorities, and Planning Fran Recht , <i>Pacific States Marine Fisheries Commission</i>	Streamflow Deficits and Elasticity in Response to the 2015 Drought in the Western United States Christopher Konrad , <i>U.S. Geological Survey</i>
11:30 AM	LUNCH			
12:30 PM	Working Across Boundaries 2	Terrestrial & Aquatic Ecosystems 4	Infrastructure 3	Coastal & Marine Ecosystems 2
ROOM	315	316	317	318
	<i>Special Session</i> Catalyzing Community Resilience: Bridging Science and Local Action Tye Ferrell , <i>Resilience Collaborative NW</i> ; Amanda Murphy & Phyllis Shulman , <i>Ruckelshaus Center & WSU Extension</i>	<i>Special Session</i> Picking Climate Change Winners and Losers in the Pacific Northwest Depends on Methodology and Scale David M. Bell, John B. Kim, & Donald McKenzie , <i>USDA Forest Service PNW Research Station</i> ; Melissa Lucash , <i>Portland State University</i> ; David Mildrexler , <i>Oregon State University</i> ; & Leonardo Salas , <i>Point Blue Conservation Science</i>	<i>Special Session</i> Stormwater and Flooding in King County: Co-Producing Research to Support Adaptation Guillaume Mauger & Se-Yeun Lee , <i>UW Climate Impacts Group</i> ; Eric Salathé , <i>UW Bothell</i> ; & Jim Simmonds , <i>King County</i>	<i>Special Session</i> Multi-disciplinary Perspectives of Ocean Acidification Lucas Hart , <i>Northwest Straits Commission</i> ; Terrie Klinger & Melissa Watkinson , <i>University of Washington</i> ; Micah Horwith , <i>Washington Department of Natural Resources</i> ; & Jennifer Phillips , <i>California Ocean Protection Council</i>
2:00 PM	BREAK			

WEDNESDAY, OCTOBER 11 (continued)

CLOSING PLENARY Ballroom

2:15 PM

2:15 PM

Discussion of the National Climate Assessment Draft and the Northwest Chapter
David Reidmiller, *U.S. Global Change Research Program* & **Kris May**, *Silverstrum Climate Associates*

3:00 PM

Varying Actors, Varying Aspirations: Climate Change Policy and Native Nations
Nives Dolšak, *University of Washington*

3:25 PM

Flooding, Warm Nights, and Wildfires:
How Community Defined Critical Thresholds for Extreme Events Can Be Used to Build Climate Resilience
Sascha Petersen, *Adaptation International*

End at
4:00 PM

Closing Comments & Conference Close
Joe Casola, *UW Climate Impacts Group*

POSTER SESSION & NETWORKING RECEPTION

Tuesday October 10, 2017–5:30 - 7:30 PM

Posters will be on display for the duration of the conference. Poster presenters will be available for discussion during the poster session. Posters are listed in alphabetical order by topic and author's first name.

Agriculture

1. "Columbia River Treaty Renegotiation: Potential Impacts on Agriculture, Hydropower and Flood Risk in the Context of an Altered Climate"—**Jennifer Adam**, *Washington State University*
2. "Integrated Adaptive Scenarios for Agriculture in the Yakima River Basin: Synergies and Tradeoffs"—**Kirti Rajagopalan**, *Washington State University*
3. "Codling Moth Pest Pressures for Tree Fruit: Future Outlook and Likely Adaptations for Washington State"—**Kirti Rajagopalan**, *Washington State University*
4. "Sensitivities of Agricultural Nitrogen Use Efficiency to Climate Change and Climate Variability over the Pacific Northwest"—**Mingliang Liu**, *Washington State University*

Coastal and Marine Ecosystems

5. "Adaptation for Addressing Impacts to Forage Fish Spawning Beaches, Recreation, and Coastal Infrastructure due to Shore Armor and Sea Level Rise in the Salish Sea"—**Alexis Blue**, *Coastal Geologic Services*

6. “Nearshore Spatial Data Architectures to Enable Restoration, Preservation, and Coastal Hazard Mapping”—**Branden Rishel**, *Coastal Geologic Services*
7. “Zis a ba Estuary Restoration for Climate Resilience”—**Daniel Elefant**, *Cardno*
8. “The Nature of the Policy Process is Hindering Comprehensive Sea Level Rise Policy”—**Jessica Andrepont**, *Oregon State University*
9. “Projections of Future Transitions in Tidal Wetlands Under Sea Level Rise Within the Port Gamble S’Klallam Traditional Use Areas”—**Mary Ramirez**, *University of Washington*
10. “Blue Carbon in Central Salish Sea Eelgrass Ecosystems”—**Mira Lutz**, *Western Washington University*

Collaboration and Co-production

11. “Dry Farming Collaborative: Participatory Climate Adaptation Research”—**Amy Garrett**, *Oregon State University Extension Service*
12. “The Northwest Climate Science Center: A Partnership for Co-Producing Actionable Science in Support of Northwest Climate Resilience”—**Amy Snover**, *UW Climate Impacts Group*
13. “From Field to Flight: Using Community Capitals to Predict Sustainable Aviation Biofuel Scale-Up”—**Daniel Mueller**, *Washington State University*
14. “Building an Environmental Justice Tool to Inform Climate Policy and Funding Priorities for Communities of Washington”—**Esther Min**, *University of Washington*
15. “Regional Climate Enterprise in the Pacific Northwest: Where Should We Go From Here?”—**Guillaume Mauger** (UW), **Kathie Dello** (OSU), **Gabrielle Roesch-McNally** (USDA Hub), & **Joe Casola** (UW), *UW Climate Impacts Group*

Communications

16. “Deliberative Mapping for a Changing Salish Sea: Acidification Indicators & Marine Protected Areas”—**Katrina Radach**, *Western Washington University*
17. “Life of Pika: A Video Game About PNW Climate Impacts on Animals”—**Life of Pika Team**, *EarthGamesUW*
18. “Campus Climates and Global Climates”—**Nathaniel Matthews-Trigg**, *University of Washington Department of Global Health*

CWU REU Summer Intern

19. “Permafrost in the Eastern Cascades, Washington: Mapping of Pro-Talus Features”—**Casey Ash**, *Chemeketa Community College, now starting at Oregon State University*
20. “Variations in Atmospheric Lead Spanning 1936-1992 from the South Cascade Glacier Ice Core, Washington State”—**Harwant Sethi**, *Rensselaer Polytechnic Institute*
21. “Place-Based Learning: Preparing Students For Climate Change”—**Huiqi Crystal Chen**, *Indiana University*
22. “Dating of Rock Glaciers in Washington’s Eastern Cascades and Its Connection to Climate Change”—**Kate Conlan**, *Colgate University*
23. “Postglacial Fire History of Mount Rainier National Park: Reconstruction using macroscopic charcoal analysis”—**Molly Burchfield**, *Whitman College*
24. “Humidity as a Factor in the Habitat Preferences of the Brown Marmorated Stink Bug”—**Sam Kalb**, *Oberlin College*

25. “Effects of climate change on permafrost distribution in the Eastern Cascade Mountain Range”—**Sarah Newcomb**, *Case Western Reserve University*
26. “Climate Change and Sustainability in K-12 Education Standards: Preparing Future Generations”—**Warren Gunn**, *Portland Community College*

Equity

27. “Climate Change, Public Health, and Social Equity in Washington State”—**Katie Fellows**, *University of Washington*
28. “Addressing Equity & Air Pollution in Seattle’s Chinatown-International District”—**Landon Bosisio & Tania Tam Park**, *Puget Sound Clean Air Agency*

Human Health

29. “Health Risks from Greenhouse Gas Co-Pollutants in Environmental Justice Communities”—**Brendon Haggerty**, *Multnomah County Health Department*
30. “Describing a Changing Pollen Season and its Impacts on Allergies and Asthma” – **Fiona Lo**, *University of Washington*

Hydrology

31. “An Objective Approach to Identify a Representative Subset of an Ensemble of Streamflow Projections”—**Chris Frans**, *U.S. Army Corps of Engineers, Seattle District*
32. “Climate Change Research in Mountainous Headwater Regions of the Columbia River Basin”—**Courtney Cooper**, *University of Idaho*
33. “Downstream Water Availability Consequences of Investment in New Irrigation Technologies”—**Keyvan Malek**, *Washington State University*
34. “Modeling Climate Induced Flow Variability on the Umatilla River”—**Scott O’Daniel**, *Umatilla Tribes*
35. “Soil and Geologic Controls on Recharge and Groundwater Flow Response to Climate Change: A Case Study of the Yakima River Basin”—**Tung Nguyen**, *Washington State University*

Infrastructure

36. “Implementing Future Climate Scenarios into the Decision Making Process of Storm Water Management”—**Beate G Liepert & Jason King**, *Lumen LLC*
37. “On the Potential to Manage Urban Street Tree Canopy for Air and Stormwater Temperature Reductions”—**Kevan B. Moffett**, *Washington State University*
38. “Distributed Energy Generation for Climate Resilience”—**Sherry Stout**, *National Renewable Energy Laboratory*

Pacific Northwest Climate

39. “The National Forest Climate Change Maps Project: Providing Climate Change Projections at a Scale Relevant to Land Managers”—**Abby Lute**, *University of Idaho*

40. “Impact of Projected Changes in Atmospheric Circulation on Cold-Air Pooling in a Small Basin in the Western Cascade Range of Oregon”—**David E. Rupp**, *Oregon State University*
41. “Recipe for a Hot Summer in the Northwest: Roles of Large-Scale Dynamics and Land-Surface Feedbacks” – **John Abatzoglou**, *University of Idaho*
42. “The Northwest Climate Toolbox”—**Katherine Hegewisch**, *University of Idaho*
43. “The Effect of Land Use and Land Cover Changes on Atmospheric Composition and Biogenic Emissions Over the Western United States”— **Mahmoudreza Momeni**, *Washington State University*
44. “Examining the Effects of Pacific Ocean Climatic Oscillations on Snow Water Equivalent in the Washington Cascade Range”— **Matt Lubar**, *Western Washington University*
45. “The Walter Climate Diagram Arc GIS Tool”— **Michael Jennings**, *USDA Forest Service*
46. “Rain in the Pacific Northwest in Relation to the 564 Line”—**Nicholas Bond**, *Office of the Washington State Climatologist*

Terrestrial and Aquatic Ecosystems

47. “A Harbinger of Things to Come : Water Year 2015 in Northwest National Parks”—**Bill Baccus**, *Olympic National Park*
48. “Will Changes in Climate Impact Height-Diameter Ratios of Douglas-fir?”—**Dryw Jones**, *USDA Forest Service Pacific Northwest Research Station*
49. “Carbon Sequestration Valuation of United States Forests and the Potential for Policy Impacts”—**Jeffrey Kline**, *USDA Forest Service*
50. “Assessing the Relative Contribution of Climate Change Versus Forest Management in Driving Large Wildfires”—**Jianing Ren**, *Washington State University*
51. “A three-step decision support framework for linking climate science to adaptation action”—**Lara Hansen**, *EcoAdapt*
52. “How Does Climate Influence Ranges of Berry- and Nut-producing Native Northwestern Shrubs?”—**Leslie Brodie**, *USDA Forest Service Pacific Northwest Research Station*
53. “Modeling interactions among water availability, atmospheric controls, and vegetation productivity in western North America”—**Linnia Hawkins**, *Oregon Climate Change Research Institute*
54. “Climate Land: Saving Dollars & Lives by Mitigating Floods, Fires and Other Hazards”—**Michael Burnham**, *Thurston Regional Planning Council*
55. “The Available Science Assessment Process (ASAP): Evaluating the science behind climate adaptation actions”—**Nicole DeCrappeo**, *Alaska Climate Science Center*
56. “Adaptation of Science and Policy in Ecological Restoration”—**Shana Hirsch**, *University of Idaho*

Tribal Communities

57. “Multidisciplinary Adaptive Water Resources Management for Vulnerable Communities: Analyzing socio-ecological resilience within the Coeur d’Alene Basin”—**Kathleen Torso**, *University of Idaho*
58. “Building Tribal Capacity for Climate Change Vulnerability Assessment”—**Meade Krosby**, *University of Washington*
59. “A Community Discussion on Developing a Tribally Focused Adaptation Guide”—**Meghan Dalton**, *Oregon Climate Change Research Institute*

60. “Outreach and Engagement for the Makah Tribe’s Climate Adaptation Plan”—**Michael Chang**, *Makah Tribe*
61. “Creating a Tribally-Based Toolkit to Encourage Community-Driven Resilience Planning”—**Pah-tu E. Pitt**, *Confederated Tribes of Warm Springs*
62. “Ni Mii Puu Voices on Climate Change: Preliminary Survey Results”—**Stefanie Krantz**, *Nez Perce Tribe*

Working Across Boundaries

63. “Feasibility Assessment: Poplar-based production of ethyl lactate in Centralia, Washington ”—**Amira Chowyuk**, *University of Washington*
64. “Using the Climate Adaptation Knowledge Exchange (CAKE; CAKEEx.org) to Build Resilience and Make Climate-Informed Decisions”—**Jessica Hitt**, *EcoAdapt*
65. “How Can We Grow the Resilience of the Puget Sound Region? Fifty cross-sector leaders agree: Grass roots and cross-sector collaboration and action are key”—**Katia Blackburn**, *Sustainable Seattle*
66. “Rewriting the Model for Effective and Equitable Climate Action”—**Stephanie Celt**, *Washington Environmental Council*
67. “The Fate of Climate Change Agreements: Philosophy's Role in Policy”—**Victoria DePalma**, *University of Idaho*