



Pacific Northwest Climate Science Conference
The Governor Hotel
Portland, Oregon
5-6 September 2013



Thursday, September 5

	Speaker	Title (underlined titles have links to videos)
8:30	Philip Mote, conference chair	Welcome
8:50	Richard Spinrad	<u>Regional climate science and Pasteur's quadrant</u>
9:20	Chad Wilsey	<u>Climate impacts on wildlife populations</u>
9:40	Guillaume Mauger	<u>From climate scenarios to impacts: Key considerations for managers</u>
10	<i>break</i>	
10:25	US Senator Jeff Merkley	<u>Keynote</u>
11:00	Kristen Sheeran	Closing the gap between climate science and climate economics
11:20	Connie Roser-Renouf	<u>Communicating with global warming's six Americas: strategies for building public understanding and issue engagement</u>
11:45	Amy Snover	<u>Successful adaptation to climate change in the coastal context: Insights from scientists and practitioners</u>
12:00	conference lunch Keynote speaker: Yoram Bauman, Standup Economist	

Concurrent session 1 (Heritage Ballroom)

	Speaker	Title	
1:10	Patricia Tillmann	<u>Advancing Climate-Smart Landscape Conservation in the North Pacific LCC Region</u>	human dimensions
1:30	Elina Mu	<u>Regional Agricultural Pathways and Scenarios (RAPS) and Climate Impact Assessment for the Pacific Northwest Agricultural Systems</u>	
1:50	Joanna Parkman	Weed Management from Present to Future: Assessing Wheat Producer and Crop Advisor Decision-making Strategies	
2:10	Trevor Murdock	<u>Comparing a real 200-year flooding event to projected precipitation extremes</u>	
2:30	Dan Isaak	<u>Progress on the NorWeST regional stream temperature climate scenarios for the Northwest U.S.</u>	fish, wildlife, forests
2:50	Lindsey Thurman	<u>In hot water: developmental plasticity in response to a warming climate in a high elevation amphibian assemblage</u>	
3:10	<i>break</i>		
3:30	Polly Buotte	<u>Understanding the effects of climate on mountain pine beetle outbreaks in whitebark pine</u>	
3:50	Constance Harrington	<u>Winter dormancy requirements for Pacific Northwest tree species: Will it be cold enough in future years?</u>	
4:10	Lisa Crozier	Evaluating uncertainty from different sources for population viability analysis under climate change scenarios – what does management need to know? A case study of threatened Chinook salmon	
4:30	<i>Leslie Bliss-Ketchum, Lori Hennings, Rachel Reagan</i>	synthesis and discussion of session 1	

break; move furniture for poster session

Poster session¹ with refreshments 5-7pm

¹ see listing of posters at the end of this document

Concurrent session 2: hydrology, climate, and novel approaches to data (Billiard Room)

	Speaker	Title
1:10	Connie Woodhouse	<u>Klamath River Streamflow Reconstructed from Tree Rings: Extracting Meaningful Information from Imperfect Data</u>
1:30	David Noone	<u>The secrets of the trees: A history of water availability in the Pacific Northwest to enhance management of risk associated with uncertain future precipitation patterns</u>
1:50	Eric Sproles	<u>Vulnerability of Oregon hydrologic landscapes and streamflow to climate change</u>
2:10	Cristina Mateus	<u>Hydrologic sensitivity to changes in climate and land use in the Santiam River Basin, Oregon</u>
2:30	Nick Bond	<u>Positive Trends in Summer Evapotranspiration in Eastern WA State</u>
2:50	Matt Brunengo	<u>Rain-on-Snow Occurrence Across Elevations in the Washington Cascades: Monte Carlo Simulation of Large Storms Under Recent and Projected Climatic Conditions</u>
3:10	<i>break</i>	
3:30	David Rupp	<u>Superensemble regional-scale climate modeling</u>
3:50	Andrea Allan	<u>Analysis of the present and future winter Pacific-North American teleconnection in the ECHAM5 global and RegCM3 regional climate models</u>
4:10	Erich Seamon	<u>Interdisciplinary Data Management and Analysis - Regional Approaches to Climate Change for Pacific Northwest Agriculture (REACCHPNA)</u>
4:30	Ted Weick	<u>Leveraging provincial and private weather monitoring networks to enhance the provincial climate record</u>
4:50	<i>Philip Mote</i>	synthesis and discussion of session 2

Poster session² with refreshments 5-7pm

² see listing of posters at the end of this document

Friday, September 6

Concurrent session 3: Modeling (Heritage Ballroom)

	Speaker	Title	
8:25	Philip Mote	<u>Toward integrated scenarios of climate, hydrology, and vegetation for the Northwest</u>	Integrated Scenarios of Future Environment
8:40	Javier Homero Flores Cervantes	<u>Integrated scenarios in the Pacific Northwest: hydrology</u>	
9:00	Dominique Bachelet	<u>Simulating vegetation change, carbon cycling and fire over the western US using CMIP5 climate projections</u>	
9:20	Julian Reyes	<u>BioEarth: A Regional Biosphere-Relevant Earth System Model to Inform Agricultural and Natural Resource Management Decisions</u>	Regional earth system modeling
9:35	Nathalie Voisin	<u>Assessment of uncertainties on the impact of climate change on water resources management using an integrated Earth System Model: application over the Columbia River Basin</u>	
9:55	Ruby Leung	<u>Extreme events in dynamically downscaled climate change scenarios for North America</u>	
10:15	Katy Serafin	<u>Impact of projected changes in wave climate on extreme total water levels in the US Pacific Northwest</u>	
10:30	<i>break</i>		
10:50	Heejun Chang	<u>Incorporating stakeholders' perspectives into ecosystem services assessment under climate change and land conversion scenarios in the Lower Willamette Valley</u>	Ecosystem Services: Lower Willamette Valley
11:05	Wes Hoyer	<u>Assessment of water-related ecosystem services in the Tualatin and Yamhill basins under climate and land cover change: A scenario-based approach</u>	
11:25	Tammy Winfield	<u>Evaluation of a Soil and Water Assessment Tool stream temperature model for assessing the impact of climate and land use change on stream habitat conditions in the Lower Willamette Valley</u>	
11:45	<i>Guillaume Mauger</i>	synthesis and discussion of session 3	

Concurrent session 4: Adaptation (Billiard Room)

	Speaker	Title	
8:30	Mary Gwyneth Myer	<u>Interagency and Community Collaboration to increase resiliency in a Changing Climate</u>	
8:50	Lucy Gelderloos	<u>Can cities achieve what Kyoto failed to do? A case study of Seattle's climate policy</u>	
9:10	Harry Nelson	<u>Translating Climate Futures Into Forest Management Guidance: the experience from British Columbia</u>	Principles in Practice
9:30	Amy Snover	<u>Identifying actionable adaptation pathways for aquatic ecosystem management within the Pacific Northwest Region of the USFS</u>	
9:45	Susan Dickerson-Lange	<u>Predicting optimal forest management strategies to maximize snowpack duration across the Pacific Northwest</u>	
10:05	Bart Johnson	<u>Spatial and temporal partitioning of wildland-urban interface fire regimes under future climate, development and management scenarios</u>	
10:25	<i>break</i>		
10:45	Roger Fuller	Green infrastructure solutions: a Salish Sea case study evaluating the role of wetlands in protecting communities from increasing storm impacts	
11:05	Andrea Martin	<u>The Climate Impact - Decision Support Tool (CIMPool (CIMPACT-DST): A Platform for Integrating Climate Science Information into Everyday Decision Making</u>	
11:25	Kaitlin Lovell	<u>Strategic prioritization of restoration projects in an urban stream under climate change</u>	
11:45	<i>Kirsten Winters</i>	synthesis and discussion of session 4	

12:00-1:15 Lunch - on your own

Closing plenary

	Speaker	Title
1:15	Kathy Jacobs (keynote)	The US National Climate Assessment: A Foundation for Adaptation
2:00	Philip Mote	<u>Northwest Climate Assessment Report 2013</u>
2:20	Kathy Lynn	<u>Northwest Tribal Approaches to Climate Change</u>
2:40	Dennis McLerran (invited)	closing keynote
3:00-3:15	Conference committee	final wrapup; awards

Posters

P#	Name	Abstract Title
1	Halofsky, Jessica	Climate Change Adaptation in U.S. Federal Land Management Agencies: Progress and Next Steps
2	Raymond, Crystal	Climate Change Adaptation in the National Parks and Forests of the North Cascades Region, Washington
3	Rochefort, Regina	Climate Change Adaptation and Access Management in North Cascades National Park Complex
4	Diaz, David	Free online decision support for Pacific Northwest forest managers
5	Stevenson, John	An Experimental Approach to Science Delivery: The Big Wood Basin Alternative Futures Project Knowledge to Action Network.
6	Marshall, Allison	An Experimental Approach to Science Delivery: A Collaborative Modeling Approach in the Big Wood River Basin, Idaho
7	Kay, Jenna	Helping Communities Proactively Adapt to Climate Change Impacts
8	Lovell, Kaitlin	Preparing for Climate Variability: The City of Portland and Multnomah County's Climate Change Preparation Strategy
9	Miller, Ian	Generating local sea level rise projections to support community adaptation
10	Klein, Steven	EPA Region 10 Climate Change and TMDL Pilot
11	Hamberg, Andrea	Lessons learned from adaptation planning in five Oregon county health departments
12	Kelly, Miriah	Using Social Science Methods to Better Prepare Outreach and Engagement Professionals to Assist Communities with Climate Change Adaptation Planning
13	Kraucunas, Ian	PRIMA: The Platform for Regional Integrated Modeling and Analysis
14	Whitefield, Elizabeth	Animal Agriculture and Climate Change: An Online Course to Educate Extension Educators
15	Spry, Christina	Characterizing Pineapple Express Storms in British Columbia's Lower Mainland Using Meteorological, Streamflow and Stable Isotope Data
16	Cooper, Matthew	Modeling snowcover sensitivity to global warming across a climatic gradient in the Oregon Cascades
17	Frans, Chris	The role of glacial melt and areal recession on historical dry season streamflow in the Hood River Basin, Oregon
18	Law, Jason	Stream temperature monitoring program in Portland, Oregon for detecting long term, city wide trends in water temperature

P#	Name	Abstract Title
19	Psaris, Mike	Assessing Shifts in Hydrologic Ecosystem Services Resulting from Climate and Land Use Changes Using the SWAT Model
20	Safeeq, Mohammad	Spatial distribution of long-term hydrologic trends: Implications for regional streamflow sensitivity to climate warming in the Pacific Northwest, USA
21	Tohver, Ingrid	An Intercomparison Study of Climate Change Scenarios for the Canadian Columbia River Basin
22	Vano, Julie	A quick approach to evaluating climate change projections for trends in future streamflow
23	Kim, John	Which Climate Scenarios Should We Simulate? A Sensitivity Analysis of MC2 DGVM Simulation Results Using 3 Sparsely Sampled CMIP5 Projections.
24	Eskelson, Bianca	Wildfire effects on forest biomass in the Pacific coast states
25	Gleason, Kelly	Charred Forests Increase Snowmelt: Effects of Burned Woody Debris and Incoming Solar Radiation on Snow Ablation
26	Ringo, Chris	Toward a Regional Droughty Soils Map: Using Legacy Forest Service Soil Resource Inventory Data to Augment NRCS SSURGO Data
27	Restaino, Christina	A continental scale approach to understanding climate sensitivity in Douglas-fir
28	Reyes, Julian	Incorporating grazing into an eco-hydrologic model: Simulating coupled human and natural systems in grasslands
29	Peterman, Wendy	The importance of soils in vegetation modeling
30	McMullen, Laura E.	Climate change and agricultural intensification impacts on Steelhead (<i>Oncorhynchus mykiss</i>) populations in the Umatilla River as evaluated with a species-specific ecosystem model Ecosystem Diagnosis & Treatment
31	Narum, Shawn	Can fish adapt to warmer climates?
32	Schwalm, Donelle	Location matters: geographical variation in predicted effects of climate change on site occupancy of American pikas (<i>Ochotona princeps</i>)
33	Crook, Geoff	Climate Change Vulnerability Assessment and Adaptation Options for Transportation Infrastructure
34	Hamlin, Samantha	The Economic Value of Water in the Tualatin River Watershed: Potential Effects of Land Use Change and Climate Change on Water Provisioning
35	Schoenen, Jodi	A socio-ecological approach to landscape legacy and change in the Rogue River Basin, Oregon
36	Yorgey, Georgine	Incorporating Stakeholder Engagement In Regional Earth System Modeling
37	Buffington, Kevin	Coastal Ecosystem Response to Climate Change: Assessing sea-level rise and storm impacts to Pacific Coast salt marshes
38	Chi, Jinshu	Analysis of Carbon Cycling at Different Agricultural Sites in the Pacific Northwest
39	Eigenbrode, S. D.	Regional Approaches to Climate Change for Inland Pacific Northwest Cereal Production Systems
40	Eigenbrode, Sanford	The Cereal Leaf Beetle and its Parasitoid under Projected Climates in the Pacific Northwest
41	Hewett, Heath	Climatic Controls of Earthworm Activity / Aestivation in Agroclimatic Zones of the Inland Pacific Northwest
42	Walsh, Chelsea	Climatic and Biophysical Constraints on Earthworm Density Across Agroclimatic Zones

P#	Name	Abstract Title
43	Cross, Benjamin	The Impacts of Wind Speed Trends and Long-term Variability in Relation to Hydroelectric Reservoir Inflows on Wind Power in the Pacific Northwest
44	Curry, Charles	Quantifying uncertainty in regional climate model projections over British Columbia watersheds
45	Sharp, Darrin	Assessing Climate Change in the Columbia River Basin: A Comparison of NARCCAP and CMIP5
46	Mauger, Guillaume	Hydro-climatic projections for the Western U.S.: online interface, results, and applications
47	Nergui, Tsengel	Correlations between inter-annual climate variability and nitrogen wet deposition in the United States
48	Miller, Cody	Early results from an effort to downscale a global dissolved inorganic nitrogen model to achieve a regional assessment of nitrogen dynamics in the Columbia River Basin
49	Salathé, Eric	Projecting Future Hydrologic Extremes
50	Flores Cervantes, Javier Homero	The impacts of GCM downscaling on hydrologic projections for the Pacific Northwest
51	Mosier, Thomas	30 Arc-Second Historical and Forecast Monthly Climate Data: a Case Study for Oregon
52	Bothun, Greg	Changing Waveforms of Winter Precipitation in Western Washington and Oregon
53	Bachelet, Dominique	Providing climate change projections and impacts through databasin.org
54	Buma, Brian	A new watershed-scale research landscape: Berners Bay, Juneau
55	Drapek, Raymond	A comparison of approaches to producing downscaled future vapor pressure when it is not provided by the General Circulation Model
56	Drumheller, Bill	The Use of Innovative Emissions Accounting Frameworks to Provide Multiple Perspectives on Oregon's Contribution to Global Greenhouse Gas Emissions
57	O'Connell, Kari	Researcher Teacher Partnerships: Improving climate literacy and the teaching of science in middle and high school classrooms
58	Mullis, Tristan	Demonstration of Kepler workflows for efficient management of eco-hydrologic model simulations over the Pacific Northwest region