



THE FIRE CONTINUUM CONFERENCE

MAY 21-24, 2018 • MISSOULA, MT

PREPARING FOR THE FUTURE OF WILDLAND FIRE



Tentative Program Schedule

Sunday, May 20								
7:00 PM	Afterhours Networking - Brooks and Brown, Holiday Inn							
Monday, May 21								
7:30 to 5:30	Registration Opens - University Center							
Training and Educational Workshops								
8:00-10:00	#6 Teaching the Oregon State University Fire Science Core Curriculum				#9 Operations and Application of Unmanned Aircraft Systems for Forest and Burn Area Mapping and Monitoring			
8:00-12:00	#1 Learning the Photoload Sampling Technique: Visually estimating surface fuel loadings from photographs for research and management application	#2 Clear talk about wild fire: Meeting the communications challenges of the wide wildfire audience	#3 Reaching Deep into Our Collective FireToolbox to Get More of the Right Fire on the Landscape	#4 Introduction to the Interagency Fuels Treatment Decision Support System (IFTDSS)	#5 Linking wildfire burn mosaic and lynx habitat modeling	#8 Fuel and Fire Tools (FFT)—Application for Wildland Fuel and Fire Management Planning		
	#11 Unmanned aircraft in fire research and management	#12 FireWorks Educational Program: Handon Activities to Engage Students and the Public about Wildland Fire Science	#14 Geospatial Fire Modeling Using FlamMap6	#15 NASA Wildfire Applications Toolbox: Training in Availability, Access, and Use of Earth Observation Data, Models, and Information	#16 Empowering Strategic Decision Making for Wildfire Management: Avoiding the Fear Trap and Creating a Resilient Landscape			
10:00 to 12:00	#13 Publishing in International Journal of Wildland Fire		#7 Wildfire hazard and risk assessment: concepts, terminology, and applications		#10 Applying Advanced Technology to Enhance the Situation Unit			
12:00 to 12:30	Lunch - on your own							
1:00-5:00	Exhibitor Set-up - UC Ballroom							
CONFERENCE BEGINS								
Dennison Theater								
Welcome and Opening Remarks								
12:30 to 1:00	Drum Group, Presentations of the Colors, Tribal Elder Welcome - Tony Incashola, Sr., Confederated Salish and Kootenai Tribes							
1:00 to 1:30	CONFERENCE OPENING KEYNOTE							
CONFERENCE KEYNOTE								
1:30 to 2:10	The Fire Season Next Time: The Need for a Modern Analytical Strategy for Wildfire Management Dave Calkin, PhD, Supervisory Research Forester, Human Dimensions Program, US Forest Service Rocky Mountain Research Station							
Long Term Fire Planning Panel Session								
Matthew Thompson, Research Forester, RMRS								
Tim Sexton, Program Manager, Wildland Fire Research Development & Applications Program								
Riva Duncan, Interagency Fire Staff Officer, Umpqua National Forest								
2:10 to 2:50	INCLUSIVITY IN FIRE MANAGEMENT AND SCIENCE							
2:50 to 3:15	Break and transition to concurrent sessions							
3:15 to 3:30	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Special Session Organizer Bob Keane	Special Session Organizer Maureen Essen	Concurrent Session	Special Session Organizer Reeves	Concurrent Session	Concurrent Session	Concurrent Session	Special Session Organizer Thompson
	Assessing landscape change under changing climates with the spatial process model FireBGCv2	Social opportunities to increase adaptation and reduce shared wildfire risk	Prescribed Burning	Advancements in fuel mapping with emphasis on updating strategies	Pre-Fire Risk & Modelling	Fire Plans	Fuel Treatment	Operationalizing Responder Exposure Metrics to Support Response Decisions, Learning, and Accountability
3:30-3:50	Using landscape modeling to quantify ecological variability as a means to assess resilience Robert E Keane	What We Already Know About the Social Components of Wildfire Risk Sarah McCaffrey	Prescribed Burn Decision Support Tool (PB DST): An Essential Process to Support Your Decision Making Brian Levine	Annually Updated Rangeland Plant Functional Type Percent Cover Maps at 30m Resolution for Improved Fuel Mapping Matthew O. Jones	Regional Differences in Wildfire Risk in the United States from Systematic Operational Risk Assessments- How Risk is Conceived by Land Managers Erin Noonan-Wright	Source Water Protection Investment in the Rio Grande Headwaters Alan G Hook	Adaptive silviculture for climate change: Preparing dry mixed conifer forests for a more frequent fire regime Mike Battaglia	Modernizing wildland fire performance measurement: A brief history and future directions David Calkin

3:50-4:10	Can fire and fuel management maintain or restore ecological resilience under a changing climate? Rachel Loehman	Wildfire Collaboration Networks: An Empirical Study of Network Governance of Wildfire Risk in North Central Washington Cody Evers	Modelling an econometric function to predict prescribed burning costs Francisco Rodriguez y Silva	A geospatial approach to account for interannual variability in rangeland fuels Matt Reeves	Simulated vegetation and fire hazard at Eglin Air Force Base for 50 year time periods under multiple prescribed fire management scenarios using Fuel Classification and Characteristics System (FCCS) and a landscape-fire-succession model Jim Cronan	Net Gain to the Public Benefit in Fire Management Decisions Philip William Bowden	Advancing fuel modeling and fuel treatment analysis capabilities with STANDFIRE Russell A Parsons	Leveraging evidence-based management and key performance indicators to improve responder safety Matthew Thompson
4:10-4:30	Evaluating ecological shifts across levels of wildfire suppression on US northern Rocky Mountain landscapes Kathy Gray	Co-producing research and responses to address wildfire risk Carina Wyborn	Can we have it all? Optimal burning regimes for management of fuel, carbon, water and vegetation Tina Bell	Updating of LANDFIRE Vegetation and Fuel Data using Transition Modeling Donald Long	The association between emerging fire occurrence hotspots and historical area burned in the boreal zone of Alberta, Canada Jen Beverly	The European Wildfire Risk Node: towards uniting formal and informal networks on wildfire risk Nuria Prat-Guitart	Interagency Fuels Treatment Decision Support System: Facilitating Fuels Planning For All Caroline Noble	Aviation analytics to inform strategic planning and risk management in large fire support Crystal Stonesifer
4:30-4:50	Can herbivore management be used to reinforce fuel reduction programs? Robert Riggs	Cross-Boundary and Adaptive Governance to Facilitate Adaptation to Wildfire Risk Maureen (Mo) Essen	Combining lidar and other data to create landscape scale, site specific Fire Hazard Index for the Four Forest Restoration Initiative Mary Lata	Improving national shrub and grass fuel maps using remotely sensed data to support fire fuel assessments Jim Vogelmann	Forest Fire Prediction Modeling in Terai Arc Landscape of Lesser Himalayas using Maximum Entropy Method Amit Kumar Verma	Developing a Fire Danger Operating Plan for North Carolina from a State Fire Agency Perspective Meyer "Cabe" Speary	A retrospective analysis of fuel treatment effectiveness following the 2014 Carlton Complex Fire in semi-arid forests of north-central Washington State Susan Prichard	The Wildfire responder triangle: integrating safety, probability of success, and values at risk for operational response Jessica R Haas
4:50-5:10	Evaluating future success of whitebark pine ecosystem restoration under climate change using simulation modeling Lisa Holsinger	Network analysis of wildfire transmission and implications for risk governance Alan Ager	Fire and Ecological Forest Management and Prescribed Fire- Perfect Together Bob Williams	Operational periodic updating of LANDFIRE fuels data Kurtis Nelson	California Burning: Developing Sustainable Solutions To Emerging Climate Challenges - Electric Utilities As A Case Study Martin Kurtovich	After the Conflagration: Where Do We Go From Here? The Life Cycle of a Fire Management Plan Scott Murphy	Radial Thinning to Retain Legacy Trees: Effects on Tree Growth and Fire Behavior Sharon Hood	The spatial and temporal dynamics of responder exposure to snag hazards following mixed-severity fires Christopher Dunn
5:10-5:30	Assessing alternative management strategies for whitebark pine under future climate change Kathryn Ireland	Demographic analysis of transboundary wildfire exposure in the western US Palaologos Palaologou	The Ultimate Test of the Effectiveness of Fuel Management in the Wildland/Urban Interface Stephen Cornelsen	Discussion	GridFire: Open Source Fire Behavior Modeling in the Cloud Gary Johnson	Discussion	Stand-level dynamics of pinyon-juniper woodlands following hazardous fuels reduction treatments in Arizona David Huffman	Previous burn scars- a blessing or a curse? Responder mobility as a hazard in the post-fire environment Christopher O'Connor
5:30 to 7:30	No host social - UC Ballroom							
7:30+	Afterhours Networking - Tamarack or Yoga Session or Running Group							
Tuesday, May 22								
7:00 to 7:20	Wellness Session/Running Group							
7:30 to 5:30	Registration Opens - UC							
Dennison Theater								
8:00 to 8:10	Welcome and Logistics - Alen Slijepcevic, IAWF President							
CONFERENCE KEYNOTE								
8:10 to 8:50	What Will it Take to Advance Wildland Fire Behavior Science? Mark Finney, Research Forester, USDA Forest Service, Missoula Fire Sciences Laboratory							
Fire Behavior Panel Session								
8:50 to 9:30	Laura Ward, Lolo National Forest Fire Management Officer Rodman Linn, Senior Scientist, Earth and Atmospheric Sciences Division, Los Alamos National Laboratory Erin Noonan-Wright, Fire Application Specialist, Wildland Fire Management Research Development and Application Group (WFMRD&A)							
9:30 to 10:00	Networking Break - UC Ballroom with Exhibitors							
10:00 to 12:00	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Special Session Organizer Parks	Special Session Organizer Hamilton	Special Session Organizers Miller and Haire	Special Session Organizers Morvan, Simeoni, and Finney	Special Session Organizers Brown and Landis	Special Session Organizer Naficy	Special Session Organizer Ambrosia	Special Session Organizers Scott and Riley
	Climate change and altered fire regimes: what should we expect?	Coupling the social and biophysical assessment of wildfire risk	Fire refugia: identification, formation, function, and management	Toward a physical understanding of wildfire behavior: modeling and experimental approaches	EPA Wildland Fire Research: The Intersection of Emissions, Ambient Characterization and Public Health Outcomes	Assessing resilience to wildfires across the social-ecological spectrum	NASA Applied Science Efforts: Collaborations in Earth Observation Data, Information, Models and Tools Supporting Wildland Fire Management	Wildfire hazard and risk: assessment and management
10:00-10:20	Fire regime shifts under climate change depend on the timeframe and ecological context Sean Parks	Risk Interdependence and Alignment of Social and Ecological Networks in Fire-prone Forests Matthew Hamilton	What Are These Things We Call Fire Refugia? Meg Krawchuk	How 10 years of physical assumptions led to the development of the Balbi model, from laboratory scale to field scale Jacques-Henri Balbi	Cardiovascular and cerebrovascular emergency department visits associated with wildfire smoke exposure in California in 2015 Ana G. Rappold	Linked and compound disturbance interactions between multiple fires in conifer forests of the western US Brian J. Harvey	NASA Applied Science Efforts: Collaborations in Earth Observation Data, Information, Models and Tools Supporting Wildland Fire Management Vincent G. Ambrosia	Improved Simulation of Probabilistic Wildfire Risk Components for the Conterminous United States: 2018 FSim Product Updates Karen Short
10:20-10:40	Fire During High-velocity Climate Change Can Trigger Ecological Transformation Shelley Crausbay	Wildfire Exposure and Community Capacity to Manage Wildfire Risk: A Coupled Biophysical and Social Analysis of Wildfire Risk in Communities across the Western United States Max Nielsen-Pincus	Mapping and Characterizing the Distribution of Forest Wildfire Refugia Across Burn Severity Mosaics Ryan Walker	A review of current knowledge of woodland firefighter safety zones Jean Louis Rossi	Communicating Risk: Air Quality Index, Wildfire Guide, and Online PM Medical Course Susan Stone	Fire-fire interactions and multi-scale controls on fire severity in historical mixed-severity fire regimes of the northern U.S./southern Canadian Rockies Cameron Naficy	A topographically resolved wildfire danger and drought monitoring system for the conterminous United States Zachary Holden	Deterministic generation of flame-length probabilities for use in risk assessments Joe H. Scott

10:40-11:00	Climate-induced variations in global severe fire weather conditions W. Matt Jolly	Assessing and Managing Wildfire Risk Across Diverse Forest Ownerships in a Fire-Prone Landscape Susan Charnley	Mapping and modelling patterns in wildfire refuge using satellite imagery Luke Collins	Observing kinematic structures of large wildfire plumes from ground and airborne platforms Craig Clements	Comparison of Aspiration and Inhalation Exposure Methods for Predicting Pulmonary Toxicity of Biomass Smoke Yong Ho Kim	Compromised resilience of northern boreal forests following large wildfires Marc Parisien	WRFX - Numerical framework for operational coupled fire-atmosphere-fuel moisture forecasting Adam K. Kochanski	Generating a Small-Fires Event Set to Complement the FSim Large-fire Event Set Kevin Vogler
11:00-11:20	Effect of reduced warm-season cloud cover on aridity and fire danger in coastal California Park Williams	A Typology of Community Wildfire Exposure from US National Forests Cody Evers	Drivers and outcomes of burn severity in the northwestern Canadian boreal forest Ellen Whitman	Wind effects upon the behavior of wildfires: unsteady and 3D effects Dominique Morvan	Long-term trends in fire behavior and changes in population at risk Ana G. Rappold	Change in vegetation patterns over a large forested landscape based on historical and contemporary aerial photography Jamie Lydersen	Monitoring Great Basin Shrub and Grasslands using Landsat and MODIS data for Fire Applications Jim Vogelmann	Calculating Fire Season Length with Weather and Fire Activity Metrics Karin L. Riley
11:20-11:40	Reexamining the drivers of recent wildfire activity in the Pacific Northwest U.S. Zachary A. Holden	etwork Governance of the Chernobyl Exclusion Zone: When Fire and Radiation Mix (Phase 1) Derric Jacobs	Fire Refugia in Forests of Mexico: What do we Know? Larissa Yocom	Experimental investigation of ignition and thermal degradation of natural fuels and structural materials under static and dynamic conditions Alexander Filkov	Characterization of Aerosol Polar Organic Compounds of Smoldering and Flaming Combustion of Red Oak, Irish Peat, and Eucalyptus Jaoui Mohammed	Persistent fire-induced vegetation state switches in southwestern ponderosa pine forests Chris Guiterman	Enhanced Wildland Fire Management Decision Support Using Lidar-Infused LANDFIRE Data Birgit Peterson	Modeling Synchronous Large-Fire Activity Across the Conterminous United States Karen Short
11:40-12:00	Extensive Burning Reduces Future Landscape Flammability in North American Boreal Forests: Implications for Anticipating 21st-Century Fire-Regime Shifts Adam Young	Anticipating interactions between forest management and wildfire as private forestland owners adapt to climate change Jeffrey Kline	Influence of Topography and Fire Weather on Late-successional Forest Fire Refugia in the US Pacific Northwest Garrett Meigs	Laboratory experiments in fires spreading with wind and slope Mark Finney	Discussion	Climatic controls of post-fire conifer regeneration in low-elevation forests of the western U.S. Kimberley Davis	Conservation Impacts of a Near Real-time Monitoring and Alert System for the Tropics Karyn Tabor	Modeling Long-Term Effects of Fuel Reduction on Fire Severity on the Deschutes National Forest Rachel Houtman
12:00 to 1:00	Lunch (student/mentor luncheon) - provided							
	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Special Session Organizer Parks	Special Session Organizer Hamilton	Special Session Organizers Miller and Haire	Special Session Organizers Morvan, Simeoni, and Finney	Special Session Organizers Brown and Landis	Special Session Organizer Naficy	Special Session Organizer Ambrosia	Special Session Organizers Scott and Riley
	Climate change and altered fire regimes: what should we expect?	Coupling the social and biophysical assessment of wildfire risk	Fire refugia: identification, formation, function, and management	Toward a physical understanding of wildfire behavior: modeling and experimental approaches	EPA Wildland Fire Research: The Intersection of Emissions, Ambient Characterization and Public Health Outcomes	Assessing resilience to wildfires across the social-ecological spectrum	NASA Applied Science Efforts: Collaborations in Earth Observation Data, Information, Models and Tools Supporting Wildland Fire Management	Wildfire hazard and risk: assessment and management
1:00-1:20	Analyzing Risk of Regeneration Failure in the Managed Boreal Forest of North-Western Quebec Tadeusz Splawinski	Building Community Capacity for Cross-Boundary Fire Risk Management Daniel R. Williams	Distribution of Persistent Forest Fire Refugia Patches in the Alberta Rocky Mountains Marie-Pierre Rogeau	Modeling of stationary wind-driven flames to understand wildland fire behavior Micahel Gollner and Arnaud Trouve	The chemical composition of aerosols from wildland fires: Current state of the science and possible new directions Michael Hays	Historical Fire Disturbance Regimes and Implications for Forest Restoration James Johnston	Development and Application of Spatially Refined Remote Sensing Active Fire Data Sets in Support of Fire Monitoring, Management and Planning Janice L. Coen	Results and application of the National Risk Assessment Greg Dillon
1:20-1:40	Simulation of extreme wildfire events and impacts across spatial and temporal scales with statistical and dynamical models LeRoy Westerling,	Assessing influences on social vulnerability to wildfire using surveys, spatial data and wildfire simulations Catrin Edgeley	Flammability as an ecological driver Dylan Schwilk	Flow Dynamics of Plume Attachment in Fires on Slopes Torben P. Grumstrup	Status of EPA's National Emissions Inventory for Wildland Fire Amara Holder	Long-Term Understorey Vegetation Response to Prescribed Burning in Pinyon-Juniper Woodlands Alexandra Urza	Completion of a new open-source tool to map burned area and burn severity Joshua Picotte	Assessing Wildfire Risk in Real Time on the 2017 Frye Fire LaWen Hollingsworth
1:40-2:00	Climate- and vegetation-driven changes in area burned in the Sierra Nevada Matthew Hurteau	Obstacles to improving wildfire risk governance in Greece Palaialogos Palaialogou	Does it Matter if it Burned? Fire Refugia Composition and Structure in Oregon's Blue Mountains Will Downing	Using process-based coupled fire/atmosphere models to gain better understanding of wildfire dynamics Rod Linn	Implications of Burned Area Approaches in Emission Inventories for Modeling Wildland Fire Pollution in the Contiguous U.S. Shannon Koplitz	Fire across North America, a continuum process across three contrasting countries Diego Pérez-Salicrup	Linking Remote Sensing and Process-Based Hydrological Models to Increase Understanding of Wildfire Effects on Watersheds and Improve Post-Fire Remediation Efforts Mary Miller	Use of FSPro and a Quantitative Wildfire Risk Assessment (QWRA) to create Exceedance Probability Curves to Aid Incident Prioritization Rick Stratton
2:00-2:20	The Climate Change altered wildland fire regime for Canada in the 21st Century: Possible Implications Mike Flannigan	Prioritising WUI fuel treatments using statistical models of past fire ignition and spread Owen Price	The importance of fire refugia in the persistence and recolonization of a fire-sensitive conifer in northwest Patagonia Jennifer B. Landesmann	Shankar Mahalingam	Influence of Combustion Factors on Biomass Emissions Brian Gullett	2017 Wildfires in British Columbia: Urgent Need to Adapt Management to Improve Forest Resilience Lori Daniels	Post-Wildfire Decision Support with NASA RECOVER Keith Weber	Wildfire hazard assessment for community land use planning: a case study in Chelan County, WA Eva Karau
2:20-2:40	Mid-21st-century climate changes increase predicted fire occurrence and fire season length, Northern Rocky Mountains, United States Karin L. Riley	Participatory modeling of stakeholder-developed landscape strategies for fire and fuels management Andrew Merschel	Wildfire impacts on bird communities and habitat in the Sky Islands of Southern Arizona Jose Iniguez	How reduced plume entrainment in large fires affects the burning rate Sara McAllister	Improving EPA's Fire Emissions Inventory: A Dive into MODIS Fire Detections George Pouliot	Reintroduction of Fire as a Natural Process in Banff National Park - Implications for Wildlife Habitat Management and Forest Resilience Jane Park	Socioeconomic Impacts of Geospatial Data in Wildfire Emergency Response Planning: A Case Study using the NASA RECOVER Decision Support System William Toombs	Wildfire Risk to Homes in Western Montana April Brough

2:40-3:00	Assessing fuel treatment effectiveness during wildfires under future climate conditions Carrie A. Minerich	Sharing the road: managers and scientists transforming fire management Craig Bienz	Discussion	Discussion	Discussion	Toward a resilient wildfire management organization: current efforts and future needs David Calkin	Leveraging spatio-temporal data to improve wildland fire management decision support systems: a NASA Wildfires partner perspective W. Matt Jolly	Wildfire threat to surface drinking water in western Montana Julie Gilbertson-Day
3:00 to 3:30	Networking Break - UC Ballroom with Exhibitors							
	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Concurrent Session	Concurrent Session	Special Session Organizers Miller and Haire	Special Session Organizers Morvan, Simeoni, and Finney	Special Session Organizers Brown and Landis	Special Session Organizer Naficy	Concurrent Session	Special Session Organizers Scott and Riley
	Firefighter Safety	Smoldering Fires and Fuel Detection	Fire refugia: identification, formation, function, and management	Toward a physical understanding of wildfire behavior: modeling and experimental approaches	EPA Wildland Fire Research: The Intersection of Emissions, Ambient Characterization and Public Health Outcomes	Assessing resilience to wildfires across the social-ecological spectrum	Smoke Issues	Wildfire hazard and risk: assessment and management
3:30-3:50	Chemical Evaluation of Wildland Firefighting Gear Crystal Forester	Peatland Fires: Field Reference Conditions – Challenges and Research Needs Kevin C. Ryan	Fire refugia promote forest resilience Jonathan Coop	The promise and challenges of CFD physics-based wildland fire behavior modeling William Mell	EPA Wildland Fire Sensor Challenge: Preliminary Results from the Stage I Evaluation Matthew Landis	Risk-based spatial fire planning from concept to execution: a case study of the Tonto National Forest Christopher O'Connor	The roles of prescribed fire in reducing duff loads and subsequent wildfire emissions and air pollution Yongqiang Liu	Success rate of alternative criteria for the prioritization of fuel management in the Deschutes National Forest Ana Margarida Gracio de Barros
3:50-4:10	Team Awareness Kit, enhancing firefighter safety through better situational awareness David Zader	Mapping the impact of Canadian boreal forest canopy interception on satellite detection of smoldering wildfires Joshua Johnston	Are Essential Fire Refugia Black or Green? The Real Megafire Story Rick Hutto	Direct measurements of energy transport in naturally burning fires Bret Butler	Evaluation of Commercially Available Small Sensors (CO, CO ₂ , NO ₂ , H ₂ S, NH ₃) in Wildland Fire Plumes Andrew Whitehill	The value in resilience: integrating normative and objective dimensions of resilience in fire-prone landscapes Philip Higuera	Quantifying avoided wildfire emissions from significant wildfires Thomas Buchholz	Optimizing large-fire response based on risk and responder exposure Yu Wei
4:10-4:30	Joseph P. Roise	Role of the ornamental vegetation in the propagation of the Rognac fire 2016 Anne Ganteaume	Life-History Traits Mediate The Impact Of Climate Change And Enhanced Fire Regimes On Fire Refugia Of Endemic Tasmanian Conifers Andres Holz	Improvement of sub-modeling in physical fire spread models Albert Simeoni	Comparison of Ozone Measurement Methods in Biomass Burning Plumes Russell Long	Social resilience to wildfire: Perspectives from fire-affected communities Elizabeth Covelli Metcalf	Simulating Plume Rise, Dispersion and Radiative Smoke Impacts in a Coupled Fire-Atmosphere Framework Adam Kochanski	Concepts and tools to simplify complicated risk management problems Matthew Thompson
4:30-4:50	Pocket Wildfire Analyst Santiago Monedero	Fuel variability impacts fire behavior: small-scale studies utilizing drone technology Chris Moran	Patterns and conservation value of fire refugia in the northwestern United States Arjan Meddens or Anthony Martinez	Contrasting Internal and External Vulnerabilities of Buildings to Fire Jose L. Torero	Modeled Smoke Impacts on Ozone and Particulate Matter Evaluated with Field Study and Routine Air Quality Measurements Kirk Baker	Planning for resilience in federal forest management: Analysis of the current state of practice Jesse Abrams	Plume Evolution from Wildfires and Aged Regionally Distributed Smoke Sampled during BBOP Lawrence Kleinman	An assessment of wildfire risk from utility-related ignitions in California David Sapsis
4:50-5:10	Improving Wildland Firefighter Safety While Operating And Carrying Chainsaws & Supplies Tom Bendien	Daniel M Jimenez	The fate of fire refugia in future, warmer climates: Modeling spatial patterns and thresholds of disturbance-resistant areas in the Jemez Mountains, New Mexico USA Rachel Loehman	Extreme Fire Behaviour in Complex Topography Domingos Viegas	Improving the vertical distribution of wildland fire emissions in the CMAQ modeling system Joseph Wilkins	Recognizing Resilience of Indigenous communities in Canada to Wildland Fire Amy Christianson	The Summer of Smoke: 2017 Peter Lahm	Wildfire Risk Mitigation at San Diego Gas and Electric Brian D'Agostino
5:10-5:30	Fireline medical: Solutions for the future Ray Storm	Homes as Fuel: Do We Need a New Fire Behavior Paradigm? Daniel Leavell	Discussion	Discussion	Discussion	Cross-Boundary Wildfire Governance Laurie Yung	A Health Sector Perspective: A Case Study of Manitoba's 2017 Wildland Fire Smoke Season Jennifer Chiarotto	Discussion
5:30 to 8:00	Poster session - UC Ballroom							
8:00+	Afterhours Networking - Press Box or Hike to the M							

Wednesday, May 23								
Wellness Session/Running Group								
Registration Opens - UC								
Concurrent sessions - UC								
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
7:00 to 7:20	Concurrent Session	Special Session Organizer Davis	Special Session Organizers Gollner and Kuligowski	Concurrent Session	Special Session Organizer Hyer	Concurrent Session	Concurrent Session	Special Session Organizers Hood and Sala
7:30 to 5:30								
8:00 to 9:20	Firefighter Safety	Managing Wildfire Risk: Socio-Organizational Perspectives from Current Research: Part 1 - Co-Management and Collaboration Moderator: Emily Jane Davis	Characterizing Firebrand Exposure at the Wildland-Urban Interface (WUI)	Fuels Wildland Fuel Science	Western Wildfire Field Experiments Information Session	Fire Weather and Detection	Smoke Modeling	Lessons learned from long-term fuel treatment and fire monitoring studies
8:00-8:20	Human Performance Optimization: A holistic approach to Improve Wildland Firefighter Performance, Well-Being, and Safety David Schary	Factors facilitating and frustrating collaborative adaptive management in forest landscape restoration Tony Cheng	Wildfire Exposure to Buildings: Vulnerabilities and Mitigation Strategies Stephen Quarles	Down woody debris fuel load for Canadian forests Chelene Hanes	The Fire and Smoke Model Evaluation Experiment Western Wildfire Campaign Roger Ottmar	A site suitability index for remote automated weather stations (RAWS) in Washington State using a weighted linear combination scheme Josh Clark	Direct Numerical Simulation of a Turbulent Helium Plume and Methane Pool Fire Nicholas T. Wimer	The Importance of Time and Space when Monitoring Effectiveness of Forest Restoration Treatments David W Peterson
8:20-8:40	Implementation of Network-Enabled GPS Tracking Units During Operations: Challenges and Opportunities Joaquin Ramirez	Co-Managing Risk or Parallel Play? Examining Connectivity Across Wildfire Risk Mitigation and Fire Response in the Intermountain West Emily Jane Davis	Characterization of Firebrands from Common Structural and Wildland Vegetative Fuels Aixi Zhou	Fuel Dynamics along a Climatic Continuum: Insights from Australia's most Dangerous Fuel Type James Furlaud	Overview of the upcoming Western Wildfire Experiment for Cloud Chemistry, Aerosol Absorption and Nitrogen (WE-CAN) study Emily Fischer	The Diablo Wind and Extreme Fire Behavior during the 2017 Wine Country Fires Carrie Bowers	Real-Time Smoke Management Support using Paired Fuel/Atmosphere Risk Assessment with a Web-based Decision Support System Erin Law	Succession in Columbia Basin sagebrush steppe following wildfire: insights from long-term vegetation monitoring Claire Wainwright
8:40-9:00	Risk based resource allocation for emergency response operations - wildfire to road crash rescue Martijn Van der Merwe	Risk Co-Management on Interjurisdictional Lands Toddi Steelman	Physical and Chemical Processes Controlling Ember Production in Wildland Fires David Blunck	Estimating Litterfall Rates Following Stand-replacement Disturbance in Northern Rocky Mountain Ecosystems Chris Stalling	Fire Influence on Regional Environments and Air Quality (FIREX-AQ) James Crawford	The use of remote sensing and coupled weather-fire modeling for hazard identification and testing mitigation impacts in the northern Sierra Nevada Mountains Janice Coen	Calculation of smoke dimensions and estimation of affected area using calibrated optical sensors Andreas Jock	Lessons from long-term stand dynamics of old-growth longleaf pine communities in the mountains of north Alabama, USA J. Morgan Varner
9:00-9:20	An Analysis of Wildland Firefighter Entrapment Fatalities on Prescribed Fires and Wildfires, in the US, 1990 to 2017 Richard McCrea	Panel Discussion: Common themes, challenges, and opportunities in co-managing wildfire risk Panelists: Tony Cheng, Emily Jane Davis, Toddi Steelman	Breakage and Transport of Firebrands from Wildland Fuels Ali Tohidi	Modelling bushfire fuels using biophysical parameters Meaghan Jenkins	Coordinated Activities of Fire Influence on Regional and Global Environments and Air Quality (FIREX-AQ) Carsten Warneke	Using Fire Weather Data in Tactical Decision-Making: the Dream and the Reality Christine Shaw Olsen	U.S. Fine Particulate Matter Air Quality Improves Except in Wildfire Prone Areas Crystal McClure	Impacts of six different complex fire regimes in a longleaf pine ecosystem: Results over twenty-five years Sharon Hermann
9:20-9:40	It's the thought that counts Michael Williams-Bell		Influence of Thermal Degradation in Dispersion and Deposition of Firebrands in a Turbulent Boundary Layer Babak Shotorban	Simulating the effectiveness of prescribed burning at altering wildfire behaviour in Tasmania, Australia James Furlaud	FIREX-AQ: Fueled from below: Linking Fire, Fuels and Weather to Atmospheric Chemistry Amber Soja	Innovation in Early Detection – Real-Time Surveillance for Private and Commercial Use Artur Matuszczak	Discussion	Fuel loads and simulated fire behavior in 24-year old, post-fire lodgepole pine forests Kellen Nelson
9:40-10:00	An Operational Fire Weather Alert System Tanner Finney		Topographic effects on firebrand transport over a canyon Eunmo Koo	Revisiting fuels measurements using a novel 3D fuels sampling technique and remotely sensed data Eric Rowell	Biomass Burning Observation Project (BBOP): Near Field Evolution of BB Emissions Arthur J. Sedlacek	Multi-platform, multi-scale approaches to optimal fire characterization Charles Ichoku	Discussion	Initial prescribed fire treatment reduces mixed-conifer forest resilience Malcolm North
10:00-10:40	Networking Break - UC Ballroom with Exhibitors							
	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Special Session Organizers Rhoades, Doerr, and Silins	Special Session Organizer Davis	Special Session Organizers Gollner and Kuligowski	Special Session Organizer Ruby	Special Session Organizer Hyer	Special Session Organizer Hand	Concurrent Session	Special Session Organizers Hood and Sala
	Forests to flames to faucets: the influence of wildfire on watershed processes	Managing Wildfire Risk: Socio-Organizational Perspectives from Current Research. Part 2 - Resilience and Adaptation in Wildfire Risk Management Moderator: Tony Cheng	Characterizing Firebrand Exposure at the Wildland-Urban Interface (WUI)	Protection of the Wildland Fire Workforce: evidence-based human factor physiology and health	Western Wildfire Field Experiments Information Session	Advances in the empirical assessment of the effectiveness of wildfire management activities	Smoke Emissions	Lessons learned from long-term fuel treatment and fire monitoring studies
10:40-11:00	Assessing water contamination risk following vegetation fire: challenges, opportunities and a framework for progress Stefan Doerr	Policy Barriers to Increasing Prescribed Fire Accomplishments on Federal Lands: A Diversity of Challenges and Approaches Across the West Courtney Schultz	Structure Vulnerability to Firebrands from Fences and Mulch Kathryn Butler	Identifying the energy demands of the job and developing effective tactical nutrition for performance and recovery Brent C. Ruby	Identifying PM and O3 impacts in urban areas due to wildfires Daniel Jaffe	A Real Barn Burner: The Effectiveness of Home Protection During Wildfire Jude Bayham	An examination of fuel moisture, energy release, and emissions during laboratory burning of live wildland fuels Evan Ellicott	Retaining Fire Resilience: Twenty Years of Forest Development Following Wildfire in Old Growth Ponderosa Pine Forest Alan Taylor

11:00-11:20	Prioritizing fuel treatments to reduce wildfire risk to municipal watersheds Benjamin Gannon	The National Cohesive Wildland Fire Strategy and Fire Adapted Communities Sarah McCaffrey	Short-range firebrand hazard assessment – firebrand flux, travel distance and heat flux from accumulations Rory Hadden	Energy Costs of Load Carriage and the Assessment of Seasonal Readiness Matthew Bundle	Space-Based Constraints on Smoke Aerosol Plume Injection Height, Source Strength, and Particle Type Ralph Kahn	Initial Attack Effectiveness of Large Air Tankers: An Econometric Approach Hari Katuwal	Emissions from heated extract-rich fuels and impacts on smoke dynamics Fengjun Zhao	Combined Effects of Fuel Treatments and Beetle Outbreak on Forest Fuel and Fire Hazard Development in Ponderosa Pine Justin Crotteau
11:20-11:40	Forests to Faucets in National Forest risk assessments: a national perspective Greg Dillon	The Future of Fire Management in Alaska: Adapting Approaches in Light of Current and Predicted Effects due to Climate Change Tait Rutherford	Experimental investigation of the ignition potential of single firebrands and their accumulation Alexander Filkov	Hydration is not your only option in the avoidance of heat related injuries Charles Dumke	An Examination of Extreme Fire Behavior and its Impact on Smoke Plume Characteristics using Remote Sensing and Meteorological Data David Peterson	Fire on the frontier: Understanding Alaskan homeowner preferences for wildfire risk mitigation Joseph Little	Laboratory Analysis of Gas Emissions from Southeastern Forest Fuels Adam Coates	Stand-Density Reduction Treatments Alter Tree-Level Climate–Growth Relationships and Vulnerability to Drought in Low-Elevation Ponderosa Pine Forests of the Northern Rockies Alan Tepley
11:40-12:00	Hydrologic Recovery After High Severity Wildfire Joe Wagenbrenner	Panel Discussion Panelist: Courtney Schultz, Sarah McCaffrey, Tait Rutherford	Firebrand Ignition of Attic Insulation and an Ornamental Grass Savannah Wessies	The Safety Zone: Injury Prevention Strategies for the WLFF Valerie Moody	Improving Nocturnal Fire Detection with the VIIRS Day-Night Band Jun Wang	Efficient wildfire suppression in Mediterranean ecosystems: A stochastic frontier analysis Michael Hand	Gas-Phase Products from the Pyrolysis of Southeastern Fuels using Open-Path Infrared Spectroscopy Nicole Scharko	Recovery of Ectomycorrhizal Fungus Communities Fifteen Years after Fuels Reduction Treatments in Ponderosa Pine Forests of the Blue Mountains, Oregon Jane Smith
12:00-12:20	Stream channel stability at Fishtrap Creek after the 2003 McLure Fire, British Columbia, Canada Tim Giles		Temperature Measurement and Ignition Potential of Firebrands James Urban	Challenges of Developing a Physical Training Program for WLFFs: Lesson Learned Annie Sondag	Hyperspectral and polarimetric fire emission characterization from the NASA ER-2 aircraft Olga Kalashnikova	The role of previous fires in the management and expenditures of subsequent wildfires Erin Belval	Characterization of Pyrolysis Products from Fast Pyrolysis of Live and Dead Vegetation Thomas H. Fletcher	Ecological Responses to Prescribed Fire Regimes in Ponderosa Pine Forests: Lessons Learned From a Long-Term Study Becky Kerns
12:20-12:40	Muted streamflow response to increased net precipitation in wildfire-affected headwater catchments Chris Williams		Heating and Ignition from Firebrand Piles Michael Gollner	Podcasts, social media, websites and their role in knowledge dissemination Charles Palmer	Discussion	Examining the Spatial Alignment of Large Airtanker Use and Potential Fire Control Locations Crystal Stonesifer	Tar and gas composition from slow pyrolysis of 15 live and dead plant species from the Southeastern United States Elham Amini	Twenty-five years of ecological restoration research at the G. A. Pearson Natural Area, Fort Valley Experimental Forest, Arizona Andrew Sánchez Meador
1:00 to 5:30	Field Trips (includes transportation and lunch)							
6:00 to 10:00	Evening Event - Street Eats and Beats (Awards, Food Trucks, Music) Caras Park							
Thursday, May 24								
7:00 to 7:20	Wellness Session/Running Group							
7:30 to 5:30	Registration Opens - UC							
Dennison Theater								
8:00 to 8:10	Welcome and logistics - IAWF President							
CONFERENCE KEYNOTE								
8:10 to 8:50	Postfire Ecology in the Face of Rapid Global Change Jon E. Keeley, Senior ST Research Scientist, U.S. Geological Society Fire Event Panel Session- Post Fire Activities and Fire Ecology Paul Hessburg, Research Landscape Ecologist, USDA Forest Service Michael Norton, Director General, Northern Forestry Centre, Natural Resources Canada Bill Avey, Forest Supervisor, Helena-Lewis and Clark NF							
8:50 to 9:30	Networking Break - UC Ballroom with Exhibitors							
9:30 to 10:00	Concurrent sessions - UC							
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight
	Special Session Organizers Rhoades, Doerr, and Silins	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Special Session Organizers Cansler and Lodge	Concurrent Session
	Forests to flames to faucets: the influence of wildfire on watershed processes	Fire Suppression	Fire History/Fire Regime Reconstruction	Fire Effects Mapping Tools	Micro-Talks	Fire Modeling I	Fire-induced tree mortality: Empirical modeling, physiology, and integrative approaches	Post Fire Recovery & Severity
10:00-10:20	Scaling Post-fire Effects from Hillslopes to Watersheds: Processes, Problems, and Implications Lee MacDonald	Measuring Suppression: Quantifying Reductions in Burn Probability from Initial Attack Jonathan Reimer	Stand dynamics of lodgepole pine forest types, and their influence on historical fire regimes in surrounding ponderosa pine and mixed-conifer forests of the Klamath Basin Andrew Merschel	BURNOUT: a Rapid Mapping burnt area extraction tool Mathilde Caspard	Homeowner Wildfire Preparedness: How Efficacy Affects the Relationship Between Risk Perception and Mitigation Claire Rapp FireWorks Educational Program: Hand-on Activities to Engage Students and the Public about Wildland Fire Science Ilana Abrahamson	Effects of different prescribed fire ignition techniques on fire behavior Alex Jonko	Validating mortality predictions from the First Order Fire Effects Model (FOFEM) model with external data C. Alina Cansler	Effects of fire severity on understorey diversity in the Sierra Nevada, California Clark Richter

10:20-10:40	Are Northern Latitudes Less Subject to Erosion, Landslides and High Sediment Yields after Wildfire? Peter Jordan	Modeling Suppression Difficulty: Current and Future Applications Francisco Rodriguez y Silva	Fire reconstruction in ponderosa and mixed conifer forests of the Mescalero Apache Tribal Lands (NM) Alicia Azpeleta Tarancon	Mapping Canadian Interface Areas Lynn Johnston	Preparing Youth Camps for Wildland Fire 2018 Mike Jensen Prescribed Fire Outreach: Develop Your Resources to Meet the Needs Jennifer Fawcett	Adjusting wildland fire simulations remotely through satellite active fire data: A near real-time approach Adrián Cardil	Burning down the plot: Evaluating FVS-FFE predictions of tree mortality with post-fire assessment of inventory plots using local fire weather Jason Barker	Heterogeneity in fire severity benefits post-fire plant diversity Jesse Miller	
10:40-11:00	Predicting Post-fire Hillslope Erosion and Small Watershed Response with an Online GIS Interface Using WEPP Technology Peter Robichaud	The development of the algorithm for the attraction of the adapted technical equipment may be taken as a basis for the creation of the concepts and recommendations for the use of the engineering equipment to douse forest fires in Ukraine Andrii Vorokhta	Stand-Replacing Fire in Historically Frequent-Fire Forests in South-Central Oregon Keala Hagmann	Hyperspatial Mapping of Post-fire Effects Using Artificial Intelligence Dale Hamilton	Challenges in Indonesia for Fire Management Juan Caamano Using automated surface fire sticks to estimate surface fine fuel moisture Jane Cawson	Simulating megafires in Europe as a tool to define management strategies Marc Castellnou	Short-term Stem Mortality of 10 Deciduous Broadleaved Species following Prescribed Burning in Upland Forests of the Southern US Tara Keyser	Restoration Treatment Effects on Fire Severity and Post-fire Vegetation Recovery David W Peterson	
11:00-11:20	Long-term Suspended Sediment Yields in Wildfire Affected Mountain Streams in Southwestern Alberta, Canada Kalli Herlein	Assessing aerial firefighting use and the continuum of effectiveness with probabilities of success at nested incident management scales to improve future fire response Keith Stockmann	Early successional conditions in the eastern Washington Cascade Mountains: Contrasting the pre-management and modern-eras Paul F Hessburg	sUAS Based Post-fire Remote Sensing Lessons Learned: Southwestern Idaho Fire Season 2017 Nicholas Hamilton	The NIDIS Drought and Wildfire Nexus Timothy Brown An improved National Fire Danger Rating System for the United States: NFDRS2016 W. Matt Jolly	Faster Rate of Fire Spread Algorithm Does Not Fundamentally Change the Relative Unimportance of Fuel Treatment for Limiting Simulated Wildfire Area in South-eastern Australia Geoffrey Cary	Evaluating and refining the First Order Fire Effects Model for use in hardwood forests of the eastern US Benjamin Knapp	Initial Response of Plant Community Composition to Fire Severity in Andean Araucaria-Nothofagus Forests, Chile Andres Fuentes-Ramirez	
11:20-11:40	Comparative effects of different post-fire forest management strategies on hillslope sediment yield Ryan Cole	Deconstructing Suppression Efforts on Large Wildfires to Quantify Effectiveness Heather Simpson	Assessing the Work of Wildfires with Post-Fire Landscape Evaluations Miles LeFevre	Discussion	Do Outputs from the US National Fire Danger Rating System (NFDRS) Influence Fire Size? Nicholas Walding An Evaluation of the Forest Service Hazardous Fuels Treatment Program Nicole Vallant	Overview of FlamMap6 Geospatial Modelling Capabilities Charles W. McHugh	Mortality of the European beech (Fagus sylvatica L.) after forest fires of varying severity Janet Maringer	Population Dynamics within Relict Stands of a Fire-dependent Cypress Following a Large Scale Wildfire Event Teresa Brennan-Kane	
11:40-12:00	Modelling ash contamination risk after wildfires: a new tool aimed at end-users Jonay Neris	Metolius Research "Not-So-Natural" Area: The Effects of Fire Exclusion for an "Intact" Forest Kayla Johnston	The biogeography of fire regimes: a trait-based approach Jens Stevens	Discussion	Characterizing fire behavior across the globe Paulo Fernandes Discussion	Automatic assessment of fire propagation nodes for optimizing fuel treatments and improving suppression strategies and tactics Joaquin Ramirez	Another look at analyzing post-fire tree mortality data J. Morgan Varner	A New Process for Quantifying Post Fire Recovery of Rangeland Production Matt Reeves	
12:00 to 1:00	Lunch - provided								
Concurrent sessions - UC									
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight	Room Nine
	Special Session Organizers Rhoades, Doerr, and Silins	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Special Session Organizers Cansler and Lodge	Concurrent Session	Concurrent Session
	Forests to flames to faucets: the influence of wildfire on watershed processes	Collaborative Process	Salvage and Hydrology	Fire Effects and Ecology	Micro-Talks	Fire Modeling II	Fire-induced tree mortality: Empirical modeling, physiology, and integrative approaches	Post Fire Recovery & Severity	Knowledge Building
1:00-1:20	Alternate Trajectories for Post-fire Watershed Recovery: Crystal Balling Nitrogen Production a Decade after Wildfire and Beyond Uldis Silins	Wildfire evacuations of First Nations across Canada Tara McGee	Influence of wildfire severity and post-fire timber salvage on forest regeneration in mixed-conifer forests Nicholas Povak	Effects of Prescribed Burning on Whitebark Pine Cara R. Nelson	Fuels and fuel loading in the Fire Continuum Nancy French Quantifying wildfire behaviour using observations from weather radar Thomas Duff	Nonlocal Influences: Influence of Domain Size on Wildfire Simulation Marlin Holmes	Post-fire Tree Mortality: Plant Hydraulic Responses to Heat Plume Exposure Alexandra Lodge	Effects of Prescribed Fire on Aspen and Grassland Restoration in an Elk, Wolf, Bison, Aspen, and Grassland System in Waterton Lakes National Park, Alberta Cristina Eisenberg	Webinars as Tools to Bridge the Fire Science – Management Divide David Godwin

1:20-1:40	Impacts of the Fort McMurray Wildfire on the River Water Quality of Burned Catchments Craig Emmerton	Global Perspectives on Wildfire Community Risk Reduction Lucian Deaton	Overlapping Bark Beetle Outbreaks, Salvage Logging and Wildfire Restructure a Lodgepole Pine Ecosystem Kristen Pelz	Embracing Complexity and Discovering Clarity: Bark Beetles and Fire in Subalpine Forests of the Western US Brian J. Harvey	Are fires faster in real life than in the lab? Bret Butler Forest Fire Modeling: An Integrated Climate and Remote Sensing-based Drought Indices for Improved Fire Detection Getachew Demisse	Application of Background Oriented Schlieren on Visualization and Measurements of Convective Mass Flux Around Fire Amirhessam Aminfar	"Pyrohydraulic" Traits That Influence Post-Fire Tree Mortality Or Survival Adam West	Post-fire Recovery of Wildlife Populations Karen Hodges	Education in fire management and fire management in education Heather Heward
1:40-2:00	The alteration of hydrological and biogeochemical behavior after wildfire, and relevance to water quality Sheila F. Murphy	Enhancing the Co-Management of Wildfire Risk: Lessons from the Colorado Wildfire Risk Reduction Grant Program Tony Cheng	Effects of post-fire salvage logging on early-seral ecosystems in western Oregon Christopher Dunn	Relating Burn Severity and Short-Term Ecological Effects of Wildfires in High-Elevation Lodgepole Pine (Pinus contorta) and Subalpine Fir (Abies lasiocarpa) Mixed Forests Bryn Marah	Experience, Commands, Training—drivers of firefighter's responses to fire behavior Tamara Wall CAWFE coupled weather-wildland fire model simulations of the October 2017 Northern California Diablo wind event and fires Janice Coen	Modeling Containment of Wildfires Managed for Resource Objectives Jesse Young	The impact of season of burn on physiology, mortality and growth of sweetgum (Liquidambar styraciflua) Joseph J. O'Brien	Relationships Among Fire, Fuels, and Prehistoric Ceramic Materials in the Jemez Mountains Connie Constan	Ground Safety Crew Lessons Learned Rebekah Fox
2:00-2:20	Wildfires cause long-term shifts in stream nutrient dynamics Allison Rhea	Promoting Resilient Landscapes through the use of Prescribed Fire in South Florida Justin Shedd	Forest Management Improves the Water Quality by Altering Detrital Chemical Composition Hamed Majidzadeh	Vegetation changes, tree physiology, and bark-beetle mortality in relation to open and enclosed irrigation channels: A case study within a wildland-urban interface forest in western Montana Eric Keeling	Forest disturbance, fuels and flammability in wet eucalypt forests Jane Cawson The effects of an invasive grass, Bothriochloa ischaemum, on fuel loads and fire temperatures Carolyn Whiting	Numerical Investigation of Aggregated Fuel Spatial Pattern Impacts on Fire Behavior Russell Parsons	Fires following bark beetles: factors controlling severity and disturbance interactions in ponderosa pine Carolyn Sieg	Biotic and Abiotic Drivers of Fire Severity in the Klamath Mountains Stacy Drury	A Centre of Excellence for Prescribed Burning Deb Sparkes
2:20-2:40	Using the Soil-Water-Assessment-Tool (SWAT) to Predict Water Quality in Streams After Forest Fire Ashley Rust	Creating a Smoke Resilient Community in a Wildfire-Prone Land Sarah Coefield	Using Prescribed Burn Fire Severity Assessments to Estimate Post-burn Hydrologic Risk in Australian Forests and Woodlands Adam Leavesley	Managing post-fire landscapes: lessons from natural regeneration and planting guidelines Camille Stevens-Rumann	After The Smokes Clears: The Thomas Fire Debris Flow in Monticello California Pete Robichaud Fire Moss: An Under Explored Community and Potential Tool for Restoring the Post Fire Environment Henry Grover	Improvements in Australia's Bushfire Rate of Spread Models Over Time Martin Alexander	Pre-fire drought and competition mediate post-fire conifer mortality in western U.S. National Parks Phillip van Mantgem	High severity fire: evaluating its key drivers and mapping its probability across western US forests Sean Parks	Opportunities and Disruptions Across the Continuum of Radio Training Elena Gabor
2:40-3:00	Eight Years Later: Long-term Effects of Severe Wildfire on Aquatic Ecology in Rocky Mountain Streams Amanda Martens	Ten Years of FireWise Communities in Indigenous Communities, South Africa Valerie Charlton	Coconino County, AZ - Pre-Fire Assessment of Post-Wildfire Flooding and Debris Flow Risk Joe Loverich	Climate Variability Impacts Growth and Post-Fire Tree Regeneration Differently among Juveniles and Adults of Ponderosa Pine and Douglas-fir Lacey Hankin	Discussion	Tar and gas composition from slow pyrolysis of 15 live and dead plant species from the Southeastern United States Thomas Fletcher	Disease-wildfire interactions impact aboveground and belowground mechanisms of tree mortality Allison Simler	Discussion	Washington's 20 Year Forest Health Strategic Plan: Preparing Landscapes for the Future Derek Churchill
3:00 to 3:30	Networking Break - UC Ballroom with Exhibitors								
	Concurrent sessions - UC								
	Room One	Room Two	Room Three	Room Four	Room Five	Room Six	Room Seven	Room Eight	
	Special Session Organizers Rhoades, Doerr, and Silins	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Concurrent Session	Special Session Organier Cansler	Concurrent Session	
	Forests to flames to faucets: the influence of wildfire on watershed processes	Knowledge Building	Reburns Effects of Changing Climate	Climate Drivers of Fire Effects	Fire Behavior Science	Fire Modelling III	Fire-induced tree mortality: Empirical modeling, physiology, and integrative approaches	NASA Satellites in predicting hazard & assessing severity	
3:30-3:50	Wildfire effects on soil hydraulic properties and organic matter in a southern Appalachian hardwood forest Kevin Bladon	Incorporating Traditional Knowledge (TK) into Fire and Fuels Management Monique Wynecoop	Wilderness Fire Management: Harder Then or Now? Vita Wright	Environmental conditions, not the type of ignition, control the temporal variability of wildfire burned area in the western U.S. Steven Brey	Observations of fine-scale moisture dynamics and flammability in pine and oak litter: Solar heating, fuel position, and species all matter Jesse Kreye	ChaRoFlux: a novel metric that links fire-intensity to its effects on ecosystems Claire Belcher	The Effects of Tree, Clump, and Neighborhood Structure on Immediate and Delayed Fire Mortality Sean Jeronimo	Using NASA's Remote Sensing Datasets and Land Information System to Characterize Lightning Initiated Wildfires Christopher Schultz	

3:50-4:10	Forest Fire Alters Dissolved Organic Matter Exports from Forested Watersheds: Impacts on Water Quality & Treatability Alex Chow	A Quarter Century of Change in Wildland Fire Science Susan G. Conard	Tree Clump and Opening Patterns Following Wildfire: Comparing Managed and Wilderness Areas Haley L. Wiggins	Factors driving wildfire activity: What do we know? Alexandra Syphard	Upslope fire and eruptive fire Francois Joseph Chatelon	Mountain Pine Beetle Effects on Wildfire Rate of Spread – the British Columbia Fire Season of 2017 Chris Stockdale	After the fire: cascading landscape changes caused by interactions between initial fire severity, forest cover type, bark beetles and climate Cameron E. Naficy	The Fire Danger Assessment System: Using NASA Satellite Observations to Map Fire Danger in the United States for Allocation of Fire Management Resources E. Natasha Stavro
4:10-4:30	Linking Post-fire Watershed Responses to Drinking Water Quality Effects Amanda Hohner	Periodic changes in wildland fire research Pil Sun Park	Forest structure, fuel loads, and successional pathways following single and repeat fires in mixed-conifer forest Andrew J. Larson	What Do We Know about the Emerging Role of Rx Fire in Preventing Mass Extinction? Cecil Frost	Examining the Terminal-Velocity Assumption in Simulations of Long-Range Firebrand Transport Christopher Thomas	Determining Burnability: Predicting the Achievement and Coverage of Burns Intended for Fuel Management Thomas Duff	Capturing Tropical Forests and Savannas with the Size-Structured Vegetation Model FATES-SPITFIRE Jacquelyn Shuman	Local biophysical patterns interacting with fire weather best explain burn severity patterns in the central Sierra Nevada, California Van Kane
4:30-4:50	Physicochemical Changes of Wildfire-Derived DOM & Precipitation Effects during First Year Recovery Alex Revchuk	Research, Data, and Tools to Support Wildland Fire Challenges Paul Steblein	Severity of Short-Interval Reburn Mediates Compositional Shifts in Fire-Adapted Montane Shrublands Deborah Nemens	Global fire induced tree loss and its biophysical effects on surface climate Zhihua Liu	Understanding Ignition: How One Spark Can Burn an Entire Forest Erik Christiansen	Determining the Probability of Impact from Wildland Fires: Santa Rosa fire case study Joaquin Ramirez	Lost in translation : how scaling fire effects from individuals to the globe reduces landscape heterogeneity Ben Poulter	Modeling Fire Severity in Eastern Washington Using Mapped Surfaces of Climate, Weather, and Topography Jonathan Kane
4:50-5:10	The 2016 Fort McMurray wildfire: Drinking water treatability challenges in an already-challenged watershed Monica Emelko	Building shared solutions to global climate-fire issues, from Africa to home Ron Steffens	Ecoregional differences in reburn patterns of California wildfires Jeffrey Kane	Causes of Indonesian Peat Fires: Implications for Research and Policy Kevin C. Ryan	Dynamic changes of forest fire in China and fire drivers in different forest ecosystems Futao Guo	An Information-Based Method for Calculating Values-at-Risk and Modeling the Consequences Van V. Miller	Outstanding Questions about Fire-induced Tree Mortality Sharon Hood	Burn severity effects on multiple ecosystem recovery trajectories Beth A. Newingham
5:10-5:30	Quantifying ash loads across burned watersheds using the Normalized Wildfire Ash Index- a remote sensing approach Cristina Santin	Preparing Tomorrow's Fire Professionals: Opportunities for Mentoring, Field Trips and Training Steven R. Miller	Discussion	A synthesis and meta-analysis of ponderosa pine fire regimes from five U.S. regions Shawn T. McKinney	Flammability Characteristics of Common Garden Litter under FPL Instrumented Hoods Mark Dietsberger	Multidisciplinary Fire Science Research at the Sycan Marsh, Oregon Russell A Parsons	Discussion	Discussion
5:30 PM	Event Concludes							
7:00 PM	After Conference Party - Marshall Mountain							