

Building on Science to Implement Landscape Level Treatments for Fire Resilience

**Report on a Conference held
April 27th and 28th, 2011 at
McClellan Park, CA**



Submitted by:

Susie Kocher, University of California Cooperative Extension

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Report Table of Contents

Key Conference Outcomes	2
Conference Planning Committee and Sponsors	4
Summary of Attendance	5
Conference Agenda	5
Presentation Biographies	9
Presentation Abstracts	15
Collaborative Concurrent Session Notes.....	22
Evaluation Results	44
Conference Flyer.....	55

Key Conference Outcomes

The two day conference “Building on Science to Implement Landscape Level Treatments for Fire Resilience” was held on April 27th and 28th, 2011 at McClellan Park near Sacramento California. The conference occurred as a result of a partnership between the US Forest Service Region Five and the University of California Cooperative Extension. The goal was to improve understanding and work towards agreement that will advance landscape level treatments for ecosystem resilience.

This was a follow-up conference to the February 2010 Pre- and Post-Wildfire Forest Management Conference that focused on the biological, ecological, and physical science associated with wildfire treatments and impacts in Sierra Nevada forests. During the 2010 conference, participants stressed that social, economic, and political aspects of wildfire needed more consideration in order to develop acceptable policies and practices that address fire resilient forested ecosystems. A planning committee including representatives of the USDA Forest Service, University of California, and conservation and non-profit groups took on the task of responding to this expressed need.

The 2011 conference presented ecological, social, and policy perspectives applicable to implementing landscape treatments to promote system resilience and encourage dialog and collaboration to advance Sierra Nevada forest management. Over 160 managers and staff of forest management agencies, regulatory agencies, state and local government, and public utility districts, representatives of environmental and business organizations, consultants, research scientists, and the public attended.

The conference was organized around several themes:

- What is a fire resilient forested landscape?
 - How does wildlife fit into landscape fire resilience?
 - How can we restore while treating forest fuels and reduce the risk of high severity wildfire?
- How is fire resilience linked to social sustainability?
 - How can treatments be economically viable and politically acceptable?
 - How can diverse groups collaborate on treatment implementation?

We explored these challenging questions through a series of scientific presentations and in depth discussions, highlighting collaborative facilitation that supports mutual learning and shared success. The Four Forests Restoration Initiative from Arizona was presented as a case study of collaboration leading to agreement on landscape level treatments on public lands. All PowerPoint presentations are posted on the conference website: <http://ucanr.org/sites/wildfire2011/>. Efforts and accomplishments of local collaborative efforts were also shared. Notes from these concurrent sessions are included in this report.

Evaluations of the event were very positive. 87% rated the conference as excellent or very good. 74% rated the presentations as excellent or very good. 100% said the

conference made good use of allotted time. 76% said the information presented helped to clarify issues surrounding treatments for forest resilience. 88% said the conference will help us move forward and resolve issues surrounding forest treatments for forest resiliency. Many comments made on evaluation forms said how much participants enjoyed hearing about the variety of collaborative groups currently working on forest resilience in the Sierra Nevada. Some said they felt that next steps should include helping the US Forest Service develop the capacity to collaborate at a broader level, holding specific trainings on how to implement collaboratives, and the specific forest management issues that collaboratives must work to address.



Conference Planning Committee and Sponsors

Planning Committee

- Susie Kocher (Chair), University of California Cooperative Extension
- Gina Bartlett, Sacramento State Center for Collaborative Policy
- Steve Brink, California Forestry Association
- Mike Chapel, USDA Forest Service Region 5
- Brandon Collins, US Forest Service Pacific Southwest Research Station
- Lynn Huntsinger, UC Berkeley
- Jonathan Kusel, Sierra Institute for Community and Environment
- Mike Landram, USDA Forest Service, Region 5
- Maggie McCaffrey, Institute for Environmental Conflict Resolution
- Kim Rodrigues, University of California Cooperative Extension
- Craig Thomas, Sierra Forest Legacy
- Deb Whitall, USDA Forest Service, Region 5
- Don Yasuda, USDA Forest Service, Region 5

Logistics and Registration

- Heidi O'Guinn, UC ANR Program Support Unit
- Sherry Cooper, UC ANR Program Support Unit

Sponsors

- National Park Service
- Sierra Nevada Conservancy
- UC Agriculture & Natural Resources, Cooperative Extension
- USDA Forest Service

We very much appreciate the support of these organizations in helping us the conference together.

Summary of Attendance

A total of 168 people participated in the conference. Attendees were affiliated with state, local and federal agencies, and universities and research institutions, conservation organizations, members of collaborative groups and facilitators, the forest products industry and private consultants. Attendee affiliation is listed below:

Federal Agencies 45%

- USDA Forest Service 67
- USFS Research 5
- US Fish and Wildlife Service 2
- USDI Park Service 1
- Natural Resources Conservation Service 1

- John Muir Project 1
- National Forest Foundation 1
- Pacific Rivers Council 2
- Resources Legacy Fund 1
- Sierra Club 1
- Sierra Forest Legacy 3
- The Nature Conservancy 2
- The Wilderness Society 1

State Agencies 12%

- California Air Resources Board 2
- California Department of Fish and Game 2
- California Energy Commission 2
- Cal EPA 1
- CalFire 4
- California Tahoe Conservancy 1
- California Water Quality Control Board 1
- Sierra Nevada Conservancy 5
- Tahoe Regional Planning Agency 2

Private 7%

- Forest products industry 3
- private consultant 8

Other 3%

- Professional facilitator 2
- Recreation group rep. 1
- Collaborative Group member

Local Government Representative 2%

- local fire department 1
- Resource Conservation District 1
- Board of Supervisor's rep 2
- Tribal representative 2

Research Institutions 19%

- University of California 22
- other university 4
- other research institute 6

Conservation Organizations 10%

- Ebbetts Pass Forest Watch 1
- Environment Now 1
- Foothill Conservancy 1

Conference Agenda

Wednesday, April 27, 2011

8:00 Registration

9:00 **Welcome and Logistics**—*Susie Kocher, University of California Cooperative Extension*

9:05 **Summary of Outcomes of Last Conference**—*Dave Graber, National Park Service*

What is a Fire Resilient Forested Landscape?

Moderator: Brandon Collins

9:30 **Fire Ecology Overview**—*Scott Stephens, University of California, Berkeley*

10:00 **Treatment Options, Pace and Scale**—*Malcolm North, USDA FS, Pacific Southwest Research Station*

10:30 Break

Additional Implementation Issues?

Moderator: Bill Stewart

10:45 **Biomass Utilization**—*Gareth Mayhead, UC Berkeley*

11:00 **Prescribed Fire**—*Brent Skaggs, USDA FS, Sequoia NF*

11:15 **Social Overview**—*Sarah McCaffrey, USDA FS, Northern Research Station*

11:45 **Q&A Session for the Panel**



12:15 Lunch

Wildlife in a Resilient Forested Landscape?

Moderator: Diana Craig

1:00 **Wildlife Ecology and Fire Overview**—*Wayne Spencer, Conservation Biology Institute*

Wildlife and Fire Policy Panel

1:30 *Armand Gonzales, California Dept. of Fish and Game*

1:40 *Craig Thomas, Sierra Forest Legacy*

1:50 *Don Yasuda, USDA FS Region 5*

2:00 *Q&A Session with Panel*



How Can a Fire Resilient Forested Landscape be Socially Sustainable?

Moderator: Kimberly Rodrigues



2:15 **The Cost of Protecting Homes from Wildfires in the Sierra Nevada**—*Patty Gude, Headwaters Economics*

2:45 Break



3:15 **Community Perspective**—*Jonathan Kusel, Sierra Institute for Community and Environment*

3:45 **Interactive Panel Discussion**

3:45 *Kim Carr, Sierra Nevada Conservancy*

3:50 *Farrell Cunningham, Maidu Cultural and Developmental Group*

3:55 *Pam Gude, Headwaters Economics*

4:00 *Don Hankins, California State University, Chico*

4:05 *Jonathan Kusel, Sierra Institute for Community and Environment*

4:10 *Teri Murrison, Sustainable Forest Action Coalition*

4:15 **Q&A Session with Panel**



5:30 **Evening Poster Reception**

Thursday, April 28, 2011

8:00 **Call to order/logistics: Identify the top 2-4 questions/issues from Wednesday**

How Can Diverse Groups Collaborate on Implementation of Fire Resilience Treatments?

Moderator: Maggie McCaffrey

8:15 **What are keys to successful collaboration? What works – what doesn't?**—*Vicky Sturtevant, Southern Oregon University*

8:45 **Collaboration Case Study: Four Forest Restoration Initiative of Northern Arizona**

Steve Gatewood, Greater Flagstaff Forest Partnerships

Edward Smith, The Nature Conservancy

- 9:30 **Collaboration Case Study: Dinkey Creek**
Mose Jones-Yellin, Sierra National Forest
Gina Bartlett, Sacramento State University Center for Collaborative Policy
Craig Thomas, Sierra Forest Legacy
Larry Duysen, Sierra Forest Products
- 10:15 Break
- 10:30 **Overview of Collaboration Concurrent Sessions**
Group 1: Quincy Library Group, Mike De Lasaux and Frank Stewart
Group 2: Burney/Hat Creek Community Forest, Todd Sloat and Kit Mullen
Group 3: Amador Calaveras Consensus Group, Doug Barber
Group 4: Placer County Wildfire Protection and Biomass Utilization Program,
Brett Storey
Group 5: Sustainable Forests and Communities Collaborative, Mandy Vance
and Elissa Brown
- 10:45 **Collaborative Case Study Concurrent Sessions** - participants to choose
three of five options listed below:
10:45 Collaboration Session 1
11:15 Collaboration Session 2
11:45 Collaboration Session 3
- 12:15 Lunch (assembling information for report back)

**How Do We Build on the Science to Implement Landscape Level Treatments for
Fire Resilience?**

Moderator: Kimberly Rodrigues

- 1:00 **Report back on key issues and interests from small group discussions**
- 1:45 **Panel reaction to collaborative sessions and report back**
Farrell Cunningham, Maidu Cultural and Developmental Group
Don Hankins, California State University, Chico
Jonathan Kusel, Sierra Institute for Community and Environment
Teri Murrison, Sustainable Forest Action Coalition
- 2:30 **Wrap up/next steps/evaluation**
Kim Carr, Sierra Nevada Conservancy
Mike Chapel, USDA Forest Service
- 3:00 Adjourn

Presentation Biographies

Gina Bartlett, Center for Collaborative Policy, California State University, Sacramento

815 S Street, Fl 1, Sacramento, CA, 95811, 415-255-6805, Gina@ccp.csus.edu

Gina Bartlett is a managing senior mediator with the Center for Collaborative Policy. Her public policy mediation practice is primarily concentrated in applying consensus building to natural resource issues. She conducts situation assessments, facilitates effective meetings and mediates challenging issues. Ms. Bartlett is facilitating the Sierra Cascades Dialog. With approximately 130 people attending, the intent is to hold regular conversations to enhance understanding and trust on forest management issues in the Sierra Nevada and Cascades. Following a successful mediation for the Sierra National Forest in the Dinkey Creek area, Ms. Bartlett is now providing strategic guidance to the expanded collaborative effort encompassing 135,000 acres. Ms. Bartlett received her Master's degree from the Institute for Conflict Analysis and Resolution at George Mason University in 1994 and has worked in the field since 1991. She is based in San Francisco.

Kim Carr, Sierra Nevada Conservancy

1061 Third Street, South Lake Tahoe, CA, 96150, 209-620-0553, kcarr@sierranevada.ca.gov

Kim Carr is the Sustainable Initiatives Coordinator for the Sierra Nevada Conservancy. She is leading projects across the Sierra, including the Sierra Nevada Forest and Communities Initiative. The initiative strives to foster collaboration locally and regionally to reduce wildfire risk, restore and protect watershed health, and ensure the local communities benefit from these activities. A key component is supporting locally based collaboratives that are taking action to actively manage the forests, create local jobs and improve the social wellbeing of residents. Kim has worked on environmental and sustainability issues in the Sierra Nevada for over 10 years. She holds a MA in Natural Resource Planning from the University of British Columbia and a Bachelor in Business Administration.

Larry Duysen, Sierra Forest Products

P.O. Box 10060, Terra Bella, CA, 93270-0060, 559-535-4893, lduysen@sierraforest.net

Larry Duysen is the Logging Superintendent and a Forester for Sierra Forest Products in Terra Bella, CA. He received a BS Degree in Forest Engineering from Oregon State University. He is a Registered Professional Forester (RPF). Larry has served as the President of the Sierra-Cascade Logging Conference (1994), the President of the Pacific Logging Congress (2003) and is a former member of the California Forest Products Commission.

Steve Gatewood, Four Forest Restoration Initiative, Greater Flagstaff Forests Partnership

1300 S. Milton Rd, #209, Flagstaff, AZ, 86001, 928-600-3858, wildwoodvb@earthlink.net

Steve is a native of Florida who received a BS in Forestry/Wildlife Ecology from the University of Florida in 1973. He has a 40+ year career in the natural resources field, including employment with state and local government, academic institutions, non-profit organizations, and as a

private consultant. His areas of expertise involve conservation biology, ecosystem restoration, protected area design and management, project and grant management, and non-profit organization leadership and fundraising. After working on various environmental issues in Florida, including 18 years with The Nature Conservancy, Steve moved to Tucson Arizona in 1996 to serve as the Executive Director of The Wildlands Project and then as Executive Director of the Society for Ecological Restoration. Moving to Flagstaff to become Director of the Greater Flagstaff Forests Partnership in 2003, he formed his current business in 2007, WildWood Consulting, LLC, which works in the natural resources and non-profit fields. Among several diverse project currently supported, Steve is Technical Services Program Manager the Coconino Natural Resource Conservation District and Coordinator of the San Francisco Peaks Weed Management Area, and as a GFFP Board member, represents that organization in various forest restoration programs, including serving as Co-chair of the Four Forest Restoration Initiative Steering Committee.

Armand Gonzales, California Department of Fish and Game

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agonzales@dfg.c.gov

Armand Gonzales has worked for the California Department of Fish and Game for 25 years conducting environmental review, conservation planning, and endangered species program management throughout the state. He is currently a Special Advisor working on policy issues related to renewable energy, climate change, and statewide conservation priorities. Armand is leading the team that will update the State's Wildlife Action Plan and is the Department's representative to the Desert, California, Great Basin, and North Pacific Landscape Conservation Cooperatives and the Technical Team for the National Fish, Wildlife, and Plants Climate Adaptation Strategy. Armand received his Bachelors degree in Biological Conservation from California State University, Sacramento, and his Masters degree in Natural Resources-Wildlife from Humboldt State University. Armand is the current past-President of the Western Section of the Wildlife Society and a Certified Wildlife Biologist.

David Graber, National Park Service

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Dave Graber is Chief Scientist for the Pacific West Region of the National Park Service. He is based at Sequoia & Kings Canyon National Parks in California and has responsibilities for NPS units on the West Coast and Pacific Islands. He provides consultation and analysis on conservation science and policy in the region and develops strategies to further nature conservation and science in the service of management. He has served on the endangered species recovery teams for Channel Island fox, Sierra Nevada bighorn sheep, and northern spotted owl.

Patricia Gude, Headwaters Economics

514 W. Lawrence St., Helena, MT, 59601, 406-599-7425, patty@headwaterseconomics.org

Patty specializes in research on land use, land management, and ecosystems at Headwaters Economics, an independent, nonprofit research group. She works with Geographic Information Systems and manages the development of software for exploring socioeconomic and geographic trends. Patty holds a M.S. in Ecology from Montana State University and a B.S. in Wildlife Ecology from the University of Florida.

Don Hankins, California State University, Chico

Department of Geography and Planning, Chico, CA, 95983, 530-898-4104,
dhankins@csuchico.edu

Don Hankins is an Associate Professor in the Department of Geography and Planning at California State University, Chico. His areas of expertise are pyrogeography and conservation biogeography. Don is of Miwko (Plains Miwok) descent, and is a traditional cultural practitioner. Combining his academic and cultural interests he is particularly interested in the application of indigenous land management practices as a keystone process to aid in conservation and management of resources including the built environment. He is currently engaged in fire research involving indigenous California and Aboriginal Australian communities. Don has been involved in various aspects of land management and conservation for a variety of organizations and agencies including federal and tribal governments.

Mosé Jones-Yellin, USDA Forest Service, Sierra National Forest

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Mosé Jones-Yellin is a Presidential Management Fellow (PMF) working with the USDA Forest Service on the Sierra National Forest. He is currently the Project Lead for the Dinkey Landscape Restoration Project, a collaborative effort encompassing 150,000 acres of public and private land funded in part by the Collaborative Forest Landscape Restoration Program (CFLRP). Mr. Jones-Yellin holds a Master's degree in Natural Resources and the Environment from the University of Michigan and a Bachelor's Degree in Civil Engineering from Carnegie Mellon University.

Jonathan Kusel, Sierra Institute for Community and Environment

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Jonathan Kusel, Ph.D., is a rural sociologist who founded and directs the Sierra Institute for Community and Environment. He was a member of the Clinton Administration's "Option 9" Forest Ecosystem Management Assessment Team, led the community assessment team and public participation team for the Sierra Nevada Ecosystem Project (SNEP), and recently led a national assessment of the Secure Rural School and Community Self-Determination Act, which involved evaluating the effectiveness of Resource Advisory Councils across the county. He has written or edited three books on community forestry and written numerous articles on community engagement in natural resource management. He continues to work closely with groups directly involved with improving natural resource management and community health and well-being.

Gareth Mayhead, University of California, Berkeley

1301 S 46th St, Richmond, CA, 94804, 510-665-3662, gmayhead@berkeley.edu

Gareth Mayhead is based at the University of California Berkeley and specializes in woody biomass utilization technology and marketing. He runs workshops and provides technical assistance to businesses and communities to help them develop markets for woody biomass. He helped 15 California businesses secure \$4.4m from the national competitive Woody Biomass Utilization Grant program and also works on the development and review of grant programs for the US Forest Service. He has 15 years of wide ranging experience in the global

forest products sector including research and development, economic development and community forestry.

Sarah McCaffrey, Northern Research Station, USDA Forest Service

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Sarah M. McCaffrey, Ph.D. is a Research Social Scientist for the USDA Forest Service, Northern Research Station. Her research focuses on the social aspects of fire management. This has included National Fire Plan and Joint Fire Science sponsored projects examining the characteristics of effective communication programs and the social acceptability of prescribed fire, thinning, and defensible space. More recently she has begun work on the social issues that occur during fires including alternatives to evacuation and community-agency interactions during fires. She received her PhD in Wildland

Resource Science from the University of California at Berkeley where her research examined Incline Village, Nevada homeowner views and actions in relation to defensible space and fuels management.

Teri Murrison, Sustainable Forest Action Coalition

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Teri Murrison is a member of the Sustainable Forest Action Coalition and a former Tuolumne County Supervisor. Shepherd's Crook Enterprises serves rural communities and government, working to advance balance and resolve conflicts between the interests of human and natural environments. Teri has worked extensively on water, natural resources, agriculture, and public lands issues throughout her career. A former public information and administrative services officer, watershed coordinator and facilitator for the Merced River Stakeholders, she was an appointed member on the California Natural Resource Agency's Statewide Watershed Advisory Committee, is a nationally published writer, and has a MA in Negotiation & Conflict Resolution.

Malcolm North, USFS PSW Research Station

1731 Research Park Dr, Davis, CA, 95618, 530-754-7398, mpnorth@ucdavis.edu, <http://www.plantsciences.ucdavis.edu/affiliates/north/Malcolm.html>

Malcolm North is a Research Forest Ecologist with the U.S. Forest Service Pacific Southwest Research Station, and an Affiliate Professor of Forest Ecology, Department of Plant Sciences at the University of California, Davis. He received his Master of Forest Science at Yale University and his PhD in Forest Ecology from the University of Washington. He has worked on research examining the carbon dynamics of fuels treatments and wildfire, and different management practices on forest structure, composition and function. He has also worked for USAID on developing guidelines for fostering REDD (reduced emissions from deforestation and forest degradation) projects in Southeast Asia. His lab (students and postdoc) primarily focus on forest and fire ecology of Sierra Nevada mixed-conifer forest.

Brent Skaggs, US Forest Service Sequoia NF and Giant Sequoia National Monument

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Brent Skaggs is the Forest Fire Chief for the Sequoia NF and Giant Sequoia National Monument. He is a Type 1 Prescribed Fire Manager and Burn Boss. During his career he was an Engine crewmember, Fuels Crew Superintendent, Fuels Battalion Chief, Forest Fuels Officer, Deputy Forest Fire Chief and Forest Fire Chief, all the Sequoia since 1982. Brent is a 1982 Reedley College and a 1996 Technical Fire Management graduate. One of his charges is to reduce the number of uncharacteristic severe wildfire acres by using lighting ignitions and prescribe fire applications to reduce forest flammability, in a safe and cost effective manner.

Edward Smith, The Nature Conservancy in Arizona

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Since 1996, Edward Smith has led forest habitat conservation, restoration, and more recently climate change adaptation efforts for The Nature Conservancy in Arizona, working at statewide, landscape, and project level efforts to design and prioritize conservation action. Current and recent efforts include development of regional scale ecological vegetation models that are being used to set goals for National Forest planning efforts across 11 national forests in Arizona and New Mexico. He also co-designed and is helping implement the Four Forest Restoration Initiative (4FRI) along the Mogollon Rim. Ed recently contributed to a west-wide effort to protect private working forests with development of a comprehensive strategy through the Western Forestry Leadership Coalition, helped develop a statewide assessment and strategy for forest restoration with the Arizona State Forestry Department, and led a workshop on building forest resilience in the face of climate change. He received his BA at UC San Diego in 1983, and his MS from NAU's School of Forestry in 1997.

Wayne Spencer, Conservation Biology Institute

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Dr. Spencer is a wildlife conservation biologist with the nonprofit Conservation Biology Institute. He received a BS in Wildlife Management from the University of Wisconsin, Stevens Point, an MS in Wildland Resource Science from UC Berkeley, and a Ph.D. in Ecology and Evolutionary Biology from the University of Arizona. He specializes in the pragmatic application of science to the conservation of biological diversity, and he often leads science advisory processes for large conservation planning efforts. His field studies have focused on mammal species of conservation concern, including martens, fishers, and endangered kangaroo rats and pocket mice. He has studied recovery of mammal communities following large wildfires in southern California, and recently served as Principal Investigator for an assessment of how fires and fuels management may affect the isolated population of fishers (*Martes pennanti*) in the southern Sierra Nevada.

Scott Stephens, University of California, Berkeley

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Scott is an Associate Professor of Fire Science in the ESPM Department at UC Berkeley. He is also the director of the UC Center for Fire Research and Outreach (<http://firecenter.berkeley.edu/>) and co-director of the UC Center for Forestry (<http://forestry.berkeley.edu/>). Stephens' areas of expertise focus on interactions of wildland fire and ecosystems. This includes how prehistoric fires once interacted with ecosystems, how current wildland fires are affecting ecosystems, and how future fires and management may change this interaction. He is also interested in wildland fire policy and how it can be improved

to meet the challenges of the next decades. He is on the board of directors of the Association for Fire Ecology and is working with a group to launch the California Fire Science Consortium. The consortium will work to more effectively deliver fire science information to California managers. Scott's publications are available at <http://www.cnr.berkeley.edu/stephens-lab/Articles.htm>

Victoria Sturtevant, Southern Oregon University

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Victoria Sturtevant taught sociology and environmental studies at Southern Oregon University from 1980 to 2009; currently she conducts research focused on social dimensions of forest management, particularly community involvement in social assessment, ecological monitoring, wildfire planning, and collaborative stewardship. She works with such regional groups as Rural Voices for Conservation Coalition, Southern Oregon Small Diameter Collaborative, and Applegate Partnership. She is co-editor of the book, *Forest Community Connections*, and has contributed to numerous journals and conferences.

Craig Thomas, Sierra Forest Legacy

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Craig Thomas is Executive Director of Sierra Forest Legacy, a coalition of over 80 conservation organizations established in 1996 focused primarily on Forest Service management of the eleven national forests in the Sierra Nevada. Craig holds a degree in cultural ecology-the ecological, social, economic and spiritual relationships between people and the land. Sierra Forest Legacy is currently attempting to engage the Forest Service and other stakeholders in discussions around ecological sustainability in a "triple bottom line" framework the shifts our restoration vision to one of strong sustainability and deep collaborative engagement in forest management and enhanced community stability within a restoration context.

Don Yasuda, USDA Forest Service

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Don Yasuda is currently the Regional Analyst for the Forest Service's Pacific Southwest Region and serves as team leader for the Region's Strategic Decision Support Cadre. He has worked for the last 8 years as a wildlife biologist focused on developing and implementing a regional strategic approach to planning fuels and vegetation and ecosystem restoration treatments. He worked on the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) and continues to support Forest Service planning. Prior to that, he was the District wildlife biologist on the Pacific District of the Eldorado National Forest for 15 years. He is a Certified Wildlife Biologist® with The Wildlife Society (TWS) and is a representative on the TWS governing Council. He has a strong background in fire ecology gained from field experience conducting prescribed burns and as a wildland firefighter and through assessing and supporting pre-fire fuels management and post-fire restoration planning. Don is an instructor for the wildlife portion of RX-310 - Introduction to Fire Effects and teaches wildlife and resource effects at the Wildland Fire Apprenticeship Program's Advanced Academy. He has a B.S. in Wildlife and Fisheries Biology from the University

Presentation Abstracts

Gina Bartlett, Center for Collaborative Policy, California State University, Sacramento

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A significant challenge to national forests in the Sierra Nevada is unleashing controversy associated with forest management. Management actions are essential to reducing fuel loads, providing habitat, improving public safety, reintroducing fire, and supporting vibrant ecosystems now and in the future. This session will explore an agreement that ended over a decade of controversy by applying a cross-disciplinary scientific framework to collaboratively develop a project under the Healthy Forest Restoration Act. The effort has now expanded the project area to a larger all lands restoration forestry approach and received Collaborative Forest Landscape Restoration Funding. Larry Duysen of Sierra Forest Products, Craig Thomas of Sierra Forest Legacy and Mose Jones-Yellin of the Sierra National Forest, and mediator Gina Bartlett of the Center for Collaborative Policy will represent the collaborative, examining the role science played, the structure used for the collaboration and other lessons learned.

Larry Duysen, Sierra Forest Products

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(see Gina Bartlett)

Steve Gatewood, Four Forest Restoration Initiative & Greater Flagstaff Forests Partnership

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(See Edward Smith)

Armand Gonzales, California Department of Fish and Game

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The Department is just beginning the process to update the California Wildlife Action Plan. We are beginning the Action Plan update early in order to integrate new information from several recent developments including the California Climate Change Adaptation Strategy, the California Essential Habitat Connectivity Project, the Marine-life Protection Act, and the Areas of Conservation Emphasis model that identifies areas of high conservation value in California. There are also several large-scale planning efforts underway including the Desert Renewable Energy Conservation Plan and the Bay-Delta Conservation Plan that will be developing new analysis, priorities, and recommendations that will affect vast areas of the state and influence policy on many important natural resources. Synthesizing these and other state-wide planning efforts such as Calfire's Forest and Rangeland Assessment, and DWR's State Water Plan, as

well as the many Federal initiatives underway will require monumental levels of coordination with partners, stakeholders, and the public.

David Graber, National Park Service

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In the first conference, we reviewed the accepted scientific thinking on fire behavior and ecology. We discussed what good forest outcomes look like. Pre-fire and post-fire treatments were presented. Wildlife was integrated into the fire discussion. We confirmed that it's impossible to move forward comparing values if we don't first agree on facts.

Patricia Gude, Headwaters Economics

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This paper estimates the relationship between housing and fire suppression costs after controlling for the effects of potential confounding variables, such as fire size and terrain. The research was conducted to provide policy makers and land managers with information about the extent to which housing affects fire suppression costs. Our analysis uses daily data from 27 wildfires that burned during 2006, 2007, 2008, and 2009 in the Sierra Nevada region of California. Using a mixed models framework, we selected explanatory variables from a broad initial list of potential explanations for wildfire suppression cost. We estimate that, on average, after controlling for confounding variables, a 1% increase in homes within 6 miles of a wildfire is associated with a 0.1% increase in daily firefighting costs. Among the studied fires, we estimate that if the count of homes had been double the observed number, the per fire costs would have increased by \$0.2 to \$9.6 million. The percent of firefighting costs related to housing varied among sample fires from 0% to 46%, and averaged 32%. These results confirm that there is a measurable effect of homes on firefighting costs.

Mosé Jones-Yellin, USDA Forest Service, Sierra National Forest

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(See Gina Bartlett)

Jonathan Kusel, Sierra Institute for Community and Environment

P. O. Box 11, Taylorsville, CA, 95983, 530-284-1022, jkusel@SierraInstitute.us

The Great Recession exacerbated socioeconomic decline in many rural Sierra communities and counties. This presentation focuses on the socioeconomic conditions in southeastern Shasta County, Plumas County, and Mariposa County, all of which were part of in-depth case studies. Changes in unemployment, poverty, migration patterns, and other socioeconomic conditions over the last ten years, and before and after the recession are discussed. Also highlighted are the results of a northern Sierra community survey completed in April of 2011 in which residents shared what they value, what they're concerned about, and how the recession affected them.

Gareth Mayhead, University of California, Berkeley

1301 S 46th St, Richmond, CA, 94804, 510-665-3662, gmayhead@berkeley.edu

This presentation will look at the fundamentals of woody biomass utilization in the context of the forests of the Sierra Nevada. From a technical perspective there are many potential products and markets for woody biomass. The form of the material and its location is important in determining utilization options. The cost of sourcing woody biomass from forests is comparatively expensive which may limit its utilization potential. We will look at utilization options that make sense in California in terms of feedstock specification, technology, cost and scale.

Sarah McCaffrey, Northern Research Station, USDA Forest Service

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As more people live in high fire hazard areas, the active involvement of the public will be central to many efforts to minimize fire risk and improve forest health. One barrier to effectively engaging the public may be that many of the accepted descriptions related to the public and wildfire are based primarily on conventional wisdoms that may or may not hold. Developing an accurate understanding of public views of fire and forest management will be important in designing policy and outreach that effectively engages the public and ensures that limited resources are most effectively targeted at the issues that are of actual rather than perceived public concern. This presentation will present findings from recent research on social issues of fire management with particular emphasis on the accuracy of various accepted truths about the public and fire management and variables that actually influence approval of different fire management practices.

Malcolm North, USFS PSW Research Station

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Treatment Options, Pace and Scale In the Sierra Nevada ponderosa pine and mixed-conifer forests depend on fire for their ecological functions and resilience. Yet it is clear that the public, air resources board, and the Forest Service's infrastructure cannot support what, by one estimate, would be the 450,000 forested ha that annually would need to burn to restore historic fire regimes. This talk explores approaches that may help increase the treatment options, pace, and scale of implementation. Several projects, including some that have been extensively litigated, are now moving forward using ecosystem management concepts that emphasize balancing forest restoration, provision of wildlife habitat, and fuels reduction. Balancing these objectives, however, is probably more effective at a much larger scale, 50,000-100,000 ac, than the 3,000-10,000 ac sizes of most projects. Scaling up would require work force concentration, collaborative planning forums, and a serious commitment to monitoring and transparent course correction?. The potential benefits are a more stable, long-term supply of biomass, coupling treatments so that high-priority restoration and wildlife areas are supported by areas with economic return, and large-scale maintenance using prescribed fire. Creation and maintenance

of key defense zones will need to remain a priority but increasing wildland fire use may be the only practical "treatment" option in more remote locations. When treatment plus fire losses are subtracted from annual growth, on average Sierra Nevada forests add another 1.35 million metric tons of biomass each year. All options need to be explored in an effort to fundamentally change the roadblocks to large-scale, proactive forest management.

Brent Skaggs, US Forest Service Sequoia NF and Giant Sequoia National Monument

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Challenges and Opportunities to implement landscape level treatments using not just Prescribed Fire, but All uses of fire as a tool. Discussion of the most significant implementation issues associated with the use of fire as a tool and what is currently being done to facilitate increased use of fire. What responsibilities do us as managers have to study and monitor fire applications and use?

Edward Smith, The Nature Conservancy in Arizona

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The Four Forest Restoration Initiative (4FRI) is a collaborative group drawing from 35 private and public entities working together to accelerate large-scale ecological restoration on 2.4 million acres of ponderosa pine forests across the Mogollon Rim in northern Arizona. This work is based on sound science and is designed to: support resilient, diverse stands of trees that sustain native biodiversity; safely re-establish natural fire regimes; reduce fire threats to communities; create sustainable forest industries that strengthen local economies while conserving natural resources and aesthetic values; and engage the public through increased public outreach, education and support for this initiative. Lessons learned by two regional (100,000+ acre) community-based collaborative groups over the past 15 years - the Greater Flagstaff Forests Partnership (GFFP) in northern Arizona and the Natural Resources Working Group (NRWG) of the White Mountains in east-central Arizona supported efforts to pursue landscape-scale (1,000,000+ acre) forest restoration and to re-establishment of natural fire regimes and processes in a changing climate. Although success of these efforts emanates from good leadership, strong willingness to collaborate, broad support from local communities and advocacy groups, and careful consideration of ecological, social, and economic science in project design, implementation, and monitoring, the economic drivers from small-diameter wood utilization continue to be a challenge to scaling-up restoration activities and offsetting costs. We provide examples of some of the collaborative processes and products developed, including governance, monitoring and evaluation, application of science in decision-making and adaptive management.

Wayne Spencer, Conservation Biology Institute

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Wildlife Ecology and Fire Overview Managing for fire-resilient forests that also sustain healthy wildlife populations is an uncertain undertaking, because fires, fuels treatments, forest conditions, and wildlife populations interact over multiple spatial and temporal scales. For wildlife associated with forest conditions targeted for fuel reductions, treatments may reduce habitat value locally and disturb or displace some individuals in the short term; but if treatments reduce the risk of canopy-replacing wildfires, they may indirectly benefit the regional population in the long term. I illustrate an approach for assessing the likely net effects of such competing interactions on wildlife populations, using fishers (*Martes pennanti*) in the Sierra Nevada as an example. The approach couples a fisher habitat quality model with a fisher population model and a stochastic vegetation change model. The vegetation model simulates how forest conditions change due to management actions, successional processes, fires, and other disturbances. Vegetation changes affect the amount, quality, and configuration of habitat, which in turn affect responses of the fisher population. By altering assumptions about fire regimes, fuels treatments, and other factors, simulation experiments can be run to compare alternative strategies for managing vegetation to increase forest resiliency while sustaining fisher populations.

Scott Stephens, University of California, Berkeley

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Fire regimes in California forests were once very diverse. From the coastal redwood and Douglas-fir forests to those in the alpine environments, fire has shaped our forests in critical ways. Most ignitions in coastal redwood forests were from Native Americans whereas lightning ignitions increased as we move inland. It is very difficult to separate Native American ignitions from lightning ignitions because the peak seasonality of both sources overlap. Fire exclusion has changed many of California forests, particularly those that once burned frequently with low-moderate intensity fire regimes. Ponderosa pine, mixed conifer, dry Douglas-fir, and Jeffrey pine are probably the forest types that have changed the most from fire exclusion and past harvesting. Many managers are concerned that the amount and spatial scale of high severity fire is increasing in these forest types and this is forecasted to increase with changing climates. Research has shown that some patchy high severity fire was a part of these fire regimes but it was probably a small component. Increasing resiliency is a common management goal today with the idea that forests that can maintain the ability to regenerate, evolve, and provide ecosystem services to current and future conditions are desirable. I will review some ideas that can assist in this goal and also discuss some areas in California where forests have high resiliency.

Victoria Sturtevant, Southern Oregon University

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The National Fire Plan of 2000 and the Healthy Forest Restoration Act (HFRA) of 2003 emphasize collaboration as a means to achieve hazardous fuels reduction and wildfire mitigation and management goals. HFRA specifies that Community Wildfire Protection Plans (CWPPs) would be developed collaboratively; assuming communities could adapt appropriate

processes for their own situations. This presentation outlines key findings from a study involving 13 case studies of CWPP processes in eight states, discussing how various goals and strategies are influenced by social and environmental contexts. Factors important to success include planning at the appropriate scale, accessing local and external resources and networks, drawing on leadership and social capital, considering multiple formulations of the wildfire problem, and aligning strategies for mitigation across ownership boundaries.

Craig Thomas, Sierra Forest Legacy

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Stakeholders engaged in forest restoration on public lands are struggling today to move beyond the framework of past resource management models to one of strong sustainability (meeting human needs without compromising the health of ecosystems). Development of strong resource sustainability is limited by many factors that tend to isolate people from meaningful engagement in solution-based collaboration. Wildlife conservation, fuels reduction, appropriate levels of ecological fire and forest health objectives can be achieved in an ecologically honest manner that is not mutually exclusive. Moving multiple resource objectives forward in landscape and project planning is possible if we can establish an “all-gain,” science-based framework for demonstrating the short and long term benefits from increasing the pace and scale of restoration. The past win-lose social structure risks the unraveling of the Sierra Nevada at a time when climate change uncertainty and threats to biodiversity are at an all time high. PSW-GTR-220 and science-based collaboration projects such as those fostered under provisions of the Forest Landscape Restoration Act hold the best promise for reduced conflict and increased landscape restoration. These “tools” function both as catalysts for re-engagement within a broken social structure and for science-based management.

Don Yasuda, USDA Forest Service

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Finding balance between managing the risk of undesired effects from wildfire and the need to provide sustainable habitats for wildlife is at the heart of the management dilemma for the Forest Service. Region 5 of the Forest Service has embraced an All Lands Approach and issued a strong declaration of the Leadership Intent for Ecological Restoration. Further, Region 5 is putting words to action by actively engaging with many statewide and regional assessments (e.g., CA Forests and Rangeland Assessment) and plans (e.g., CA Wildlife Action Plan and CA Water Plan) so that the actions on national forest lands are truly integrated into overarching wildlife and fire strategies. This is a departure from most previous planning efforts where the Forest Service largely conducted independent assessments focused primarily on national forest system lands. This change presents a challenge to the agency, our partners, and the public in practicing effective communication to help us move beyond our history of past interactions to being able to foster a collaborative, adaptive management environment. I believe that central to effective collaboration is tackling the “elephant in the room” — trusting each other to truly embrace an adaptive learning approach. I believe a lack of trust has led to the situation where managing for wildlife and managing for fuels and fire is seen as being in opposition. I’m hopeful

though that recent dialog has indicated a willingness to work together to learn from our past and build a new future that will allow us to identify the common issues, objectively evaluate the tradeoffs from choices, and make strategic decisions that move us towards a resilient future for wildlife and forests.

Collaborative Concurrent Session Notes

Group 1: Quincy Library Group

Abstract: The Quincy Library Group (QLG) is a local collaborative effort that started in 1993 to implement a short-term strategy of sustainable all-aged forest management activities on portions of the Lassen, Plumas and Tahoe National Forests that may allow local communities to survive while long-term Land Management Plans are being developed. In order to increase the annual pace and scale of hazardous fuel reduction and forest restoration activities on the ground, the QLG worked with Congress and the administration in the development of the Herger-Feinstein Quincy Library Group Forest Recovery Act of 1997 that passed the House with a vote of 429-1 and a unanimous vote in the Senate. The Pilot Project has been extended twice and has only been able to accomplish 75% of the acres to be treated under the Act because of a continual onslaught of appeals and lawsuits. The Defensible Fuel Profile Zone network stretches across portions of eight counties and ties into and supports numerous hazardous fuel reduction projects on adjoining private property.

Presenters:

Frank Stewart, Quincy Library Group, 530-345-3876, rpf235@digitalpath.net

Bio: Frank is a licensed forester in California with 43 years experience in forestry and forest management in Northeastern California. In twelfth year as County QLG Forester for Shasta, Lassen, Plumas, Tehama and Sierra Counties and representing their social, economic, environmental and fire protection interests in the Herger-Feinstein Quincy Library Group Forest Recovery Act - Pilot Project on the Lassen, Plumas and Sierraville Ranger District of the Tahoe National Forest.

Michael De Lasaux, University of California, Davis, 208 Fairground Road, Quincy, CA, 95971, 530-927-9993, mjdelasaux@ucdavis.edu

Bio: Mike has been active with community fuel reduction projects conducted by Fire Safe Councils in Plumas and Sierra Counties including landowner education and implementation monitoring. He has also been involved with education related to implementation of the Herger Feinstein Quincy Library Group Forest Recovery Act.

Questions asked of the Collaborative Presenters:

Question: What exactly did the congressional act creating the QLG do?

Answer: It should be clarified that Congress did not create the Quincy Library Group. Congress created the Herger-Feinstein Quincy Library Group Forest Recovery Act (HFQLG) which directed the actions of the Forest Service. It stated that they would do resource management activities that would include single tree selection, Defensible Fuel Profiles Zones (DFPZ) and group selection of trees under a certain size and watershed restoration; all by the most cost effective means while staying out of owl protected activity centers (PAC). It also stated that they would develop an Environmental Impact Statement (EIS) within a year of passage and have an independent scientific review when the pilot project ended. The HFQLG functions under

the current standards and guidelines of the Sierra Nevada Forest Plan Amendment 2004. They have been waiting for over a year for the 9th Circuit Court's ruling on the 2004 Framework.

Question: You call this a good collaborative plan; yet say it has been stalled by excessive litigation. Why? It would seem if it was a good collaborative plan there would be less litigation.

Answer. The litigation comes from outside environmental groups, not the local ones involved. One of the problems with the group process is that votes are taken and then we move on; and some who vote no then choose the litigation option to get attention to their issues overruled by the vote. There have been 12 lawsuits and over 100 appeals. Tree diameter limits, group selection of trees and canopy cover percentages are the most common issues of concern.

Question: Is there more conflict with cross ownership projects when public and private land is involved?

Answer. The QLG elected to focus only on publicly owned national forests. Private projects that have a nexus to public projects are implemented independently often well in advance of adjacent projects on public land. .

Question: How do you report areas treated in acres? How do you avoid double counting areas with multiple types of treatment?

Answer. The Forest Service does this and they have a way to avoid double counts.

Question: Have you treated riparian areas?

Answer. Largely no, although there has been some meadow restoration. The HFQLG Act specified the Scientific Advisory Team (Northwest Forest Plan) riparian guidelines that provides for wide treatment buffers. There is a provision in the SAT guidelines that provides for work in the riparian areas, but it requires an additional level of environmental review. Because there is so much forested land outside the riparian areas requiring treatment it has been a strategy to forego riparian work because it is more sensitive and would likely burden the NEPA process and result in fewer acres treated because of additional costs. There is concern that untreated riparian corridors will "wick" a fire through treated areas. More recently the Forest Service has been treating the ephemeral riparian areas generally using hand treatments instead of mechanical.

Question: Explain you group selection design?

Answer. Group selection has a two acre limit. They are small and designed to let light in. It is gauged by the height of neighboring trees and can only be 0.5% of the landscape, about 9000 acres.

Question: What have you done with profits from products that have come out of the forest? Has any of it gone back into the project?

Answer. Yes and no. Some projects that are implemented with a Stewardship Contract may have resulted in proceeds from products being used to do other work in the area.

Many projects are implemented with Service Contracts which require appropriated funds. Those projects that have been implemented with timber sale contracts may have resulted in funds back to the federal treasury though some funds are retained for Knutsen-Vandeburg funded actions such as tree planting.

Question: What is the status of the Quincy mill?

Answer: The SPI small log mill closed two years ago. It reopened in May of 2010. When it reopened it ran two shifts while the large log mill that is co-located was reduced to one shift. Many of the biomass mills in the area are closed. In one case, the Loyalton facility has been closed more often than not in the past two years. They have had to import municipal wood waste from the Bay Area and the central valley because biomass from surrounding forests has not been available. It should also be pointed out that a newly retooled small log mill closed when small sawlogs could not be harvested because of supply issues associated with appeals and litigation.

Question: If treatments are designed to be effective for ten to thirty years, then how much material can we expect to have come off these areas upon retreatment?

Answer: There may be some sustainable harvesting in the future to help maintain infrastructure. Other sites may be able to be maintained by prescribed fire. Maintenance treatments require more time but may provide work for local contractors.

Question: Can you describe the type of monitoring that has been done?

Answer: QLG received \$500,000 for comprehensive monitoring activities as part of the Forest Health Pilot project in 1995. Jo Ann Fites lead those efforts at that time. More recently monitoring has been conducted by the Herger-Feinstein QLG (HFQLG) Pilot Project Monitoring Team. In addition to this the Pacific Southwest Research Station has been conducting the Plumas-Lassen Administrative Study (PLAS) that includes studies that monitor small mammals, terrestrial birds, California spotted owls, vegetation and fire and fuels. In addition there are studies on how the QLG treatments have affected over 20 fires. The reports associated with these efforts can be located at: <http://www.fs.fed.us/r5/hfqlg/> and http://www.fs.fed.us/psw/programs/snrc/forest_health/plumas_lassen_study.shtml

Question: What do you feel are your chances of getting funded beyond 2012?

Answer: The local Forest Service values the work and is suggesting that they want the HFQLG to continue, but beyond that, we don't know.

Question: Where can we find your publications on line?

Answer: Under the Plumas National Forest or Herger Feinstein Quincy Library Group (HFQLG) you will find links to Collin Dillingham's work (<http://www.fs.fed.us/r5/hfqlg/>). The Sierra Nevada Forest Research Center/ Plumas Lassen Administrative Study/ Pacific Southwest Research Station's website (http://www.fs.fed.us/psw/programs/snrc/forest_health/plumas_lassen_study.shtml) will also provide information.

Group 2: Burney/Hat Creek Community Forest, Todd Sloat and Kit Mullen

Abstract: The Burney-Hat Creek Community Forest and Watershed Group: A Collaborative Overview. Discussion will include:

- (1) General orientation of where project is located and land ownership.
- (2) Idea formulation. The project was initiated by individuals serving on the Shasta RAC. The Resource Conservation District (RCD) applied for a Shasta County Resource Advisory Committee (RAC) grant which funded the two year effort.
- (3) Stakeholder analysis and socio-economic study and assessment with report findings that led to recommendations.
- (4) Based on stakeholder analysis, a tentative list of potential representatives for a collaborative group was developed. Group composition, common interests, willingness to participate, and diversity.
- (5) Subgroup formulation consists of landowners who are the decision makers on private timberland and other large ownerships.
- (6) Keys to what makes this work: a) FS demonstrated success and willingness to receive input; b) Not FS driven; c) RAC and others have a legacy vision; d) Expectations of success.

Presenters:

Kit Mullen, Lassen National Forest, Hat Creek Ranger District, P.O. Box 220, Fall River Mills, CA, 96028, 530-336-3310, kmullen@fs.fed.us

Bio: Kit Mullen is the Hat Creek District Ranger on the Lassen National Forest. She holds a Bachelor of Science degree in Wildlife Biology from Colorado State

University. She worked six seasons as a Wildlife Biologist followed by six years as an Environmental Specialist at the 13.2 million acre Wrangell-St. Elias National Park and Preserve, Alaska. From 1992 to 1995 she worked at the National Park Service, Denver Service Center as the Senior Compliance Specialist guiding large planning and NEPA projects. In 1995, Kit went to Grand Teton National Park, Wyoming as the Management Assistant, a special assistant to the park superintendent for external, political and partnership issues. From 1998 to 2006 she was the Superintendent of Timpanogos Cave National Monument, Utah. Kit has been the Hat Creek District Ranger since December 2006.



Todd Sloat, Fall River Resource Conservation District, P.O. Box 83, McArthur, CA, 96056, 530-336-5456, tsloat@citlink.net

Bio: Todd Sloat is an independent contractor who specializes in project coordination, development, and habitat restoration of wetland ecosystems. He currently conducts most of his work within northeastern California where he develops restoration projects on private and public land working through the Fall River and Pit Resource Conservation Districts. He has extensive knowledge of biological resources throughout California and has managed several projects ranging from small private land restoration to region-wide biological inventories. He currently co-coordinates a project through the Fall River RCD to integrate sustainable resource management using the community forest model in the Burney and Hat Creek subwatersheds.

Questions asked of the Collaborative Presenters:

Question: What spurred development of the collaborative?

Answer: In the Burney/Hat Creek community, there is a high need for forest health improvement activities, available infrastructure (3 cogeneration facilities and 2 sawmills), and a skilled labor force. To enact an all-lands approach, the Forest Service needed more information on how private timberland owners managed their land, including their objectives and other considerations (spotted owl, etc.) There had also been difficulty in gathering input from the broader community. The Forest Service was looking for a way to bring the community to the table.

Question: How was the collaborative funded?

Answer: The Shasta RAC initiated the collaborative by requesting (and funding) a grant application from the Fall River Resource Conservation District (RCD). The RAC hoped to develop a collaborative that would outlast the RAC itself. Not having the expertise to conduct socioeconomic analyses, the RCD contracted with the Sierra Institute for Community and the Environment to help establish the collaborative by identifying stakeholders and assessing their interests, diversity, and willingness to contribute.

Question: Could you elaborate on Sierra Institute's baseline research? Did you ask for a time commitment from interviewees?

Answer: The research was needed to understand community needs. Having this outside party to co-facilitate has been useful. Jonathan's social science background and the socioeconomic data have been extremely useful. We did not ask for a particular time commitment, but the Sierra Institute asked "would you be willing to attend meetings, etc.?" during the stakeholder interview process.

Question: Who are the members of the collaborative?

Answer: From the larger stakeholder group, a subgroup of major landowners was established (SPI, PGE, Fruit Growers Supply, Beaty and Associates). The commercial timberland owners have acted as advisors for PGE, particularly in navigating the Timber Harvest Plan (THP) process. They have also been cooperative with Forest Service

goals and treatment activities, for example, by completing thinning on lands bordering Forest Service fuels treatments.

Question: How does the collaborative function?

Answer: Once formed, the group quickly developed proposals for the RCD. The initial goal was to identify projects that could be implemented quickly in order to build trust and confidence in the collaborative process. Projects underway include meadow restoration on private lands, Hat Creek restoration, and fuel treatments in a forested area that includes an old plantation. These efforts have been successful in part because they are community-driven.

Question: For projects on private land, is the RAC contributing funds? Were the private timberland owners willing to play at their own expense?

Answer: Yes RAC funds are being used to supplement private landowner funds.

Question: What has been the role of environmental groups (other than Sierra Forest Legacy) in the collaborative project?

Answer: The John Muir Project and Siskiyou Alliance have commented on fire salvage. We keep them informed. You don't just invite those who agree with you in to the collaborative process.

Question: What types of projects were proposed?

Answer: We are conducting an open meadow project (multiple landowners agreed to file a joint THP). A bedload sedimentation issue in Hat Creek is being addressed through a restoration project. Burney Gardens is a treatment of old plantation/forested area (fuel treatments). Adjacent timber owners agreed to thin their own properties near this project area.

Question: For the meadow project, are private land conflicts addressed by the group?

Answer: Yes, they are addressed within the landowner subgroup. PG&E was having trouble getting their THP through Calfire – other groups coached PG&E on the process and their staff also went out with Calfire in the field. Timber landowners have also agreed to thin their stands near USFS projects to increase the total impact.

Question: To Kit: How did you work with your internal staff to develop a united commitment?

Answer: Funding is going away. Most staff sees the benefit in landscape-scale treatments and finding a way to help fund them. All are interested in additional information to help with their individual analyses. Other benefits recognized by staff include trust- building.

Question: What will happen if RAC funding dwindles – will they continue to be involved? If not, could a similar model be continued in the future?

Answer: The RAC's function is to distribute grant funds. If funds disappear, the RCD has funding too.

Question: If you don't get funding from CLFRA, how would you proceed?

Answer: The CFLRP Proposal for the Burney-Hat Creek Basins Project will provide a landscape scale plan for ecological restoration work, regardless of funding source. We will look at all potential funding.

Question: How does the Hat Creek fire area figure into your projects?

Answer: Other than a demonstration of the need to improve forest conditions, very little. The Hat Creek Complex fires are already being attended to through salvage, but are mostly outside of the areas we would treat through CFLRP.

Question: Are decadent manzanita areas the result of past logging?

Answer: No, they are the result of past wildfires.

Question: What is the background of the Lava reef area? Was there once logging in the area? **Answer:** No, Lava Reef is very difficult to access.

Question: Did you develop any targets for prescribed fire on the landscape?

Answer: Targets are built into the project planning. Burning is difficult on private land because of liability issues.

Question: Do you put out fires escaped from private lands?

Answer: Yes

Question: What types of monitoring were proposed?

Answer: Under the CFLRP Proposal we are looking at a minimum of 8 percent of the funding going to monitoring for vegetation, wildlife, hydrology, and socioeconomics.

Question: How "shovel-ready" are the projects proposed in the EIS...?

Answer: Projects from the North 49 Forest Health Recovery Project EIS are laid out and being prepared for sale. Of the seven sales in the project, two have been sold, the third will sell in 2011, and the other four will be sold by 2013 or 2014.

Group 3: Amador Calaveras Consensus Group

Abstract: The Amador Calaveras Consensus Group was formed to respond to the shared concerns about unhealthy forest conditions and equally unhealthy economies and communities in Calaveras County, California. The nearly total loss of forest-related employment has left some rural communities with unemployment rates over 30%. Most foothill residents have become aware of the current unhealthy and unsafe conditions in our forests. But, we've continued to fight about the where and the how of addressing the issue for over 20 years. The group, later expanded to Amador County, seeks answers to those questions. Members include elected officials, land managers, local contractors, environmental organization representatives, employment agencies, and interested citizens. We emphasize a triple bottom line approach, seeking solutions that will improve the health of our forests, local economies, and communities. More information is available at <http://acconsensus.wordpress.com>.



Presenter:

Doug Barber, Member,
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Bio: Doug Barber retired from the USDA Forest Service in August, 2010. His USFS career spanned 38 years and included assignments in California, Alaska, Utah, Arizona, and New Mexico. His last assignment, as District Ranger of the Amador Ranger District, Eldorado National Forest, brought him into contact with the Calaveras Consensus Group. Doug encouraged the expansion of the group to include Amador County so that the group's efforts could encompass the entire Mokelumne River watershed, which forms the boundary between the two counties. He lives in Sutter Creek, Amador County, California, and continues his active membership in the Amador Calaveras Consensus Group (ACCG) in retirement.

Questions asked of the Collaborative Presenters:

Question: What was the catalyst for the formation of ACCG?

Answer: The catalysts were a charismatic leader (Supervisor Steve Wilensky), the formation of CHIPS (Calaveras Healthy Impact Product Solutions), and the need to act to remedy dire socioeconomic conditions. Calaveras County, like other rural counties, has high unemployment, a polarized public, mixed ownership of forested lands, and some history of severe wildfires with areas slow to recover and dense vegetation in other areas. Supervisor Wilensky brought together representatives from agencies, environmental groups and the wood products industry to find common ground on economic, social and environmental goals. The CHIPS program, which provides training and employment in forest management-related work, and was also started by Supervisor Wilensky, provides manpower for a variety of fuel reduction and fire-safe projects, and has developed a niche in culturally appropriate restoration of archeological sites. The Sierra Nevada Conservancy played a significant role by helping to convene the group and providing administrative support. The retooling of the Buena Vista Power Plant into a proposed biomass facility was a huge catalyst in the decision to expand the group's membership to include Amador County interests. The CHIPS program, which provides training and employment in forest management-related work, and was also started by Supervisor Wilensky, provides manpower for a variety of fuel reduction and fire-safe projects, and has developed a niche in culturally appropriate restoration of archeological sites. The Sierra Nevada Conservancy played a significant role by helping to convene the group and providing administrative support. The retooling of the Buena Vista Power Plant into a proposed biomass facility was a huge catalyst in the decision to expand the group's membership to include Amador County interests.

Question: Who are the members of the collaborative?

Answer: Increased interest in this group led to its expansion to include Amador County. Now participants range from the USFS, fire safe councils, Bureau of Land Management (BLM), the Nature Conservancy (TNC), Foothill Conservancy, Ebbetts Forest Watch and Native American groups. Representatives from local construction companies, resource conservation and development districts, and Buena Vista Power also participate.

Question: How does the collaborative function?

Answer: Meetings are open to any interested party. The ACCG structure includes a governing group, which all participants are part of, plus subgroups to handle administration, finance, plans and operations/project monitoring. If a participant wishes to vote on a matter before ACCG, they must sign the MOU. A National Forest Foundation grant was obtained to hire a consultant to prepare the MOU and to aid in the organization of the group.

Question: What is the decision making process for contentious issues?

Answer: All ACCG members that have signed the MOU must agree for a final decision. If someone does not agree, they must present an alternative proposal that will then be considered by the whole group. If agreement cannot be reached, no action is taken.

Question: What has the collaborative accomplished?

Answer: Outcomes from ACCG actions include an increase in working relationships between previously opposed groups; the implementation of the Sierra Nevada Conservancy Community Initiative; the Cornerstone project which is a \$16.6 million all lands restoration project that has been given approval by the regional forester but has been postponed due to budget constraints at the national level; a focus on areas of agreement such as plantation thinning; and ACCG has been able to provide support/endorsement for other projects, such as helping to compile funding sources for smaller projects. A contractor cooperative has been formed which should allow them to bid on federal contracts.

Question: Have any on the ground treatment projects been implemented?

Answer: ACCG has not done any treatment projects to date, but it is not the goal of ACCG to do the actual project. ACCG works with BLM, the USFS and others to provide the support for projects, either through CHIPS or other means. An example would be the View 88 project which is a USFS project and is out for comment – ACCG agreed to include this project in its CFLRA proposal, subject to NEPA review. ACCG helped obtain the needed funding for BLM to complete a fuels reduction project along Highway 26 in Calaveras County.

Question: Does ACCG look for areas to treat or present ideas on what and how to treat to the USFS?

Answer: ACCG member agencies, including the USFS, BLM, and CALFIRE, help identify potential projects and provide some expertise. ACCG works with the agencies to formulate actions. ACCG is not opposed to helping private landowners look for potential treatment areas.

Question: Had ACCG been able to attract any interest from new businesses or support from existing ones?

Answer: The Buena Vista plant is a member of ACCG. Local contractors from the two county areas have formed a cooperative to bid on projects once they begin. ACCG is also looking into a portable pellet plant and/or an animal bedding manufacturer. There is a hot house tomato grower that supplies tomatoes to the Sacramento area that heats his greenhouses using biomass and is also interested in manufacturing pellets.

Question: Is ACCG exploring stewardship agreements and /or ecosystem services?

Answer: Yes, both are being looked at. The Mokelumne River supplies the East Bay Municipal Utility District with most of its water so the potential to add on revenue from that is there. Stewardship contracts are great if there is money. If a project goal can be agreed upon by ACCG, then we can pursue funding. ACCG members are participating in an ecosystem services project led by the Sierra Nevada Conservancy, Environmental Defense, and Sustainable Conservation that includes the upper and lower Mokelumne River watershed.

Question: Is prescribed fire a potential goal for ACCG supported projects?

Answer: Yes, prescribed fire will be a significant tool in the implementation of the Cornerstone Project if CFLRA funds are received. It is always considered as a tool in USFS and BLM land management proposals anyway, but the Cornerstone Project would significantly increase acreage treated. Environmental Group members of ACCG are urging the agencies to use prescribed fire to the extent possible.

Group 4: Placer County Wildfire Protection and Biomass Utilization Program

Abstract: In 2007 Placer County recognized that a more formal program to work with government agencies, private business and the public would be necessary to bring balance to the increasing issues of wildfire protection, forest health, air pollution, biomass waste removal and infrastructure to keep pace. A strategic plan was developed, programs were put in place and projects were planned to understand and address each of the elements of balance. Now several years later, Placer County has a working set of programs with numerous partners, several on-the-ground projects that are contributing to the several issues of sustained balance. Our collaborative and cost sharing willingness to work with each other has allowed us to receive numerous grants, better protect ourselves from catastrophic forest fires, create a better fate for forest biomass waste and lower air pollution and green house gas levels in our region. Recently we have been awarded a 2010 US Environmental Protection Agency Clean Air Award as a result of our efforts regarding Forest Resource Sustainability and addressing utilization of biomass for renewable energy.



Presenter:

Brett Storey, Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 140, Auburn, CA, 95603, 530-745-3011, bstorey@placer.ca.gov

Bio: Brett Storey is currently the Biomass Program Manager for Placer County working for the Planning Services Division. His responsibilities include directing the plans and program development for all wildfire protection and biomass utilization activities for the County and authored the Strategic Plan for those activities. He is the Project Director for the Department Of Energy \$3 million grant program “Placer County Biomass Utilization Project” currently underway performing a series of studies for a biomass to energy facility in the Lake Tahoe Region. He is also working with the Placer County Air Pollution Control District

to formulate a market-based carbon market. The County’s biomass work can be viewed at www.placer.ca.gov/Departments/CommunityDevelopment/Planning/Biomass.aspx

Questions asked of the Collaborative Presenters:

Question: What spurred development of the collaborative?

Answer: Our goal is to remove forest biomass so it does not have to be burned on site, but can be hauled to a facility to create energy. That will reduce air emissions, and create energy and jobs.

Question: Who are the members of the collaborative?

Answer: There are a variety of agencies we work with including Placer County Air Pollution Control District, USFS, CalFire, US Dept of Energy, Placer County Water Agency, UC Davis. I am a senior management analyst currently working for the planning department but have been with Placer County for five years.

Question: How does the collaborative function?

Answer: We have developed agreements and MOU's. We signed a Master Stewardship Agreement (MSA) with the Lake Tahoe Basin Management Unit in April 2011. It has multiple projects defined in it based on the ten year multi agency Lake Tahoe Basin fuels reduction strategy. We also developed agreements with CA State Parks, the CA Tahoe Conservancy, and the North Tahoe Fire Protection District in 2010/11. We have a proposed MSA with the Tahoe National Forest to be signed in 2012.

A stewardship agreement is not the same as a stewardship contract. It doesn't bind two parties for a definite length of term. The agreement allows the USFS to engage at a broad level. Different agreements can be formed for each project. The longevity of the agreement is indefinite because it's not a contract. We are using the money that we will need to use to pull out the biomass for funding this agreement.

Question: How many tons of biomass will be needed to keep the proposed biomass facility in Lake Tahoe operation running?

Answer: That depends on the technology that will end up being used to build the plant. It should be between 17,000 to 20,000 bone-dry tons annually.

Question: What types of projects have been carried out?

Answer: We have been collaborating on chipping programs and community biomass collection. We have put out big trash bins for people to dump their green waste. This is expensive but a good start. We have conducted regional biomass collection. We are getting other agencies and businesses to dump at a designated location. This is a culture and education change, in which people come and drop off instead of open burning. So in the end, this is cost-saving.

Question: What has been your success so far?

Answer: We have been recognized by the US EPA as an outstanding & innovative effort to achieve cleaner air. We won the 2010 Clean Air Excellence Award. Because of the project, 15,000 tons of biomass waste were removed and not burned, eliminating 90 tons of PM, 23 tons NO, 70 tons VOC's, 900 tons CO and 6000 tons of GHG's. And we have reduced the fire danger.

Question: What funding are you using to make this project work? What is the run down for the costs?

Answer: Most funding has come from grants. We have received \$500,000 in grants from Congressman Doolittle, \$2.5 million from Senator Diane Feinstein, \$600,000 from SPI, and a cost-share from the USFS of \$50,000. The master stewardship agreement estimates the treatment costs will be several hundred dollars per acre (\$175/acre - \$450/acre depending on the forest).

Question: How much do you think your biomass use offsets the cost?

Answer: That depends on the location of the forest project and the NEPA conditions that were agreed to. For some it's easier to get the materials with the use of machinery. The cost goes up the more has to be accomplished by hand. A joint paper (Placer County and USFS) is coming out to compare the two projects we have done in the Lake Tahoe region. These projects are done to enlighten people as to the effects of the NEPA. The paper will be available soon after we accomplish the last edits.

Question: Does this biomass removal also happen on private land?

Answer: There are some private lands but it is 99% from public land, of which 97% is forested. That doesn't mean that private land wouldn't work for this project. It's just that there is very little private land in the Lake Tahoe Basin Management Unit. Many of these projects are small chipping projects.

Question: Can you explain more about your facility development project? Who will own the facilities?

Answer: We are developing public/private partnerships (between Placer County and Calpeco) to build a two megawatt combined heat and power facility in the Lake Tahoe region.

It takes an area reaching out about 50 miles build a ten megwatt plant but the economics of that were not so good. Our studies showed that 20 miles of biomass collection would be adequate for a 2MW facility. If a future possible project is sited in Foresthill, a bigger plant would be more possible because of the nearby supply being larger and the costs are lower.

Air quality improvement is a big factor in moving the project forward. We think will be able to reduce particulate matter by 96%, NOx by 54%, carbon monoxide by 97%, volatile organic compounds by 99%, and greenhouse gasses by 17%. This could be accomplished with old biomass technologies. We hope to do better than this with new technologies.

Question: What's the economic sustainability for the facility?

Answer: We are developing an energy creation-power purchase program. We will have a private partner that will purchase the energy generated. We will be looking for cost-share with each agency to collect the biomass. The rest is paid for by the money generated. We currently sell the chips but in the future we will value them and this money will go inback to the program. Since we are building a two megawatt facility, investors are comfortable going forward without a Stewardship contract but with a

Stewardship agreement. Our power purchase agreement should come in around 9 or 10 cents per kilowatt, well below the current 13 cents per kilowatt for biomass which will be attractive to the investor and hopefully make it worth the risk.

Question: Did you have biomass facility present when you started this?

Answer: We had several within 60 and 70 miles. They are too far away to make hauling chips to them break even. After 50 miles, you lose money. That's why our biomass planning area in Tahoe is all within 20 miles.

Question: Do you think you will have enough fuels?

Answer: TSS did a fuel assessment study. We looked at availability for the next 20 years. This helped us feel certain that we can build a two megawatt facility that brings in biomass from an area within 20 miles. We could build up to a ten megawatt facility if we were able to haul in from within 50 miles, but when you look at the next 20 years, the amount of biomass available goes down. That is why we are planning conservatively to build only a two megawatt plant.

Question: What's your relationship with PG&E?

Answer: Calpeco is the energy provider in Tahoe. (PG&E is the provider in Foresthill). A two megawatt plant is quite small for them but they have shown interest in biomass energy.

Question: Have you decided the location of power facility?

Answer: We have a proposed site in the King's Beach. We have alternative proposal just outside the Tahoe Basin.

Question: How's the public perception who have not been involved in building a plant?

Answer: It's a mixed thing. We try to stay close to environmental groups. They are supportive in general but they are waiting for the environmental results that will be identified in the project EIR/EIS. The EPA awards help, but there will always be people who doubt what we are doing. We are currently working on community outreach plans and are ready to roll out the EIR/EIS soon.

Question: Talking about the trucks, how do you sell putting more trucks on the road because of emissions? What's the capacity of these trucks?

Answer: That's where the air pollution district comes in. They have a way to quantify this. The air pollution from the truck is actually quite low. We use medium size trucks which are safer for the communities they travel through and better for the road, though it means we have to use more trucks. We have 20 trucks per day with a capacity of 10 yards.

Question: Will there be requirements for contractors?

Answer: The type of trucks allowed for the projects are specified in the contract, so contractors do need to use that size truck.

Question: What is the break-even distance for operating the trucks? Is it all combined?

Answer: We break even at 30 miles in the Tahoe region. We are only planning on driving a 20 mile radius.

Question: Do you have/own all the equipment?

Answer: No, we hire local contractors to do all the work. We help fund the fire department's chipper program. We try to put money back to the local economy. For the grant project work itself, the staff at North Lake Tahoe Fire Protection does the work. Our project hauls away the material.

Question: Have you looked at funding through carbon credits?

Answer: We would love to use carbon credits in our budget. We have developed a biomass carbon credit program and the California Air Resource Board has finally agreed to review it. But it presupposes a market to be open. Whatever the credits are, we want to put it back into the local ecosystem program, not to the state, to lower the treatment costs.

Question: Malcom North [in his talk] about the scale of treatment needed and the movement towards prescribed burning. Collaboratives talk about community stability, increasing jobs and they seem to prefer mechanical treatments for that reason. There seems to be looming collision.

Answer: The way we look at it is that the most important thing to do is to get the big pile of fuels generated by the thinning projects off the landscape first. Our project can help get conditions ready to do prescribed burning. The budget problem is that you need to be able to take the pile to the facility. We need that facility because that's how to get the money to fund the project.

Group 5: Sustainable Forests and Communities Collaborative

Abstract: Unlike most other forest collaborative groups, the Sustainable Forests and Communities Collaborative (SFCC) did not arise out of a conflict, a funding opportunity, or a charismatic leader. It was initiated out of a general interest in working together to gain the benefit of collaborative planning and project development. All well and good, but how do you keep people interested and engaged when there is no crisis, funding, or organizational mandate? Also, how do you shift facilitation and organizational responsibilities from an umbrella organization (in this case the Sierra Nevada Conservancy), to the group itself? We'll share some strategies and ideas.

Presenters:

Elissa Brown, Sierra Nevada Conservancy, 32485 Road 228, North Fork, CA, 93643, 559-877-2432, elissa@elissabrown.com

Bio: Elissa Brown provides grant writing, program development and consulting services within the southern Sierra region. Her expertise includes community-government partnerships, funding development and collaborative project implementation. Elissa holds a JD and an MA in City and Regional Planning from UC Berkeley. She is currently completing her first book: *How to Get Things Done in a Small Town*.

Mandy Vance, Sierra Nevada Conservancy, 5039 Fairgrounds Road, Mariposa, CA, 95338, 209-742-0482, mvance@sierranevada.ca.gov

Bio: Mandy Vance is a Project Consultant for the Sierra Nevada Conservancy (SNC), a state agency which initiates, encourages, and supports efforts that improve the environmental, economic and social well-being of the Sierra Nevada Region, its communities and the citizens of California. She also served six years as the Director of WildLink, a groundbreaking wilderness education program and interagency partnership based in Yosemite National Park. In her more recent role with the SNC, she manages a wide variety of projects, including encouraging collaborative planning and project development through the Sustainable Forests and Communities Collaborative.

Website: <http://sites.google.com/site/sustainablesierragroup2/>



Questions asked of the Collaborative Presenters:

Question: What was the catalyst for the formation of collaborative?

Answer: We were encouraged by the Sierra Nevada Conservancy (SNC) to start this collaborative, which is based mostly in Madera and Mariposa Counties. But there are no set boundaries; some participants also come from Fresno and Tulare Counties. It has the potential to grow in terms of participation and projects from these two counties. This project didn't emerge from a forest project or grant opportunity, and there was no specific, local conflict or problem to solve or charismatic leader. It's very unique in this way. We did have a lot of social infrastructure and interest by the community in the triple bottom line. About 40 people came to the SNC "Connect the Dots" held in 2009 and there was lots of interest in pursuing the connection between forest health, fire safety and community sustainability. That motivated the SNC to help start this collaborative. There is a sense of urgency around fuels reduction in the area, but that's not the main motivator for this project.

Question: What is the area like?

Answer: We are working in the Sierra National Forest and Yosemite National Park but there is also lots of private land in the area, some is forested, and some has grazing. We haven't defined boundaries because people are still joining the collaborative. We have a great social history of collaboration in this area with watershed assessments, watershed councils like the Central Sierra Watershed Committee, resource conservation districts, fire safe councils, and previous information sharing. We don't have a history of extreme conflict.

Question: Who are the members of the collaborative?

Answer: The group includes local people concerned with economic development, local government, watershed councils, fire safe councils, tribal, agencies, boards of supervisors, park service, local nonprofits, and chambers of commerce. Local subcommittees also bring folks in that might not attend the larger meetings. The area's population is skewed toward an older demographic, but we have a good age and gender balance. We have a lot of participants from agencies, and also a lot of retirees who participate in local fire safe council, watershed groups, etc. Interests are pretty well represented. However, we would like to better engage environmental organizations and tribal organizations. We don't have a strong local environmental community in the region. We usually have between 30-40 people. That's been a good size; it's not too big or too small.

Question: I'm a member of a national environmental organization – and national organizations don't have the capacity to participate locally. But we represent people that use national forests, they just don't live there. How do we get capacity for outside organizations to participate?

Answer: We've talked about the in-person piece being so important. But it's difficult. Webinars may help but usually after relationships have been established. When or if there is significant contention, a teleconference doesn't work as well. The National

Forest Foundation might be a good source of funding to create opportunities for face-to-face participation.

Question: How does the collaborative function?

Answer: We meet every other month, in Madera or Oakhurst. It's a weekday meeting. Also there are subcommittees which meet more often. In the first few meetings we covered logistics of how the meetings would work, and came to a point of agreement on goals, objectives, vision, etc. This went smoothly. The objectives weren't a challenge for this group because there wasn't much conflict. The group didn't expend a lot of work coming to any agreements. After we finished the first few meetings, we had to consider what was next---Planning! We looked at existing opportunities in the categories of planning, process and projects and prioritized these. . However, this planning never really guided the process and many of the projects we prioritized have not gotten off the ground. But it did help everyone get to know each other and was a good exercise.

Question: What has contributed to the sustainability of this group?

Answer: We have started long-term capacity building. We got a grant from the National Forest Foundation. We asked for \$5,000 but they liked the application so much they offered us \$15,000. That doesn't happen very often, we were very lucky. We started a capacity-building training for a core group of participants within the collaborative. The training includes facilitation, conflict resolution, strategic planning, role-playing exercises, etc. Now, the core group of about 12 people has started stepping forward to take the leadership and planning roles. We see them use these skills in other meetings too, which is really great.

More recently we realized that we needed to start getting projects on the ground in order to maintain participation. We selected the projects that had been discussed most often and also asked the participants to identify any other projects. Then we created subcommittees to move these projects forward. Of the five projects originally selected, three are actively moving forward.

Question: What projects have you accomplished so far?

Answer: The projects that are moving forward are:

- The local district ranger, Dave Martin wanted a collaborative planning process for the Willowcreek Watershed, a landscape level forest restoration planning process. Dave was instrumental in starting this and is interested in getting collaborative agreement on what restoration means for this forest before starting the NEPA process for individual projects. SNC approved Mandy and Elissa to be facilitators. It's very broad planning process, including not just what trees get cut, but also how do we make biomass available for local businesses, what do we do to restore roads, campgrounds, riparian areas, protect wildlife, etc. We're working to get the tribes involved in some cultural practices, perhaps burning.
- The Midpines community forestry project is on a 40 acre parcel owned by Mariposa County that was donated many years ago, but has never been managed. It is a tinderbox waiting to go up, and close to the devastating

telegraph fire. A committee of the core group are facilitating this as a possible community forestry project

- A green business incubator is being worked on by participants. As an example, Yosemite National Park is concerned about importation of firewood which could bring disease. They want local firewood for park campgrounds, etc. Campground firewood could be a good small business for local entrepreneurs. The green business incubator project didn't have a lot of ideas to start with but they want to provide capacity building to local businesses and assistance to local businesses.
- A Private Lands Committee has been very active in promoting more volunteerism among private landowners in terms of fuels reduction, and they are also working on an innovative educational campaign which they hope to replicate in other parts of the Sierra Nevada.

Moving to projects changed the tone of meetings - before they would do all the work in the large group meetings, but now they spend most of their time reporting back to the group from different projects being pursued by subcommittees.

Question: Is there any remaining infrastructure in the area?

Answer: There is only one mill currently, with one set to come back this summer. We really need more mill capacity because there's so much wood. Also, because of economic concerns, we needed to address the social piece. The North Fork mill site closed in 1994, but some of the infrastructure is still in place. The community has looked at different ways to redevelop the site but we keep going back to biomass utilization. The Conservancy wanted to assist and bring resources together to help make this happen. Elissa wrote a USDA Rural Business Enterprise grant to get money to incubate local biomass entrepreneurs, and also fund feasibility studies to find the best biomass niche markets.

There was interest in expanding biomass utilization at the Mariposa landfill, but the landfill manager left and it has floundered. A biomass feasibility study is currently happening for the North Fork site. Crossroads Recycled lumber has a small mill on the site which has been in operation for 10 years. The consultants were very enthusiastic about his business and the potential for expansion. The millsite has obtained a lot of grants for remediation of contamination, infrastructure, etc.

Question: What have been your successes?

Answer: It is difficult to define success explicitly in collaborative at this beginning stage, but we can point to some great outcomes.

- Increased Capacity - core leadership training was done and now the core leaders have started facilitating projects themselves.
- Relationship Building - this group already had relationships, but it is forming new alliances and great new ideas are coming from this. Things happening in the private landowner side have been very positive. A Core Group of private landowners have used this resource to get help and move things forward.

- This group has become an idea (project) incubator. Outside people perceive this as a group that can give legs to a project and have started to request time in the collaborative meetings to pitch ideas to the group.
- Increased support - Grants and technical assistance, partnerships help people more successfully pursue resources

It was really worth the time investment to develop strong relationships. We are just starting this phase, and feel ready to move forward. Relationships are good but they aren't enough. Without the projects they would probably have lost the group's interest. We needed incentive for people to keep showing up.

Question: As you move forward, there doesn't seem to be a core center of need or driver. I hear that you do have serious socio-economic issues. Perhaps what you're looking for is an initial focus that pulls on these imperatives and creates a project that can be a demonstration or poster child.

Answer: It's not just need, it's also opportunity. We have opportunity for local biomass here which can be an important component of community sustainability.

Question: What motivates participants to continue to participate?

Answer: The economic constraints of the region are an important motivator. The group provides an opportunity for networking and starting projects. In a way we're also doing the work for Forest Service processes which need to include collaboration. This is very helpful for them. Elissa's fundraising support was very instrumental. People didn't have the capacity to do this and she's been able to secure funds for capacity building and projects. But there are constraints, the SNC can only fund Elissa to do a small amount of grant writing and any work beyond this has to be paid for by someone

Question: The strength of having an outside facilitator was brought up yesterday – someone that doesn't have a stake in the fight. But you're training local facilitators. Can you talk about that?

Answer: We're not in a dispute resolution mode so we haven't had to worry about that. Mandy and I are outside facilitators, but we have a lot of relationships with the people. So we're somewhere in the middle. So far the meetings have been information sharing, not fights.

Question: It seems like building a safe environment is important for you. Can you speak about that?

Answer: We're definitely trying to create an environment where it's safe for everyone to participate. Everything that collaboratives do has a strong emotional component. This is part of the reason why we put in grant funding for the entire group to have training, not just the leadership group. We're very interested in creating emotional safety.

Comment: Having been involved only in collaboratives under crisis, I think you have an opportunity to build collaborative in a slower way and that will be very productive.

Question: Beyond your roles in the collaborative, what are your larger roles in SNC, and how has that influenced this collaborative?

Answer: Mandy is a project manager for SNC and handles grant projects with stakeholders in the group. Elissa is a grant writing consultant, but right now there aren't as many grants around so she is more involved with developing collaboratives. But participants are interested when they know they might have access to grant resources through their involvement with the collaborative. SNC will sometimes allow her to write grants for partners' initiatives that further the SNC goals.

Evaluation Results

Day 1 – April 27th, 2011

First, would you give us your overall impressions of this workshop? *(Please circle the response that best fits your answer)*

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Dis agree</i>	<i>Strongly Disagree</i>	<i>N</i>
1. The talks presented today were informative and comprehensive.	34%	66%	0%	0%	0%	44
2. The level of detail covered today was about right.	18%	78%	4%	0%	0%	45
3. The agenda made good use of the time allotted.	41%	41%	14%	5%	0%	44
4. This information presented helps clarify issues surrounding treatments for forest resilience.	20%	56%	20%	4%	0%	45

	<i>Excellent</i>	<i>Very good</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>N</i>
5. Overall how would you rate today's presentations?	27%	52%	20%			44

6. Next, would you please rate the presentations given at this workshop on a scale of five to one.

(5 = excellent, 4 = very good, 3 = good, 2 = fair, 1 = poor)

What is a Fire Resilient Forested Landscape?

a. Scott Stephens- Fire Ecology Overview	4.6	47
b. Malcolm North – Treatment Options Pace and Scale	4.6	47
c. Gareth Mayhead – Biomass Utilization	4.2	47

d. Brent Skaggs – Prescribed Fire	3.5	47
e. Sarah McCaffrey – Social Overview	4.6	47
f. Fire Resilience Panel	4.0	47

Wildlife in a Resilient Forested Landscape?

g. Wayne Spencer - Wildlife Ecology and Fire Overview	4.0	47
h. Armand Gonzales – Wildlife and Fire Policy Panel	2.6	47
i. Craig Thomas - Wildlife and Fire Policy Panel	3.8	47
j. Don Yasuda – Science Based Collaboration in Natural Resource Management	4.2	7

How can a fire resilient forested landscape be socially sustainable?

k. Patty Gude - Cost of Protecting Homes from Wildfires in the Sierra Nevada	3.5	46
l. Jonathan Kusel – Community Perspective	4.1	45
m. Interactive Panel Discussion	3.7	43
n. Panel Question and Answer	3.8	43

7. Please share any comments you might have about today’s presentations or suggestions for tomorrow’s session.

Location:

- Meeting room good and central.
- If you use the same venue next year, might be helpful to give presenters guidelines for ppt preparation. I couldn't read many of them in back because of small print and poor background choice for slides.

Food:

- Lunch too heavy. Reduce tuition and provide sandwiches and or salads.
- Provided lunch good for relationship-building. Snacks/drinks good.

Content:

- Excellent sessions.
- Really enjoyed the morning sessions and liked the social scene follow in the afternoon.
- There seems to be a clear division between goals for reintroducing fire for ecosystem benefits and the need for rural jobs. This hasn't really been addressed.
- I really enjoyed the first half of the presentations. I felt that the last section's presentation didn't offer much in terms of fire specifically. They didn't answer the question in the title How can a fire resilient forested landscape be socially sustainable?
- I think it raised more questions on how to conduct Restoration projects and meet fire resiliency in the correct environment under current regulations and restrictions.
- The framing of the session on wildlife was not clear to me. Following Spencer, I think I expected a more applied/management approach to wildlife in forests!
- Not much social science; what was there was excellent. Need more social science research results and information.
- Wildfire panel really didn't say much about wildfire. Some slides had too much text and weren't useful. Social side - two presenters are good, but didn't really answer the question posed.
- The morning performances were much better than the afternoon (and it's not because I think the topics weren't important). The panel was good, though. Presentations that give a lot of statistics without relating it to current initiatives, projects or strategies are less useful and interesting.
- Some of the today seemed to get off-topic. Instead of dealing with the fire resilient and planning topic, then drifted to seemingly unrelated topics. Otherwise, great discussions and hopefully people are taking the thoughts have with them to implement.
- Would have liked more science re; wildfire/len policy. I expected more discussion about latest thinking re: implementation strategies for developing fire resilient forested landscape. No time spent on strategies.
- So far the information presented has been really good. But maybe, too much was pushed for 1 day. The lack of in depth discussion was very telling. It would have been good to have more discussion on fewer topics. Don't get me wrong, the information has been good. But it was almost too much, with not enough time to dig into it all, outside of very surface level evaluation.
- I hope tomorrow will include some focus on regulatory and policy challenge and that create roadblocks to implementation and job creation, retention on creation of infrastructure, and improving sustainability of our rural communities.
- Need stronger linkage between collaboration to plan treatments on forests and the development of economic opportunities of the community, county or state level that is needed to sustain on-going treatments (fael Reduch and Forest Health)

Schedule:

- Breaks good.
- Needed more time for morning panels discussions.
- Keep lengths of major presentations consistent - 15 minutes is too short and 30 minutes is too long.
- Speakers can move through their slides faster. It would be very helpful to end each presentation with key take away points from the presentation.
- We need to help them stay on time because Q&A sessions are helpful.
- Could have used more time for Q&A with first 2 of 3 topic panels. Seems like we rushed through those to stay on schedule, but never really got a chance to ask as many questions.

Panel:

- The last panel was great. That needed to happen in the first 1/2 of the day also.
- End of day panel so so.
- Panel Question and Answer - long day, tired
- Panel Question and Answer - could have been skipped
- The panel was not a good use of time. Most questions were just comments from the audience. Panel sessions seem to be used as a time for people to push their own agenda and most people listening don't learn anything.
- For the interactive panel it's sufficient for them to replan who they and what they stand for before the Q&A session. It is unclear to me what issues they are interacting over; it would be helpful to have a panel moderator posing questions.
- Question and Answer - could be off putting
- Many some Q&A panel until end of day and have all panel members on it.
- Interactive Panel Discussion - scientist vs. social scientists distinction
- End of Tuesday was too slow.

Presenters:

- 2 out of 10 presenters were female. We can do better.

Stephens

- Excellent

McCaffrey:

- Sarah McCaffrey was really good and very interesting!
- Sarah's talk was exceptional.

Gonzales

- Little substance
- Need brief overview of what the document covered

Yasuda

- His presentation touched one of the toughest issues
- Difference in Objectives: Sustainable Cat vs. Overall forest health

Spencer

- Summed up the difficulty of overlapping needs and how tough mgmt really is. Overall health vs. single species protection.
- Too detailed, missed big landscape picture

Craig Thomas

- Summed up the difficulty of overlapping needs and how tough mgmt really is. Overall health vs. single species protection.
- The 1:45 - 3pm part of the agenda was contained too little information.

Gude

- Too much detail/repetition
- Weak voice
- Needs to cut a few slide
- Would have been more useful if they spent less time on statistics and more time describing relations with some of the other Forest Restoration issues.
- talked too long

Kusel

- Excellent
- Too much detail and repetition, not sure why the emphasis on recession
- Would have been more useful if they spent less time on statistics and more time describing relations with some of the other Forest Restoration issues.

Workshop Evaluation Form Day 2 – April 28th, 2011

Please complete this evaluation form and turn it in by the end of today's session. First, would you give us your overall impressions of this two day conference? (*Please circle the response that best fits your answer*)

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>N</i>
1. This conference made good use of the time allotted.	45%	55%	0%	0%	0%	47
2. This conference will help us move forward and resolve issues surrounding	17%	71%	13%	0%	0%	48

forest treatments for forest resiliency.

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3. Overall how would you rate this conference?

<i>Excellent</i>	<i>Very good</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>N</i>
40%	47%	13%	0%	0%	47

4. Next, would you please rate today's sessions on a scale of five to one.

(5 = excellent, 4 = very good, 3 = good, 2 = fair, 1 = poor)

Vicky Sturtevant - What are keys to successful collaboration?	4.0	44
Steve Gatewood/Ed Smith	5.0	45
Report back on key issues and interests from small group discussions	4.1	49
Panel reaction to collaborative sessions and report back	3.9	49
Wrap up / next steps	4.1	49

Lastly, please indicate your previous level of involvement with these issues by circling one response for each question below:

5. What is your type of job?	Research	Public education /outreach	Environmental regulation	Land / resource manager	Environmental advocate	Private company	Other:	N
	22%	6%	6%	46%	2%	0%	18%	50

If other, please describe:

- NGO consultant
- facilitator
- consulting forestry - forest policy
- stage agency (granting/non regulatory)

- consultant for program development collaboration, guest writing
- science advisor
- energy development, funding biomass energy projects
- environmental conservation/foundation
- local government representative
- monitoring coordinator for Forest Service
- student (2)

6. How familiar were you with issues around forest treatments for fire resiliency before this conference?

Very familiar	Some what familiar	A little familiar	Not at all familiar	N
68%	24%	6%	2%	50

7. Please share any comments you might have about the conference or what kind of follow up you hope to see.

General:

- Thanks for a great conference! (7)
- Great pulling together of excellent speakers and examples.
- I found this conference informative and helpful. Thanks to the conference organizers for putting together this well-organized meeting.
- Helpful & enjoyable
- Very good interaction of multiple view points in the conference. Exciting to see successes through collaboration.
- Overall, the conference was very good.

Venue/logistics:

- Good venue as well.
- Thank you for providing a vegetarian meal option.
- Too much plastic trash.

Schedule:

- I especially appreciated the ability of organizers and facilitators to keep participants with staying on track during the question-asking period (not interrupting speakers, refraining from long narratives during questioning).
- Lengthen breaks (even if you have to do less)

Participants:

- Friendship in the room is growing - it is palatable. I really appreciate Craig/Sue's involvement - Without them this would be a bit two dimensional. Their perspective is VERY (star). It makes some more thoughtful.
- Might be nice to see more participants from outside the FS (though I know you did good outreach thanks for writing these feds!)
- I am not sure how much exposure local fire safe councils get to these fire issues, and I think it would be a good addition to the conversation. Fire safe councils are the direct connection to communicate for education on such issues.

Presenters:

- Nice gender balance in presenters - at 39% female. As a woman I appreciate that.
- Have speakers spell out and speak out the wide diversity of acronyms for those of us less fluent in regulatory and agency terminology.
- Bigger font on powerpoints.

Content:

- This was very valuable - a great use of my time. I wish all of my colleagues had been able to attend. Thank you for informing my work. In both an environment and social science base. I'm already looking toward to referencing notes to the meeting. Materials it to next year's conference. Keep up the good work!
- Day 2. Very different from what I had thought it would be. The topics were good. The stories of success, the hardships they have encountered, and what they are doing to continue on.
- I learned quite a lot from this conference. I don't often get a chance to focus on the social issues surrounding forest management.
- Too much social science - please focus more on the ecology of fire and management. The social part is important but just have one section. Please tie it in more to fire management.
- Overall I liked the balance of the conference. I second the vocalized wish to see more talk of implementation.
- This conference did a great job presenting the reality of getting treatments on the ground, though I feel like some of the presentations stayed from fire issues and focused more on issues of collaboration between the public and federal agencies, shorter presentations after lunch were good!
- I don't think the title of the conference really matched the conference. Not a big deal to me, but something to think about next year -> maybe change the title if it doesn't match the theme.
- Today was very collaboration-oriented.
- Very good interaction of multiple view points in the conference. Exciting to see successes through collaboration.
- Very interesting, especially Sarah's social overview and Wayne's WL presentation.

Case studies:

- The lessons learned from the two case studies were helpful as well. Examples are key!

Dinkey Creek:

- Dinkey panel excellent.
- Mr. Mose Jones-Yellin hit the nail on the head about USFS personnel being entrenched in their process--and that it is empowering to staff to let them design projects that focus on broad resource management objectives.
- It's difficult to get anything done - a lot of road blocks due to NEPA issues. I like the idea of collaboration - we all want a sustainable forest – I think the dialogue is great - Craig Thomas brought a lot of light to me understanding collaborations and his point of view.

Concurrent sessions:

- The small group sessions were great.
- Small simultaneous case studies were awesome!
- I liked the small group rotation - very, very efficient. Hands on best practices for implementing 6TR 220 ways of implementing that work efficiently.
- The breakout session is very helpful in terms of seeing a number of collaborative efforts in a short time.
- I really enjoyed the breakout collaboration groups which allowed us to see in smaller groups the successes and hardships of each process.
- The smaller groups were personal and small (though speakers often took >15 min, which didn't leave much time for questions).
- Breakout groups should have been more instructive with questions to answer and refer all to larger group - it ended up being more talking heads.
- Thanks the small group notetakers - so helpful! Particularly Shasta.
- Breakout groups didn't provide much interaction. Could have been better used by two general sessions for everyone much like the other case studies.
- Would like to hear more about implementation success like Barney/Hat Creek.

Panel Reaction:

- The panel reaction was a good summary of what was presented and discussed.
- The end of the day panel and the summary sessions had too much redundancy
- Last panel was under title of How do We Build... but the panel was up there to react on collaboration groups - left end of conference feeling like we didn't answer that question OR talk about next steps to move forward to an answer.
- Why the same panel people on day 2 as day 2? Would have preferred new panel people. I already hear those people talk.
- Comments by Teri Morrison at panel reaction/report back re. Patty Gudes presentation were off. I don't think Patty ever said that we need to remove homes from the forest landscape as Teri said. Patty was simply illustrating the cost of having to protect homes in a fire event. One home costs lots of money to protect, many homes in one area costs less to protect. This is a planning issue.

Wrap up

- The wrap-up connects give testament to the differences and productiveness of these conferences.
- The afternoon session rehash was less valuable than it could be. It was so general it was pretty worthless. I think the most valuable to share were examples, stories, etc. ie. best practice. I think this would be a better focus for the wrap-up.
- Kim and Mike - Need some processing time to think about next steps. I've seen some very good indications that people are patient, persistent, and positive. There are my 3Ps and I'm glad to see others.

Products:

- Have you considered video taping the sessions? Muld is just get in dairy the presentee and just seeing the PowerPoint notes.
- Please consider sending around an email to attendees when ppt are posted on the wildfire 2011 site.
- Would like access to slideshows - please upload them to website.

Future conferences:

- I would like to see more of this collaboration and learning experiences of other groups nationwide in the future.
- Let's move to the next step of looking at actual projects currently being implemented. You have provided excellent advice for the planning aspects of projects (i.e. collaboration groups, formation), but the tools for successfully implementing ecological restoration on federal lands appear to be absent. Please try to follow-up this conference with one that focuses on the implementation of projects.
- Do this again - this was a great opportunity for different stateholders to hear other perspectives. The agency is not there yet – Correct
- What's the long-term vision for these workshops/conferences own time? Not sure of concrete next steps. Would be good to have a funding pties or session on funding next time.
- Field trips! Take the show on the road. Different ecosystems outside of the Sierra/Cascades.
- All the presentations sound great but when you get down to reality the extreme views still seem to dominate. Example is QLG that has been collaborating for 20 years but still getting litigated. We need to focus on the broader public that was shown to support in 80%. If we really want to do more we should talk about the specifics that still hold up in appeals or litigation.

Future of USFS collaboration:

- This comment is not about this conference! I am very disappointed with the leadership of Region 5 and the Stanislaus. I don't understand why you have not provided clear direction as to our role in this collaboration process!

- Training for core groups together: Consensus or Interest-based bargaining, or active listening or diversity of values/beliefs, etc. How change dance from top -> down to ground -> up? Change the way funding comes? Share priorities from bottom -> up (vs. top -> down).
- I am encouraged by comments (and to a degree purported actions) about USFS acknowledging that they need to be more open to collaboration. They are a huge organization and need continuous prodding

Conference Flyer

Announcing: Building on Science to Implement Landscape Level Treatments for Fire Resilience

A conference to be held April 27-28, 2011
In the Garden Pavillion at McClellan Field, Sacramento, CA



This is a follow up conference to the February 2010 Pre- and Post-Wildfire Forest Management Conference <http://groups.ucanr.org/wildfire2010/> that focused on the biological, ecological, and physical science associated with wildfire treatments and impacts in Sierra Nevada forests. During that conference, participants stressed that social, economic, and political aspects of wildfire need more consideration in order to develop acceptable policies and practices that address fire resilient forested ecosystems. The 2011 conference will present ecological, social, and policy perspectives applicable to implementing landscape treatments to promote system resilience and encouraging dialog and

collaboration to advance Sierra Nevada forest management.

- *What is a fire resilient forested landscape? How does wildlife fit into landscape fire resilience? How can we restore while treating forest fuels? and reduce the risk of high severity wildfire?*
- *How is fire resilience linked to social sustainability? How can treatments be economically viable and politically acceptable? How can diverse groups collaborate on treatment implementation?*

We will explore these challenging questions through a series of scientific presentations and in depth discussions, highlighting collaborative facilitation that supports mutual learning and shared success. While focused in the Sierra Nevada and the mixed conifer forest, this conference may offer lessons and tools for other locations and systems. We hope you will join us in seeking improved understanding and working towards agreement that will advance landscape level treatments for ecosystem resilience.

Sponsored by the US Forest Service, Region Five and the University of California Cooperative Extension

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