Fire Ecosystem Forest Management & Water Yield Symposium

May 2, 2014 9 AM – 4:30 PM

USFS Wildland Fire Training Center, McClellan, CA

Sponsored by: USFS PSW Region 5, Sierra Nevada Conservancy, Sierra Business Council, Mt. Counties Water Resources Association, American River Watershed Institute

Water yield and Sierra forest management has emerged as a critical issue. Severe drought, increasingly massive fire incidents, fuel loaded forests, and climate change trends combined have forced re-evaluation of watershed forest management methods to increase water supply (and power production), protect forests from catastrophic fires, and build resilience to climate change effects.

Decision-makers, project implementers, water and power managers, researchers, and all stakeholders who want to know the science and economics of healthy forest and water reliability. The Fire Ecosystem Forest Management and Water Yield Symposium presents the current facts and issues from the leading researchers and demonstration project managers.

The key goals of the Symposium are:

- Provide an overview of the topic and a summary of what we know now from published and reviewed scientific studies, (Bales, February 2014).
- Present the current research in Sierran forests on water yield and management practices from four lead researchers with summaries of what we know to date.
- Convene a researchers' forum to discuss what we need to know, where are the gaps, what we will know, and when will we know it.
- Provide an overview of the issues from local, regional, state and federal levels with examples of model projects and plans.
- Present an economic model of optimal forest treatment methods with cost/benefit comparisons to wildfire, (SNC, April 2014).
- Present the economic assessment of the Rim Fire, and climate change predictions for Sierran fire trends, (EarthEconomics, December 2013).
- Describe the economics of ecosystem service elements that are part of fire management practices, with examples of successful projects with financial analysis.
- Convene the economics and leadership forum for a dialogue on next steps

The Symposium has invited the leading scientists and economists, who will join policy and project leaders, to provide attendees with the state-of-the-art scientific, economic, and political knowledge of the subject area. .

Information & Registration: WWW.FIRESYMPOSIUM.ARWI.US

Registration fee: $55 before April 18, and $85 after. Students: $20 before 4/18, and $45 after

Contact the Coordinator, Otis Wollan, at otiswollan@gmail.com cell 530-320-6841

Symposium Planning Team & Participating Sponsors: Roger Bales, UC Merced; Carolyn Hunsaker, USFS Pacific Southwest Research Station; John Kingsbury, Mountain Counties Water Resources Association; Bill Stewart, UC Berkeley School of Forestry; Peter Tittmann, UC Berkeley Center for Forestry; Liz Mansfield, Sierra Water Workgroup; Kerri Timmer, Sierra Business Council; Otis Wollan, American River Watershed Institute

FIRE ECOSYSTEM FOREST MANAGEMENT & WATER YIELD SYMPOSIUM, 5/2/14

UFSF Wildland Fire Training Center, McClellan, CA Registration: www.arwi.us

TIME	TITLE	PRESENTER	TOPIC
08:00	Registration begins. Light continental breakfast, coffee, tea available.		
09:00	Welcome/Agenda	Otis Wollan, ARWI	
09:05	Forests, water, climate and disturbance in the Sierra Nevada: critical knowledge gaps	Roger Bales, UC Merced	Where in the world is this research being done? Where are conditions similar? What can be learned from afar? What we know & don't know.
09:40	The Mokelumne Watershed Avoided Cost Analysis: Comparing the economic benefits of enhancing healthy forests with the costs of fire damage.	Nic Enstice, Sierra Nevada Conservancy	New evaluation and analysis of avoided costs of wildfire compared to fuel treatment costs show clear benefits to virtually all stakeholders.
10:15	Water Yield changes from Forest Treatment Methods	Martha Conklin, UC Merced	Results from SNAMP sites in Tahoe NF and Sierra NF of water yield from different levels of fuel reduction treatments.
10:50	Break		
11:00	Water Yield and Forest Health: Findings from the Sierra Headwaters	Carolyn Hunsaker, USFS PSW	Sierra NF Paired Watershed Studies compare snow-dominated watersheds with rain and snow watersheds.
11:35	Wildfires and forest treatment impacts on water yield and quality	Terri Hogue, Colorado School of Mines	Post-fire water yield changes across a range of California and western wildfires. Insight on post-treatment studies at Sagehen Creek Field Station, and early work on water quality after the Rim Fire.
12:10	Lunch	Working lunch	Box Lunch Sandwich selection provided
lunch talk	From the CA State Assembly	Assemblyman Dahle (invited)	State Leadership: What is in the pipeline and what do we need?
01:00	Researchers' Forum: Assessment of existing research, gaps and needs	Enstice, Bales, Hunsaker, Conklin, Hogue.	Are sufficient demonstration/modeling sites in place now? What are the gaps? Is more needed? What will we know; and, when will we know it?
01:30	Sierra Water Agencies: Do agencies address fire ecosystem forestry and water yield in planning or projects?	John Kingsbury, Mt Counties Water Resource Assoc.	Snapshot of Fire Ecosystem/Water Yield Planning in Sierran Water Agencies: Best Existing Profile and summary of needs
01:45	Sierra IRWMPs: Status of Integrated Planning for Forestry and Water Yield	Liz Mansfield, Sierra Water Workgroup	Fire Ecosystem/Water Yield Planning in Sierran IRWMPs: Overview and examples; articulation of needs.
02:00	Learning from Rim Fire: The Economic Impact on Natural Lands	Tim Ramirez, SFPUC	Findings from the SFPUC economic assessment by consultants from Earth Economics published November 27, 2013
02:30	Economic Issues in Optimizing Fire Management and Water Yield; Two Financially Successful Thinning Projects from Blodgett Forest and Collins-Pine	Bill Stewart, UC Berkeley Center for Forestry	Using two successful model projects, a financial analysis of thinning to "restoration" levels, implications for water yield and power generation. What are the gaps? the needs?
03:05	Break		
03:15	Linking Land Use entities and Forest Management; Practicality of Biomass Utilization	Brett Storey, Placer County	Creating value for nonmerchantable Woody Biomass; local economics for a biomass plant
03:30	Opportunities for adding value to forest management residuals	Peter Tittmann, UC Berkeley Center for Forestry	Potential Economic Role of additional tools and forest products to make fuels treatment economic: biochar, synthetic fuels, heat, specialty products, and more.
03:45	Primer on Forest Carbon Sequestration	Peter Tittmann, UCB Ctr Forestry	Overview of potential role of Forest Carbon Sequestration in forestry project economics
04:00	Economics and Policy of Fire Ecosystem Forestry Forum: What do we need to move forward?	Stewart, Kingsbury, Tittmann, Story, Ramirez, Mansfield, & K. Timmer, SBC.	Next steps: Overcoming obstacles, assuring a sound foundation for managing the fire ecosystem to increase Water Yield, costs, necessary collaborations, partnerships.
16:30	Adjourn		