The Klamath Fire Ecology Symposium takes place every three years in the small mountain town of Orleans, the heart of one of the most complex fire environments in the country, if not the world. It brings together scientists, managers, area residents, tribes and the conservation community to address restoring historic fire regimes in the Klamath Mountains in a manner that protects life and property, improves forest health and enhances resources. These symposia facilitate constructive dialogue on emerging themes in fire ecology and management in the Klamath Mountains and beyond. This year’s symposium provided two and a half days of presentations and group discussions and a half-day tour of the 2013 Orleans Fire that burned through the town of Orleans, just behind the conference venue, as well as prescribed burns conducted in 2013 during the fall Northern California Prescribed Fire Training Exchange (TREX) and by the Forest Service.

The 2014 symposium was another successful gathering of land managers, scientists, tribes, conservationists and community members for important sharing of current research and discussions regarding fire history and ecology in the Klamath Mountains. Nowhere else in the country are the social, cultural, and ecological realities of fire discussed with such candor and connection to place. Over the course of the three days, more than 80 participants gained a deeper sense of the past, present and future of fire in the Klamath Mountains.

Important discussion highlights of this symposium included:

• Fire exclusion has occurred simultaneously with a changing climate—the past 100 years have been the wettest in many centuries—which has produced fuel and vegetation conditions never seen before.

• The last time we have seen so little fire on the landscape in this region was when glaciers were retreating at the end of the last Ice Age.

• Fires are getting larger and more difficult to manage.

• “Fire severity” has been defined various ways in research, leading to confusion on the topic. “Fire severity” measures relative change, whereas “fire intensity” is an exact measure of the amount of energy released during a fire event. Every fire has some degree of mixed severity depending on the scale.
The paradigm is shifting in wildland fire management, especially concerning community collaboration. Community liaisons can be a critical asset during a wildfire. Local knowledge is being listened to. Giant steps are being made with regard to collaborative landscape planning.

- Traditional fire knowledge has much to offer regarding fire management for multiple resources. Fire managers are listening more carefully to tribal practitioners and resource specialists, but there is still room for improvement. Fire suppression has had significant impacts to the Karuk Tribe’s culture and ceremonies, including their ability to gather the food, fiber and medicine resources that require specific fire cycles at different places on the landscape.

- Post-fire salvage logging decisions involve a complex balance between habitat and hazard. Issues brought up by participants included road building, erosion, invasive species and economics. A landowner whose property burned during the Orleans Fire last July asked the group to come on their field trip and offer specific advice regarding salvage logging in the burned area. As a result, his decisions will be better informed. Agreements on the scope and scale of salvage logging between diverse stakeholders are needed.

- Recent fire footprints—those that are less than 10 years old—can and should be used among the breakout sessions was one on the topic “Research: What are our burning questions?”

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Participating Organizations

California Fire Science Consortium
Environmental Protection Information Center (EPIC)
Happy Camp Fire Safe Council
Hoopa Office of Emergency Services
Humboldt County
Humboldt State University
Karuk Tribe
Klamath Forest Alliance
Mendocino Fire Safe Council
National Oceanic and Atmospheric Administration
National Park Service—Redwood National Park
Northern California Prescribed Fire Council
Orleans Volunteer Fire Department
Salmon River Restoration Council
Southern Humboldt Fire Safe Council
USDA Forest Service—Klamath National Forest
USDA Forest Service—Pacific Southwest Research Station
USDA Forest Service—Six Rivers National Forest, Orleans Ranger District
USDA Forest Service—Six Rivers National Forest, Supervisors Office
USDA Natural Resources Conservation Service
Watershed Research and Training Center

The executive director of the Watershed Research and Training Center spoke at an ancient clonal madrone tree burned in the 2013 Orleans Fire during one of the stops on the symposium field tour.

© Will Harling/Mid Klamath Watershed Council
to manage future fires. They can be allowed to burn as part of maintenance and towards the long term goal of restoring historic fire regimes—or, given climate change, more resilient fire regimes.

- Science must inform policy. Policy must be flexible enough to incorporate adaptive management.

**Fire managers and scientists** will integrate the knowledge they gained at the symposium into their land management decisions and research choices. Local restoration organizations, conservationists and community members all gained perspective and offered insights regarding wildfire management, post-fire management strategies and fire resilient communities. As important, all participants made important connections and will be networking into the future as they continue these important conversations.

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**For more information** on the Klamath Fire Ecology Symposium or Western Klamath Mountains FLN:

- **Will Harling**  
  will@mkwc.org

- **Nancy Bailey**  
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The Fire Learning Network (FLN), Scaling-up to Promote Ecosystem Resiliency (SPER) and prescribed fire training exchanges (TREX) are part of the Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at ldecker@tnc.org or (801) 320-0524.

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**PRESENTATIONS**

- **Bowman, Crystal** (Karuk Tribe)—2013 Wildfires and Water Quality on the Salmon River, CA

- **Cocking, Matt** (Natural Resources Conservation Service)—Fire Effects in Conifer-Encroached California Black Oak Ecosystems: Implications for Restoration and Management

- **Engber, Eamon** (Redwood National Park)—NW California Deciduous Oak Woodlands: Learning from 25 Years of Management and Restoration on NPS Lands

- **Goulette, Nick** (Watershed Research and Training Center)—Klamath People, Communities, and Landscapes: Fitting In and Standing Out in the National Context

- **Greenberg, Karuna** (Salmon River Restoration Council)—Community Liaison Program: Trial By Fire

- **Guzman, Ed** (USFS Klamath National Forest)—A Collaborative Approach to Hazard Mitigation on the Klamath River

- **Harling, Will** (MKWC)—Prioritizing Fuels Treatments in the Western Klamath Mountains Using Geospatial Data, Collaborative Planning, and Local and Tribal Knowledge

- **Kane, Jeff** (Humboldt State University)—Klamath Mountains as a Learning Landscape to Engage Students in Fire Science Research and Management

- **Knapp, Eric** (USFS Pacific Southwest Research Station)—Management in the Post High-Severit Fire Landscape: Balancing Wildlife Habitat and Future Fuels

- **Lake, Frank** (USFS Pacific Southwest Research Station)—Evaluating the Effects of Fuels Reduction and Wildland Fire Management on Tribally Valued Resources and Habitats

- **Minton, Mike** (USFS Six Rivers National Forest)—Landscape Level Fire Planning Efforts on the Six Rivers National Forest

- **Quinn-Davidson, Lenya** (Northern California Prescribed Fire Council)—Fire Science and Management: Bridging the Gap in Northern California

- **Reed, Ron** (Karuk Tribe) and **Kari Norgaard** (University of Oregon)—Social Impacts of Fire Exclusion

- **Sherriff, Rosemary** (Humboldt State University)—Historical and Observed Wildfire Severity Examples in Montane Forests of Colorado and Other Western states

- **Skinner, Carl** (USFS Pacific Southwest Research Station)—Trends in Wildfire Size and Severity in the Klamath Mountains and Implications for Management

- **Tripp, Bill** (Karuk Tribe)—Bridging Science and Management with People and Place

- **Wageknecht, Louise** (Author, *Light on the Devils*)—Hoedads, Herbicides & Hardwoods: Running the Red Queen’s Race on the Klamath

Symposium organizers are working with presenters to post these presentations at: http://mkwc.org/programs/fire-fuels/klamath-fire-ecology-symposium/