

# Adapting to Climate Change: Managing Federal Lands Webinar Series

A series of weekly webinars leading up to the workshop on Monday, Oct. 19<sup>th</sup>



**All Webinars will be held on Wednesdays from 12:00-1:00 PM starting September 16<sup>th</sup> through October 14<sup>th</sup>. Oregon Rooms are reserved at the MIO and Rogue Rooms at the GPIO for each webinar.**

**Call in and WebEx information will also be provided the week prior to each webinar.**

## **An Overview of a Changing Climate in the Rogue Basin**

**16 September 2015      12:00-1:00 PM**

**Gwyn Myer, SOFRC**

**Oregon Room A and Rogue Room A&C**

### Webinar Description:

This webinar will include a brief overview of the science of climate change, and then delve into the current trends and projections of climate change occurring in the Rogue Basin. It will review the findings of the “The Rogue Basin Action Plan for Resilient Forests and Watersheds in a Changing Climate.” This plan covers the current state of the economy, water, and forest sectors; risks and vulnerabilities to those sectors, particularly when considering climate change; impacts to nature’s benefits and functions and how that impacts the community; and steps we can take to reduce those risks.

Gwyn Myer, M.S. – Project Coordinator - The Southern Oregon Forest Restoration Collaborative

Gwyn is the author of the “The Rogue Basin Action Plan for Resilient Forests and Watersheds in a Changing Climate”, a collaboratively developed action plan for addressing risks and vulnerabilities in the Rogue Basin. Gwyn has worked in the Rogue Basin for over ten years in the environmental fields. Her work includes monitoring, environmental education, environmental social science research, climate change, ecosystem services, and fire adapted communities. She received her B.S. in Environmental Studies: Social Science and Policy from The Southern Oregon University and her M.S. in Environment and Natural Resources from The Ohio State University.

## **Forest and Vegetation in the Changing Climate of the Rogue Basin**

**23 September 2015      12:00-1:00 PM**

**Jessica Halofsky, UWA/USFS and Kerry Metlen, TNC**

**Oregon Room B and Rogue Room B&D**

### Webinar Description:

Kerry and Jessica's talk will cover potential shifts in vegetation and fire regimes in the Rogue Basin with changing climate. They will discuss different types of vegetation impact models and how to interpret

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them. They will also give some examples of potential adaptation strategies to increase vegetation resilience in a changing climate.

Jessica Halofsky, Ph.D. – Research Ecologist – University of Washington and USFS Research Station

Jessica Halofsky is a research ecologist with the University of Washington and is affiliated with the U.S. Forest Service Pacific Northwest Research Station. Jessica received an M.S. in Forestry from Penn State, and a Ph.D. in Forest Science from Oregon State University. Her research interests include fire and disturbance ecology, vegetation dynamics, and climate change (ecosystem impacts and adaptation). Jessica helped to lead a pioneering effort involving a vulnerability assessment and development of a climate change adaptation plan for Olympic National Forest and Park. She is currently working on several climate change science and adaptation projects in the Pacific Northwest.

Kerry Metlen, Ph.D. - Forest Ecologist - The Nature Conservancy in Oregon

Kerry is the technical lead for the team developing the Rogue Basin Cohesive Forest Restoration Strategy, an all-lands decision support framework for conservation planning that integrates wildfire threat to communities, promoting and protecting enduring habitats, restoring landscape resilience, and promoting the capacity of natural communities to adapt to climate change. As Forest Ecologist for The Nature Conservancy since 2010, he is a core member of several collaborative technical working groups, coordinates multiparty monitoring for the Ashland Forest Resiliency Project, conducts research on reference forest conditions in mixed conifer/hardwood forests, and supports TNC in Oregon's Forest Team.

## Effects of Climate Change on Aquatic Resources in the Pacific Northwest

**30 September 2015 – 12:00-1:00PM**

**Brian Staab and John Chatel, USFS**

**Oregon Room A and Rogue Room B&D**

### Webinar Description:

John will be presenting observed and potential climate change effects on aquatic resources in the Pacific Northwest, and he will also share examples from recent vulnerability assessments in the region. Brian will be presenting observed and projected effects of climate change on water resources in the Pacific Northwest, recently developed climate/water resource data products that can be used for vulnerability assessment and landscape analyses, and examples of their applications.

Brian Staab, M.S. - Regional Hydrologist with USFS- PNW region

Brian Staab has been Regional Hydrologist with US Forest Service-Pacific Northwest Region since 2006. He develops and implements policies and strategies to protect and restore water resources on 25

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million acres of national forests and grasslands in Oregon and Washington, while enabling sustainable use of their natural resources. He is involved in all aspects of watershed and water resource management, including inventories, assessments, monitoring, and protection and restoration activities. Brian managed similar programs for national forests in California from 2001-2006 and has worked as an environmental scientist and manager for other federal agencies. Brian earned a B.S. in Civil and Environmental Engineering from Pennsylvania State University and a M.S. in Hydrology from Stanford University.

## John Chatel, M.S. – USFS PNW Regional Threatened, Endangered, and Sensitive Species Program Manager

John Chatel is the Regional Threatened, Endangered, and Sensitive Species Program Manager with US Forest Service-Pacific Northwest Region. He develops and implements policies and strategies to protect and restore native species and their habitat on 25 million acres of national forests and grasslands in Oregon and Washington, while enabling sustainable use of their natural resources. He is also supports several climate change aquatic vulnerability assessments across the region which will be a key component of the region's Aquatic Riparian Conservation Strategy to maintain resilient landscapes. John has worked for the U.S. Forest Service as a fisheries biologist in Montana, Oregon, and Idaho since 1993. John earned a B.S. in Environmental Biology from Humboldt State University and a M.S. in Environmental Studies from the University of Montana.

## **Restoring Climate Resilient Landscape Facets as a key objective in the Rogue Basin Cohesive Forest Restoration Strategy**

**7 October 2015 – 12:00-1:00 PM**

**Kerry Metlen and Steve Buttrick, TNC**

**Oregon Room A and Rogue Room B&D**

### Webinar Description:

A key climate change adaptation strategy is to reduce forest loss and thereby avoid rapid state changes in landscapes with characteristics that make them more resilient to climate change. In the Mediterranean forests and woodlands of the Rogue Basin, climate change is expected to increase the amount of wildfire and shift the conversation from *if* fires will burn to *how* they will burn. Landscapes settings likely to be resilient to climate change tend to have high geophysical diversity and relatively high landscape permeability to migration, making them good locations to focus on treatments intended to maximize biodiversity retention and increased capacity to adapt to climate change.

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The Rogue Basin Cohesive Forest Restoration Strategy prioritizes placement of forest restoration and fuel reduction treatments based on five objectives 1) mitigating large wildfire community risk, 2) mitigating local fire community risk, 3) addressing landscape scale ecological departure, 4) protecting existing and promoting future Northern Spotted Owl (NSO) habitat, and 5) promoting fire resistance and resilience in climate resilient landscapes. Strategic placement of mechanical restoration treatments combined with low-mixed severity fire promotes forests that are fire resistant and dominated by large trees of fire tolerant species in appropriate landscape settings while retaining variation in forest density and species composition across the landscape. The goal is a landscape that is both resistant and resilient to fire which facilitates dry-forest adaptation to a changing climate and minimizes undesirable state changes.

Kerry Metlen, Ph.D. - Forest Ecologist - The Nature Conservancy in Oregon

Kerry is the technical lead for the team developing the Rogue Basin Cohesive Forest Restoration Strategy, an all-lands decision support framework for conservation planning that integrates wildfire threat to communities, promoting and protecting enduring habitats, restoring landscape resilience, and promoting the capacity of natural communities to adapt to climate change. As Forest Ecologist for The Nature Conservancy since 2010, he is a core member of several collaborative technical working groups, coordinates multiparty monitoring for the Ashland Forest Resiliency Project, conducts research on reference forest conditions in mixed conifer/hardwood forests, and supports TNC in Oregon's Forest Team.

Steve Buttrick, Ph.D. - Director of Conservation Science and Planning - The Nature Conservancy in Oregon

Steve is currently leading a study to evaluate the resilience of northwestern landscapes to climate change and implementing a planning effort in the lower Columbia Plateau to address sagebrush and sage grouse conservation and mitigation planning. He has been with The Nature Conservancy since 1978 when he was the first vegetation ecologist hired by TNC and spent many years working to establish Natural Heritage Programs across the US. After spending time in Arlington, VA and Boston Steve came to Oregon in 1999 and has focused on state-wide invasive species issues, conservation action planning for sites and projects, ecoregional assessments and climate change adaptation.

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## **Wildlife and habitats in a Changing Environment**

**14 October 2015 - 12:00-1:00PM**

**Peter Singleton, USFS**

**Oregon Room A and Rogue Room B&D**

### Webinar Description:

Climate change will interact with other existing and new stressors to affect wildlife populations. Identifying strategies that can maximize species and habitat sustainability, and providing opportunities for species to adapt in a changing environment, will be core challenges for land managers. In this presentation I will summarize anticipated direct and indirect effects of climate change on wildlife populations and suggest some habitat management principles for climate change adaptation planning.

Peter Singleton, Ph. D. - USFS Ecologist

Peter Singleton is a Research Wildlife Biologist with the USDA Forest Service, Pacific Northwest Research Station in Wenatchee, WA. His research interests lie at the intersection of wildlife biology and landscape ecology, including animal habitat selection, movement patterns, population dynamics, species interactions, and climate change impacts. Peter holds a Ph.D. from the University of Washington, an M.S. from the University of Montana, and a B.S. from The Evergreen State College.