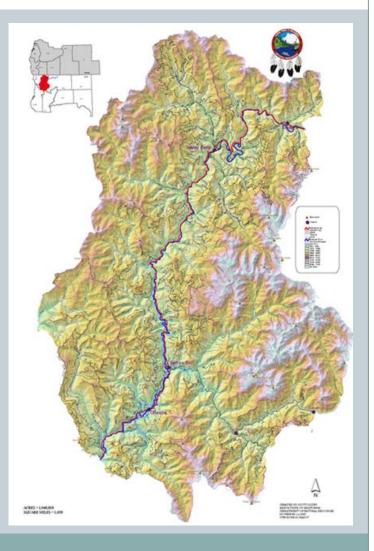
Karuk Climate Adaptation Plan

Leaf Hillman and Sinéad Talley Karuk Department of Natural Resources

I. History/Context

- Karuk Ancestral Territory covers 1.38 million acres in northern California.
- Ancestral Karuk people resided in more than 100 village sites along the Klamath and Salmon Rivers and tributaries
- Karuk environmental management practices supported resilient landscapes and a thriving subsistence economy
- Today, the Karuk Department of Natural Resources works in accordance with its mission to protect, enhance and restore the cultural/natural resources and ecological processes upon which Karuk people depend.

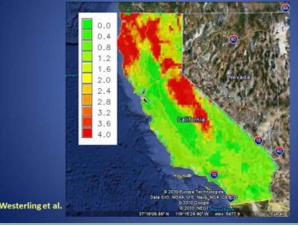


Mid-Klamath: Land Management and Climate Change

- Fire has been a central component of Karuk land stewardship and culture since time immemorial, used for tending, burning, and ceremony.
 - More than ³⁄₄ of Karuk traditional food and cultural use species are enhanced by fire
- Extractive resource-reliant economies, more than a century of fire suppression policies, and climate change considerations have resulted in a particular and immediate threat of increased fire intensity and severity in the Klamath region (Stephens et al 2014; Redsteer et al 2013)



2085 Fire Projection Red = 4 times more wildfire



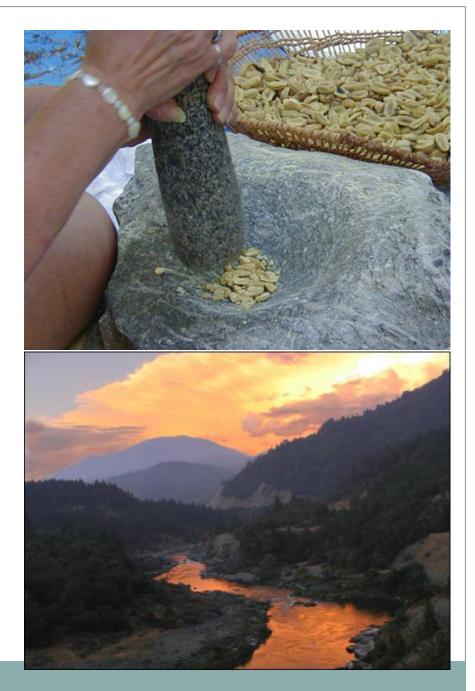
Impacts:

- Creates denied access to traditional foods and spiritual practices
- Infringes upon political sovereignty
- Puts cultural identity at risk



Huckleberries burning, October 2015. Photo: Klamath-Salmon Media Collaborative

- Karuk adaptation to climate change is often impaired by the actions of other agencies who interfere with tribal management authority and fail to recognize sovereignty.
- For more than a decade, the Tribe has been engaging in a wide variety of adaptation strategies. These include legal and political efforts to restore management, collaboration with agencies, the non-native community, academics, public education with reference to fire (e.g. recent media), proactive planning, and research.



II. Karuk Climate Change Initiative

- Karuk people have responsibilities to tend to and care for the food and cultural use species they consider as relations
- The Karuk Department of Natural Resources has taken a proactive and leading role in developing climate research on the Mid-Klamath
 - 2016 Karuk Climate Vulnerability Assessment
 - Western Klamath Restoration Partnership (WKRP)
 - Awarded 2017 PG&E Community Resilience Grant focused on wildfire protection
 - Objective within this proposal will support an additional chapter on critical infrastructure to include in final Karuk Climate Adaptation Plan



X Secure https://lostcoastoutpost.com/2017/sep/27/karuk-tribe-picks-100000-pge-climate-change-grant/

HANK SIMS / WEDNESDAY, SEPT. 27 @ 3:49 P.M. / ENVIRONMENT

Karuk Tribe Picks Up \$100k PG&E Climate Change Grant to Fund Traditional, Prescribed-Burn Forest Management



Resources

- Karuk Tribe Climate Change Projects (URL: <u>https://karuktribeclimatechangeprojects.wordpress.com/</u>)
 - Final 2016 Climate Vulnerability Assessment available online as a PDF
 - 2016 CVA will be updated to include findings from current DOE project



Karuk Tribe and Klamath Climate Change Research

MAY 10, 2016 / LEAVE A COMMENT

"We are trying to get back to an intact world. Climate change can be a vehicle for that because of the awareness it brings to so many about limitations in the current management practices. We believe there is genuine interest in Karuk perspectives about how to care for the land, we offer these explanations in the hopes that this is

III. DOE – Karuk Climate Adaptation Plan

<u>Objectives</u>

- Create a Climate Adaptation Plan for the Karuk Tribe
- 2. Refine Karuk Department of Natural Resources' Strategic Plan in light of information presented by the Karuk Climate Adaptation Plan

Methodology

Vulnerabilities are assessed at three scales:

- I. Vulnerabilities to Karuk tribal traditional foods and cultural use species
- 2. Vulnerabilities to tribal program infrastructure
- 3. Vulnerabilities to management authority and political status.

Project Partners

1. University of Oregon

- Dr. Kari Norgaard (Associate Professor, University of Oregon Sociology and Environmental Studies Departments)
- Aja Conrad (Karuk MA student, UO Environmental Studies)
- Kirsten Vinyeta (PhD candidate, UO Environmental Studies)
- 2. The Western Klamath Restoration Partnership

Project Activities/Outcomes:

Beginning steps:

- Review adaptation planning documents, scientific literature on climate change, and obstacles to adaptation for tribes
- Compile information on climate stressors that intersect with fire, especially in relation to species, program infrastructure and management authority.
- UO project team members held initial meeting.

Outcomes:

- 1. Publication of a collaboratively developed, fire-focused Climate Adaptation Plan
- 2. Revised version of our existing DNR Strategic Plan with integration of project findings

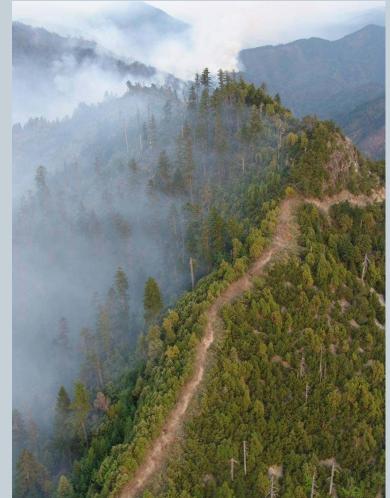
IV. Looking Forward

Project Benefits:

- **Community impact** through education, media outreach, and presentations.
- Climate Adaptation Plan will serve Tribal programs and enable the Karuk DNR to engage in and inform high-level land management planning for multiple resource objectives.
- **Supports key partnerships** with academic, federal, tribal, and non-profit partners.
- Leverages funds and technical support.
- **Serves multiple tribes** in the Mid-Klamath.

Next steps:

• Expanding 2016 CVA to include multiple indicators of climate change (e.g., changing patterns of temperature and precipitation).



Additional Resources:

- Norgaard, K. M. 2014. Social Impacts of Fire Exclusion *Humboldt* Journal of Social Relations, 39: 73-97
- Two Reports on Climate Change, Traditional Ecological Knowledge, and the need for knowledge sovereignty
 - Part I "Karuk Traditional Ecological Knowledge and the Need for Knowledge Sovereignty: Social, Cultural and Economic Impacts of Denied Access to Traditional Management." 2013
 - Part II "Retaining Knowledge Sovereignty: Practical Steps Towards Expanding the Application of Karuk Traditional Knowledge in the Face of Climate Change" 2014