A close-up photograph of several vertical, brown, textured plant stems. The stems are densely packed and show signs of growth, with numerous small, white, pointed buds or flowers emerging from the nodes. The background is a soft, out-of-focus green, suggesting a natural, outdoor setting. The text is overlaid on the left side of the image.

**Traditional
Ecological
Knowledge
Training
Workshop
2014**





CONTENTS

Welcome Letter from California Landscape Conservation Cooperative	5
Planning Team	7
Agenda	9
Instructor bios	11





WELCOME

September 23, 2014

Dear Participants,

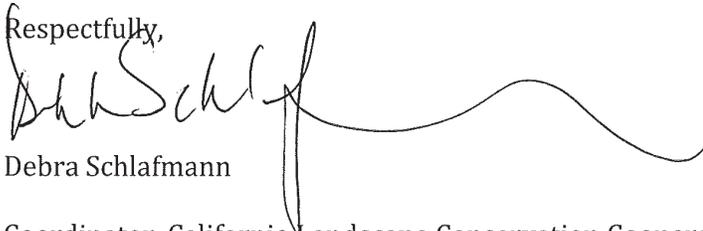
On behalf of the California Landscape Conservation Cooperative, I'd like to welcome you to the *Traditional Ecological Knowledge Training Workshop* at Modoc Hall on the California State University, Sacramento campus.

The main purpose of this workshop is to inform CA LCC Steering Committee members, partner agencies and non-governmental organizations about the value of traditional ecological knowledge and its application to natural resource management. It is also intended to convey the sensitive nature of the information to those who may work with tribes or provide support for tribal initiatives.

I am excited to inform you that the training will be conducted by a group of esteemed instructors and cultural practitioners, whose areas of expertise include tribal history, ethnobotany, archaeology, cultural resources, policy and law, mapping, climate change, natural resource management, and most importantly, Native American ways of life.

On behalf of the CA LCC staff and workshop planning committee, we look forward to your participation in this much needed and valuable training workshop on traditional ecological knowledge. We hope it inspires ideas and you come away with a deeper understanding of how it can be applied to your daily activities.

Respectfully,



Debra Schlafmann

Coordinator, California Landscape Conservation Cooperative





PLANNING TEAM

The California Landscape Conservation Cooperative (CA LCC) Traditional Ecological Knowledge Team is comprised of CA LCC Steering Committee members, Tribes, agency staff, and others who committed time and resources to help organize this training workshop. We would like to thank all of those who participated and contributed to this valuable program.

Michelle Selmon, Chair	CA Department of Water Resources
Jared Aldern	Prescott College
Emily Alejandrino	CA Department of Water Resources
Chris Bujalski	Bureau of Indian Affairs
Damion Ciotti	US Fish & Wildlife Service
Mahesh Gautam	CA Department of Water Resources
Ron Goode	North Fork Mono Tribe
Sage LaPena	Nomtipom Wintu Tribe
David Pegos	CA Department of Food & Agriculture
Chuck Striplen	San Francisco Estuary Institute



8:30– 9:00	Check-in for registered attendees	
9:00– 9:20	Welcome and Opening Remarks	Welcome <i>CA LCC chair</i> Opening prayer <i>Mary Tarango</i> Purpose of workshop Instructor introductions Expectations and desired outcomes
9:20– 9:45	Tribal history in California <i>Dr. Brendan Lindsay</i>	Tribal sovereignty and jurisdiction Cultural sensitivity Native diversity
9:45– 10:30	Introduction to Traditional Ecological Knowledge (TEK) <i>Ron Goode and Sage LaPena</i>	What is TEK to tribes? How do tribes view western science? How do western scientists view TEK? Commonalities between TEK and western science
10:30– 10:45	BREAK	
10:45– 11:15	Breakout Exercise 1	Discuss how information can inform resource management decisions. To be continued in Breakout Exercise 2.
11:15– 11:40	TEK and the Policy Environment <i>Preston Hardison</i>	Formal tribal consultation and relevance to tribal engagement on TEK Intellectual property law
11:40– 12:15	TEK and Ethnobiology <i>Dr. Chuck Striplen & Dr. Jared Aldern</i>	Ethno-ecological fire traditions Cultural landscape mapping (archaeology + ethnography + historic and contemporary resources)



AGENDA

12:15– 1:15	LUNCH Lunchtime Speaker <i>Dr. Karletta Chief</i>	
1:15– 1:45	Cross-walking of TEK and western science <i>Dr. Jared Aldern & Dr. Chuck Striplen</i>	Available data, access, and security Science needs Considerations of the sensitive nature of TEK
1:45– 2:45	Partnerships that advance effective resource and co-management research <i>Kenneth Holbrook, Matthew Leivas, Sr., & Ron Goode</i>	
3:15– 3:35	BREAK	
2:45– 3:15	Breakout Exercise 2	Extension of Breakout Exercise 1. Submit a personal or familiar project where TEK could be used in conjunction with western science. Considering the instruction, determine the steps to make a connection. What additional information or action would be needed?
3:35– 4:20	Panel Discussion	Open questions for instructors
4:20– 4:30	Closing Remarks <i>CA LCC chair or coordinator</i>	
4:30– 6:00	Reception and Poster Session	





INSTRUCTOR BIOS



Mary Tarango, Wilton Rancheria Miwok, mother, grandmother, respected and honored leader, and traditional dancer and singer. She is the former Chairwoman, and the first Chairperson, of Wilton Rancheria of Miwok Indians of Wilton, California. She was the driving force in the historic federal restoration of the Wilton Rancheria in 2009. Having dedicated 22 years of selfless work, Chairwoman Tarango believed and fought hard so that Wilton Rancheria would achieve the dream of becoming a federally recognized Indian tribe again. Her influence and leadership lives on in the current leadership of the Wilton Rancheria and tribal community at large.”



Brendan Lindsay is a tenure-track assistant professor of history at the California State University, Sacramento. He holds a PhD from the University of California, Riverside. He teaches California, Native American, and United States history. He is the author of the award-winning book, *Murder State* (University of Nebraska Press, 2012), which makes the case that genocide was committed in California against Native Americans during the nineteenth century by American settlers and miners using democracy as a genocidal mechanism. He is currently working on projects related to the abduction, sale, and abuse of Native American children in nineteenth-century California, and the connections between genocide and settler colonialism in California and the West.



Ron Goode is the Tribal Chairman of the North Fork Mono Tribe and has served in that capacity since 1983. He is a Life Member to the Sierra Mono Museum. He is a veteran of the United States Army, where he served at the rank of E-5 Sargent. Mr. Goode is a published author, archaeological consultant and conducts ethnographical research on the Mono culture. He is a co-developer of a State-wide K-12 curriculum called *Lessons of Our California Land Tenure*. Mr. Goode also spends time restoring cultural resource sites and meadow restoration.



Sage LaPena, from the Nomtipom and Nomsus Wintu Tribes of the Trinity River, is currently a Certified Medical Herbalist at Mountain Thistle Botanicals and Consultation. Ms LaPena is a professional Medicine Maker, ethnobotanist, teacher, wild crafter and gardener specializing in both Native American and Western herbal traditions. Sage started her herbal education at age seven, working with medicine people from neighboring tribes and has been a life-long participant in their ceremonial and cultural activities. She has been teaching the Ethnobotany of California native plants for over twenty years, specializing in Traditional Ecological knowledge and leading plant walks throughout North and Central California



Preston Hardison is a policy analyst with Tulalip Natural Resources Treaty Rights Office. He has worked on policy issues related to biodiversity, traditional knowledge and climate change adaptation for over two decades. He has represented the Tulalip Tribes at the United Nations in policy development and treaty negotiations at the Convention on Biological Diversity and the World

Intellectual Property Organization. Most recently he has completed the “Traditional Knowledges Guidelines” with a national working group to provide background and guidance for federal agencies in tribal issues related to the use of traditional knowledge for climate change adaptation.



Chuck Striplen is a member of the Amah Mutsun Tribal Band, the first people of the Monterey Bay region. He holds a double BA in Biology and Environmental Studies from UC Santa Cruz, and an MS and PhD in Environmental Science, Policy and Management from UC Berkeley. Chuck is a past Board Member of the California Indian Basket weavers Association, and is active in

efforts to increase Tribal participation in the study and stewardship of California's watersheds. After working for many years as an ecologist, planner, and wildlife biologist, Chuck came to the San Francisco Estuary Institute in 2002 to join their nascent Historical Ecology team. Since that time, he has helped expand the work and prominence of the discipline of historical ecology in California, and is now working to create greater alignment between mechanisms designed to protect natural and cultural resources.



Jared Dahl Aldern, Ph.D. is a historical ecologist and educator. Drawing on archival research, linguistic anthropology, literary theory, oral interviews, and ecological observations and experiments, Aldern's research and curriculum development have focused on how Indigenous people construct historical knowledge, restore ecosystems, and sustain their land and water tenure. Much of

this work focuses on how Indigenous people apply fire to the land for cultural purposes and for ecological restoration. Aldern has developed Indigenous language and ecological field research programs in collaboration with Native American nations and natural resource agencies, and he has helped to develop community-based curriculum for a number of K-12 school districts. He has taught Native American history at Palomar College, San Diego State University, and Stanford University, and he is an associate faculty member in the humanities and environmental studies at Prescott College. He co-directs the Comparative Wests Project at the Bill Lane Center for the American West, Stanford University, serves on the steering committee of the Southern Sierra Nevada Prescribed Fire Council, and was a member of the Planning Team and the Tribal Water Stories Team for the 2009 California Tribal Water Summit.



Dr. Karletta Chief is an Assistant Professor in the Department of Soil, Water, and Environmental Sciences at the University of Arizona (UA) in Tucson, AZ. Her research is to improve our understanding, tools, and predictions of watershed hydrology, unsaturated flow in arid environments, natural and human disturbances on soil hydrology, and climate change impacts on indigenous communities. Dr.

Chief is Navajo from Black Mesa, AZ and was raised without electricity or running water. She is a first generation college graduate and received a B.S. and M.S. in Civil and Environmental Engineering from Stanford University in 1998 and 2000. As a NSF Doctoral Fellow, Dr. Chief received her Ph.D. in Hydrology and Water Resources at the UA in 2007. In 2011, she completed her post-doctorate at Desert Research Institute in Las Vegas, NV. Dr. Chief was awarded the 2010 American Indian Science and Engineering Society "Most Promising Engineer/Scientist of the Year."



Kenneth Holbrook is the Director at Maidu Summit Consortium, a conservation non profit based in the northern Sierra, which strives to protect the natural and cultural resources within the homeland of the Maidu People. Himself a member of this California tribe, and a strong advocate for the expanded role of all Indigenous Peoples in the enterprise of land and resource conservation, Mr.

Holbrook supports potential partnerships which lead to environmental justice.

Matthew Leivas Sr. [no photo] is a 6-term Tribal Council Member of the Chemehuevi Indian Tribe. He is employed by the Chemehuevi Indian Tribe as Farm Manager. He was born and raised on the Colorado River Indian Reservation, but in 1970 he relinquished rights to become a member of the newly-formed and federally-recognized Chemehuevi Indian Tribe. Since graduation from Sherman Indian High School, Riverside, CA (1971), his accomplishments include the following: U.S. Indian Police Academy (1979); federally-commissioned Chemehuevi Indian Tribe Chief Game Warden (1977 - 1989); Lower Colorado River Peace and Dignity Journey Coordinator; Marana, AZ Federal Law Enforcement Training Center (1977- 1989); BIA - Law Enforcement Services, Special Operations Services - SOS Public Law 280 Tribal representative (1980 - 1985); Chemehuevi Housing Authority - Executive Director; Hualapai Housing Authority - Executive Director; Colorado River Indian Tribes - Housing Authority - Security Director Colorado River Indian Tribes - Maintenance Department, Heavy Equipment//Mechanic; Colorado River Indian Tribes- Director Tribal Employment Rights Officer; Certified Flagger Instructor /Trainer; Chemehuevi Indian Tribe - Director Tribal Employment Rights Officer Environmental Activist and Chemehuevi/Southern Paiute Traditionalist Tribal Water Rights advocate- 10 Tribes Partnership-Lower Colorado River Culture Bearer and Salt Song Singer; Co-Founder; Salt Song Project- Vivienne C. Jake, Kaibab Southern Paiute; Current Board Member of the Native American Land Conservancy, NALC Currently representing the NALC and other Indian Land Trusts & Conservancies with the formation of the Native Land Trust Alliance





NOTES

