

CA LCC FY 2013 Statement of Interest: Science Delivery for Existing Projects

General Information

<i>Title of Existing Project:</i>	From Awareness to Action: A Vulnerability Assessment and Adaptation Strategies for Focal Resources of the Sierra Nevada
<i>Project Lead, Organization:</i>	Dr. Lara Hansen, EcoAdapt
<i>Contact Information:</i>	P.O. Box 11195, Bainbridge Island, WA 98110 (206) 201.3834; lara@ecoadapt.org
<i>Ecoregion:</i>	Sierra Nevada

Partners and Management Relevance

Relevant Partners

The U.S. Forest Service (USFS), National Park Service (NPS), California Department of Fish and Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS) will be key participants in the trainings, with the USFS being the focus of specific products. We are already working with representatives from each of these agencies, and look forward to extending our work with them by identifying additional key managers and decision makers to include in the proposed activities.

U.C. Berkeley (Dr. Craig Moritz, Dr. Toni Lyn Morelli) is another partner we are working with in the current CA LCC project. Results from their 'Determining Landscape Connectivity and Climate Change Refugia Across the Sierra Nevada' project are already being used to inform the meadows vulnerability assessment and adaptation planning components of the project. With additional support, we plan to co-convene meetings to improve science delivery of each project's products, demonstrate how products are complimentary, and provide trainings for managers and users.

Description of management need addressed by the science products

The science products produced by the currently funded CA LCC project - vulnerability assessment, spatial analysis tools, and adaptation strategies - provide information and tools for forest planning and management (e.g., NEPA analyses, Forest Plan revisions, USFS Climate Change Performance Scorecard), and other natural resource management and conservation efforts (e.g., California SWAP, NPS Resource Stewardship Strategy, Joint Ventures). For example, results of the vulnerability assessment workshop have already been incorporated into the USFS Bioregional Assessment, and the Riparian Habitat Joint Venture and Sequoia and Kings Canyon National Parks have also requested products for inclusion in upcoming workshops and management plans. Additionally, there have been requests by workshop participants to bring project related training to the individual USFS units.

Explanation of how work implements CA LCC Strategic Plan

The proposed work implements the CA LCC Strategic Plan Objective 1 by **improving the delivery of usable scientific information** to agency partners so they can incorporate climate considerations into land management plan revisions and other conservation decisions. This will be accomplished through intensive trainings with agency partners as well as customized product development to maximize project outreach and usability. Intensive trainings with agency partners will **establish a general understanding of climate change science, ecosystem impacts, and implications for resource management and conservation** by sharing the results of the current project including the climate trends synthesis, vulnerability assessment, and adaptation strategy development. Trainings are also designed to **meet key management needs related to successfully achieving landscape scale conservation and emphasizing climate smart conservation processes** by teaching participants how vulnerability assessments and spatial information can be used to develop targeted adaptation strategies for a particular management goal. We will also **work with resource managers to develop and promote useful products that emphasize climate smart conservation**. We will work with partners to develop both technical products that support management decision-making and communication products that support agency outreach. For example, technical products will help National Forests incorporate vulnerability assessment and adaptation planning results in Forest Plan revisions and will directly support the forest in "getting to yes" as part of the Climate Scorecard. The proposed work also implements Objective 2 of the Strategic Plan by **including willing partners who are already engaged and ready to take on-the-ground action for the Sierra Nevada ecoregion**.

Work Summary

Status of existing product deliverables and outreach efforts

The results of the vulnerability assessment workshop are currently under peer-review and will be assembled into short synthesis documents to be posted online and disseminated to participants. Related draft climate change adaptation strategies and complementary comparative maps are under development for presentation and discussion during the Adaptation Planning Workshop (scheduled for June 4-5). All original project products will be completed by August 31, 2013. Outreach to date includes webinars (3 USFS, 1 CA LCC), a presentation (Climate College), a poster (S. Sierra Workshop), related training (NCTC VA training), and newsletters (Yosemite Gateway Partnership, USFS All Employee Climate Update), as well as information posted through listserves (CA LCC) and websites (CA LCC, EcoAdapt, TACCIMO). Additionally, invitations to stakeholder workshops were sent to over 100 managers and intended users with ~30 attending the vulnerability assessment workshop in March.

Description of additional work relative to existing work

Science delivery funds will be directed towards specific outreach activities and product customization opportunities evolved from the currently funded project. We propose the following activities: (1) Targeted agency trainings. Intensive 1-day trainings will be held with key agency partners (USFS, NPS, CDFW, USFWS) at regional or local offices to present project results and help integrate these results into participants' management decision-making processes. As budgeted, we are anticipating three joint trainings for USFS/NPS regional offices and at least one training for CDFW and/or USFWS. Trainings will include presentations from the results of the vulnerability assessment, spatial analysis, and climate change refugia project; demonstrations and examples of how these products can inform on-the-ground decisions; an introduction to adaptation strategy development; and breakout group exercises to apply products to develop adaptation options for participants' management goals. The trainings will be coordinated with U.C. Berkeley to maximize combined project impacts. (2) Tailored product development. We will consult with key agency partners to develop products from trainings and project results tailored to meet their needs. For example, products can be customized to a National Forest's needs such as the Climate Scorecard or public outreach and education. Based on input from partners, products will likely include both technical and communication briefings. Technical briefings are intended to inform agency staff of the project findings, as well as how the information can be used in forest planning and addressing key Climate Scorecard elements. Communication briefings are intended to provide talking points for forests to improve the delivery of climate and vulnerability information to the general public. (3) Module at Climate Change Refugia/Connectivity Workshop. We will present the results of the current project during the 3-day workshop organized by U.C. Berkeley to maximize project outreach, limited funding and agency staff time.

Description of value added to existing work

The results of the current project have already proven useful by requests to incorporate the information into planning efforts of both federal and state agencies. By offering specific trainings to these groups on how to use products in adaptation planning, as well as customized product development, it increases the likelihood that results will be used to inform additional planning and management decisions with regard to climate change. For example, products tailored to a specific National Forest or region will allow a forest to check off multiple Climate Scorecard elements, which they are required to fill out annually. Further, trainings and products that reflect regional or local climate changes, impacts, and adaptation options can directly inform the individual forest assessments and draft land management plans as part of the Forest Plan revision process, which all forests are required to undergo.

Staff involvement and capabilities

EcoAdapt was founded to offer support, training, and assistance in making planning and management less vulnerable and more climate-smart. EcoAdapt pioneered a series of interactive adaptation workshops to bring those engaged in the early stages of adaptation from awareness to implementation. Dr. Lara Hansen will provide technical guidance and workshop planning. Eric Mielbrecht has extensive facilitation experience with federal and state agencies, including work with the current CALCC project, and will co-facilitate trainings. Jessi Kershner is leading the current project, including its workshops, and has been working with the USFS to develop products that summarize vulnerability assessment information into an easily digestible format that effectively inform forest planning. She will continue engagement with the USFS and other managers to improve delivery of project results, and organize and facilitate trainings with managers and other intended users.

Timeline for deliverables

Coordinate with agency partners, preparation for trainings, outreach to encourage attendance: September 2013 – May 2014. Trainings with agency partners: November 2013 – May 2014. Consultation with agency partners to tailor products to their needs: November 2013 – April 2014. Development of products specific to agency partners' needs: May – July 2014.