Wildlife Conservation Society Climate Adaptation Fund 2014

Restoring Oak Resilience at the Table Rocks, Rogue River Basin, Oregon

FACT SHEET

Project Overview

Oak ecosystems in the Pacific Northwest exist in only a small percentage of their historic distribution, putting the plant and animal species associated with this habitat at risk. Protecting existing oak woodlands and restoring threatened areas is critical to reversing the declines of those species. This project will implement mitigation practices on approximately 1,200 acres of oak habitat across federal and private lands at the Table Rocks located in southern Oregon, which are threatened by increasing summer drought and a high likelihood of severe fire. Proposed treatments will include selective tree and shrub thinning, prescribed fire, invasive species removal, and herbaceous understory restoration.

Threats to Oak Habitats

Oak woodlands and savannas are among the richest wildlife habitats in Oregon and California. More than 300 species are known to use oaks, including dozens of resident and migratory birds such as Lewis' woodpecker, oak titmouse, and western scrub-jay. They also support important communities of plants and animals such as the Gentner's fritillary and the Pacific fisher.

More than 90% of pre-settlement oak habitats have already been cleared to make way for farms, urban areas, and other human developments. In remaining oak habitats, active fire suppression has altered the natural disturbance process of frequent, low-intensity fires that historically helped maintain oak habitat structure. As a result, stands have become greatly overstocked, reducing habitat quality, building fuel loads, and increasing the risk of high-intensity wildfire. Major threats to oak habitat quantity and quality include:

- **Conifer encroachment.** Fire suppression has allowed conifers, like Douglas-fir, and shrubs, like manzanita, to encroach and outcompete oak trees.
- **Loss of habitat structure.** Large diameter oak trees with mushroom shaped canopies that provide the limb structure, cavities, and acorn production required by many wildlife species have been lost. Remaining oaks are not developing the same structural traits due to overcrowding by young oaks and other trees.
- **Exotic invasive species.** Exotic plant species have invaded the understory communities, increasing fuel loads and degrading habitat.
- **Land use conversion.** Oak habitats continue to be converted to other uses, such as cropland, vineyards, and residential development.

In addition, the predicted effects of climate change, including warmer temperatures and drier summers, will contribute to the decline of oak ecosystems and the wildlife that depend on them. Using innovative climate science provided by The Nature Conservancy, the Table Rocks was identify as a priority location where restoration treatments can accomplish conservation of oak ecosystems in a changing climate.

Project Objectives:

- Reduce existing threats to oaks and associated plant communities.
- Protect and promote oak habitat and its connectivity for oak associated wildlife.

- Increase the potential for oak ecosystems to withstand the likely effects of climate change.

This is a landscape scale project which incorporates climate adaptation strategies designed to reduce wildfire risk, promote and protect oak habitat, and increase the potential of oak ecosystems to withstand the likely effects of climate change.

Partners:

- Lead Partners – Lomakatsi Restoration Project, Bureau of Land Management (BLM), The Nature Conservancy (TNC), US Fish and Wildlife Service (USFWS), Natural Resource Conservation Service (NRCS) and Klamath Bird Observatory
- Supporting Partners – Cow Creek Bank of Umpqua Indians, Confederated Tribes of Siletz Indians of Oregon, The Confederated Tribes of Grand Ronde, Oregon Department of Forestry (ODF),and Oregon Department of Fish and Wildlife

Project Duration:

- Lomakatsi ecosystem workforce crews will begin on-the-ground activities this February, 2015 and conclude in early April, 2015. Work will commence again in the fall of 2015 and operate seasonally until 2019.

Treatments Activities:

Lomakatsi workforce crews will perform selective tree and shrub cutting utilizing an ecological thinning approach know as variable density thinning, or mosaic patch retention thinning. This thinning strategy and associated treatment techniques focuses on clearing brush and small trees from around large, old oak trees (specifically Oregon white oak ,California black oak and ponderosa pine). To maintain a diversity of wildlife habitats, some patches of dense vegetation, including chaparral (buck brush and manzanita), will be retained where they are not encroaching on oak trees. Snags and large downed wood serve as important structures for wildlife and will be retained. Invasive plant species will be manually removed, and controlled fire including hand pile burning and/or swamper burning (a method in which fuels are added gradually to a burning pile over the course of a day) will be utilized to consume the slash generated from the thinning work. After areas have been thinned, or in open savannah areas, prescribed underburning may be applied to keep fuels reduced and restore this critical ecosystem process. Following the use of fire, native grasses and forbs will be seeded into the mineral rich ashes in an effort to reestablish herbaceous understory vegetation.

Geographic Location:

Partners have identified approximately 5,000 acres of critical oak habitat in need of restoration and climate adaptation work in and around the Table Rocks. This project will implement restoration on 400 acres on BLM (public) lands and 800 acres on adjacent private lands at the Table Rocks over the next 5 years.

Potential Impacts:

Visitors can expect to hear chainsaw noise and smell smoke periodically during operations. No trails will be closed at this time. At any given time, work will take place on either Upper or Lower Table Rock. When work is in proximity to the trail, signs will be posted to advise visitors to use the other Table Rocks trail.

Monitoring

The Nature Conservancy, Lomakatsi, and Klamath Bird Observatory are using science-based monitoring methods to achieve oak habitat conservation goals. Vegetation measurements before and after treatments, including the number of large open oak trees, shrub cover, and overall tree density, will be assessed to determine how well the project reduced encroachment, decreased wildfire risk, and improved overall oak ecosystem health. In addition, scientists will document the change in bird populations across the Table Rocks to determine how wildlife respond. Project partners will use this data to evaluate the effectiveness of restoration activities and refine future treatments.

Additional Project Funding

Support for this project is being provided through private foundation grants and federal funding awards secured by project partners.

For BLM Federal Lands:

- Wildlife Conservation Society – Lomakatsi has secured $218,347 of grant funding through the Climate Adaptation Fund (established by support from the Doris Duke Foundation) to conduct restoration treatments, monitoring, education and outreach pertaining to climate adaptation.
- Bureau of Land Management (BLM) – The Medford District BLM has committed $50,000 in funding, awarded to Lomakatsi through a cooperative agreement, for the implementation of restoration treatments on BLM administered lands within the Table Rocks project area.

For Private Lands

- United States Fish and Wildlife Service (USFWS) – The USFWS has committed $50,000 in funding, through the Partners for Fish and Wildlife Program, awarded to Lomakatsi in a cooperative agreement, for the implementation of treatments on private lands within the Table Rocks project area.
- Natural Resources Conservation Service (NRCS) – Lomakatsi has secured $615,000 through the NRCS Regional Conservation Partnership Program to conduct restoration and adaptation treatments on private lands adjacent to BLM lands.

For Monitoring

- The Nature Conservancy (TNC) – TNC has secured and committed $50,000 of funding through the BLM to complete an oak habitat and vernal pool assessment of the Table Rocks project area. This assessment will guide the prioritization treatment locations, restoration needs and treatment strategies.
- Klamath Bird Observatory (KBO) – KBO has secured and committed $13,000 through the US Fish and Wildlife Service for the project to assist in avian pre and post project monitoring, to measure both short and long-term treatment effectiveness.

For Project Planning and Coordination

- Lomakatsi Restoration Project (LRP) – LRP has secured $35,000 through federal and private funding sources for staffing, salaries, benefits, as well as travel and capital expenses to manage and further develop the project.
- In-Kind Agency and NGO Partners – The BLM, USFWS and KBO have committed a combined $21,500 in staff time for technical assistance and support of the project, consisting of regulatory compliance, GIS mapping support, project development and design, coordination and monitoring.

Additional Important Info:

- Lomakatsi Restoration Project is a non-profit, grassroots organization that develops and implements forest and watershed restoration projects in Oregon and northern California. Having implemented restoration projects over 20 years (since 1995) across thousands of acres of forests and miles of streams, Lomakatsi has a proven record of success. In cooperation with a broad range of partners Lomakatsi's work has set precedents on nationally recognized projects. Lomakatsi provides expertise and capacity in project development, planning, management, fine-scale ecological treatment design, monitoring, and implementation for ecosystem restoration projects. Lomakatsi coordinates closely with multiple funding partners and manages a diverse workforce in complex social settings supported by critical community outreach.

- The Wildlife Conservation Society is an international non-profit organization that saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. This project was one of 13 grants WCS selected nationally for their competitive Climate Adaptation Fund. Made possible through the generous support of the Doris Duke Charitable Foundation, WCS's Climate Adaptation Fund provides support for on-the-ground efforts to help species and the ecosystems on which they depend adapt to changing climatic conditions across the United States.

- For More Information visit:
    - www.lomakatsi.org/oak-habitat-restoration/
    - www.blm.gov/or/resources/recreation/tablerock/index.php
    - http://programs.wcs.org/northamerica/ClimateAdaptationFund.aspx
- Call:
    - BLM: 541-618-2422
    - Lomakatsi: 541-488-0208

Potential Questions:

- Has this ever been done at the Table Rocks?
    - No. This is the first forest restoration/fuels management work done at Table Rocks ever.
- Why are you allowed to burn and I am not?
    - Controlled burns are done during moist conditions on days when winds are most likely to blow smoke out of the valley and away from town. The goal of controlled, or prescribed, burns is to consume fuels that might burn out of control in a summer wildfire, threatening the community. Open/Barrel and woodstove/fireplace burning is regulated by the county and is determined by current weather conditions and the ventilation index (atmospheric mixing ability). The prescribed burning being done at the Table Rocks is outside of the Air Quality Maintenance Area, where smoke is not allowed. It is also considered "forest management burning" and is regulated by the State of Oregon-Department of Forestry (ODF) rather than the county.

- What is climate change? What does it mean for us in the Rogue Valley? How will it affect my property?
    - Climate change for the Rogue Basin is evident in the pattern of increasing temperatures, decreased summer precipitation, increased drought conditions and higher likelihood of summer wildfire that we've already started to see over the last few years. The potential impacts will affect everyone. These include severe wildfire which can consume houses and endanger the local community, as well as associated smoke. Wildfire may also impact availability of water and contribute to further loss of important wildlife habitat.