



# East Cascades Oak Partnership

Oak and Fire: Restoring Resilience in the East Cascades

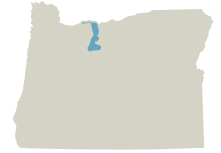
## OAK WOODLAND AND PRAIRIE HABITAT



East Cascades oak landscape (credit: Doug Gorsline)

### The East Cascades Oak Partnership

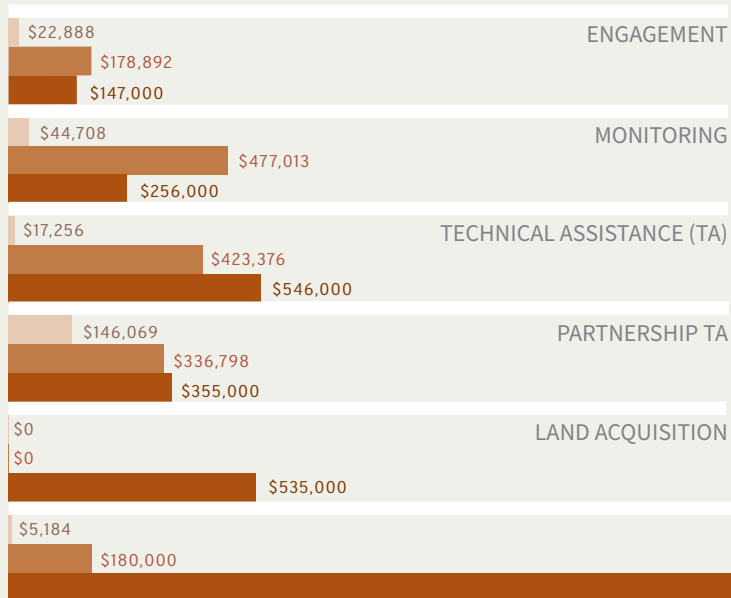
is an initiative that highlights the significance of Oregon white oak ecosystems for both local communities and the numerous species of plants and animals that depend on them. This effort involves collaboration among over twenty-five different groups, including Tribes, public organizations, and private partners.



The primary goals are to establish a relationship of local stewardship that will preserve these vulnerable oak habitats, ensure they can withstand the impacts of climate change and wildfires, and protect rural homes and culturally important resources.

### Funding

OWEB awarded \$4,977,000 in funding for the first two of an anticipated 3 biennia. At the time of application, the FIP anticipated leveraging an additional \$13,884,000 throughout the life of the initiative.



### Benefits

- Priority oak habitats are protected from expansion of weedy annual grasses, risk of high severity fire, conifer encroachment, and drought stress through restoration and adaptive management.
- Oak habitats remain connected to facilitate species migration and adaptation.
- Oak habitats continue to provide shade, food, and forage for people, wildlife, and pollinators.
- People in the oak landscape understand and actively embrace their role in shaping forest health and habitat.

### ABOUT THIS REPORT

The Focused Investment Partnership (FIP) grant program supports high-performing partnerships to implement strategic restoration actions and measure ecological outcomes through coordinated monitoring. In January 2022, the Oregon Watershed Enhancement Board (OWEB) awarded a FIP grant to the East Cascades Oak Partnership. This report documents cumulative progress since the FIP was initiated in 2022. Work completed under the FIP grant program is part of a much larger on-going collaborative effort of federal, state and local agencies, tribes, private landowners, and non-governmental organizations in the East Cascades. Accomplishments included in the report only reflect actions completed with OWEB FIP funding.

### PARTNERS

Columbia Land Trust • Confederated Tribes of the Warm Springs • Friends of the Columbia Gorge Land Trust • Natural Resources Conservation Service • Oregon Department of Forestry • Oregon Department of Fish & Wildlife • Oregon Parks and Recreation Department • Pacific Birds Habitat Joint Venture • US Forest Service (Columbia River Gorge National Scenic Area & Mt. Hood National Forest) • Lomakatsi Restoration Project • Wasco County Soil and Water Conservation District • The Conservation Fund • Columbia River Gorge Commission • Mt. Adams Resource Stewards

## GOAL

Protect and restore priority areas and corridors from the effects of development, climate change, fire suppression, incompatible grazing, and management uncertainty.

- Restore oak systems to address conifer encroachment, forest health, fuel loading, and annual grass expansion.

## STRATEGIES

- Protect priority oak systems from conversion and degradation using land protection tools.
- Develop monitoring, assessment, and communication tools to facilitate adaptive management.

## IMPLEMENTATION

### Engagement

**416**  
ATTENDEES AT  
ECOP LEARNING  
EVENTS

**1**  
COMPLETED  
OUTREACH  
PLAN

### Restoration

**694**  
ACRES TREATED  
FOR ANNUAL  
INVASIVE  
GRASSES

TO SUPPORT TRIBAL  
VALUES AND RESPECT  
TRIBAL SOVEREIGNTY

**2**  
TOOLS  
ADAPTED

**11**  
ECOLOGICAL  
SITE  
DESCRIPTIONS

UPDATED TO IMPROVE  
MANAGEMENT  
DECISION MAKING

BY NATIVE PLANT  
MATERIALS WORKING  
GROUP FOR RESTORATION  
PROJECTS

**80**  
NATIVE PLANT  
SPECIES  
ASSESSED

### Monitoring

**1**  
MONITORING  
PLAN  
COMPLETED

**4**  
STANDARDIZED  
MONITORING  
PROTOCOLS  
DEVELOPED

**209**  
MONITORING  
PLOTS  
INSTALLED

USING ECOP DISTURBANCE  
MONITORING PROTOCOLS

TO CHARACTERIZE  
PHYSIOLOGICAL RESPONSE  
TO THINNING TREATMENT IN  
DROUGHT-STRESSED FORESTS

**212**  
OAK TREES  
SAMPLED

**8,253**  
ACRES  
ASSESSED

USING THE NEW CURRENT  
CONDITION ASSESSMENT TOOL

## OUTCOMES

### Near Term 0-5 YEARS

- Fuel loads, competition stress, and invasive species are reduced through mechanical thinning, controlled burning, modified grazing, seeding, and weed control treatments.
- Oak systems in priority areas are permanently protected from conversion.
- Lessons learned about oak system condition, response to treatment, and effects of climate change are provided to decision-makers.

### Long Term 10+ YEARS

- Oaks are more resilient to fire and drought stress, risk of catastrophic fire to people and habitat is reduced, and biodiversity persists in the oak understory.
- Connectivity and oak extent are preserved in important corridors, maintaining opportunities for species to migrate and adapt to climate change.
- Management decisions and restoration prescriptions are increasingly effective in accomplishing the desired outcome: improved condition and function of oak systems.



Native plant working group seed collection at Mill Creek Ridge (credit: ECOP)



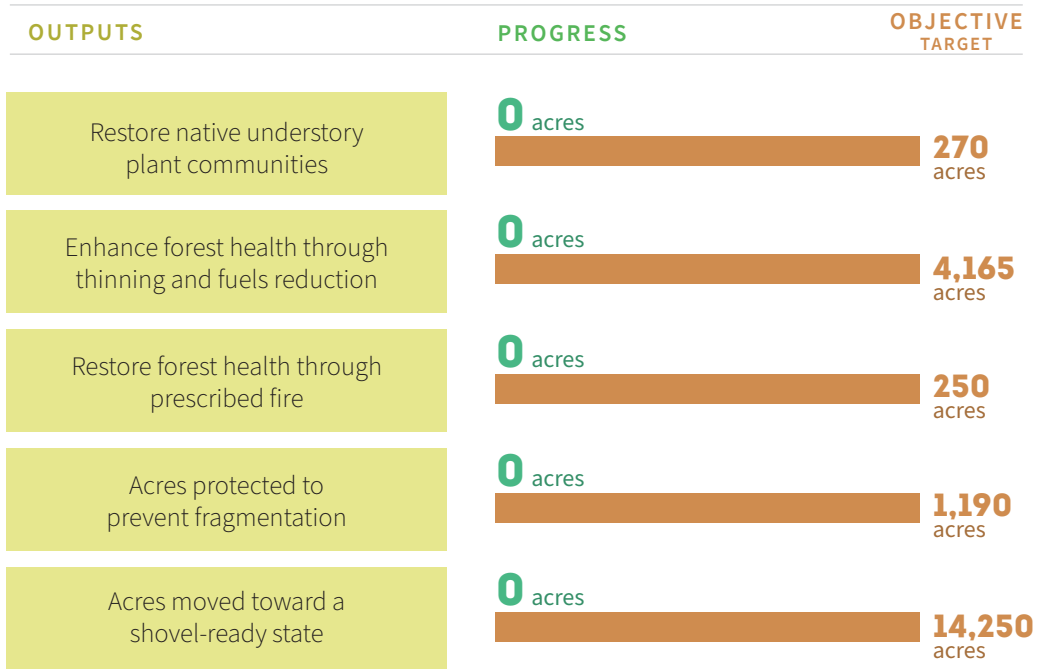
Soil station installation for oaks on the Trailing Edge monitoring project (credit:ECOP)



East Cascades oak landscape with balsamroot (credit: Doug Gorsline)

## FIP Initiative Progress, Biennia 1-2

Progress on outputs shown below represents actions completed through OWEB grants.



## Monitoring Approach

The East Cascades Oak Partnership will measure and report progress by implementing their “Restoration Project Effectiveness Monitoring Plan” which is a plan developed by members of the partnership that:

- Provides a framework to assess implementation and effectiveness of restoration projects.
- Collects pre- and post-treatment data for monitoring Oregon white oak response to restoration.
- Standardizes data collection in East Cascades oak systems using the ECOP Disturbance Monitoring Protocol, which is intended to document changes in oak systems across temporal scales.
- Outlines how we will evaluate if desired ecological outcomes linked to restoration actions are being achieved and how emerging stressors shift oak condition and response.



Oak physiology monitoring project field day (credit: ECOP)

# Adaptive Management

## Restoration

### CHALLENGES

Inflation.

Agency turnover, especially in decision-making roles.

Logistical challenges around fire danger and extreme weather.

Unanticipated fires and rapidly emerging drought-induced mortality events.

### LESSONS LEARNED

Long-term budget forecasting needs to look different in the post-COVID economy.

Anticipate change in federal agency roles.

We are anticipating that fire restrictions and closures are going to become more common and longer in duration in the future.

Conditions in the landscape can change very rapidly.

### ADAPTATIONS

Project scope reflects current costs. We will be more conservative when forecasting budgets over long time periods.

Build in extra time in project timelines to account for bringing new staff up to speed and have communications tools to do so.

Build longer or multiple implementation windows into project timelines to account for fire restrictions and closures.

Be prepared to adapt when working in transition zones or fire-prone landscapes.

## Monitoring

### CHALLENGES

Monitoring success relies on specific timelines that can be interrupted by partner capacity or implementation challenges.

Tribal sovereignty and data collection.

### LESSONS LEARNED

Anticipate change and fluctuation in partner capacity and implementation timelines.

Tribal nations may have different expectations about how monitoring data is shared and with whom.

### ADAPTATIONS

Build more lead time into monitoring project design. Establish clear expectations and have a backup plan.

Work with the tribe to develop a data management plan that safeguards sensitive information.

## Engagement

### CHALLENGES

Sequencing can limit efficacy.

Complexity of management objectives across an eco-tonal landscape.

### LESSONS LEARNED

Many of our brochures and tools point to our website, which is still being developed.

Calibrating the level of detail and specificity in communications without losing integrity.

### ADAPTATIONS

Building flexibility into tools so that you aren't relying on a single call to action.

Having tiered and targeted menus for outreach messaging. Developing high-level overarching messages consistent in any context alongside more specific tools that can convey deeper detail.