OWEB Focused Investment Partnership Priority
OAK AND PRAIRIE HABITAT

Summary Statement of Priority

The OWEB Board will consider proposals for investment in **oak** and **prairie habitats** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale, which will restore and protect ecologically meaningful areas.

OWEB's Focused Investment Priority for oak and prairie habitat guides voluntary actions that address primary ecological threats and limiting factors related to the quality of this habitat type. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in Oregon's State Wildlife Action Plan and other plans and strategies listed on the last page of this document.**

Background

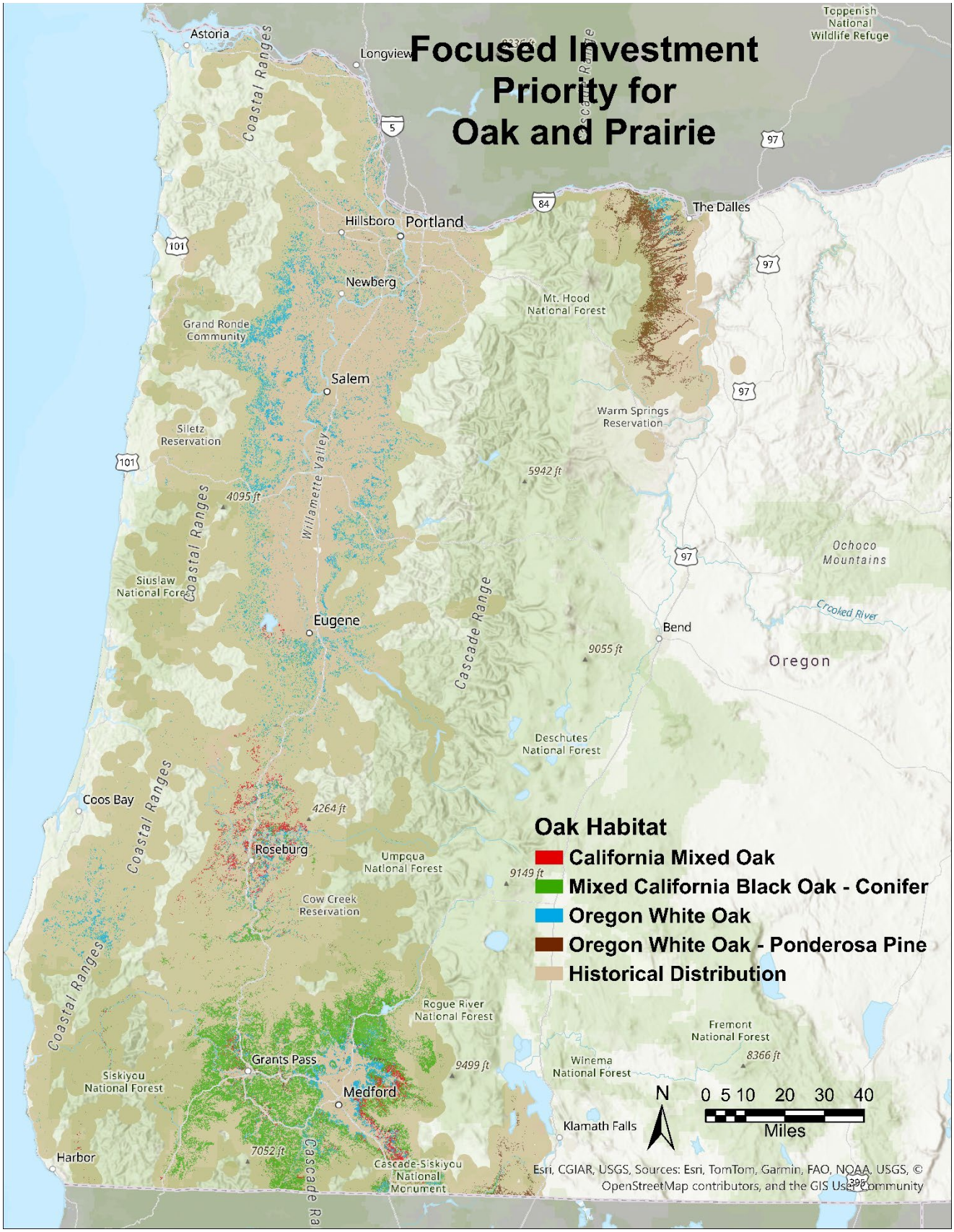
Where it occurs

Oak and prairie habitats are often in conflict with other land uses associated with a higher economic value, which has led to the loss of approximately 72% of its historical habitat range since the 1800s. However, oak and associated prairie habitats still exist throughout the state. Three types of oak habitats in Oregon include: "oak savannah" (5-25% oak coverage), "oak woodlands" (25-75% oak coverage), and "oak forests" (greater than 75% oak coverage). These oak habitats primarily occur in three areas of the state: 1) Oak and prairie habitats of the Willamette Valley ecoregion; 2) Oak woodlands of the East Cascades ecoregion and foothills along the Columbia Gorge, including both Hood and Wasco counties and south to White River; and 3) Southern Oregon oak and chaparral habitats of the Klamath, Umpqua and Rogue River ecoregions. Current habitat data layers as mapped may not fully capture all existing oak habitat; partnerships' mapped areas will also be considered eligible in future FIP applications.

Indicator species and/or species of interest supported by this habitat

The Oregon white oak is the indicator species for oak and associated prairie habitats. Species that are supported by these habitats include: streaked horned lark, the western meadowlark, Lewis' woodpecker, white-breasted nuthatch, western bluebird, acorn woodpecker, western gray squirrel, Columbian white-tailed deer, Fender's blue butterfly, Taylor's checkerspot butterfly, Kincaid's lupine, and the Willamette daisy, among many other plant species depending on the region. At least seven federally listed Endangered Species Act (ESA) species are dependent on these habitats.

Figure 1: Map of Focused Investment Priority Areas for Oak and Prairie Habitat



The map above displays priority areas for Oak Habitat across western and central Oregon, including: California Mixed Oak, Mixed California Black Oak-Conifer, Oregon White Oak, Oregon White Oak-Ponderosa Pine, and Historical Distribution.

Why it is significant to the state

In a national assessment, oak and associated prairie and chaparral habitats are one of the most endangered ecosystems in the U.S. due to land conversions and altered fire regimes. These habitats are home to a variety of wildlife and plant species addressed in the State Wildlife Action Plan. Maintaining the connectivity of oaks and their associated habitats is crucial to support species utilization of greater habitat range, but also to facilitating the gradual movement of species to the north from California in response to climate change. In addition, these habitat types are iconic and culturally important to Native American tribes. Tribes utilize cultural fire to sustain culturally important foods. Cultural fire practices are also important to maintain the health and biodiversity of oak and prairie habitats.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process

- Habitat loss and fragmentation due to land-use conversion (e.g., residential, timber, agricultural).
- Habitat degradation, including shrub-tree and conifer encroachment, invasive species encroachment, including Mediterranean oak borer and disease such as sudden oak death, a fungal tree pathogen.
- Impaired habitat persistence, due to loss of fire disturbance regimes, over-grazing, and the subsequent lack of recruitment of young oaks.
- Loss of large diameter oak trees with lateral limb structure and cavities due to densely stocked trees, grazed trees, shaded trees and fire-stressed trees that do not develop lateral limbs, cavities or higher acorn crops of open-grown trees.
- Lack of land management capacity, including ability to implement prescribed and/or cultural burns.
- Landscape-scale disturbance, including wildfire, landslides, flooding or similar events may occur within the FIP geography. Post-disturbance restoration actions addressing landscape-scale disturbance may be eligible FIP actions.
- Loss of wildlife habitat connectivity. Many species rely on the ability to move throughout the landscape to fulfill their daily and seasonal needs for access to food, shelter, and opportunities to reproduce. ODFW produced Priority Wildlife Connectivity Areas (PWCAs) maps to show where habitat connectivity is most important. Fifty-four species were selected for the project as surrogates, representing a variety of taxa, movement types, dispersal capabilities, and sensitivity to anthropogenic threats. FIP Initiatives may include actions enhancing PWCAs within the geographic boundary of their FIP Initiative.

Reference plans

1) Oregon State Wildlife Action Plan
2) Recovery Plan for Prairie species of Western Oregon and SW Washington (USFWS 2010)
3) Oregon White Oak Restoration Strategy for National Forest System Lands East of the Cascade Range (USFS 2013)