



OWEB Focused Investment Partnership Priority OAK WOODLAND AND PRAIRIE HABITAT

Summary Statement of Priority

The OWEB Board will consider proposals for investment in **oak woodland and prairie habitats** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for oak woodland and prairie/chaparral habitat guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also will support and/or improve watershed functions and processes. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Conservation Strategy and other plans and strategies listed on page 3 of this document.**

Focal areas for this Priority are identified in the associated plans as high priorities for oak and associated prairie and chaparral habitats, and the aquatic and terrestrial ecosystems that these habitats support. These areas include oak and associated prairies within the Willamette Valley, the southern Oregon oak and associated chaparral habitat corridor, and oak habitats in the East Cascades.

Background

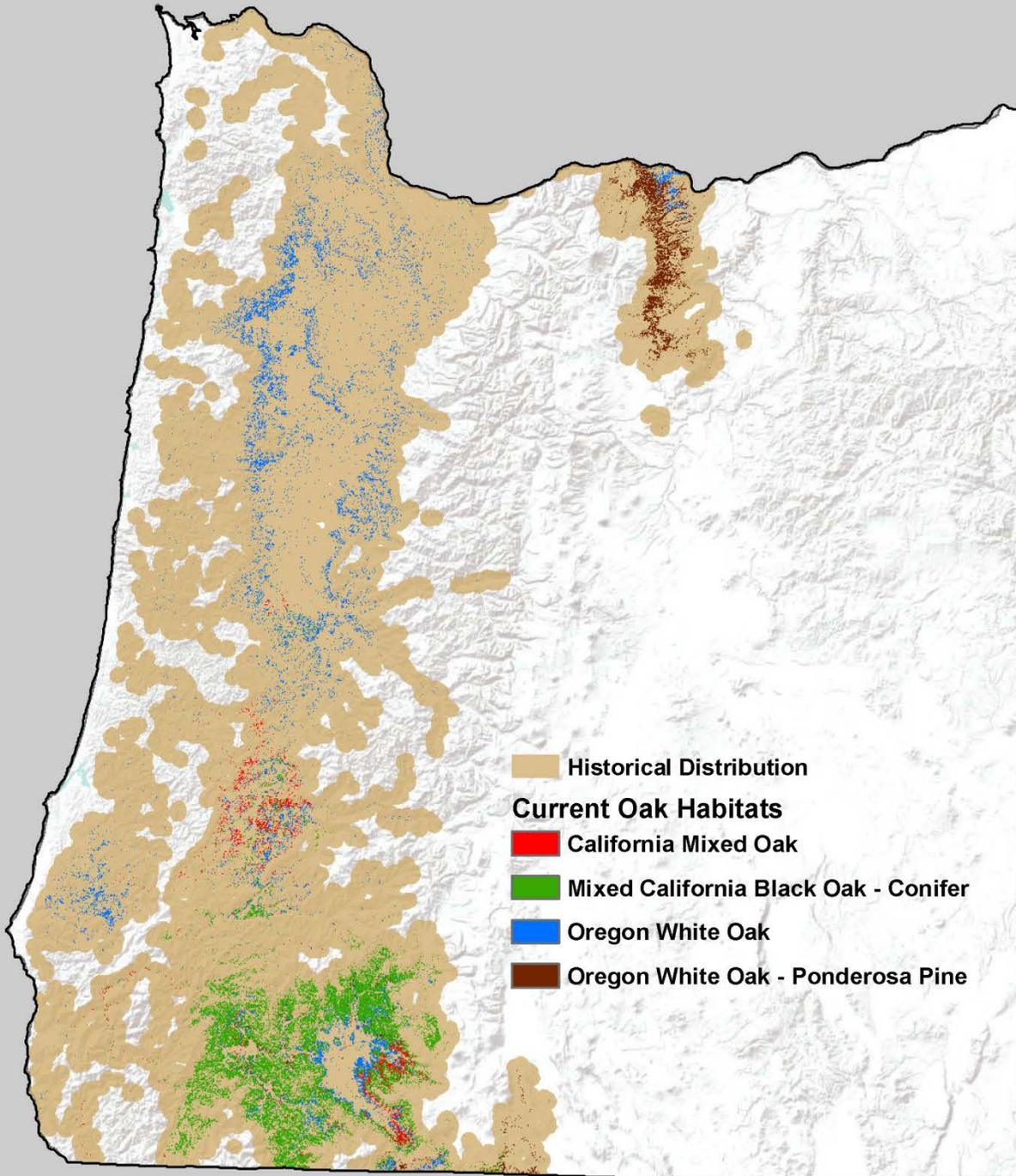
Where it occurs – Despite a loss of approximately 90% of its historical habitat range since the 1800s, oak and associated prairie and chaparral habitats still exist throughout the state. Three types of oak habitats in Oregon are “oak savannah” (5-30% oak coverage), “oak woodlands” (30-60% oak coverage), and “oak forests” (greater than 60% 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.

Indicator species and/or species of interest supported by this habitat – The Oregon white oak is the indicator species for oak and associated prairie and chaparral 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 Endangered Species Act (ESA)-listed species are dependent on these habitats.

Oak and associated prairie and chaparral habitats also support aquatic ecosystems that exist within their habitat range. The watershed function and process of these aquatic ecosystems depend on the health of the oak and associated habitats that foster them. These aquatic habitats host inland native fish species, such as salmon, steelhead, bull trout, and redband trout. Conservation actions to protect oak woodland and prairie habitat should be designed in way that limits unintended consequences to aquatic habitats in these areas.

¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

Focused Investment Priority for Oak Woodland and Prairie Habitat



Current and Historical Distribution of Oak Habitats in Oregon



0 5 10 20 30 40
Miles

Current distribution of oak habitats was derived from the 2010 Ecological Systems Framework Data Layer. Historical distribution was derived from the Oregon Historic Vegetation Framework Data Layer by buffering historic oak habitat polygons by two miles.

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. Yet, these habitats are home to roughly 30 bird, terrestrial, and plant species addressed in the Oregon Conservation Strategy. Maintaining the connectivity of oaks and their associated prairie and chaparral 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. Many species dependent on oak habitats may be considered for ESA-listing in the future; thus, an increase in habitat connectivity, complexity and acreage will benefit these vulnerable species. In addition, these habitat types are iconic and culturally important to the Native American tribes.

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, and disease such as sudden oak death syndrome; and
- Impaired habitat persistence, due to loss of fire disturbance regimes, over-grazing, and the subsequent lack of recruitment of young oaks.

Reference plans –

- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
- 2) Recovery Plan for Prairie species of Western Oregon and SW Washington (USFWS 2010)
(<http://www.fws.gov/oregonfwo/Species/PrairieSpecies/>)
- 3) Oregon White Oak Restoration Strategy for National Forest System Lands East of the Cascade Range (USFS 2013)
(http://ecoshare.info/wp-content/uploads/2013/05/Oak_Strategy_draft_3-6-13_FINAL_HQ.pdf)
- 4) Northwest Power and Conservation Council – Willamette Subbasin Plan
(<https://www.nwcouncil.org/fw/subbasinplanning/willamette/plan>)