OWEB Focused Investment Partnership Priority
DRY-TYPE FOREST HABITAT

Summary Statement of Priority

The OWEB Board will consider proposals for investment in **dry-type forest habitat** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale[1].

OWEB's Focused Investment Priority for dry-type forest habitat guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also 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 listed on page 3 of this document.**

Focal areas for this Priority are identified in the associated plans as high-priority dry-type forests and the aquatic and terrestrial ecosystems that these habitats support.

Background

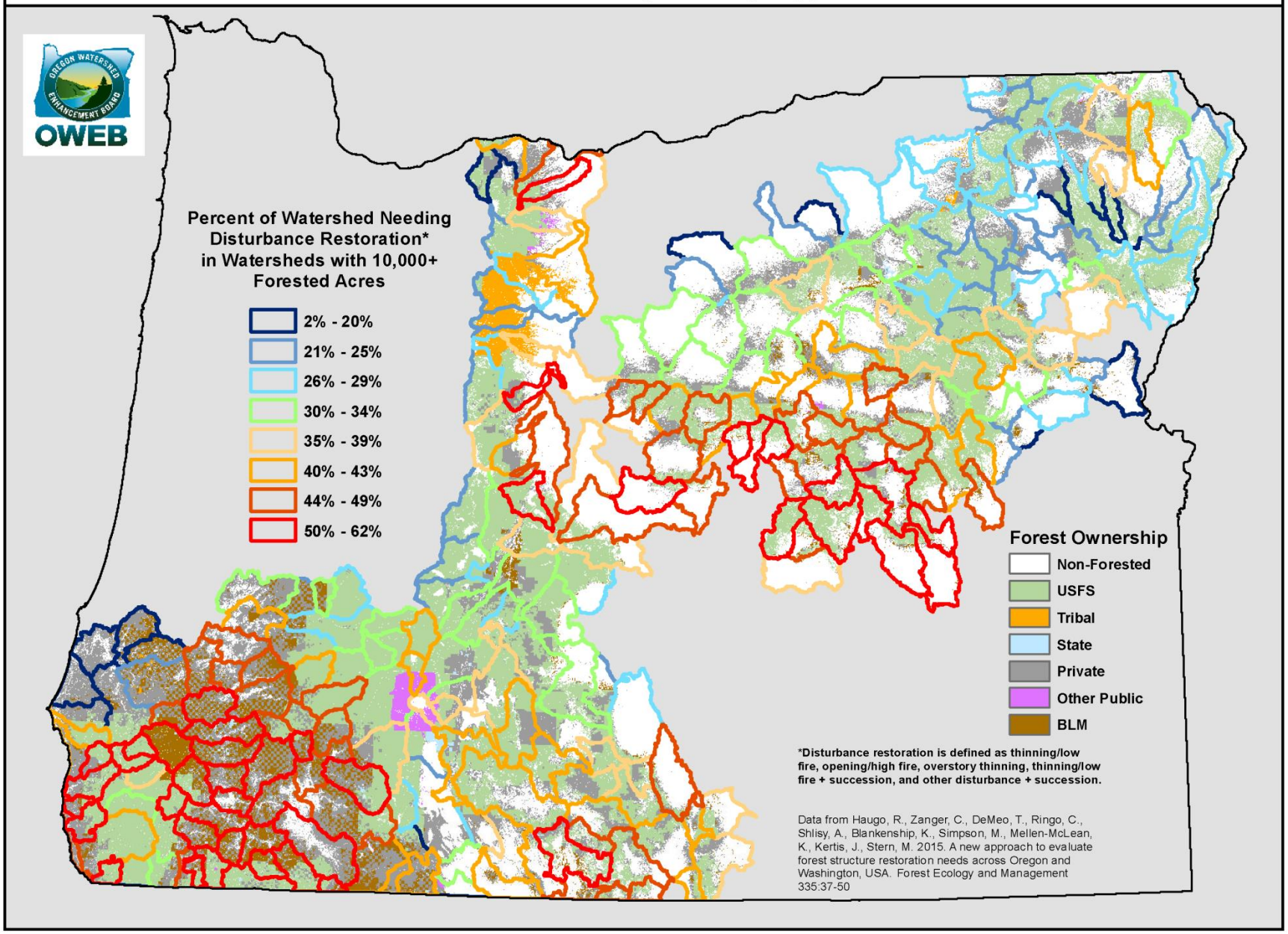
Where it occurs – Dry-type forests exist east of the Cascade Mountains and southwest in the Umpqua and Rogue watersheds of the Siskiyou and Klamath Mountains. This forest type spans 14 million acres in Oregon, constitutes roughly half of all forests in the state, and accounts for approximately 25 percent of the state's land cover. These forests are associated with nine national forests in Oregon and also coincide with land managed by the Bureau of Land Management in southwest Oregon. "Dry-type" is a general term for forests that consist of dry pine forests, dry mixed conifer and moist-cold forests.

Indicator species and/or species of interest supported by this habitat – Dry-type forest habitat is composed of numerous tree species, including ponderosa pine, sugar pine, grand fir, and Douglas-fir. Historically, these forests experienced more frequent low-intensity fires that would burn off the understory and small trees on a 7-15 year cycle, resulting in a diverse and robust mosaic of older, larger aforementioned tree species mixed with areas of younger trees, stands, and forests. Fire suppression practices in the past century have elevated 'fuel levels' to a degree that has altered forest species composition and succession, and susceptibility to uncharacteristic large wildfires due to the fuel loads. In addition to the building of fuel levels, the change in forest management practices during the last century has reduced diversity of species and age structures, and increased densities of trees within this forest type.

Dry-type forests are critical to healthy watershed function and process. The aquatic habitat within these forested areas closely linked with health of the dry-type forest. Dry-type forest habitats support over 800 fish and wildlife species, including bird species such as the white-headed woodpecker and northern goshawk, and terrestrial species, such as Rocky Mountain elk and mule and white-tailed deer. Dry-type forests also support native fish such as salmon, coastal coho steelhead, bull trout, and redband trout (see related priorities). Conservation actions to protect dry-type forest 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 Dry-Type Forest Habitats



Why it is significant to the state – Dry-type forests cover vast acreages in Oregon, and are at critical risk for uncharacteristically intense wildfires. These forest systems support a diverse range of aquatic and terrestrial species, including federally listed fish and bird species. Properly functioning dry-type forests are also critical to maintaining healthy watershed function and process for the rivers and other water bodies existing within their habitat range. Dry-type forests are iconic in Oregon, of cultural significance to Native American tribes, and have economic importance related to natural resource based economies in rural communities. In addition, these areas support an increasingly important recreation-based economy in many areas throughout Oregon.

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

- Uncharacteristically intense wildfires as a result of fuel buildup to fire suppression and forest management practices;
- Altered fire regimes resulting in forest densification and changed ecological role of fire;
- Loss of forest structure, age, composition, and habitat connectivity; and
- Vulnerability to threats such as uncharacteristic outbreaks of diseases and insects.

Reference plans –

1) Oregon Conservation Strategy (http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
2) Restoration of Dry Forests in Eastern Oregon (https://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/NetworkProducts/Pages/Dry-Forest-Guide-2013.aspx)
3) General Technical Report – The Ecology and Management of Moist Mixed-Conifer Forests in Eastern Oregon and Washington: A Synthesis of the Relevant Biophysical Science and Implications for Future Land Management (http://www.fs.fed.us/pnw/pubs/pnw_gtr897.pdf)
4) Haugo, R., Zanger, C., DeMeo, T., Ringo, C., Shlisy, A., Blakenship, K., Simpson, M., Mellen-McLean, K., Kertis, J., Stern, M. 2015. A New Approach to Evaluate Forest Structure Restoration Needs Across Oregon and Washington, USA. Forest Ecology and Management 335: 37-50. http://www.sciencedirect.com/science/article/pii/S0378112714005519