

EARLY-SERAL STAND AGE AND FOREST STRUCTURAL CHANGES IN PUBLIC AND PRIVATE FORESTLANDS IN WESTERN OREGON AND WASHINGTON

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Abstract—Federal forests in the Pacific Northwest region have undergone exceptional changes in management over the past 20 years, and these changes have led to a reduction in regional timber production and significant changes in the management and current age structure of forests. Public lands include large areas of older forests with relatively little younger early-seral forests. In contrast, private lands include large areas of younger forests and little land in older forests. The lack of early-seral forests on federal lands is an important and distinguishing characteristic of these forests and there is concern about the amount and type of early-seral wildlife habitat available in the region. Reductions in timber harvests in federal forests in the PNW region in recent years may lead to significant changes in forest age class structure between public and private lands. Lack of regeneration harvests may also reduce early-seral forest habitat on federal lands and this loss of early-seral habitat is a conservation concern for wildlife species that depend on this type of forest habitat. Conversely, the amount and intensity of management in industrial private lands have increased with a greater proportion of private forests in relatively young stands less than 20 years old.

We assess changes in forest stand age, forest structure and vegetation in public and private lands using both USFS Forest Inventory and Analysis and LANDSAT data to compare differences among forestland owners since the Northwest Forest Plan was implemented. Findings show significant differences in stand age and forest structure between federal, state and private forestlands in the Northwest Forest Plan area. We are conducting analyses of forest stand and understory data to assess potential differences between public and private landowners and relate to quality of wildlife habitat for ungulates and birds. We will report results with implications for forest management and wildlife habitat in the PNW region.

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