CRITIQUE OF ACTIVE MANAGEMENT IN SPOTTED OWL HABITAT
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The U.S. Fish & Wildlife Service's (FWS) proposed critical habitat ruling for the northern spotted owl is based on fundamentally flawed assumptions underlying "active forest management" ("ecoforestry" or thinning) derived from untested provisions and included in a February 28, 2012 Memo from President Barack Obama to Secretary Ken Salazar on the basis of "extensive scientific analysis." These assumptions are: (1) fire is bad for owls; (2) fire severity is increasing in the owls' range; (3) thinning is a remedial measure whose benefits outweigh larger impacts from fire; and (4) logging in mature forests is needed to create early seral forest and foraging habitat for owls and other species. Below we provide the best available science on owls and forest ecosystems to counter these assumptions:

1. Owls Appear to be Resilient to Wildfires - Available evidence and knowledge of spotted owl ecology across all three subspecies (Mexican, California, Northern) show that owls tolerate some degree of moderate to high-severity fire within territories, and in some cases, appear to prefer foraging in severely burned stands as long as a burned territory is capable of supporting a pair of owls, whereas owls abandon salvage logged areas (photo of California spotted owl on snag in the McNally Fire area, California – M. Bond).[i]

Recommendation: **More research is needed on habitat use by spotted owls in the dry-forest landscapes and fire effects on owl occupancy and reproduction, effects on owl prey, and barred owl invasions *before* widespread active management. Tighter prohibitions on post-fire logging are needed within owl suitable habitat.**

Photo: Post-fire logged area (left) vs adjacent unlogged snag-forest 10 years after the Biscuit fire, Oregon. Note lack of vegetation in the logged area, including poor conifer establishment (D. DellaSala).

2. High Severity Fire HAS NOT Increased - In mixed evergreen forests of southwest Oregon and northern California, fire severity has been shown to decline as forests mature. In mixed conifer and drier ponderosa pine forests of eastern Oregon and Washington, the amount of high-severity fire has not increased in decades. In dry forests of northern California, fire extent increased only slightly in the past century and far too little to compensate for fire suppression effects in reducing high-severity fire[ii]. Even with climate change, natural recruitment of forests into owl habitat should outpace fire effects for decades[iii]. Recent studies also have challenged perceptions about historical conditions in dry forests in the owls' range that FWS has incorrectly portrayed as open and park-like when in fact these conditions appear to be the exception NOT the rule[iv]. This has important implications for owl recovery, as thinning will create novel forests that replace the habitat mosaic generated by most fires that owls and other wildlife require (e.g., black-backed woodpeckers nest almost exclusively in charred, snag-rich forests).

Recommendation: Projects that open dense forests are incompatible with spotted owl recovery. Further studies must be conducted and peer-reviewed prior to FWS treating active management as recovery actions.

Photo: Vegetation mosaic generated by the 2002 Biscuit fire (10 years later) showing mix of fire severities that provide suitable nesting and foraging habitat for owls and prey species (D. DellaSala)

3. Thinning in Suitable Owl Habitat Will Degrade NOT Restore Owl Habitat – FWS incorrectly assumes that thinning is a short-term impact to owls and such impacts are less detrimental than impacts from wildfires. However, the only published empirical study of

thinning on spotted owls documented habitat use shifting away from the thinned stands.[v] Decades of research on owl prey – primarily but not exclusively northern flying squirrels – show declines following thinning[vi]. Because barred owls use younger forests more than spotted owls, thinning may also intensify competition among related owl species[vii], negating efforts by FWS to contain barred owl invasions.

Recommendation: Before thinning is employed over large landscapes, FWS should: (1) conduct comprehensive studies of thinning effects on spotted owls, prey, and barred owl invasions using pairwise comparisons (controls, thinned) over small and replicable landscapes; and (2) release an Environmental Impact Statement to determine a range of alternatives that better present the science.

4. Logging Mature Forests (generally >80 years old) Further Degrades Important Habitat for Owl Recovery – FWS proposes to execute modified clearcuts in mature moist forests to create early seral habitat for owls and other species; however, this provision would set back owl recovery by reducing mature forest (also rare) extent and its ability to become high-quality old-growth owl habitat. Complex early seral forests used by countless species can simply be created by a prohibition on post-disturbance logging.

Recommendation: Protect all mature forests (along with high-quality owl habitat), allow for development of complex early seral forests through prohibitions on logging after disturbances, and conduct studies to determine how much early seral forests, and in what condition, occurred historically vs. currently**.**

Photo: Mature forests like this (left of photo) in northern California could be logged to create early seral forests under the provisions of active management (R. Henson).

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