Appendix A. Supplementary Figures
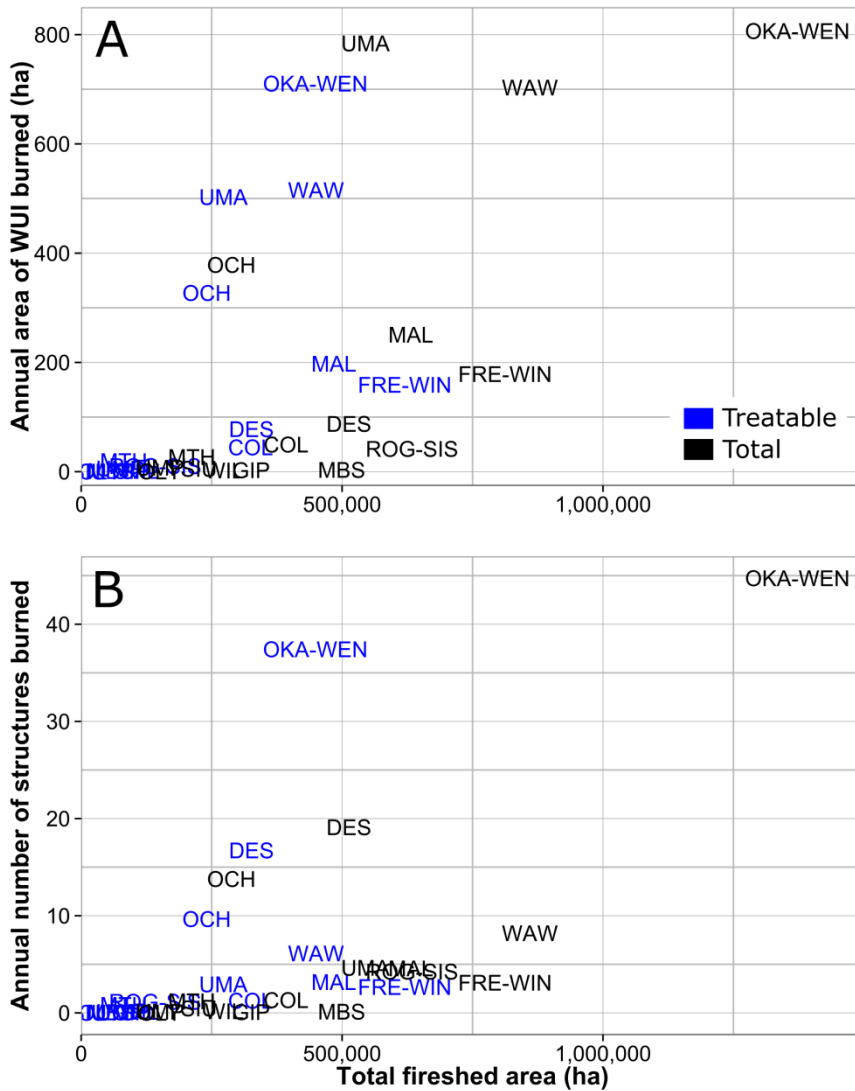

Fig. A1. Scatterplot of national forests showing predicted total fireshed area by A) predicted annual area of wildland urban interface (WUI) burned, and B) predicted total structures exposed to wildfire for all land designation classes (total) and for lands actively managed and managed for multiple objectives (treatable). Land class designation groups refer to the ignition source on the y-axis and for total area on the x-axis.
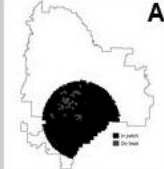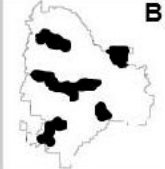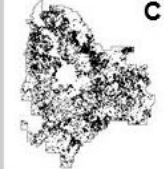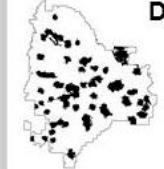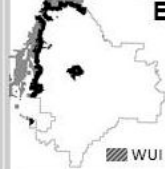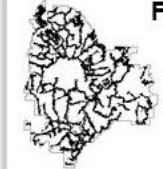
	Spatial Strategies for Fuel Management					
	Restoration of low intensity fire regime in dry forests	Restoration on mixed severity fire regimes	Broad landscape protection	Protection of dispersed values	Localized protection	Containment
Values	High density, dispersed	Any	Low density, dispersed	Clumpy	Variable density, clumpy	Low or none
Treatment goal	Low hazard fire containers	Restoration of dispersed natural fire barriers	Disrupt spread, facilitate containment	Dispersed defensible fuel breaks	Localized defensible fuel breaks	Contain large fires at defensible locations
Performance measure	Area burned by prescribed and natural fire	Landscape reduction in hazard and burn probability	Reduction in landscape burn probability	Reduced exposure to fire	Local reduction in exposure near values at risk	Containment of large fires
Example map						

Fig. A2. Landscape treatment strategies for different fuel management objectives. Strategies are determined by fire regime, fire management objectives, and the spatial pattern of values at risk. Black shaded areas in the maps depict fuel treatment areas within the example landscape. (A) Low hazard fire containers for dry forest restoration, (B) protection of dispersed values using the approach of (Finney, 2007) where treatments are arranged to maximize the reduction in spread rate, (C) defensible fuel breaks around a wildland urban interface (WUI), (D) defensible fuel breaks around dispersed values (e.g., critical wildlife habitat), (E) restoration of natural fire barriers (e.g., hardwood forest in a conifer matrix), and (F) high hazard fire containers surrounded by networks of defensible fuel breaks. Figure from Ager et al. (2013).

References

Ager, A. A., Vaillant, N. M., and McMahan, A. (2013). Restoration of fire in managed forests: a model to prioritize landscapes and analyze tradeoffs. *Ecosphere*, *4*(2), 29.

Finney, M. A. (2007). A computational method for optimizing fuel treatment location. *International Journal of Wildland Fire*, *16*, 702-711.