

Comparing the value of fuel treatment options in northern Colorado's urban and wildland–urban interface areas

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Received 23 March 2005; received in revised form 2 June 2006; accepted 16 June 2006

Abstract

Urban and Wildland–urban interface (WUI) residents of two counties in Northern Colorado were surveyed to compare residents' values for forest fuels treatment programs. A Contingent Valuation Method (CVM) survey was designed and sent to sample each of four groups: Larimer County WUI, Larimer County urban, Boulder County WUI, and Boulder County urban. Logistic regression models were used to estimate willingness to pay (WTP) and to calculate the odds of voting in favor of each fuel treatment program. We found that residents differed with respect to income, proximity to forested areas, perceived wildfire risk, and attitudes regarding treatment programs. Mean WTP was higher for thinning than for prescribed burning among all four samples. Boulder County residents mean WTP was about 25% higher for both programs than Larimer county residents. These results have potential implications for forest management and policy decisions related to fuels treatments in forested areas at risk of wildfire.

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Keywords: Contingent valuation; Thinning; Prescribed burning; Wildland–urban interface; Forest fuels; Fuels treatment

1. Introduction

Managing fuels in Colorado's wildland–urban interface (WUI) has become an increasingly complex, expensive and important problem for fire managers

and for fire policy-makers (Colorado State Forest Service, 2001). Colorado's WUI areas are considered to be at risk of severe wildfire because they are densely wooded and because they have accumulated substantial fuel loadings over the last century (Colorado Division of Forestry, 2002). WUI areas where Colorado residents are at risk from wildfire are collectively known as the “Red Zone” (illustrated in Fig. 1). Many of Colorado's most crucial “Red Zone” areas are located along the Eastern foothills of the Rocky Mountains, an area known as the Front Range. Over one million people living in the WUI along the Front

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Interface Areas of High Wildfire Risk in Colorado

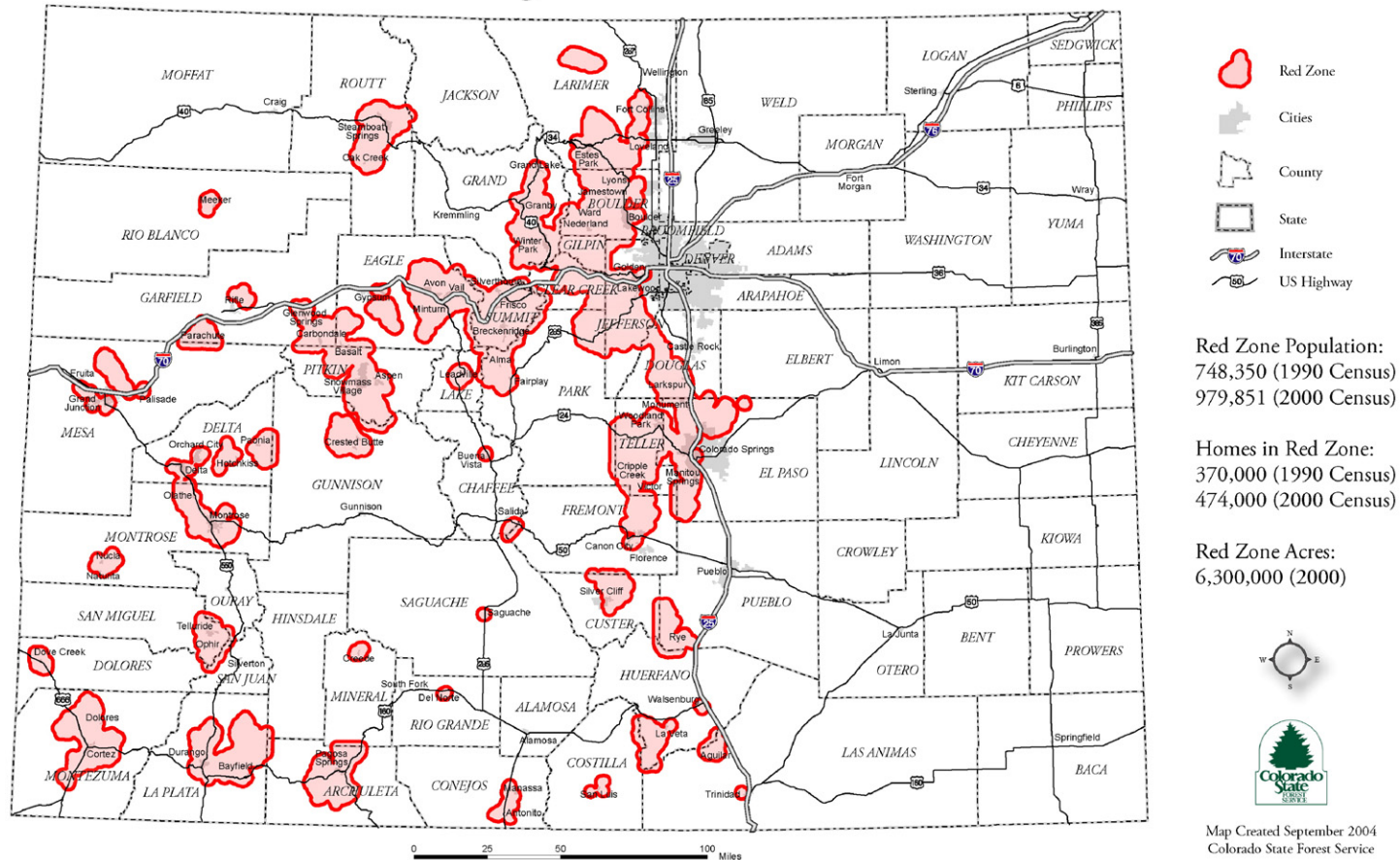


Fig. 1. Map of Colorado counties and the Red Zone showing areas at risk for wildfire.

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