Elucidating social-ecological perceptions of a protected area system in Interior Alaska: A fuzzy cognitive mapping approach

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Abstract

The Interior of Alaska is one of the few remaining places in the world with intact ecosystems. Protected areas in this region, particularly Denali National Park and Preserve and Denali State Park, are high profile tourism destinations situated in a rural landscape that is inhabited by a diverse array of stakeholders. Public land management agencies are faced with the challenging task of engaging these rural residents in discussions about their relationships with a rapidly changing landscape to understand change and growth. This study evaluated residents' perceptions of social and ecological dynamics of protected areas in Interior Alaska using data from fuzzy cognitive mapping exercises that were part of focus groups and interviews across six local communities. Guided by an exploratory resilience framework, we established a baseline understanding of features that characterized social and ecological conditions at a regional scale. Results showed how residents valued a variety of socio-cultural, socio-economic, and ecological features of the landscape. The region was predominantly characterized by *tourism*, *sense of community*, *subsistence*, and *Wilderness*. *Climate change* and *large-scale development* were the primary drivers of change. These findings provide a structured platform for building resilience and interpreting variability in visions for the future.