

Sommers-Grindstone Ranch Rapid Assessment of Mitigation Value

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Background

In 2010, The Nature Conservancy completed an assessment of priority areas for offsite mitigation for the Pinedale Anticline Project Office (PAPO). Biodiversity offsets (aka offsite mitigation, compensatory mitigation) seek to ensure that inevitable negative environmental impacts of development are moderated by environmental gains, with the overall aim of achieving a net neutral or positive outcome. The goal of our offset analysis was to design an approach that seeks to ensure that offsets are ecologically equivalent to impact site, would persist at least as long as onsite impacts, and would achieve a net neutral or positive outcomes for impacted wildlife targets. Our analysis highlighted both (1) high quality habitats and (2) known locations of selected species and ecological systems. In addition, we examined potential impacts associated with development and identified a set of offset sites to compliment landscape level conservation goals.

In 2009, the PAPO provided project funds for three conservation easements on 19,546 acres of the Sommers-Grindstone Ranch in Sublette County (Figure 1). Our objective here is to provide a rapid quantitative assessment of the contribution of the Sommers-Grindstone Ranch to the mitigation goals determined by the 2010 assessment.

Results and Discussion

Overall, one-third (6412 acres) of the Sommers-Grindstone easement lies within a Priority Mitigation Area as defined by TNC analysis. There are 752,435 acres of Priority Mitigation Areas overall within the study area, but only 12% (91,634 acres) are privately owned and available for conservation easements. The Sommers-Grindstone easement contributes significantly to many conservation goals with the PAPO (Table 1). The easement exceeds the minimum 2010 analysis goal for four conservation targets: mule deer migration corridor, bald eagle nesting habitat, wetlands, and montane sagebrush steppe. The easement also contributes significantly towards meeting goals of many other conservation targets (Table 1).

This report provides a rapid assessment of the easement's contributions towards mitigation goals, and therefore has several limitations. The assessment uses spatial data appropriate for landscape scale analyses and site-level value many not be adequately captured. On-site field level assessments are more appropriate for assessing actual value. Our rapid assessment quantifies the conservation values on the Sommers-Grindstone easement and demonstrates how the easement contributes to the mitigation

goals for the Pinedale Anticline Oil and Gas project. While field-level studies are needed to validate the data onsite, this analysis supports acquisition of the easement to meet mitigation goals.

Figure 1 Map of Sommers-Grindstone Easements

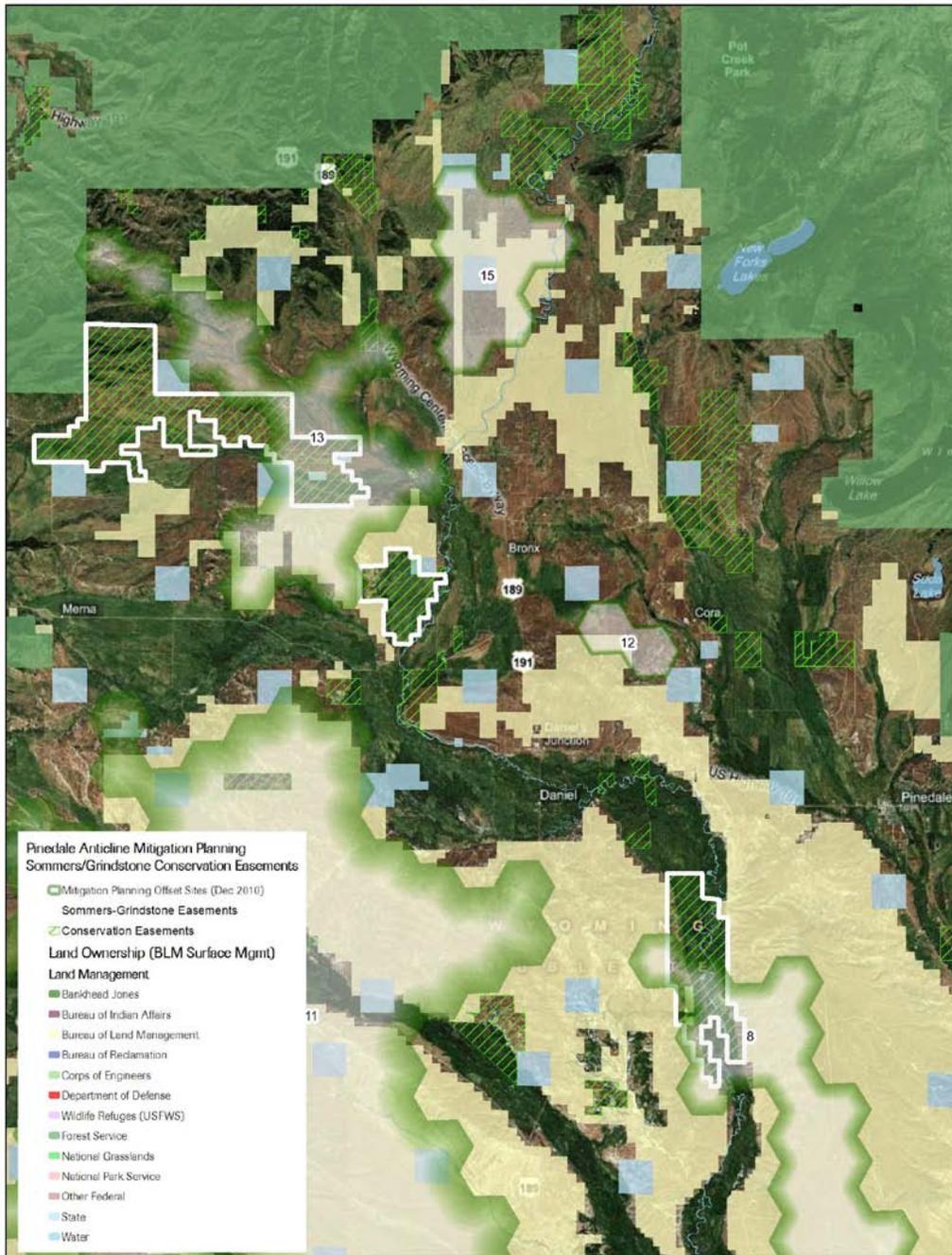


Table 1. Goals from TNC Pinedale Anticline Mitigation Project and Contribution of the Sommers-Grindstone Conservation Easement (highlighted columns have exceeded the minimum goal)

<i>Conservation target</i>	<i>Target Goal (Acres)</i>	<i>Sommers-Grindstone Easement Contribution to Goal (Acres)</i>	<i>Percent Contribution to Goal</i>
Mule deer crucial winter range	3,863	2,516	65%
Mule deer migration corridors	4,201	8,549	204%
Pronghorn crucial winter range	19,039	-	0%
Pronghorn migration corridors	12,755	3,152	25%
White-tailed prairie dog and associated targets	1,567	332	21%
Pygmy rabbit habitat	47,621	2,656	6%
Sage-grouse occupied leks, buffered by 2 mi	44,461	5,272	12%
Sage-grouse breeding and wintering habitat	54,090	4,107	8%
Golden eagle nests, buffered by 0.5 miles	502	-	0%
Bald eagle nests, buffered by 1 mile	2011	2,844	141%
Beaver Rim Phlox (Phlox pungens)	9,002	281	3%
Emergent, Forested/Shrub, Pond Wetlands	1,473	4,762	323%
Inter-Mountain Basins Big Sagebrush Steppe (117)	20,648	682	3%
Inter-Mountain Basins Big Sagebrush Shrubland (97)	37,396	-	0%
Intermountain Basins Greasewood Flat (159)	331	-	0%
Western Great Plains Riparian Woodland and Shrubland (198)	1,203	92	8%
Northwestern Great Plains Mixedgrass Prairie (130)	487	-	0%
Inter-Mountain Basins Montane Sagebrush Steppe (118)	707	3,176	449%