RESTORING UNGULATE WINTER RANGE IN AND NEAR YELLOWSTONE NATIONAL PARK¹

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Abstract. Lands within the Yellowstone River valley immediately north of Yellowstone National Park, known as the Gardiner Basin, were deemed essential for elk and pronghorn winter range and acquired for the Park and Gallatin National Forest in the 1920s and 30s. Additional lands were added to the Forest during the 1990s, also for wildlife habitat. Due to previous agricultural land use, altered hydrologic regimes and soil conditions, pervasive exotic weeds, and a semi-arid climate, and, these acquired lands support relatively low amounts and quality of native forage for wildlife. Recent unsuccessful attempts at restoration demonstrated that additional expertise from diverse disciplines was needed to effectively restore 500 hectares of arid lands to native vegetation and provide higher quality habitat for wintering ungulates. We convened a workshop in April 2005 with agency, academic, and practicing restoration and reclamation specialists to develop feasible, ecologically-based restoration and management strategies for these old agricultural lands. The goals of the workshop were (1) to develop a directional, coordinated plan for the restoration and long- term management of the federally-owned portions of the Gardiner Basin; and (2) to develop site specific actions plans to implement ecologically-based and sustainable practices for restoration of disturbed lands in a multi-use, semi-desert ecosystem with high levels of use by native ungulates. With the assistance of the restoration experts, we developed methods for restoring landscape-scale, degraded lands to native vegetation by addressing ecosystem processes.

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