Economic impacts of using working lands and prairie preserves for habitat protection, Thurston County, Washington

Prairie ecosystems of south Puget Sound are a home for rare species and a productive grazing resource for livestock farms. However, balancing the needs of agriculture and rare species conservation is a challenge. In 2014, Thurston County began developing a Habitat Conservation Plan (HCP) in response to Federal Endangered Species Act listing of six threatened or endangered prairie species. The intention of this study was to quantify the potential economic impacts of using different land management types to achieve species protection. The total economic impacts of five different combinations of ungrazed "new reserves" and grazed "working lands" acres were analyzed. Data for the impact assessment were derived from enterprise budgets developed for this project. An input-output analysis was completed using IMPLAN software to model the total new dollars introduced to the County and total economic impact of the five land management combinations. Total economic impacts increased when more working lands were recruited into the program (\$0 with no working lands to \$2.09 million with 400 ac working lands, and \$7.83 million with 1,500 ac of working lands). Generally, total economic impacts uniformly increased, and costs decreased, in scenarios where greater proportions of working lands were engaged. These results are used by Thurston County to optimize the use of working lands and new reserves in rare species protection. Optimization depends on balancing the economic impacts of using working lands and new reserve acres with the habitat value of these management types.



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