

CHAPTER 1

INTRODUCTION

Purpose & Need

Sagebrush ecosystems are declining rapidly in the western United States through direct loss, fragmentation, and degradation—and with them, important habitat for many sagebrush-dependent wildlife species (Braun et al. 1976; Dobkin and Sauder 2004; Knick 1999; Knick et al. 2003; Noss et al. 1995; Paige and Ritter 1999).

This is a relatively recent realization in the conservation and regulatory communities. Petitions to the federal government to list the sage-grouse under the U. S. Endangered Species Act have sparked conservation planning efforts for this important game species and its remaining habitat, and for a suite of other less well-known wildlife species that depend on sagebrush. These less well-known species and their sagebrush habitat in Colorado are the concern of this document.

Recognizing that habitat for wide-ranging sagebrush-dependent species cannot be managed effectively or efficiently at the regional scale if local entities are acting independently within their administrative boundaries, the Colorado Division of Wildlife (CDOW) funded the preparation of this document to provide a regional-scale assessment and guidance for regional conservation planning efforts for Colorado sagebrush habitat and sagebrush-dependent species of concern. We anticipate that local plans will incorporate, or evolve under the umbrella of, the assessment and spatially-explicit strategies identified in this document.

Scope & Limitations

This document is intended primarily to offer regional perspective and context to resource managers and to help guide coordinated regional conservation efforts. The principal tasks of this document are to:

1. Estimate the extent of historic sagebrush habitat lost in Colorado,
2. Assess the current status of sagebrush habitat in Colorado and quantify widespread threats to its continued existence,
3. Identify declining or potentially-declining sagebrush-dependent wildlife species of concern not addressed by other regional conservation planning efforts,
4. Establish conservation goals, objectives, and strategies to avert further decline of species of concern, and outline monitoring steps to assess conservation accomplishments.

This document does not attempt to address conservation needs of local endemic species or species with habitat requirements not readily mapped at the regional scale. Habitat assessment and conservation strategies are limited to declining or potentially declining vertebrates with large (>100,000 ha) ranges, and for which conservation or recovery plans do not exist in the assessment area.

Conservation planning and management recommendations presented in this document do not supersede federal recovery plans or other conservation planning efforts for other sagebrush-associated species, such as greater sage-grouse and Gunnison sage-grouse. Potential conflicts with other conservation or recovery plans have not been assessed, but are expected to be minimal.

Assessment Area

Our area of assessment represents the range of tall woody sagebrush (*Artemisia* spp.) in the state of Colorado, encompassing approximately 15.68 million ha (38.74 million acres) in Colorado's 39 contiguous western counties ([Figure 1-1](#)). The assessment area is bounded on the north, west, and south by the Colorado state line and on the east by the eastern boundaries of Larimer, Boulder, Jefferson, Teller, Fremont, Custer, Huerfano, and Costilla counties.

The assessment area transects five ecological provinces: the Southern Rocky Mountains, the Colorado Plateau, the Wyoming Basins, the Utah High Plateaus, and the Utah-Wyoming Rocky Mountains (TNC 2001). It ranges in elevation from 1,318 meters (4,324 feet) where the Colorado River crosses the state's western boundary into Utah to 4,399 meters (14,433 feet) at the summit of Mt. Elbert in Lake County.

Document Organization

This document is arranged in chapters based on the analytical steps recommended in "Procedures for Regional Assessment of Habitats for Species of Concern in the Sagebrush Ecosystem" (Wisdom et al. 2003a) and illustrated in "A Prototype Regional Assessment of Habitats for Species of Conservation Concern in the Great Basin Ecoregion and Nevada" (Wisdom et al. 2003b). Our chapters are self-contained to the greatest extent possible to facilitate the utility of this document for a variety of users. Tables and figures cited in each chapter follow the main text and literature citations of each chapter.

Following the [Table of Contents](#), we provide a list of [Acronyms and Abbreviations](#), a Metric-U.S. Standard [Unit Conversion Table](#), a [Glossary](#), and a list of [Common and Scientific Species Names](#) mentioned in the text. Profiles of the individual species of concern are provided in an [Appendix](#) to this document.

Literature Cited

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