About This Document

This document provides an overview of the complex issues occurring on Utah rangelands. State Senator Dennis E. Stowell (District 28) was the initial impetus for this effort based on his desire to have important information and data about rangelands available in one location. The Public Land Policy Coordination Office (PLPCO) supported these efforts and has provided additional focus and direction.

The 1989 *Rangeland Resources of Utah* publication was the template for this document. The primary objectives of the new document were to update data and trends and to provide up-to-date information. New sections have been included which pertain to relevant information and issues that have evolved since the late 1980s.

The intended audience of this document is the general public of Utah and those interested in Utah rangelands and the associated issues. Issues and topics are organized in a straightforward manner with extensive references of original data sources and information.

The goal was to compile, synthesize, and analyze the wealth of existing information and data on Utah rangelands. Often, the considerable volume of available information becomes overwhelming, and important details and trends can be lost. The guidelines were to use readily accessible, publicly available data sources and information from the public record. All calculations and synthesis of data were as minimal and transparent as possible, with all efforts made to retain the original source data. Information from the government agency responsible for the management or administration of the rangeland or the associated issue was used whenever possible.

Major advancements in geographic information systems (GIS) and remote sensing techniques since 1989 have enabled a more comprehensive overview. Environmental Systems Research Institute (ESRI) ArcGIS 9.3 was the software utilized to display and analyze data and to design maps. Primary data sources for this document include the following: Utah Automated Geographic Reference Center (AGRC), the Bureau of Land Management (BLM), Utah Division of Wildlife Resources (UDWR), the United States Geological Survey (USGS) National Map Seamless Server, the United States Department of Agriculture (USDA) Geospatial Data Gateway, Prism Climate Data, Daymet Climate Data, USDA Natural Resources Conservation Service (NRCS) STATSGO2 soil database, Federal Wildland Fire Occurrence Dataset, and USGS LANDFIRE (Landscape Fire and Resource Management Planning Tools Project). Each map provided within the document is accompanied with the relevant data sources.

The digital version of this document is available online at: http://extension.usu.edu/utahrangelands.

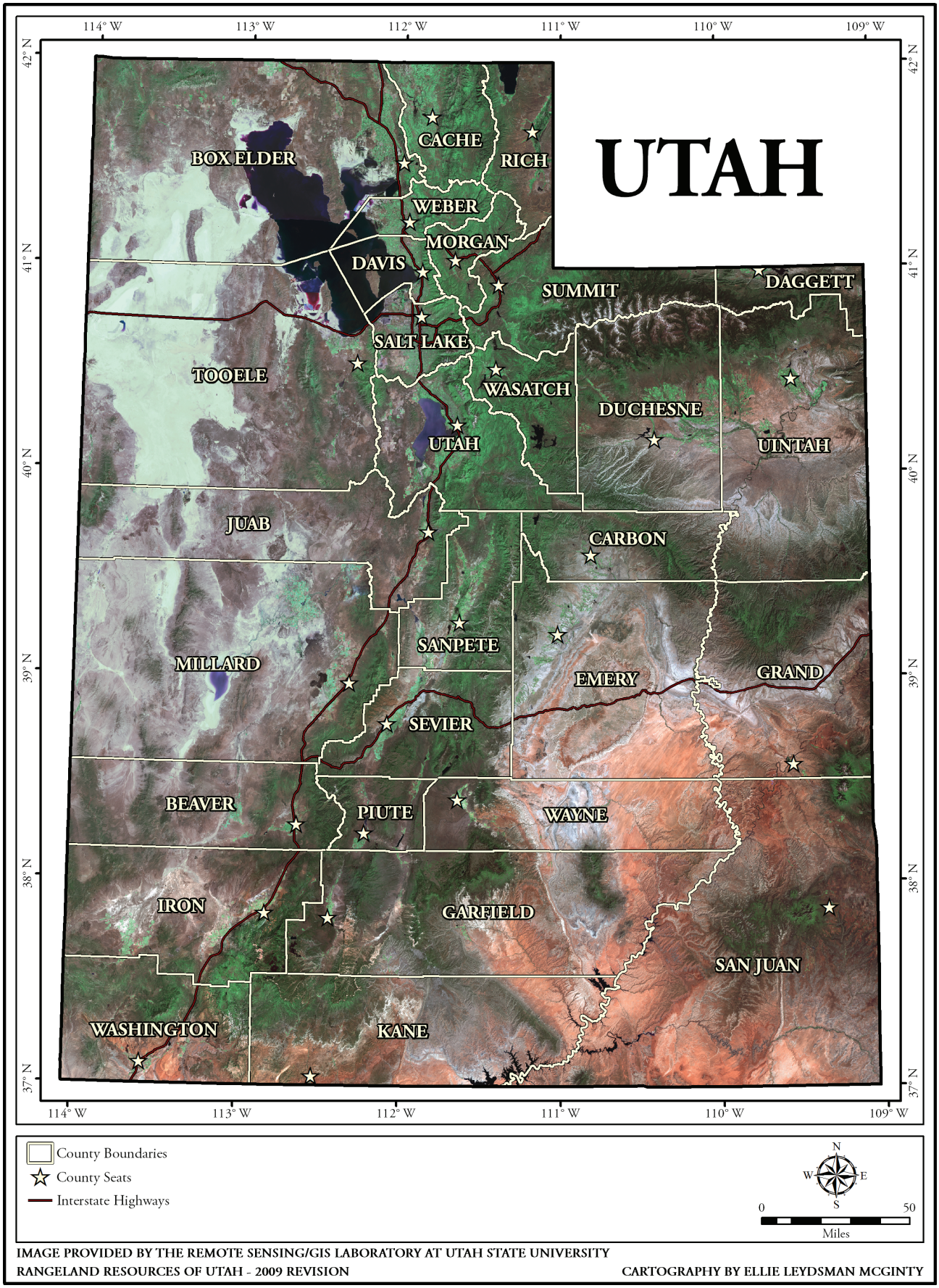

IMAGE PROVIDED BY THE REMOTE SENSING/GIS LABORATORY AT UTAH STATE UNIVERSITY

RANGELAND RESOURCES OF UTAH - 2009 REVISION

CARTOGRAPHY BY ELLIE LEYDSMAN MCGINTY

INTRODUCTION

Neil E. West

Utah has been predominantly a rangeland state for more than 150 years. Approximately three-quarters of the landscape is dry, sparsely vegetated, and either uncultivated or not permanently occupied by humans. Nevertheless, these lands provide habitat for numerous species of plants and animals, produce water for irrigation, recreational, and culinary uses, are the site for extensive extraction of minerals and fossil fuels, serve as open space for dilution of pollutants, and offer a wide variety of outdoor recreational activities, including those within designated wilderness. Grazing by livestock has been an important economic activity since Europeans began their colonization. While the use of these forages has been increasingly controlled through time, access to them remains essential for maintenance of the local food and fiber production stream.

Roughly three-quarters of Utah is publicly owned land. The overlap of rangelands and this ownership pattern is predominantly coincidental. Because the bulk of the public-owned rangelands are under federal control, decisions on their use and management will continue to not be made by the citizens of Utah alone. Hence, the stewardship of federal lands will be increasingly driven by issues on the national agenda. Since the viability of local enterprises depends on access to these federal lands, it behooves all to better understand where different kinds of rangelands are located, who controls them, and how these differing ecosystems are put together, function, and change under alternative management scenarios.

If Utah is to concurrently achieve a robust economy and high-quality environment for all its citizens, the health of Utah rangelands must be continually enhanced. In the following, the status of rangelands, in their entirety, is reviewed. This is an update of the 1989 first edition. New data and scientific knowledge has been incorporated, and advanced technological tools (especially remote sensing and geographic information systems) have been employed to make this new overview more accurate and comprehensive than possible in 1989. Hopefully this document will help further the process of cooperative resource management necessary to achieve improved rangeland health across the state.