

An Introduction to Rapid Ecoregional Assessments

Climate change and other widespread environmental influences are affecting the western landscapes that are managed, in part, by the Bureau of Land Management (BLM). In response, the BLM in 2010 has launched seven Rapid Ecoregional Assessments (REAs) to improve the understanding of the existing condition of these landscapes, and how conditions may be altered by ongoing environmental changes and land use demands.

The REAs examine ecological values, conditions, and trends within ecoregions, which are large, connected areas that have similar environmental characteristics. Examples of ecoregions include the Sonoran Desert and the Colorado Plateau. Ecoregions span administrative boundaries and typically encompass areas much larger than those managed by individual BLM field offices. The ecoregions under assessment range in size from 11 million to 91 million acres. Assessments of these larger areas provide land managers additional information and tools to use in subsequent resource planning and decision-making.

REAs are called “rapid” assessments because they synthesize existing information, rather than conduct research or collect new data, and are generally completed within 18 months. This timeframe is relatively “rapid” in comparison to assessments that conduct research or collect new data, or in comparison to the preparation of a BLM land use plan, which typically take from 36 to 48 months to complete.

What REAs Do

REAs look across an ecoregion to more fully understand ecological conditions and trends; natural and human influences; and opportunities for resource conservation, restoration, and development. They seek to identify important resource values and patterns of environmental change that may not be evident when managing smaller, local land areas. The REAs provide regional information that will inform and benefit local management efforts.

REAs describe and map areas of high ecological value. They look across all land ownerships to identify regionally important habitats for fish, wildlife, and species of concern. REAs then gauge the potential of these habitats to be affected by four overarching environmental *change agents*: climate change, wildfires, invasive species, and development (both energy development and urban growth). Additional change agents may also be addressed based on ecoregional needs.

REAs also help identify areas that do not provide essential habitat; that are not ecologically intact or readily restorable; and where development activities may be directed to minimize impacts to important ecosystem values.

In addition, REAs establish baseline ecological data to gauge the effect and effectiveness of future management actions. In this way, REAs provide a foundation for an adaptive management approach that enables implementation strategies to adjust to new information and changing conditions.

The REAs, in summary:

- identify and answer important management questions;
- document key resource values, which are referred to as conservation elements, with a focus on regionally-significant terrestrial habitats, aquatic habitats, and species of concern;
- describe influences from four environmental change agents: climate change, wildfire, invasive species, and development;
- assess the collective effects of projected trends;
- identify and map key opportunities for resource conservation, restoration, and development;
- identify science gaps and data needs; and
- provide a baseline to evaluate and guide and future management actions.

What REAs Don't Do

REAs do not allocate resource uses or make management decisions. They provide science-based information and tools for land managers and stakeholders to consider in subsequent resource planning and decision-making processes.

How REAs Will Be Used

The BLM will use the REAs to inform resource management at the ecoregional and local levels. At the ecoregional level, along with input from stakeholders, partner agencies, and Tribes, the REAs will aid in developing broad-level management strategies for an ecoregion's public lands. This *Ecoregional Direction* will identify priority areas for conservation and development, including focal areas for conserving wildlife habitats and migration corridors, and focal areas for potential energy development and urban growth. Ecoregional Direction will also provide a blueprint for coordinating and implementing these priorities through the BLM's state and field offices.

At the local level, the REAs will enhance the quality of land use planning and environmental analysis conducted by BLM field offices. The information, maps, and tools provided by the REAs will strengthen analyses of the potential and cumulative effects of climate change and other environmental disturbances on important ecological values.

In addition, the REAs present an opportunity for all land managers within an ecoregion to share information and discuss resource management conditions and needs. The REAs can provide a science-based information platform for formulating coordinated, multi-agency strategies that can respond effectively to climate change, wildfire, and other environmental challenges that transcend local administrative boundaries.

How REAs are Prepared

REAs begin as a list of *management questions* from an ecoregion's resource managers. The questions identify management issues or concerns that cannot be resolved by individual offices alone and have regional importance. For example, management questions for sage-grouse, a wildlife species of concern in several ecoregions, could include:

- What is the current distribution of occupied habitat and movement corridors for sage-grouse within this ecoregion?
- What change agents are affecting this habitat and movement corridors?
- Where are sage-grouse populations at risk?
- Where are potential habitat restoration areas?

A REA is designed to answer these and similar management questions regarding an ecoregion's key resource values and change agents.

REAs are prepared in two phases. The first phase is the *pre-assessment*, which refines the management questions and identifies the data available for analysis. The second phase is the *assessment*, which conducts the analysis and prepares the assessment report, maps, and supporting documents.

The phases of the REA are organized into the following seven tasks:

Phase	Task #	Product
Pre-assessment	1	Refine management questions
	2	Identify and recommend datasets for analysis
	3	Identify and recommend analytical models and tools
	4	Prepare REA work plan
Assessment	5	Synthesize datasets
	6	Conduct analyses and generate findings
	7	Prepare REA report, maps, and supporting documents

An Assessment Management Team (AMT) composed of Federal and state managers and technical specialists from within the ecoregion oversees each REA. The AMT guides the assessment and oversees the work of the contractors who perform the technical data management and analysis tasks required by the REA. The contractors have been hired by the BLM for their special expertise in natural resource assessment and conservation planning.

Status and Schedule

REAs were initiated in 2010 for seven ecoregions in the western United States and Alaska that contain substantial amounts of public land. The ecoregions being assessed are: the Central Basin and Range, Mojave Basin and Range, Sonoran Desert, Northwestern Plains, Middle Rockies, and Colorado Plateau in the continental U.S., and the Seward Peninsula-Nulato Hills-Kotzebue Lowlands in Alaska. Four REAs were initiated in July, 2010 and three REAs were initiated in September, 2010. All seven REAs are scheduled for completion in 2012.