How are REAs Prepared?

An Assessment Management Team (AMT) composed of Federal and state managers and technical specialists from within the ecoregion provides overall direction for each REA. The AMT guides the assessment and oversees the work of contractors who perform technical data management and analysis tasks. REAs are then prepared in the two phases shown to the right.

During the pre-assessment phase, partnerships are developed with additional Federal and local agencies--beyond the AMT, as well as non-governmental organizations within each REA to review work and provide additional input into the REA tasks. For the Northwestern Plains REA, current partners include:

What REAs Do

REAs evaluate landscapes 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 focusing smaller, local land areas.

REAs describe and map conservation elements, which include sensitive resources and areas of high ecological value. This information will help identify regionally important habitats for fish, wildlife, and species of concern. Then REAs gauge the potential of these habitats to be affected by regional change agents: climate change, wildfires, invasive species, insects and disease, and development. Additional change agents may also be addressed based on ecoregional needs.

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.

REA TASKS

- PHASE I - PRE-ASSESSMENT
- PHASE II - ASSESSMENT
- WHERE ARE WE NOW

1. Refine Management Questions, Conservation Elements, and Change Agents
2. Identify, Evaluate, and Recommend Potential Data for the Analysis
3. Identify, Evaluate, and Recommend Models, Methods, and Tools
4. Prepare REA Work Plan
5. Compile and Generate Source Datasets
6. Conduct Analyses in Response to Management Questions and Generate Findings, Including Maps and Supporting Documents
7. Prepare REA Documents

If you would like to see copies of memos and final REAs that have been prepared by BLM, or would like additional information, please visit: www.blm.gov/wo/st/en/prog/more/climatechange or contact David Wood at: 406-896-dwood@blm.gov

Public Input and Review Opportunities

REAs provide information and tools for land managers and stakeholders to consider in subsequent resource planning and decision-making processes. Because REAs are science assessments, they will undergo a science peer review process overseen by the U.S. Geological Survey, rather than a public comment process. To be added to BLM's mailing list to receive notice as to when copies of memos and final reports will be available on BLM's website, please send an email to: reas@blm.gov.

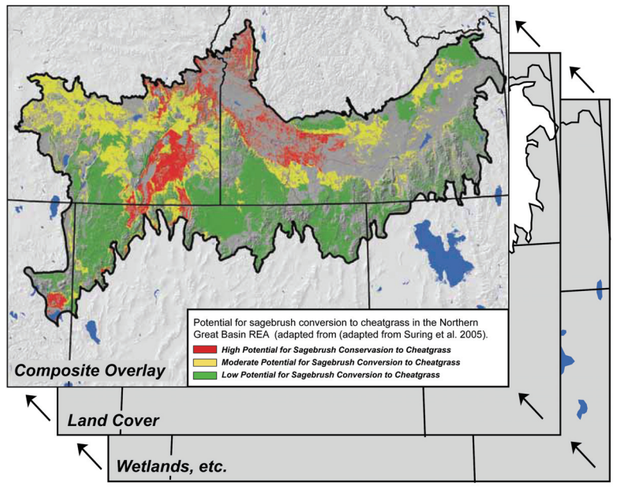
REAs

- Identify and answer important management questions and provide a baseline to guide future management actions.
- Identify and map key opportunities for collaborative resource conservation, restoration, and development.
- Document key resource values (conservation elements), such a species of concern and regionally-significant terrestrial and aquatic habitats.
- Describe influences from environmental change agents and the collective effects of projected trends from:
  - Climate Change
  - Wildfire
  - Invasive Species
  - Insect Outbreaks and Disease
  - Development
- Identify science gaps and data needs.

Rapid Ecoregional Assessments

The Bureau of Land Management (BLM) recognizes that public lands are facing increasingly complex and widespread environmental challenges that transcend traditional management boundaries. These challenges include managing wildfire; controlling weeds and insect outbreaks; providing for energy development and urban growth; and addressing pervasive impacts from the effects of climate change. The BLM understands a landscape-scale management approach is the most effective way to evaluate challenges that transcend traditional management and ownership boundaries and impact lands managed by BLM.

In response, the BLM in 2010 launched Rapid Ecoregional Assessments (REAs) to improve the understanding of existing landscape conditions, and conservation elements that guide the assessment of how ongoing environmental changes and land use demands may alter them. The REAs start with development of list of management questions and examine ecological values, conditions, and trends within ecoregions. The Northwestern Plains Ecoregion encompasses lands in Montana, Wyoming, North Dakota, and South Dakota, and Nebraska. An assessment of this size provides land managers with information and tools to use in subsequent resource planning and decision-making.



One product of REAs is a variety of maps that synthesize the best available data about resource conditions and trends within an ecoregion. These maps help BLM Managers and public land stakeholders understand environmental conditions and trends from a broader landscape perspective.

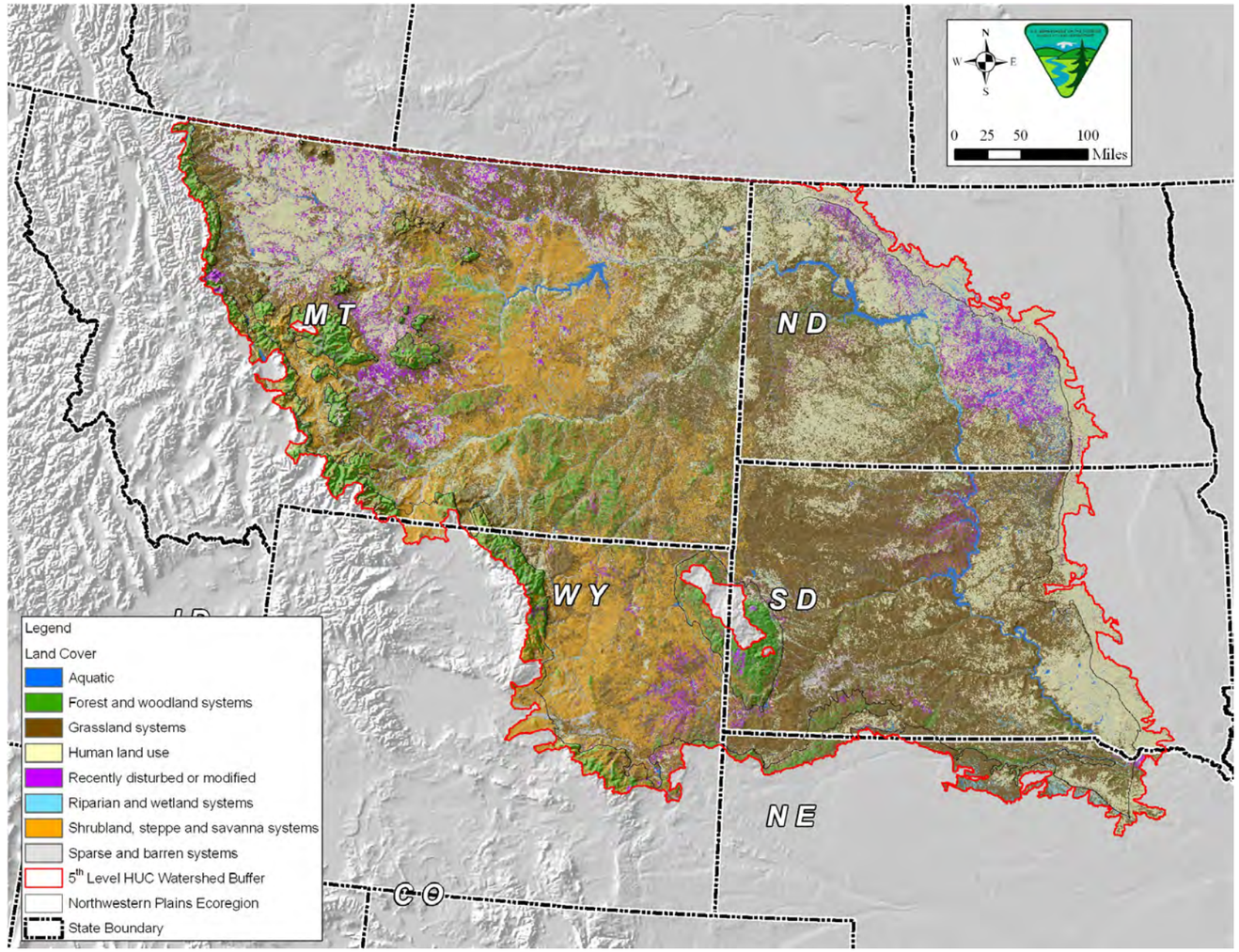
For more information, visit: www.blm.gov/ o/st/en/prog/more/climatechange

Management Questions

The following management questions have been developed to guide the REA process.

1. Where are the important regionally significant terrestrial features, functions, and services across the ecoregional landscape?
2. Where are the important regionally significant aquatic/riparian biotic features, functions, and services across the ecoregional landscape?
3. Where are the key habitat types (seasonal, refuges, corridors/ connectivity, migration routes, concentrations of regionally significant species, etc.) for landscape species, keystone species, and regionally significant suites of species?
4. Where could core regionally significant values be negatively and positively affected from altered wildland fire regimes (frequency, severity, and seasonality change from historic to present to future)?
5. Where will regionally significant values be affected through changes in the spatial distribution and abundance of invasive, (undesired) non-native species, and insect/disease outbreaks?
6. Where will core regionally significant values be affected through development?
7. Where will regionally significant values be affected by climate change?

Northwestern Plains Ecoregion Land Cover



Conservation Elements

- Prairie Grasslands
- Sagebrush-Grassland Ecosystems
- Prairie Pothole Wetlands
- Grassland Birds
- Black-Tailed Prairie Dog Communities
- Greater Sage Grouse
- Big River Fish Community
- Prairie Fish Community
- Plains Sharp-Tailed Grouse
- Big Game Community
- Wetlands and Riparian Areas

Change Agents

- Climate Change
- Wildfire
- Invasive Species
- Insect Outbreaks and Disease
- Development
  - Urban/Exurban
  - Agriculture
  - Hydrological
  - Energy

Sage-steppe lands are being lost due to a number of factors including agriculture and development.

Encroachment from urban development, infrastructure, oil and gas exploration, and wind farms can significantly impact sage grouse habitats.

Development such as energy and urban/exurban threaten the continuity of native landscapes.

Changes in fire regimes have caused shifts in biological communities across the western United States.

Invasive species such as this saltcedar threaten native species and ecosystem integrity.

Changes in temperature and precipitation can influence drought frequency and/or severity.

Northwestern Plains Rapid Ecoregional Assessment