

INTEGRATED LANDSCAPE CONSERVATION AND RAPID ECOREGIONAL ASSESSMENTS

Implementing BLM's Landscape Approach



LANDSCAPE MANAGEMENT VISION

Promote conservation and wise use of the diverse renewable natural resources and values of the public lands. Ensure conservation is:

- ✘ Proactive
- ✘ Outcome-oriented and results-based
- ✘ Founded on thorough and accurate science, data, and information
- ✘ Interdisciplinary and Multi-scale



LANDSCAPE MANAGEMENT CHARACTERISTICS COMPARISON

Traditional (Current) Practice	Integrated Landscape Conservation
Project Focus	Landscape (multi-scale) Focus
Program/Functional Direction	Integrated Direction Across Programs
Unit Decision Making	Cross Jurisdictional Decision Making
Unit Priorities	Collaborative and Partnership Priorities
Program Accomplishments	Integrated Accomplishments Across Programs with Partnerships
Tend to authorize uses and mitigate ecological values	Ecological values and use authorizations considered equally
Ecological Component (Individual Species)	Ecological Function and Service
Agency Funding	Partnership Leveraged Funding

“INTEGRATED”

- ✘ Internally: across disciplines, programs, geographic offices
- ✘ Externally: across other Federal departments and agencies and State and local governments
- ✘ With mutual respect for each other’s needs:
 - + mission, goals, objectives, authority, responsibility, legal and procedural requirements, politics, and culture

“LANDSCAPE”

Managing resources at multiple-scales:
Traditionally, resource management has been done project by project, permit by permit, without systematically assessing landscape scale effects. To effectively address the environmental changes the West is experiencing, resource managers will have to develop the capacity to evaluate effects at multiple geographic scales and across ownerships and jurisdictions.

“CONSERVATION”

Multiple Use - “Management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people” (43 USC § 1702 (c))

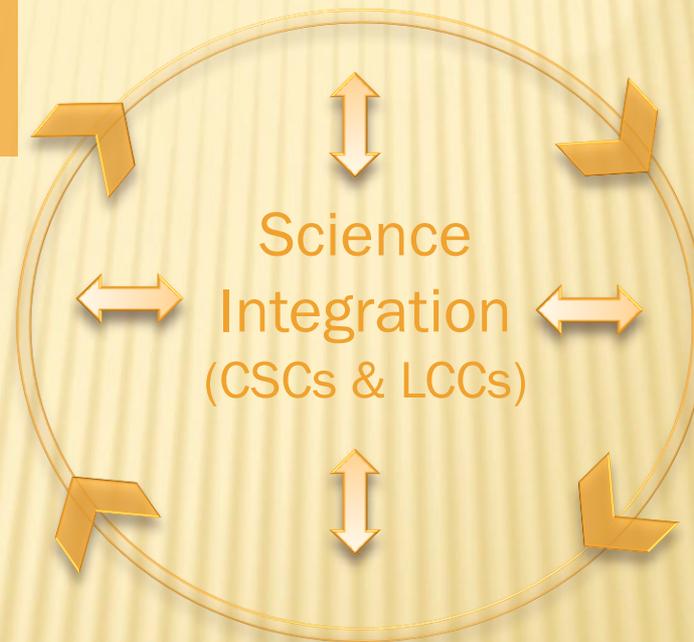
Multiple Use - “Consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output”. (43 USC § 1702 (c))

BLM's Landscape Approach

Rapid Ecoregional Assessments are the first step in the Landscape Approach

Monitoring for Adaptive Mgmt.

Rapid Ecoregional Assessments



Ecoregional Direction

Field Implementation

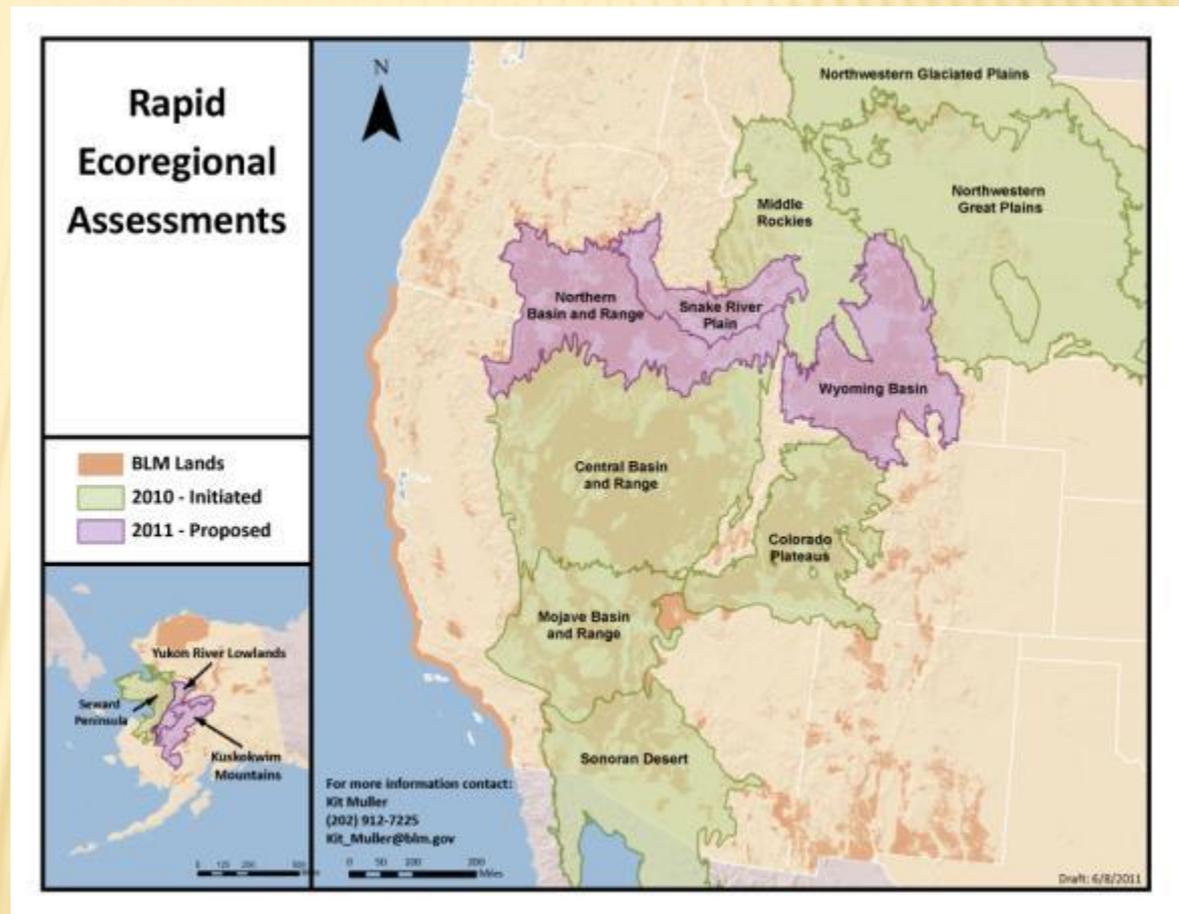
RAPID ECOREGIONAL ASSESSMENTS

What do REAs do?

- × Assess status of key ecological values
- × Forecast trends
- × Identify management opportunities
- × Identify data gaps and science needs
- × Provide information and tools – *do not make decisions or allocations*

RAPID ECOREGIONAL ASSESSMENTS: UNDERWAY AND PROPOSED

- ✘ 10 REAs initiated
- ✘ First 4 REAs to be completed in early 2012



Rapid Ecoregional Assessments

The Step-Down Process

Part of BLM's Landscape Approach for Managing Public Lands



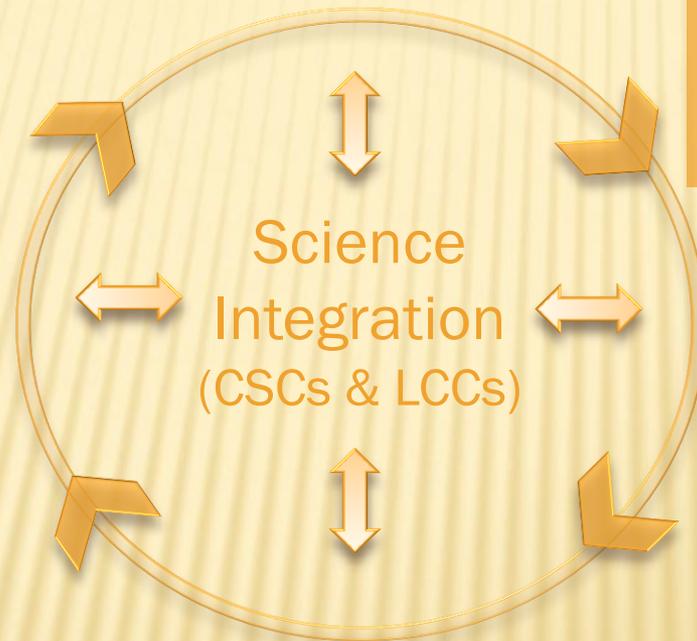
BLM'S LANDSCAPE APPROACH

Rapid Ecoregional Assessments

Development of Ecoregional Direction is the second step in the Landscape Approach

Monitoring for Adaptive Mgmt.

Ecoregional Direction



Field Implementation

LANDSCAPE APPROACH



Organizational Relationships for Developing Ecoregional Direction



COLLABORATIVE STEP-DOWN EXAMPLE: UTAH

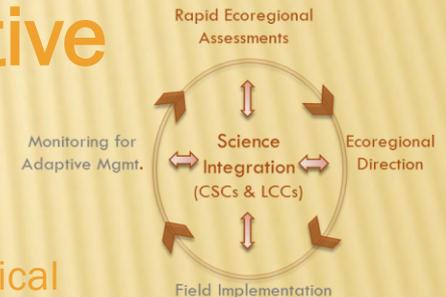
Field Implementation/Monitoring for Adaptive Management

UtahPCD

Utah Watershed Restoration Initiative

Landscape/Watershed Level Ecosystem
Restoration

A cross-boundary, partnership based initiative to maintain or improve critical private and public land resources, values, and habitats.



Organization

- Directors Council
- Statewide Core Team
- Regional Teams
- Local Conservation Work Groups

Management

- Goals
- Objectives
- Needs
- Focus Areas
- LUPs

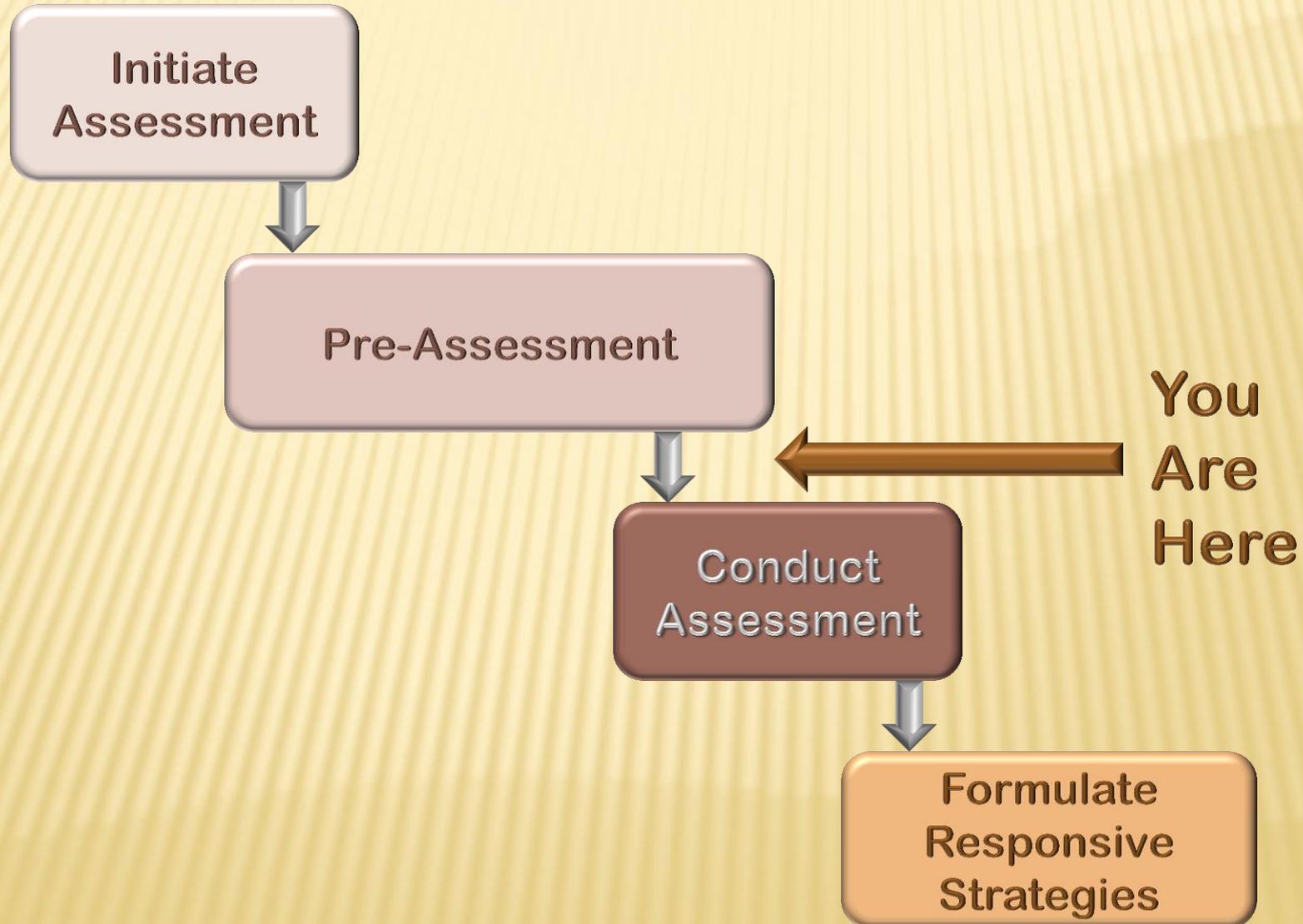
Science

- Standards
- Monitoring
- Research
- Tech Transfer

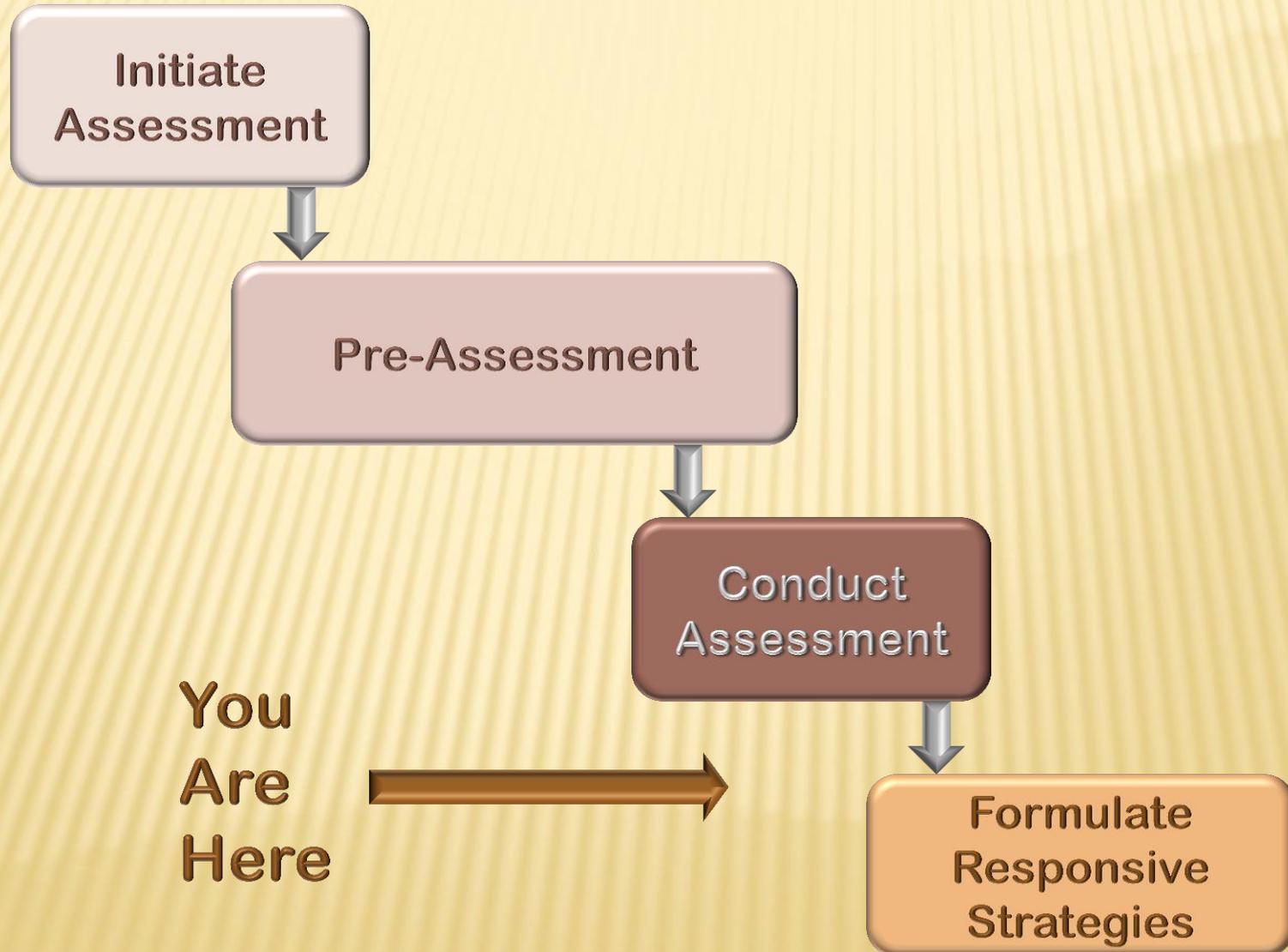
Conservation Outreach

- Audiences
- Goals
- Accomplishments

ASSESSMENT PROCESS



ASSESSMENT PROCESS

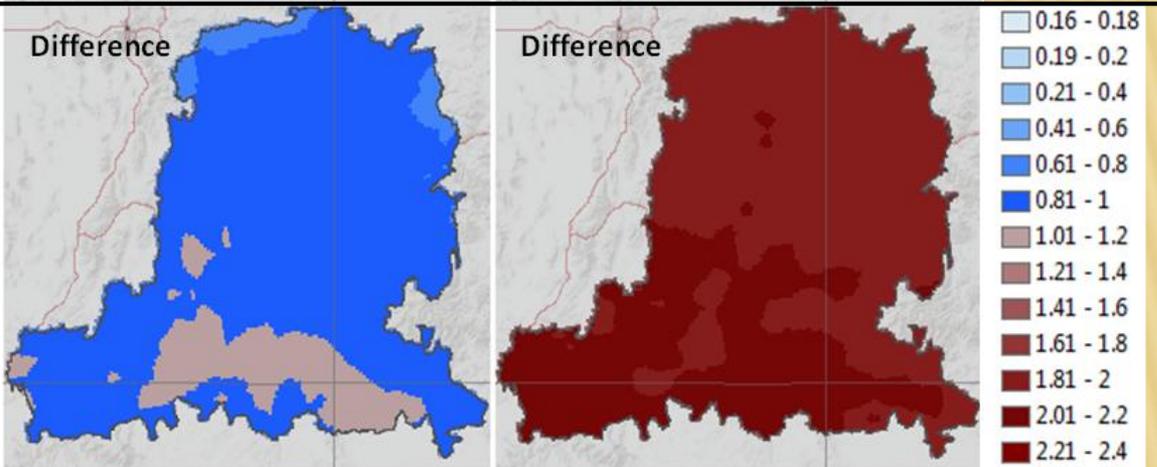
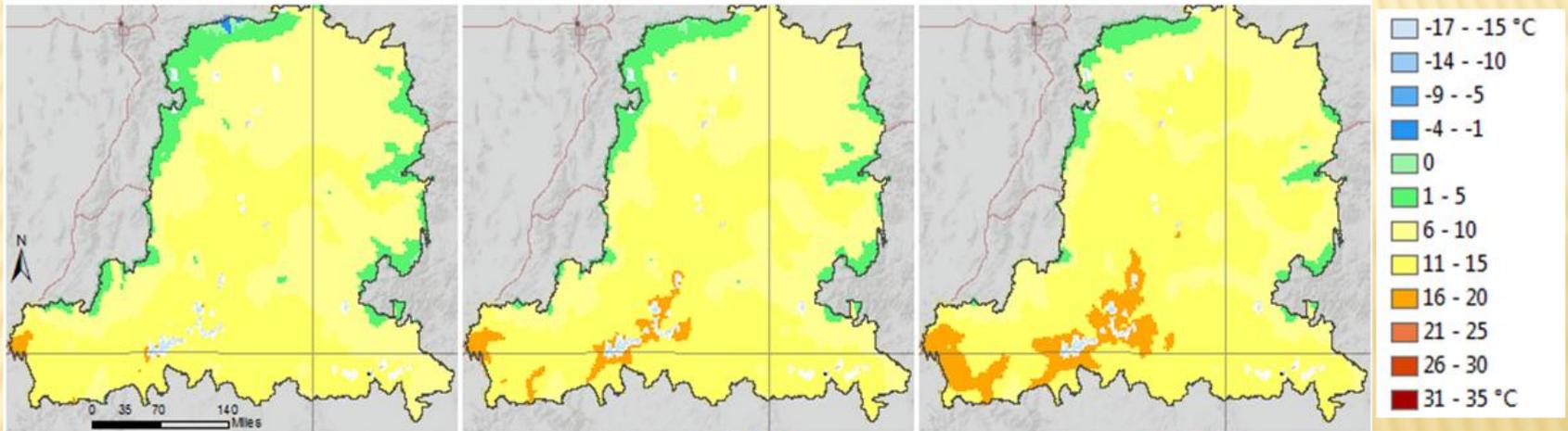


Average Annual Temperature

PRISM 1968-1999

2015-2030

2045-2060



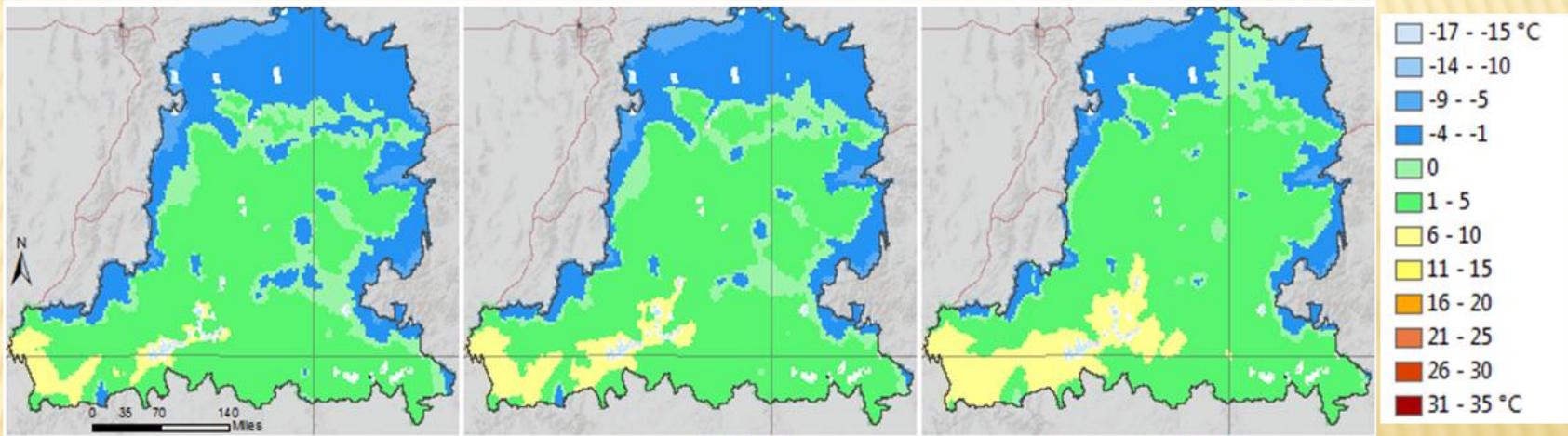
Map results for change in raw average annual temperature and temperature difference based on PRISM historic condition for the Colorado Plateau Ecoregion for 2015–2030 and 2045–2060. All colors on the difference maps are warmer than historic.

Average Winter Temperature

PRISM 1968-1999

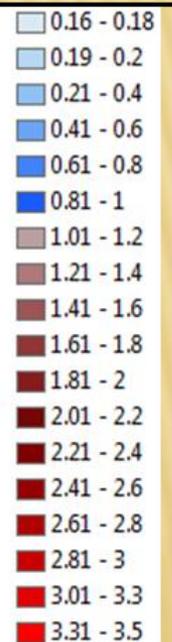
2015-2030

2045-2060



Difference

Difference



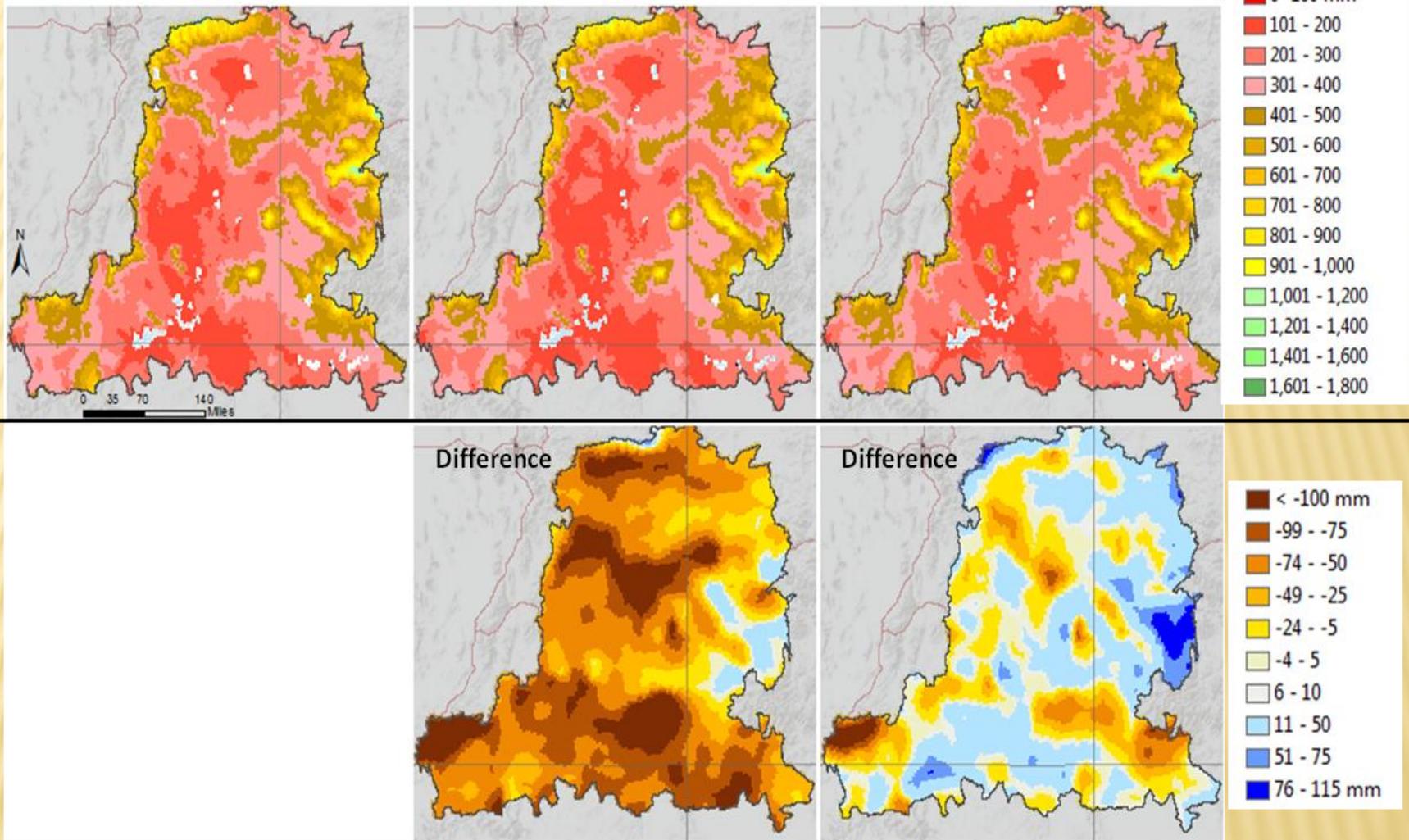
Map results for change in raw average winter temperature and temperature differences based on PRISM historic condition for the Colorado Plateau Ecoregion for 2015–2030 and 2045–2060. All colors on the difference maps are warmer than historic.

Average Annual Precipitation

PRISM 1968-1999

2015-2030

2045-2060



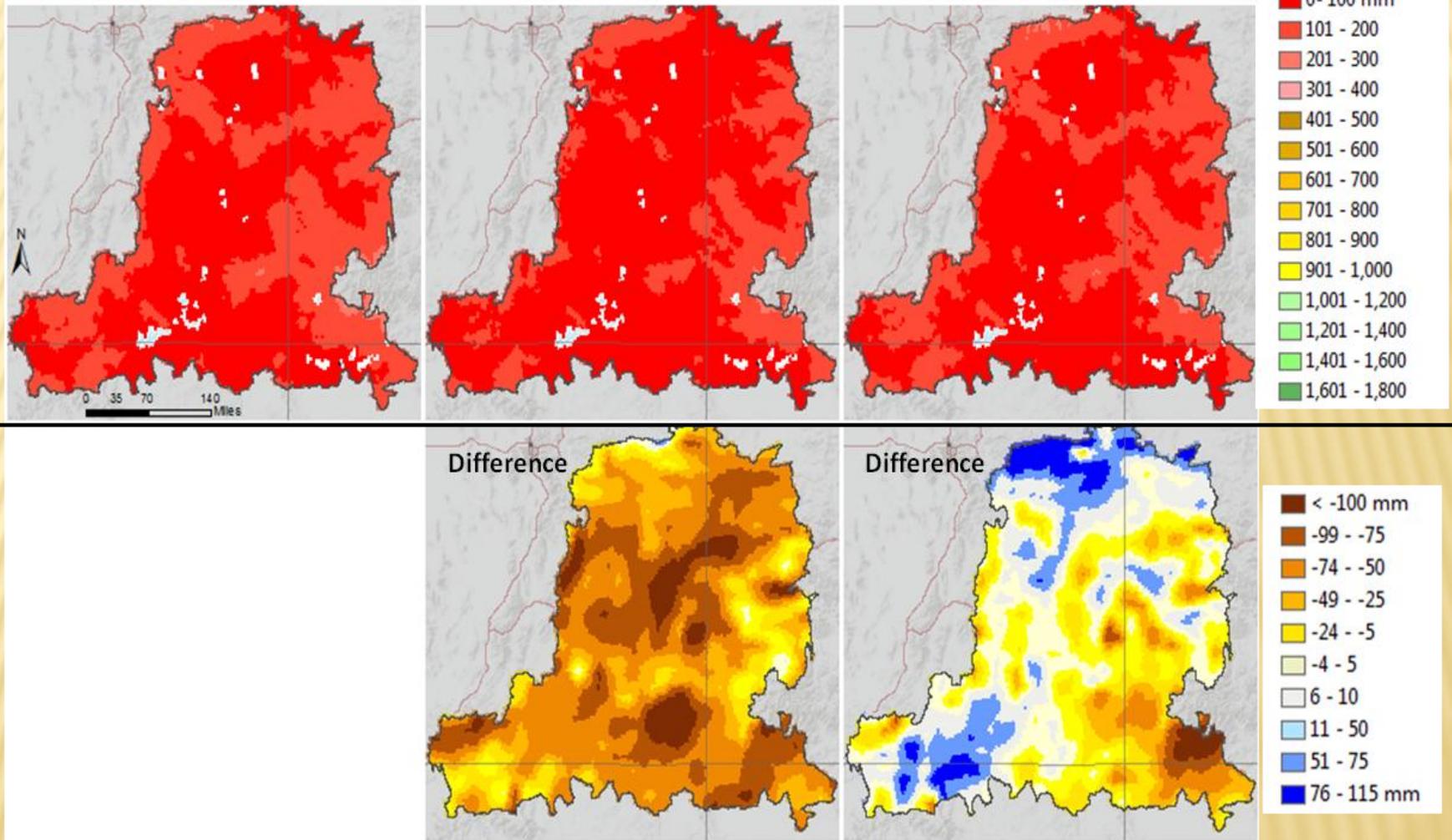
Map results for change in average annual precipitation and precipitation differences based on PRISM historic condition for the Colorado Plateau Ecoregion for 2015–2030 and 2045–2060. For the difference maps, brown color tones represent drier conditions and blue colors represent wetter conditions.

Average Summer Precipitation

PRISM 1968-1999

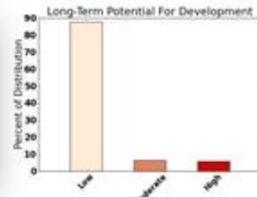
2015-2030

2045-2060

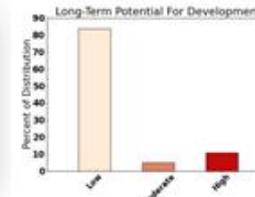


Map results for change in average annual summer precipitation and precipitation differences based on PRISM historic condition for the Colorado Plateau Ecoregion for 2015–2030 and 2045–2060. For the difference maps, brown color tones represent drier conditions and blue colors represent wetter conditions.

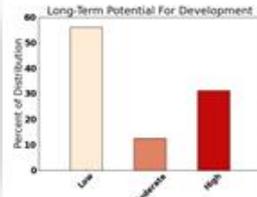
Colorado Plateau Blackbrush-Mormon-tea Shrubland



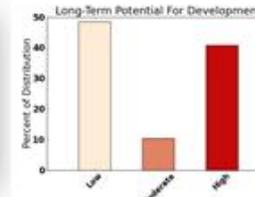
Colorado Plateau Mixed Bedrock Canyon and Tablelands



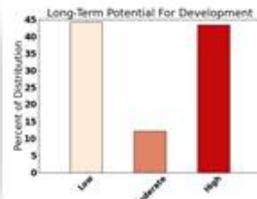
Inter-Mountain Basins Mixed Salt Desert Scrub



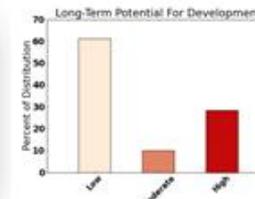
Colorado Plateau Pinyon-Juniper Woodland



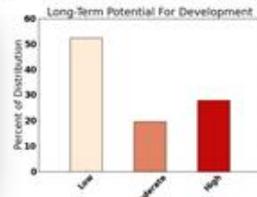
Inter-Mountain Basins Big Sagebrush Shrubland



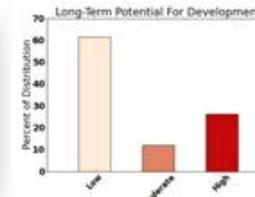
Colorado Plateau Pinyon-Juniper Shrubland



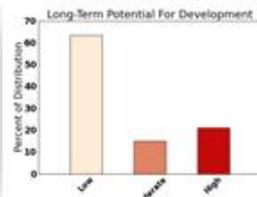
Rocky Mountain Gambel Oak-Mixed Montane Shrubland



Riparian Vegetation

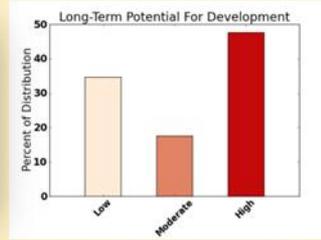


Inter-Mountain Basins Montane Sagebrush Steppe

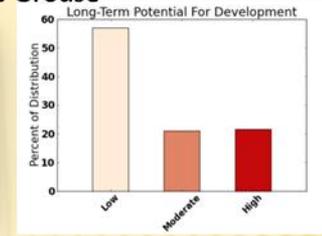


Potential impact from energy development for the vegetation communities of the Colorado Plateau Ecoregion.

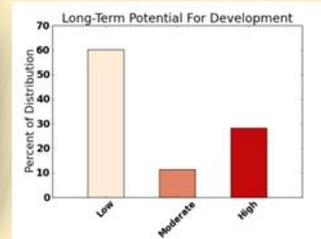
Greater Sage Grouse



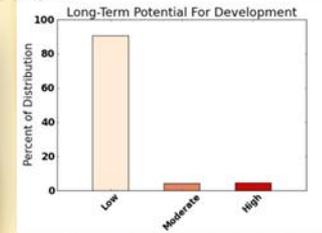
Gunnison Sage Grouse



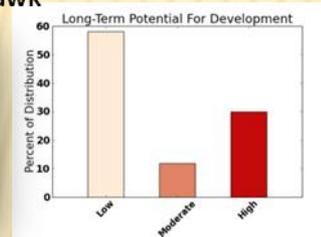
Golden Eagle



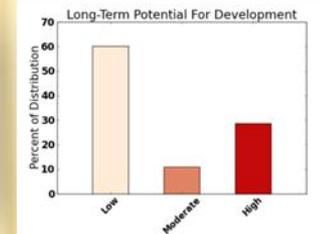
Mexican Spotted Owl



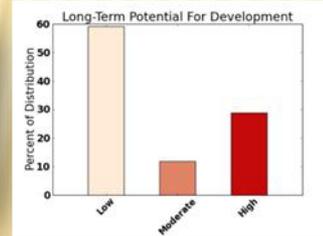
Ferruginous Hawk



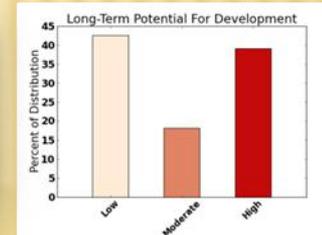
Burrowing Owl



Peregrine Falcon



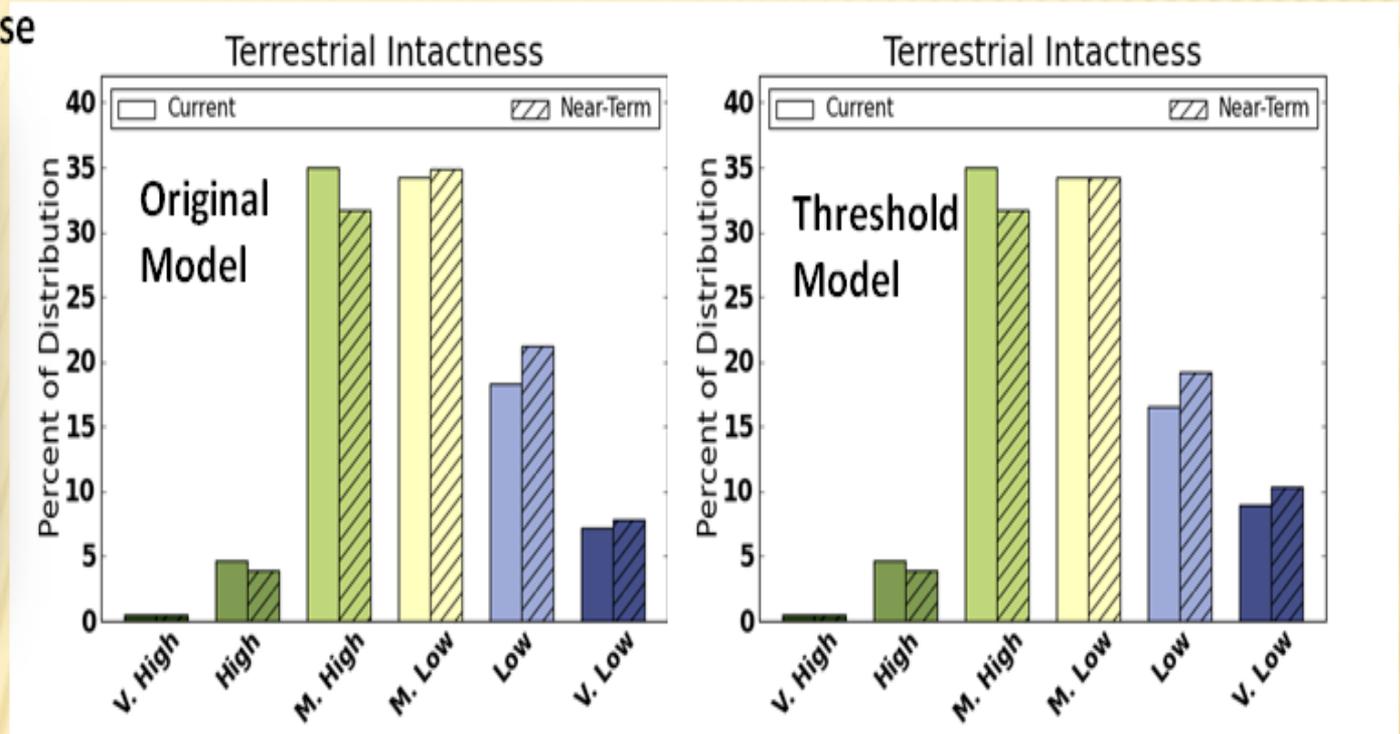
Yellow-breasted Chat



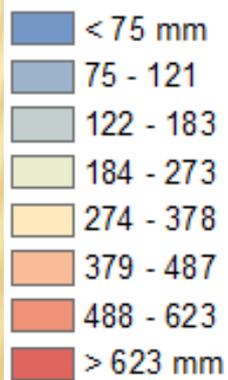
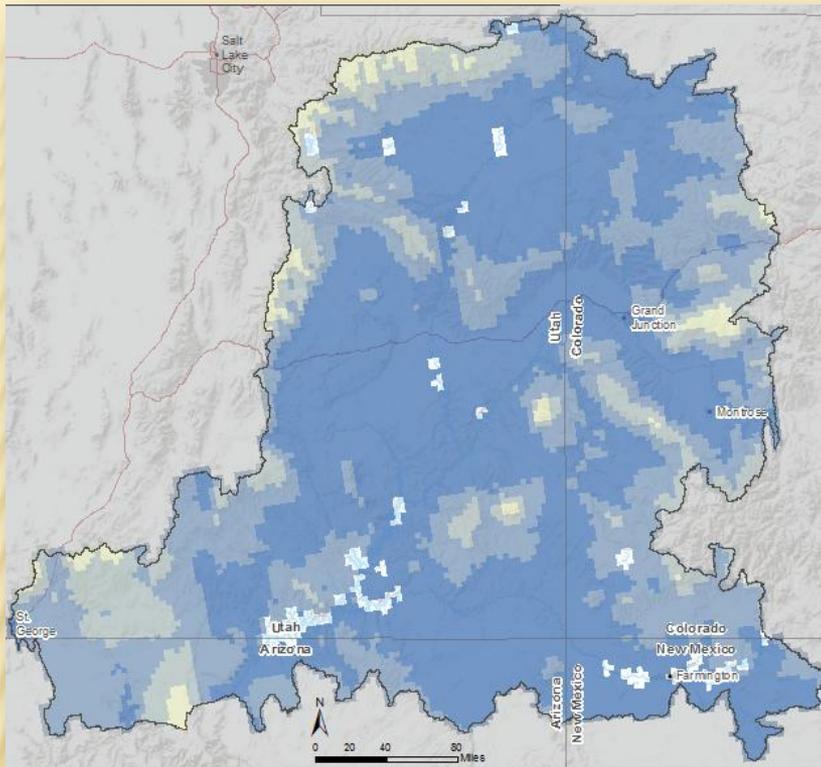
Potential impact from energy development for the bird CEs of the Colorado Plateau Ecoregion.

Greater Sage Grouse

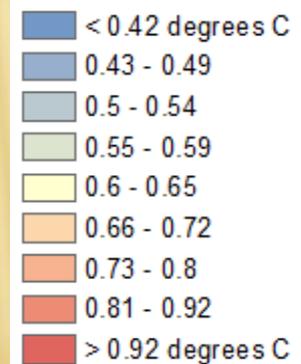
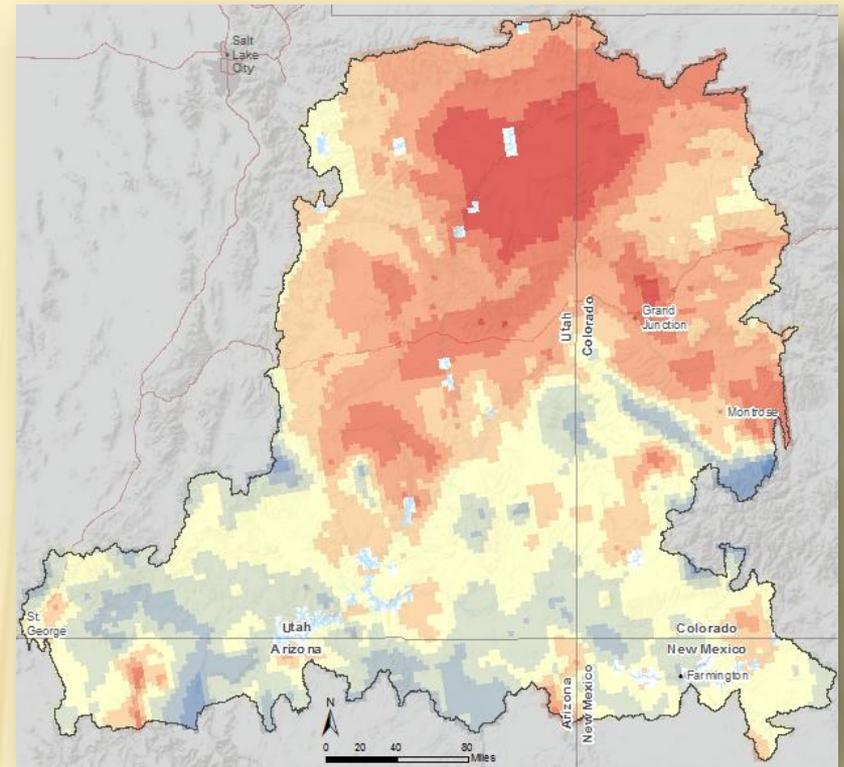
B



Comparison between current (solid) and near-term (crosshatched) terrestrial landscape intactness for Greater Sage-Grouse



Uncertainty depicted as standard deviation of precipitation (A) and temperature (B) data from PRISM historic condition (1968–1999).



Questions?

