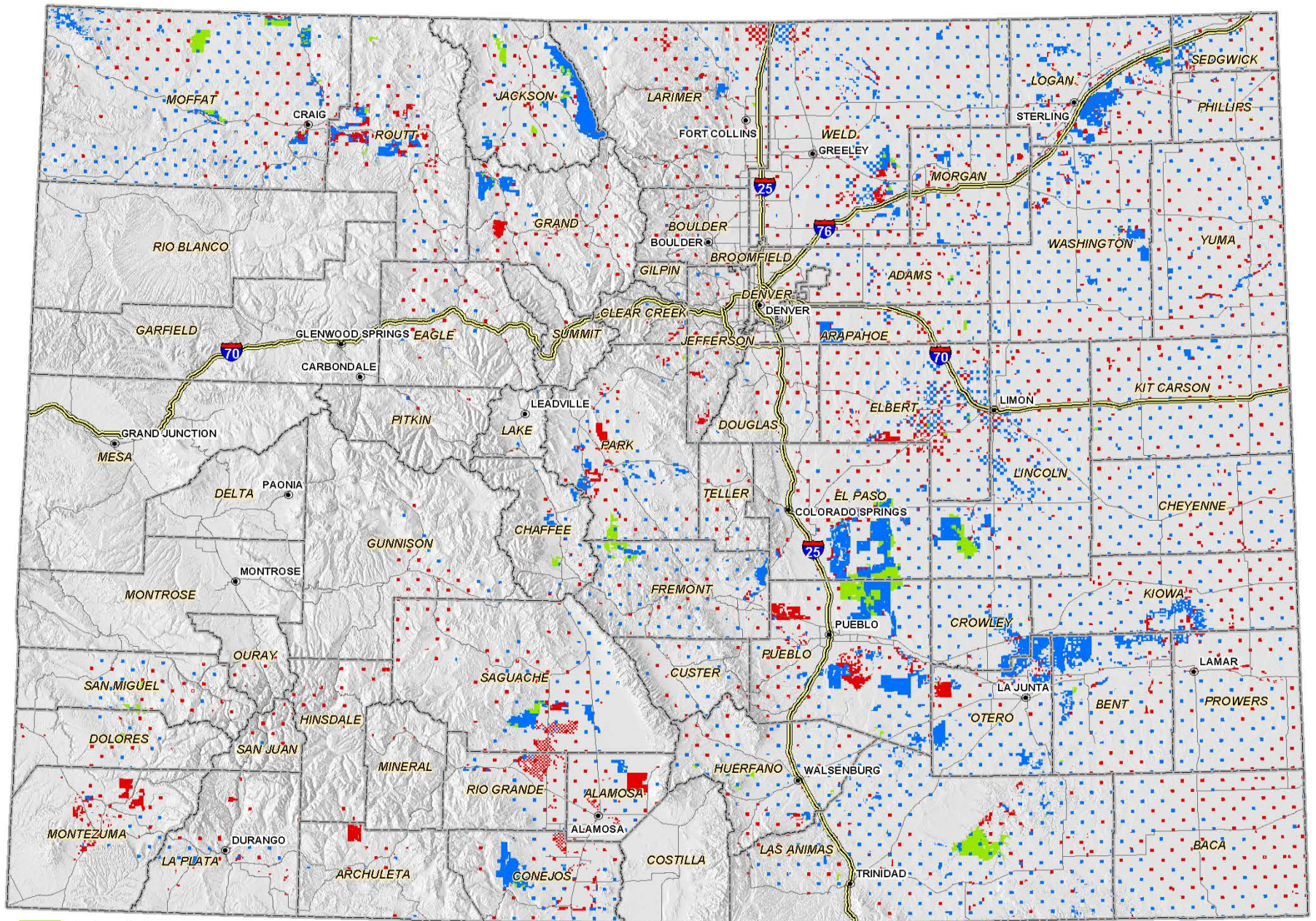
The seal of the Colorado State Land Board is a circular emblem. It features a central shield with a plow and a sheaf of wheat, flanked by two hands holding a scale. Above the shield is a triangle containing an eye, with rays emanating from it. The shield is set against a background of a sunburst. The outer ring of the seal contains the text "BOARD OF LAND COMMISSIONERS" at the top and "COLORADO" at the bottom. Below the shield, the Latin motto "SINE NUMINE" is visible.

Colorado State Land Board

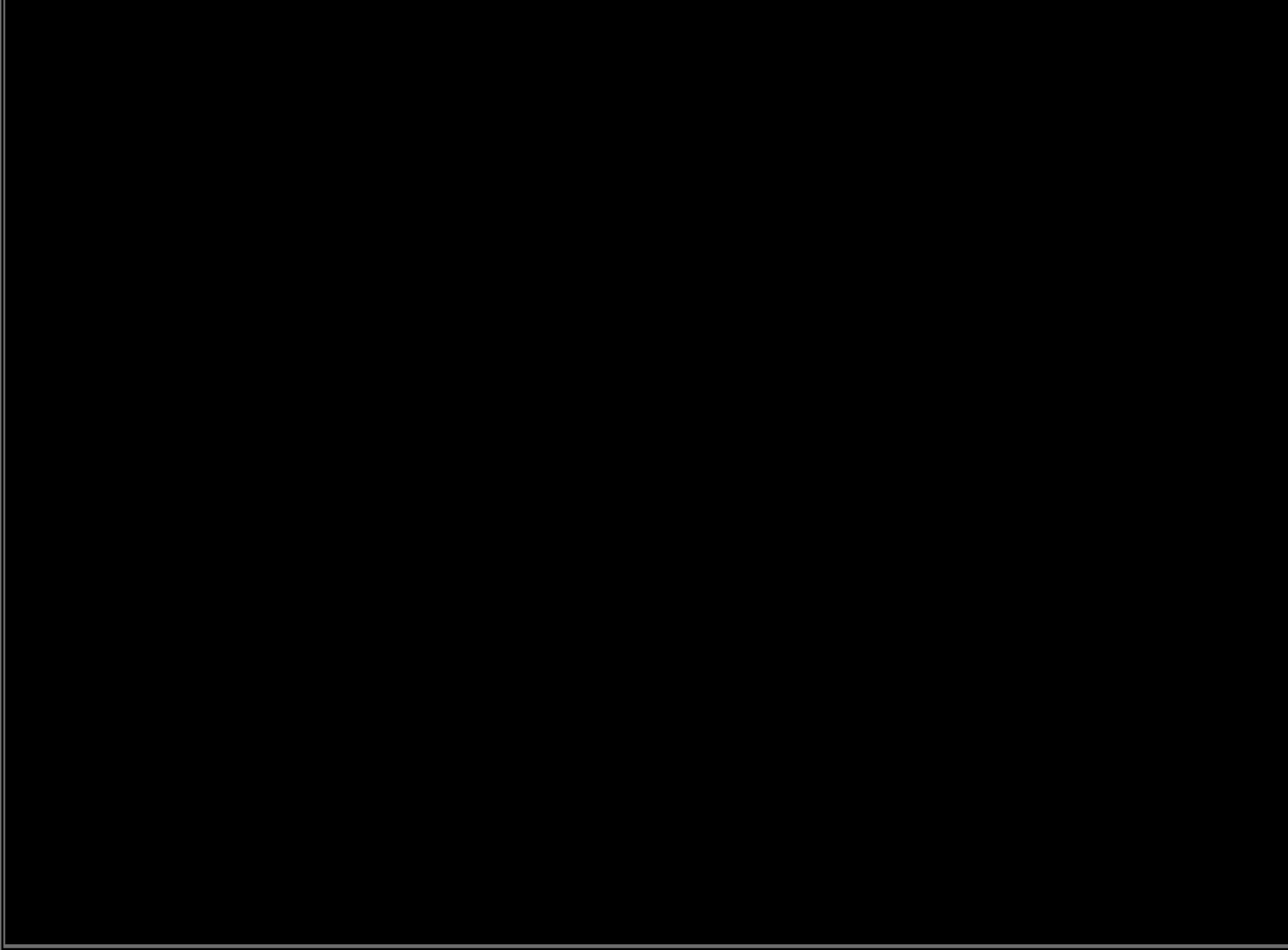
Stewardship Framework and Use of CNHP BIOTICS data to advance stewardship goals and objectives

January 14, 2014



- Surface Only
- Surface and Minerals
- Minerals Only





Colorado State Land Board

Five Year Strategic Plan – Goal 2

“Fully realize the vision of Colorado’s citizens, as expressed in Amendment 16, for stewardship of the lands we hold in perpetual trusts, especially those held in the Stewardship Trust.”

2008 8 21

Brett Gray Ranch



Strategic Objective 2.1:

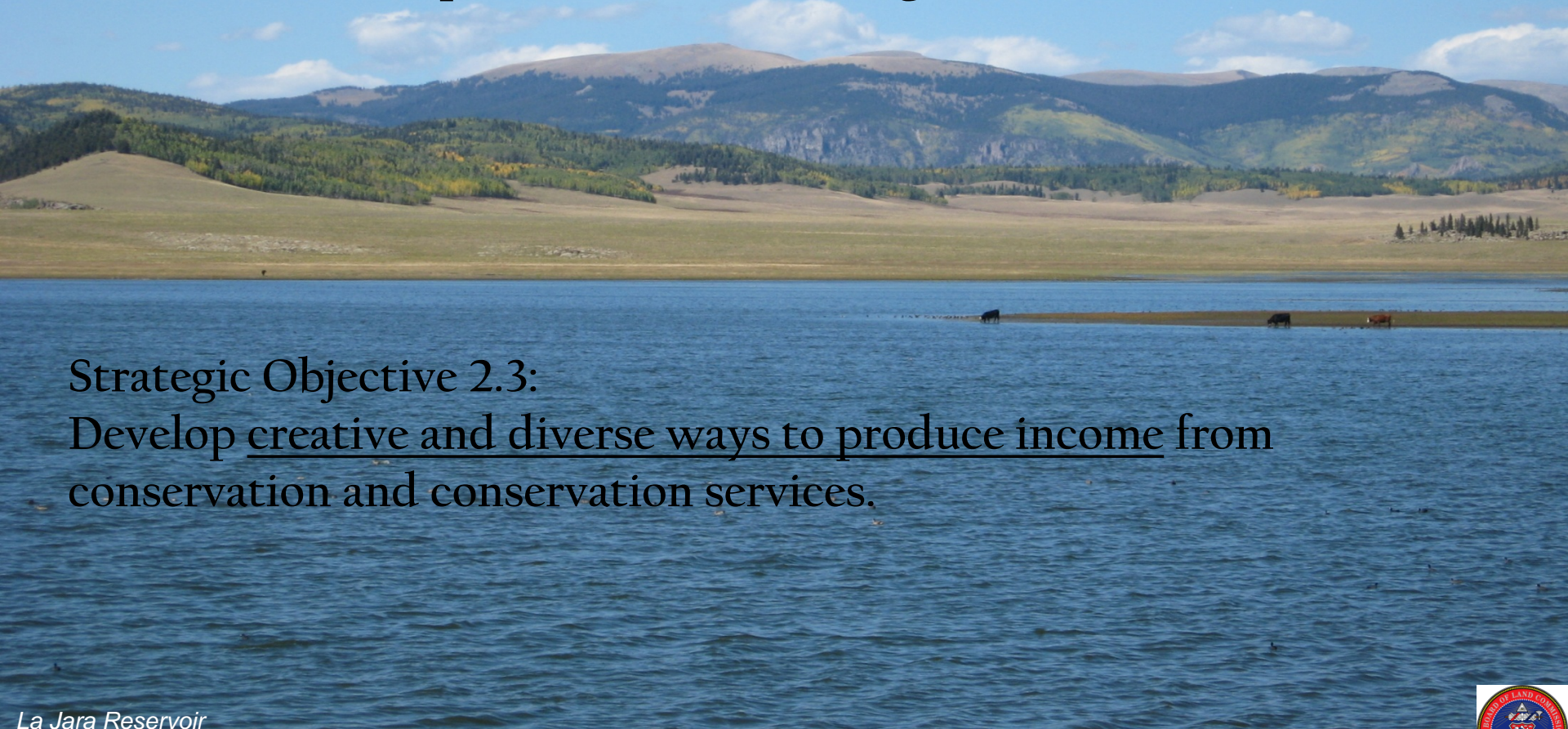
Enhance stewardship of natural values on Stewardship Trust lands.

Strategic Objective 2.2:

Enhance stewardship of all state trust lands through an increased use of sustainable practices in land management.

Strategic Objective 2.3:

Develop creative and diverse ways to produce income from conservation and conservation services.



The Stewardship Trust: 295,923 acres of 2.88 million acres

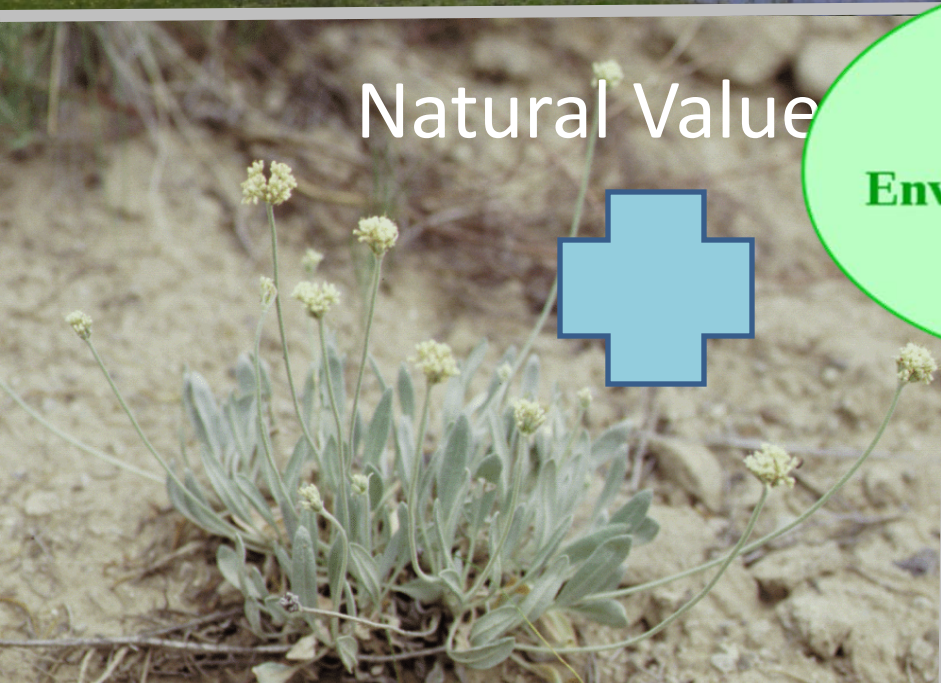


Wilson Mesa

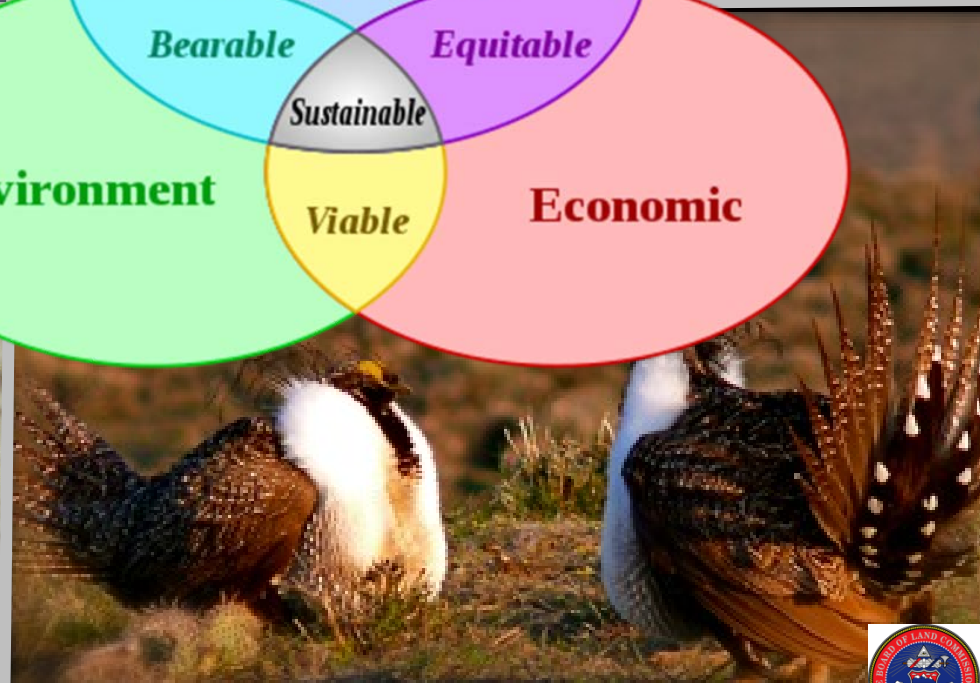
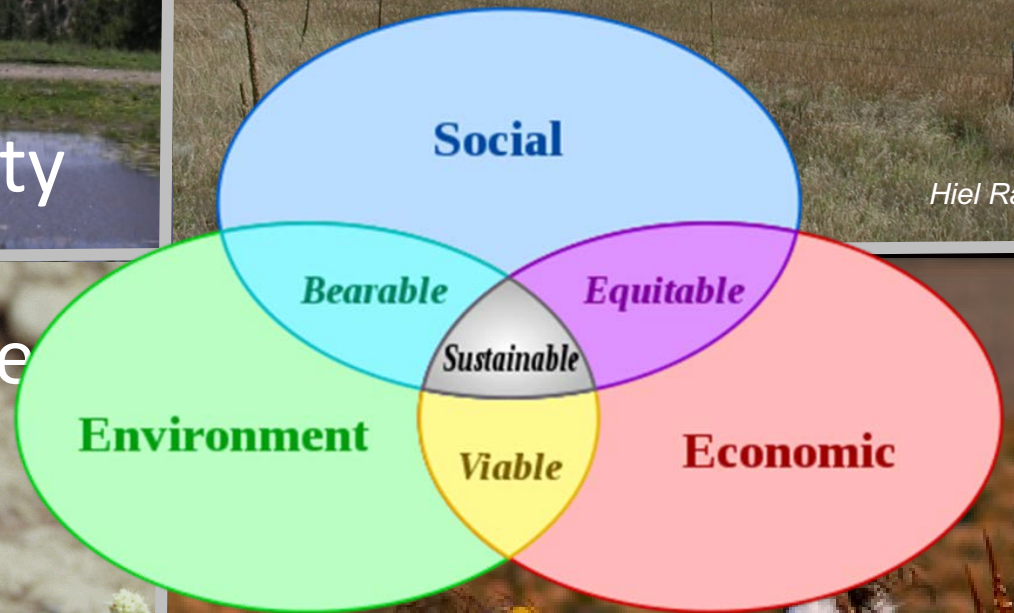
Beauty



Hiel Ranch



Natural Value



Why is Biodiversity Important?

- Mutual survival creates a “balanced ecosystem.”
 - Ecosystems are complex, intricate systems of interdependence.
- The richer the ecosystem, the greater the protection against disease.
- Biodiversity provides scientists with lessons for scientific advancement.
 - 40% of all medicines are still derived from biological resources.
 - Spiders can produce silk with the high tensile strength of many steel alloys, even though it's made of proteins.
- Biodiversity boosts ecosystem productivity and resiliency → long-term sustainability.



“All the least...”

High Biodiversity

- The rarest and most threatened of plant and animal species
- “Fully tracked” plants and plant communities



Lesser Prairie Chicken



Bell's Twinpod (physaria bellii) G2/S2



Extreme Rich Fens



“...and the best of the rest”

Statewide Significance over Local Importance

- Beauty
- Open space
- Geologic, archaeological & paleontological features



Realignment of the Stewardship Trust

- Biodiversity
- Statewide Significance
- Threat Status

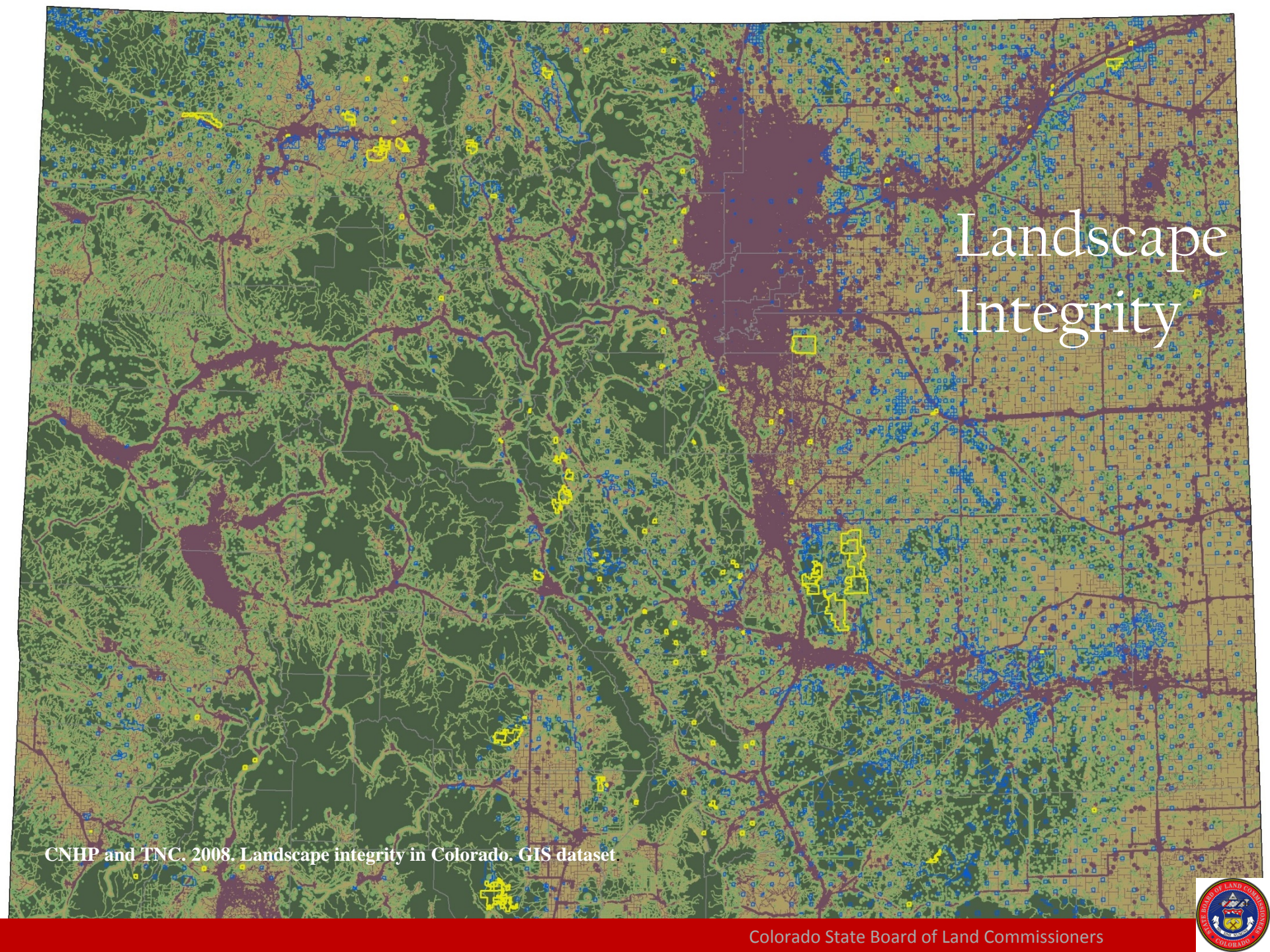
East Sand Dunes, Jackson County



Biodiversity

CNHP and TNC. 2011. Biodiversity in Colorado. GIS dataset

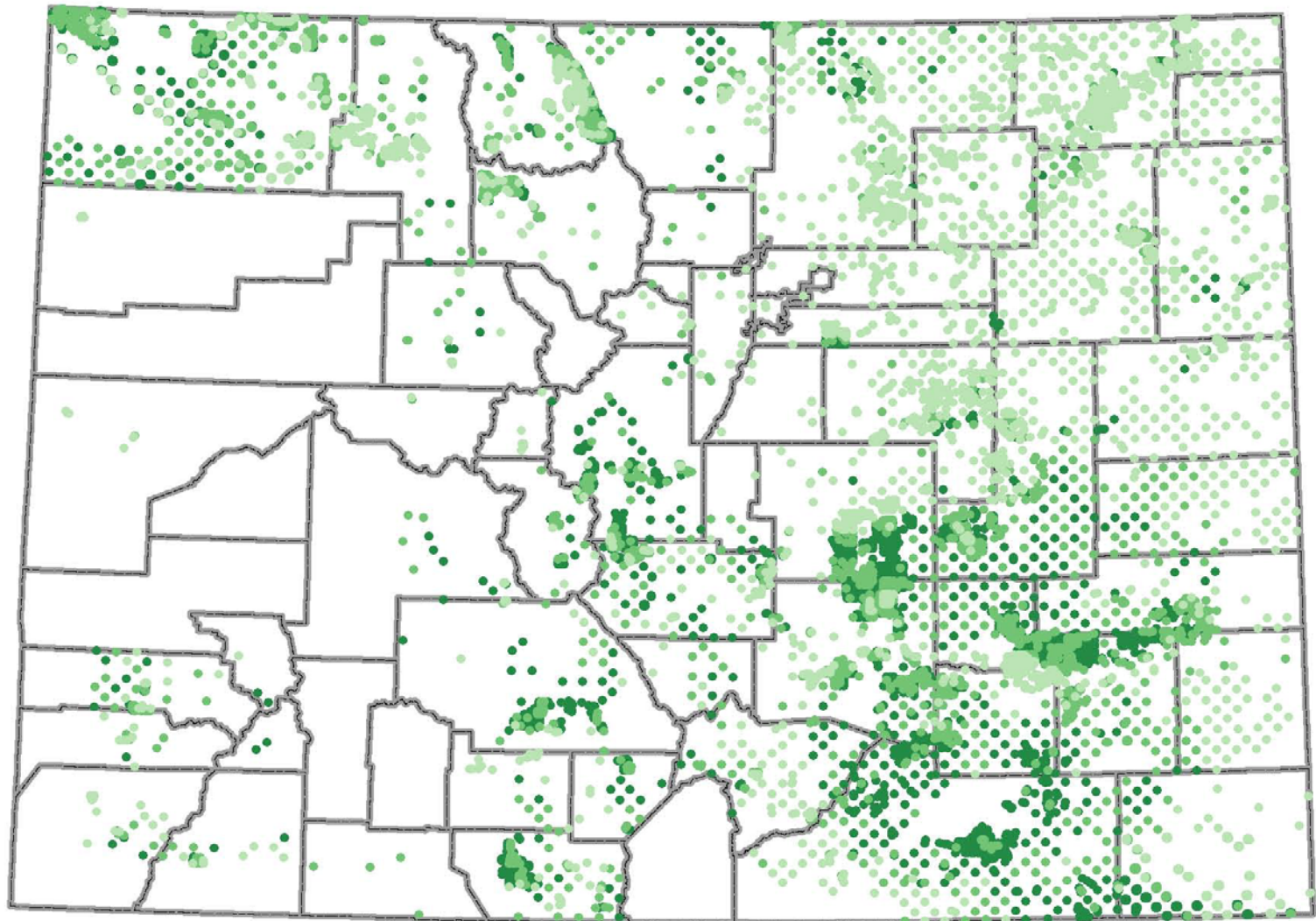




Landscape Integrity

CNHP and TNC. 2008. Landscape integrity in Colorado. GIS dataset.





- SLB lands with relatively lower conservation value
- SLB lands with moderate conservation value
- SLB lands with top conservation value

CNHP Conservation Value Analysis

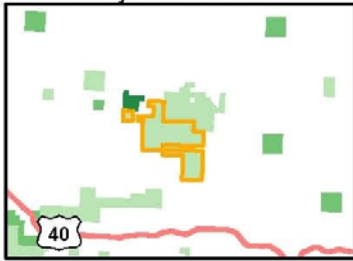
2/17/2012

Source: CNHP 2012

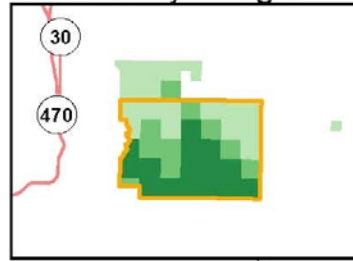
2012 - State Land



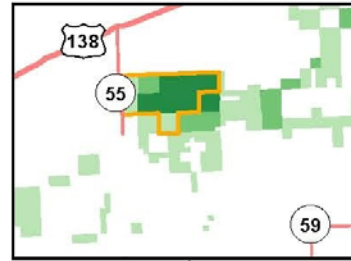
Jimmy Dunn Gulch



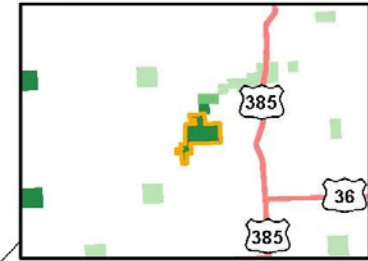
Lowry Range



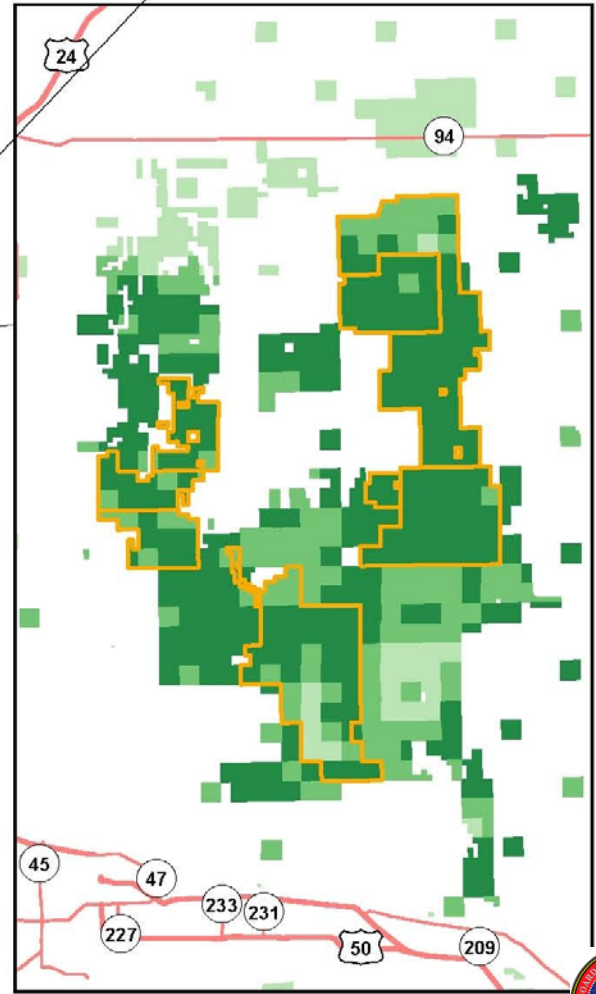
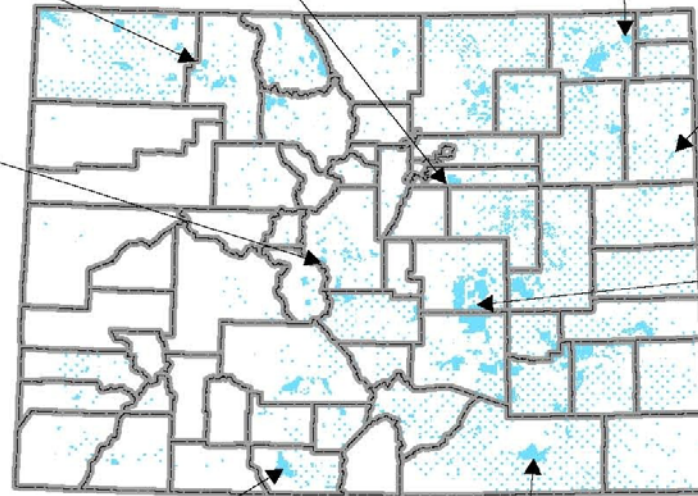
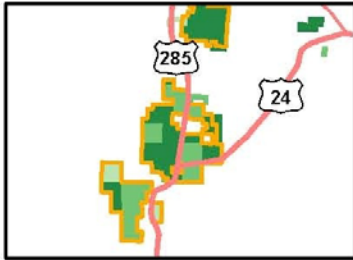
Tamarack SWA



Arikaree River Basin



Antero/Salt Creek



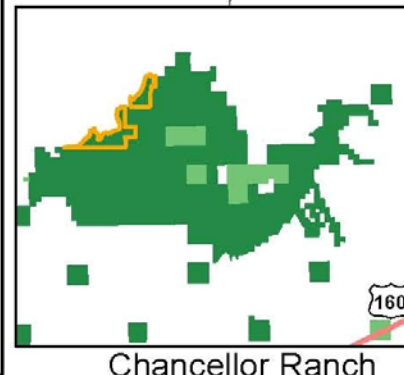
CNHP Conservation Value Analysis

-  Stewardship Trust
-  SLB lands with relatively lower conservation value
-  SLB lands with moderate conservation value
-  SLB lands with top conservation value



Source: CNHP 2012

2/17/2012 State Land Board



Chancellor Ranch

Chino Basin/Robert Ranch



Magic Forest Fen - Park County

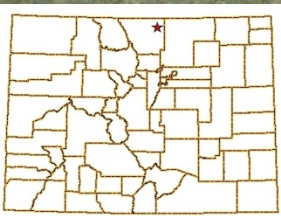
Forested, extremely rich fen of exceptional quality. Several rare plants and fully tracked plant communities. Unique in the state and previously unknown.



Table Rock - Larimer County

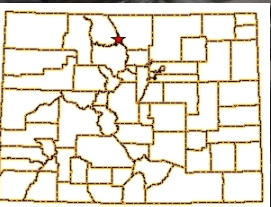


Several fully tracked plant communities, riparian habitat and Prebles Meadow Jumping Mouse habitat. Scenic beauty.



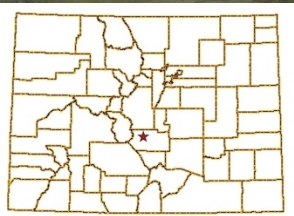
Agnes Lake – Jackson County

Several tracked plant communities. Rare columbine found.



Buffalo Drop - Fremont County

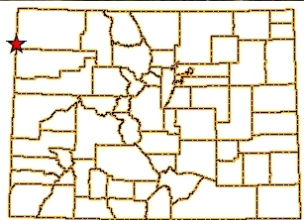
Historical interest with location serving as a cliff drop for Native Americans hunting buffalo. Rare willow and several tracked plant communities. Peridot mineral collecting spot.



Sand Draw – Moffat County



Dramatic geologic landscape of breathtaking beauty. Several fully tracked plant communities and high quality wildlife habitat. In excellent condition.



Emerging Trends

- Landscape Scale Conservation
 - Focus on ecosystems
 - Increasing collaboration among all levels of government
 - Ecological health vs. single species
- Sustainability
 - Biodiversity – the richness of the ecosystem
 - Ecological Integrity – how “intact” these ecological systems are and how likely they are to withstand intrusion and long-term impacts



The Evolution of the SLB's Stewardship Vision

- Pre-Amendment 16
 - CNAP Designated Areas (5 areas designated)
 - Long-term non-development leases
- 1996-2012
 - Stewardship Trust
 - CNAP Designated Areas (18 more areas designated)
- 2013 forward: A new framework
 - Stewardship Trust
 - Stewardship Action Plans
 - Integrated Resource Management Plans for large properties
 - CNAP Designated Areas
 - Ecosystem Services

View from Gribbles Park parcel



What is a Stewardship Action Plan?

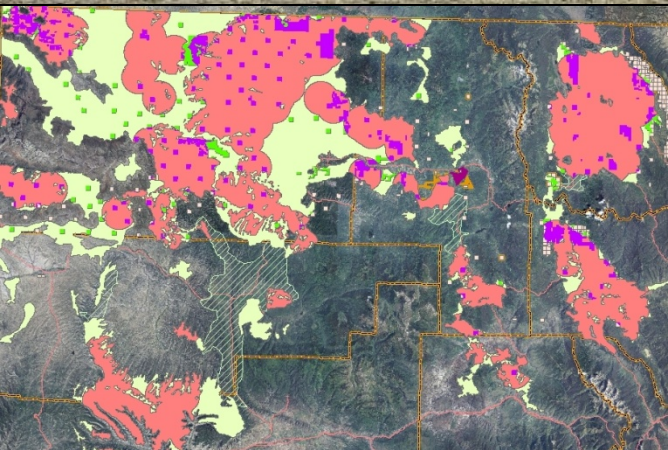
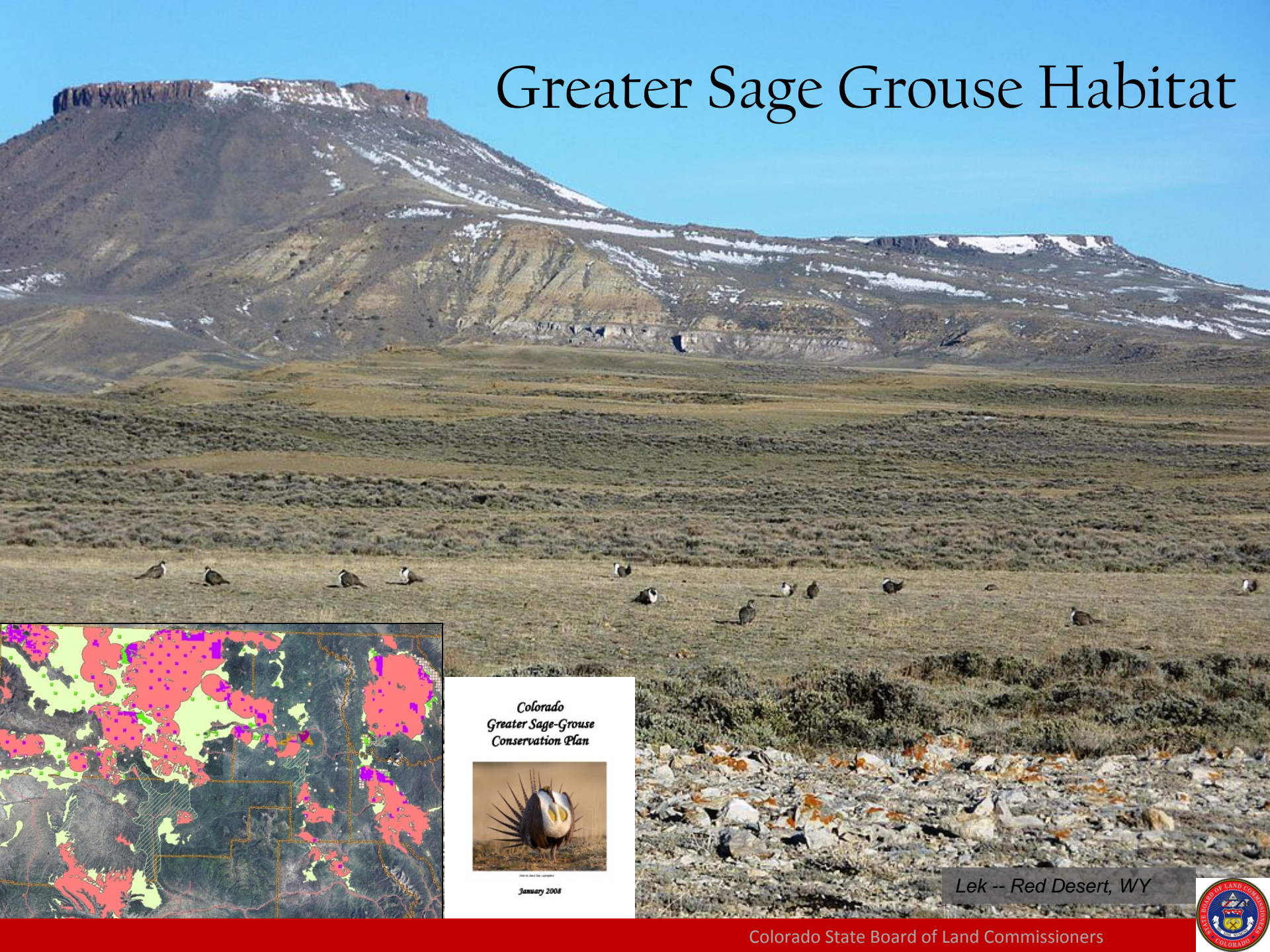
A Management Plan:

- Targeted species or ecosystem
- Outcome-based and pragmatic
- Landscape scale
- Involving collaboration with stakeholders
- Adaptive management framework
(Set goals, priorities, strategies, action steps, measure results, re-evaluate)
- Can provide a strong and direct link to mitigation programs.

Near Bear Creek parcel, Huerfano County



Greater Sage Grouse Habitat



*Colorado
Greater Sage-Grouse
Conservation Plan*

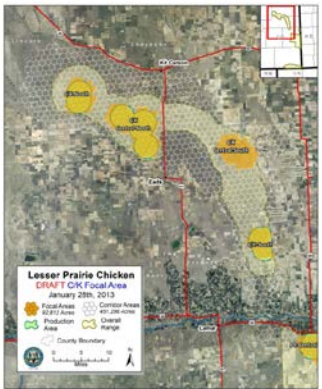


January 2008

Lek -- Red Desert, WY



Lesser Prairie Chicken Habitat



Mountain Fens



Spring Creek parcel



Riparian Areas and Wetlands



Antero-Salt Creek

“Bench” parcel, South Fork of the South Platte



Piedmont Tallgrass Prairie



El Paso County Piedmont Tall grass



Southeast Colorado and Purgatoire River Canyonlands



Chancellor Ranch, Las Animas County

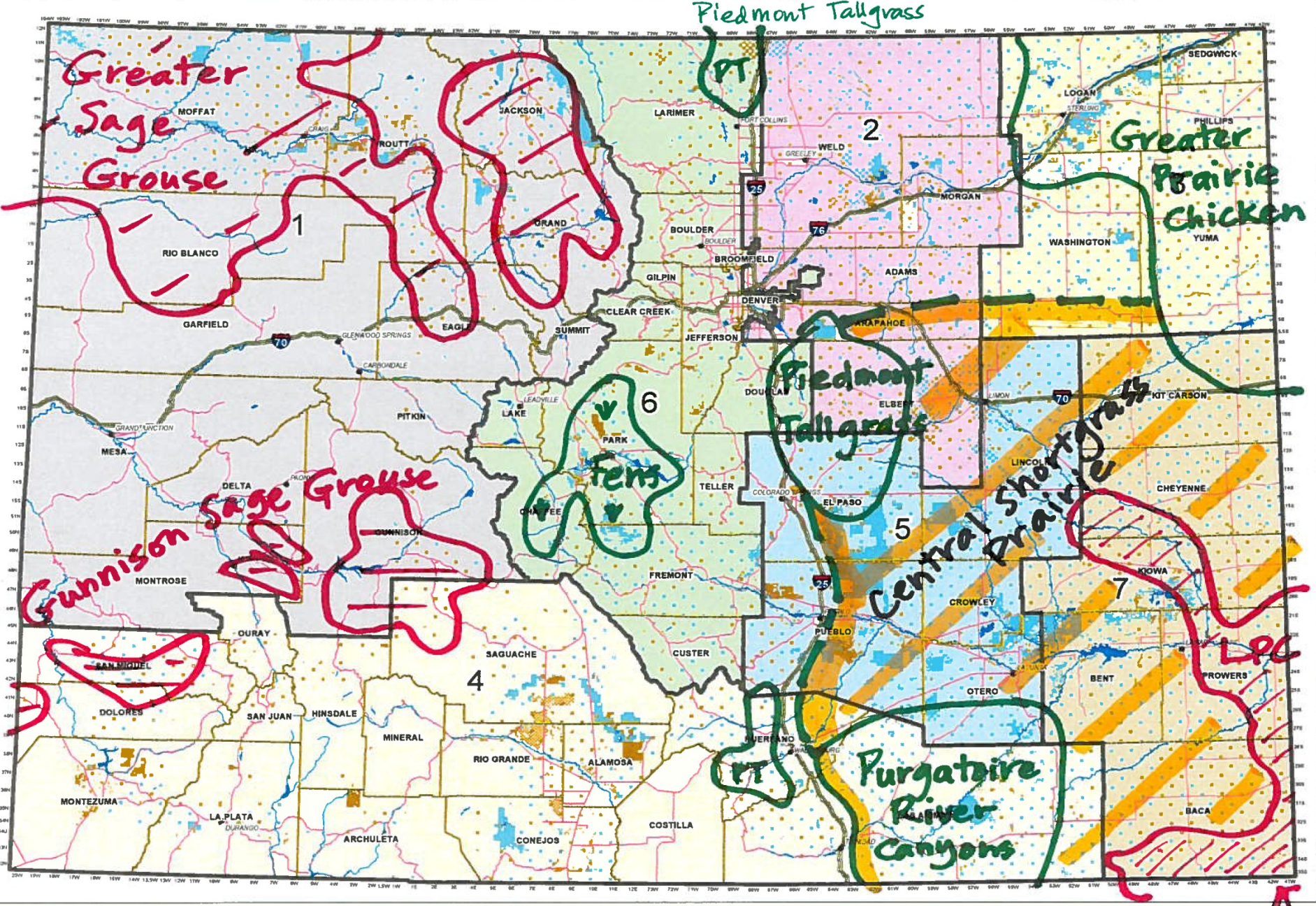


Central Shortgrass Prairie



Lowry, South of Quincy





Preliminary Conservation Action Plans areas

Lesser Prairie



Development of Stewardship Action Plans and accompanying Field Assessments over 5 years

Targeted Species or Ecosystem	2013	2014	2015	2016	2017	Current Mitigation Potential
SAPs to be prepared by SLB for its state trust lands in collaboration with CAPs prepared for the target species						
Lesser Prairie Chicken						High
Gunnison Sage Grouse						High
Greater Sage Grouse						High
Proposed SAPs -- to be prepared by SLB for its state trust lands						
Mountain Fens						High
Rivers and Wetlands						Moderate
Piedmont Tallgrass Lands						Low
Greater Prairie Chicken						Low
Purgatoire River Canyons						Low
Central Shortgrass Prairie						Low



Asset Management Plans for large properties



Lowry, North of Quincy

Lowry Range: Integrated Resource Management Plan

April 2012



Colorado Board of State Land Commissioners
1127 Sherman Street, Suite 300
Denver, CO 80203

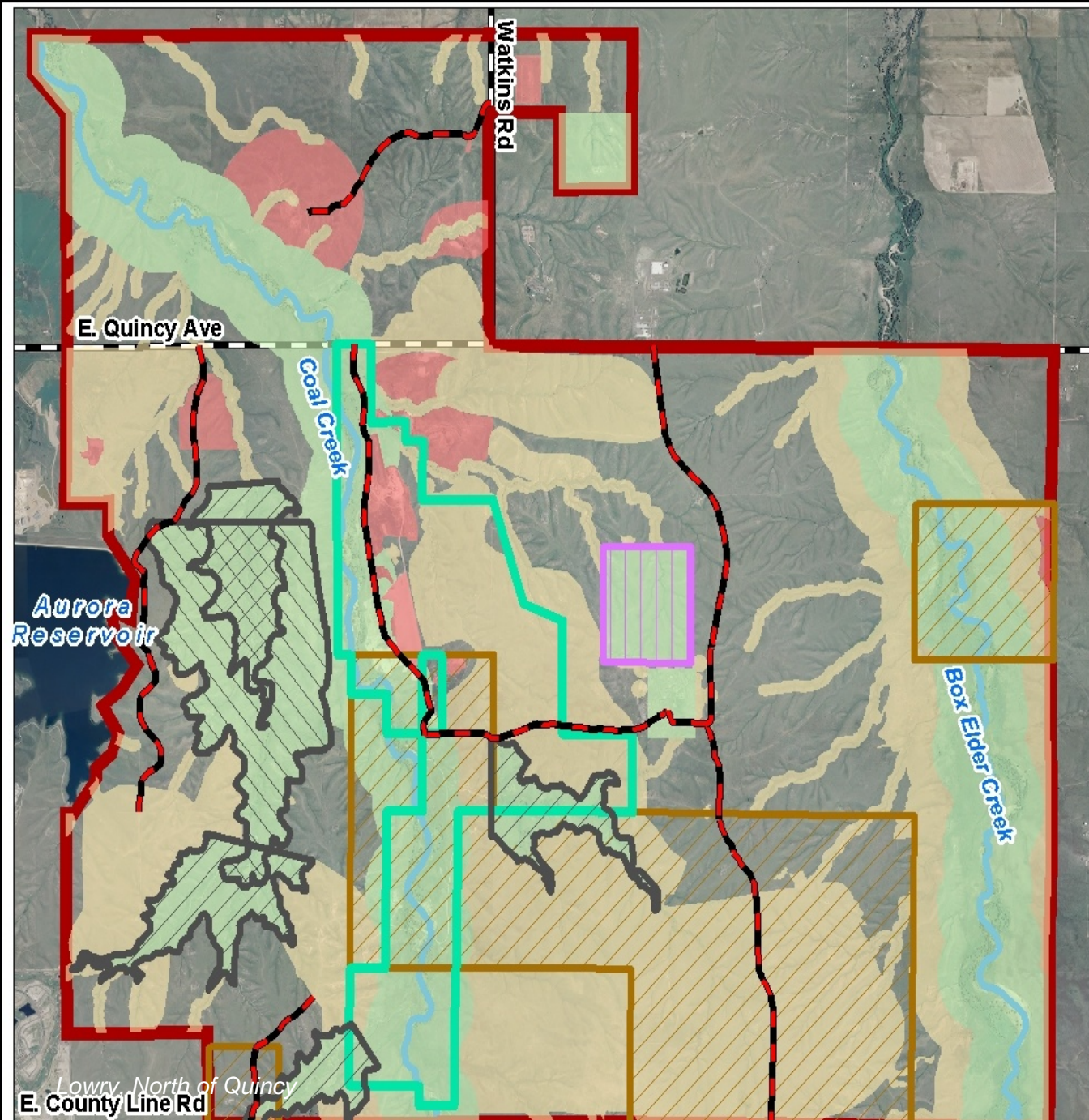
EXECUTIVE SUMMARY Mountains to Plains Energy by Design Report to the Colorado State Land Board






January 10, 2013



The Nature
CONSERVANCY
Protecting nature. Preserving life.



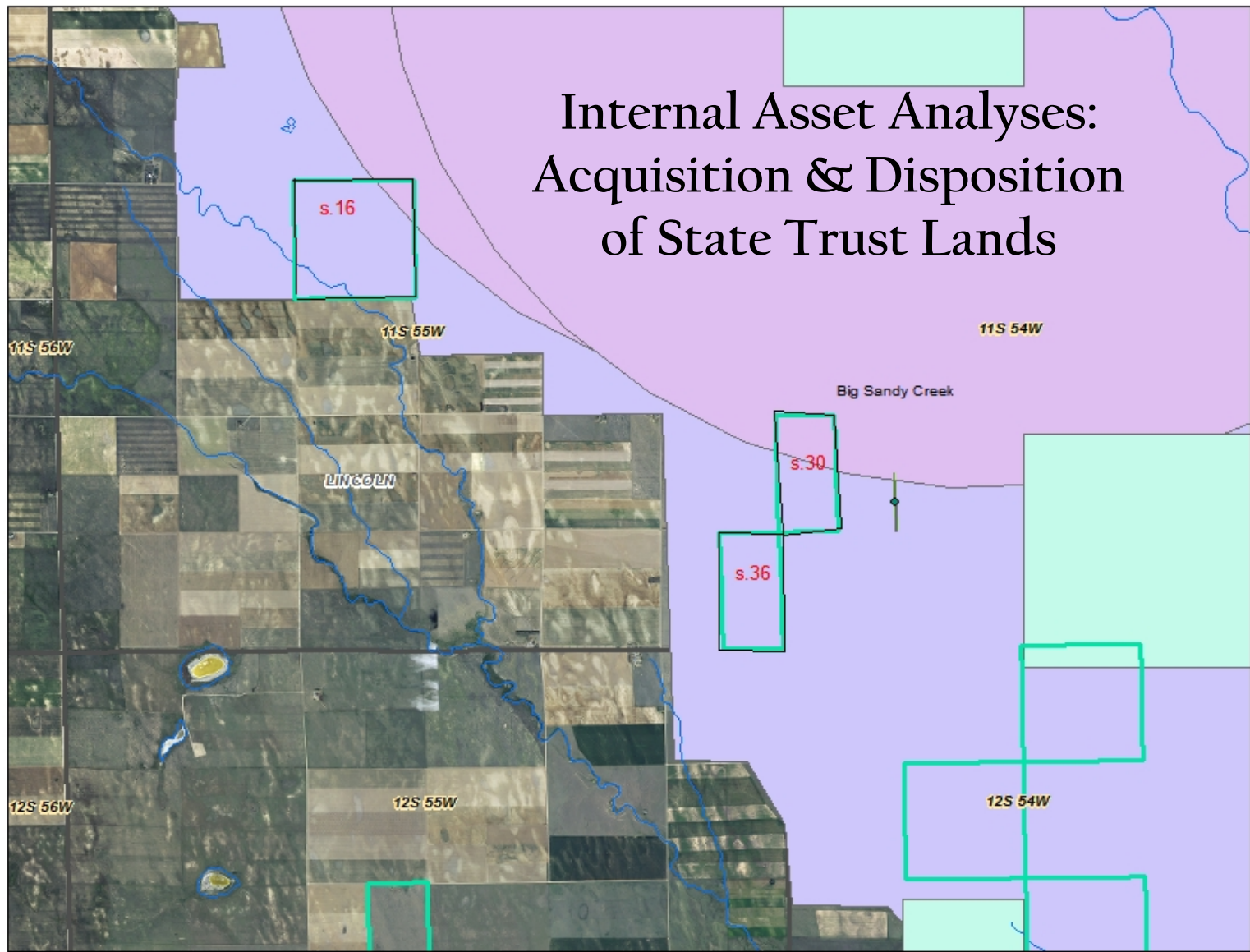


-  Lowry Range Boundary
-  Tier 1 - No Surface Occupancy
-  Tier 2 - Controlled Surface Occupancy
-  Tier 3 - Managed Surface Occupancy
-  Tier 4 - Preferred Surface Occupancy
-  Rangeview Adjudicated Reservoirs
-  Aurora Proposed Reservoir
-  DMVA Lease Area
-  Current OG Lease Area
-  Sand/Gravel Lease Area
-  Tier 4 Primary roads - 40' wide corridor

Lowry Range Integrated Resource Management Plan



Internal Asset Analyses: Acquisition & Disposition of State Trust Lands



- Legend**
- surf_ed_011413a
 - ◆ L1_EOR_Centroid
 - ◆ L1_SF_Pt
 - ◆ L1_Obs_Pt
 - L1_SF_Ln
 - L1_Obs_Ln
 - L2_PCA
 - L2_EOR
 - L1_EOR
 - L1_PCA
 - L1_SF_Poly
 - L1_Obs_Poly
 - NCA
 - L3_EOR
 - L3_PCA
 - NCA
 - ◆ co_nwi label
 - ◆ co_nwi tic
 - co_nwi arc
 - swa_all_comap8_rs1

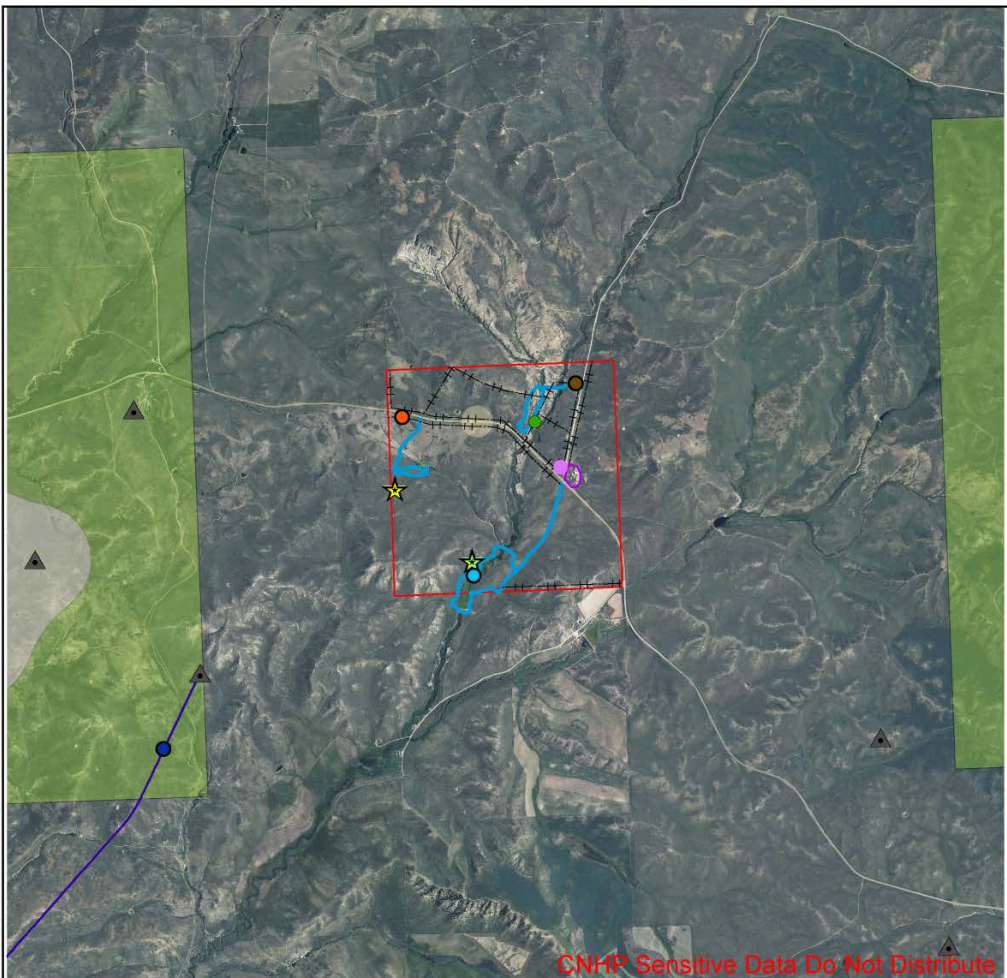
Lincoln County - Proposed Disposition

Identified Natural Values

CONTAINS SENSITIVE DATA -- NOT FOR PUBLIC DIST.



Internal review of state trust lands nominated for oil and gas development



Legend

2013 Moffat Points

- Canada Thistle
- Gate
- Manure Pile
- Sheep Trailers
- ★ Transect 1
- ★ Transect 2
- Wetland
- ▲ CO Oil/Gas WELLS
- CO Oil/Gas DIR_BHLS

2013 Moffat Lines

- Sheep Pens
- - - Fence Line
- 2013 Hiking/Driving Trail
- CO Oil/Gas DIRLINES
- CO Oil/Gas COGCC_Fields

2013 L1 CNHP

- Greater Sage-Grouse
- Sage Sparrow
- SLB

N Fork Big Gulch

Moffat County
T8N_R92W_16

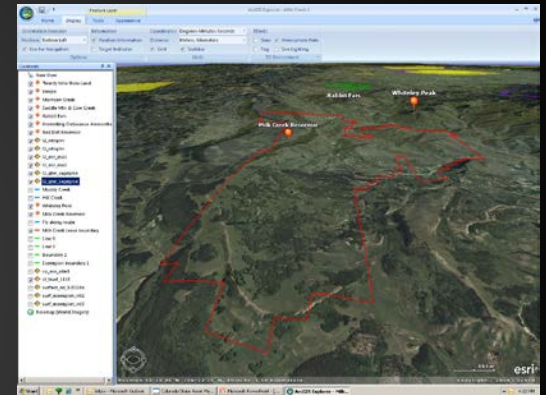
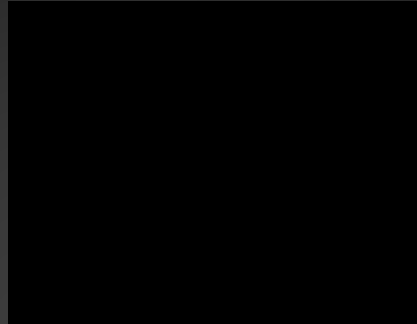


1 in = 1 miles



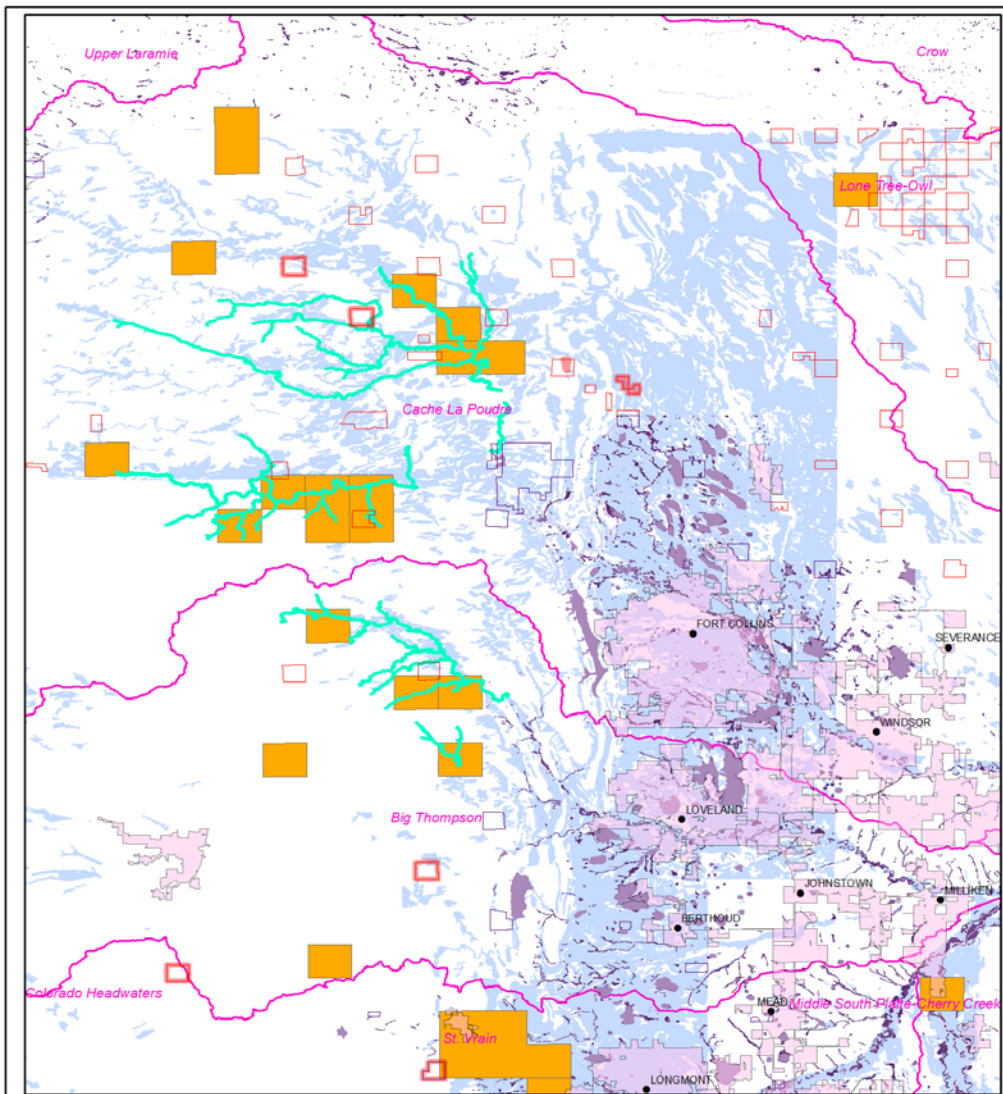
Four Levels of Evaluation for Ecosystem Services Potential

- 100,000 foot view
- GIS desktop analysis
- Site evaluations
- In-depth site analyses by experts



GIS Desktop “Windshield Analysis” decision support system:

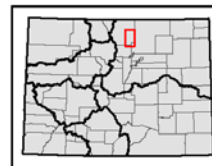
Identifying state trust
lands with potential
for Prebles Meadow
Jumping Mouse
mitigation banks.



PMJM Element Occurrences

Key to Symbols

PMJM EO's	NWI Wetlands	Rivine
NWI Mapped Trust Lands	WETLAND_TYPE	HUC-8
Stewardship Trust	Freshwater Emergent Wetland	Hydric soils
Big Cities	Freshwater Forested/Shrub Wetland	
City Areas	Freshwater Pond	
PMJM Critical Habitat	Lake	
	Other	



Colorado State Land Board

