



Mountains to Plains Energy by Design

TECHNICAL TEAM WEBINAR * APRIL 10, 2013



Topics:

- Project refresher
- Results
- Lessons learned & next steps



PROJECT REFRESHER



Goal:

To allow for reasonable energy development while achieving **biological, cultural, scenic and recreational** resource conservation goals.

Main partners:

TNC, State Land Board, City of Fort Collins, Larimer County

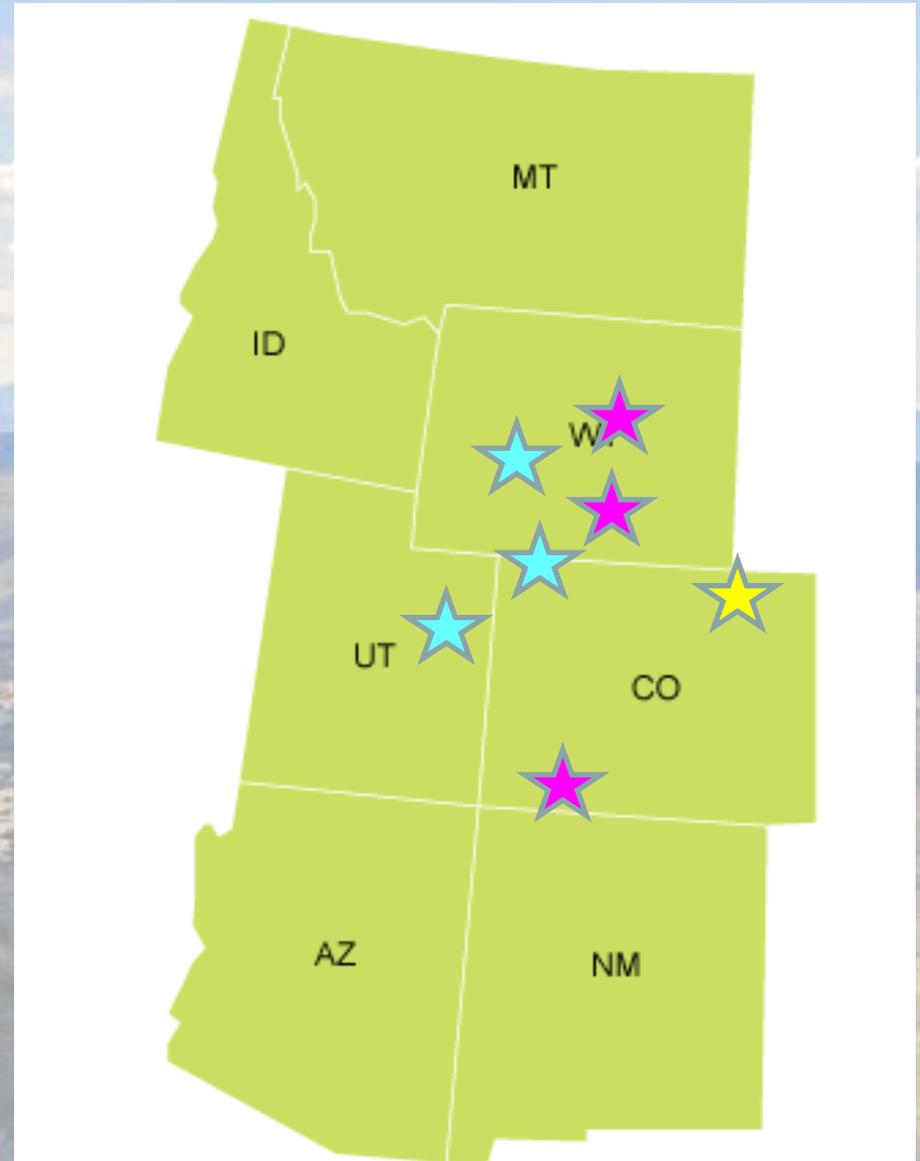


Tool:

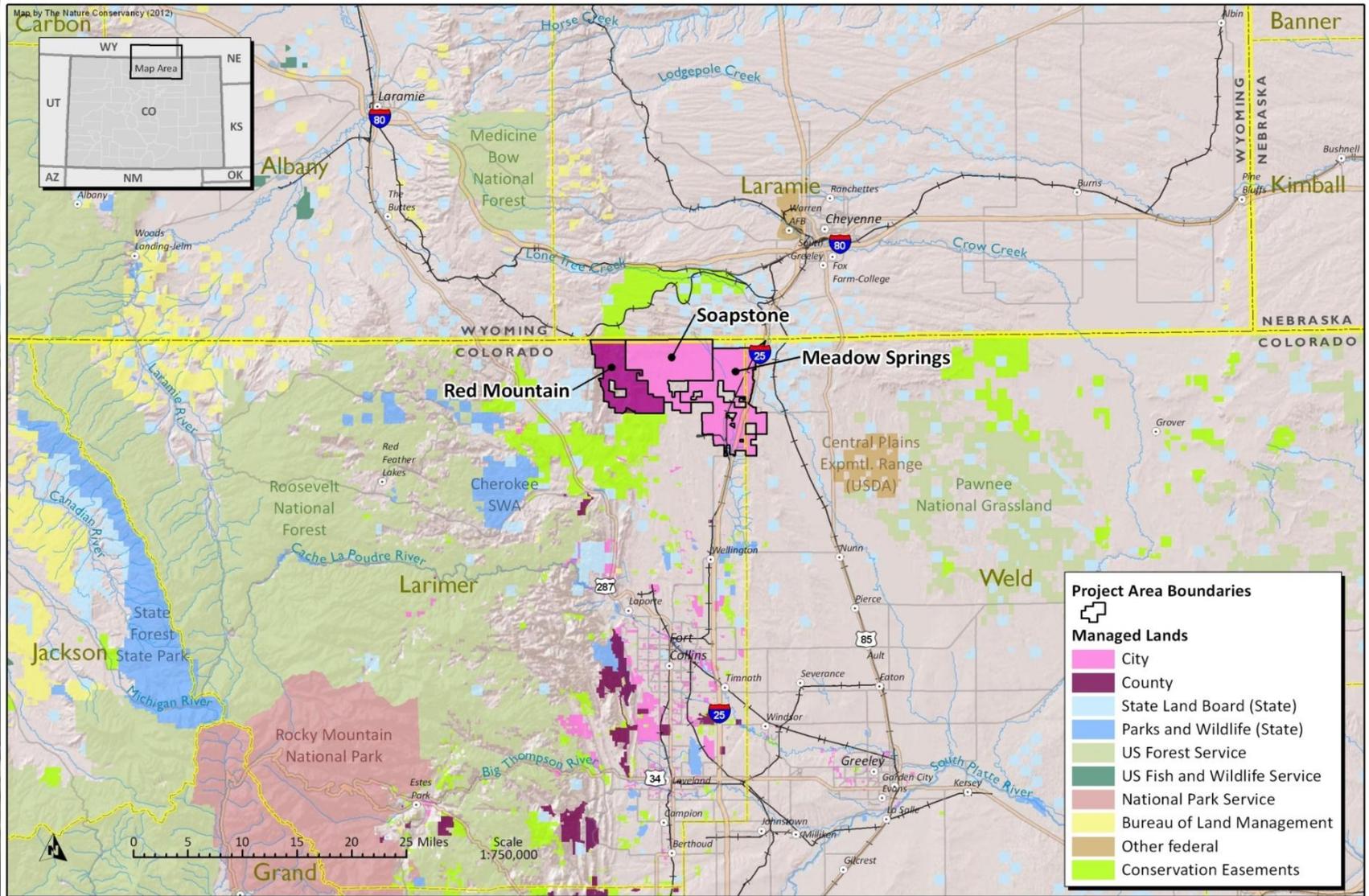
Energy by Design



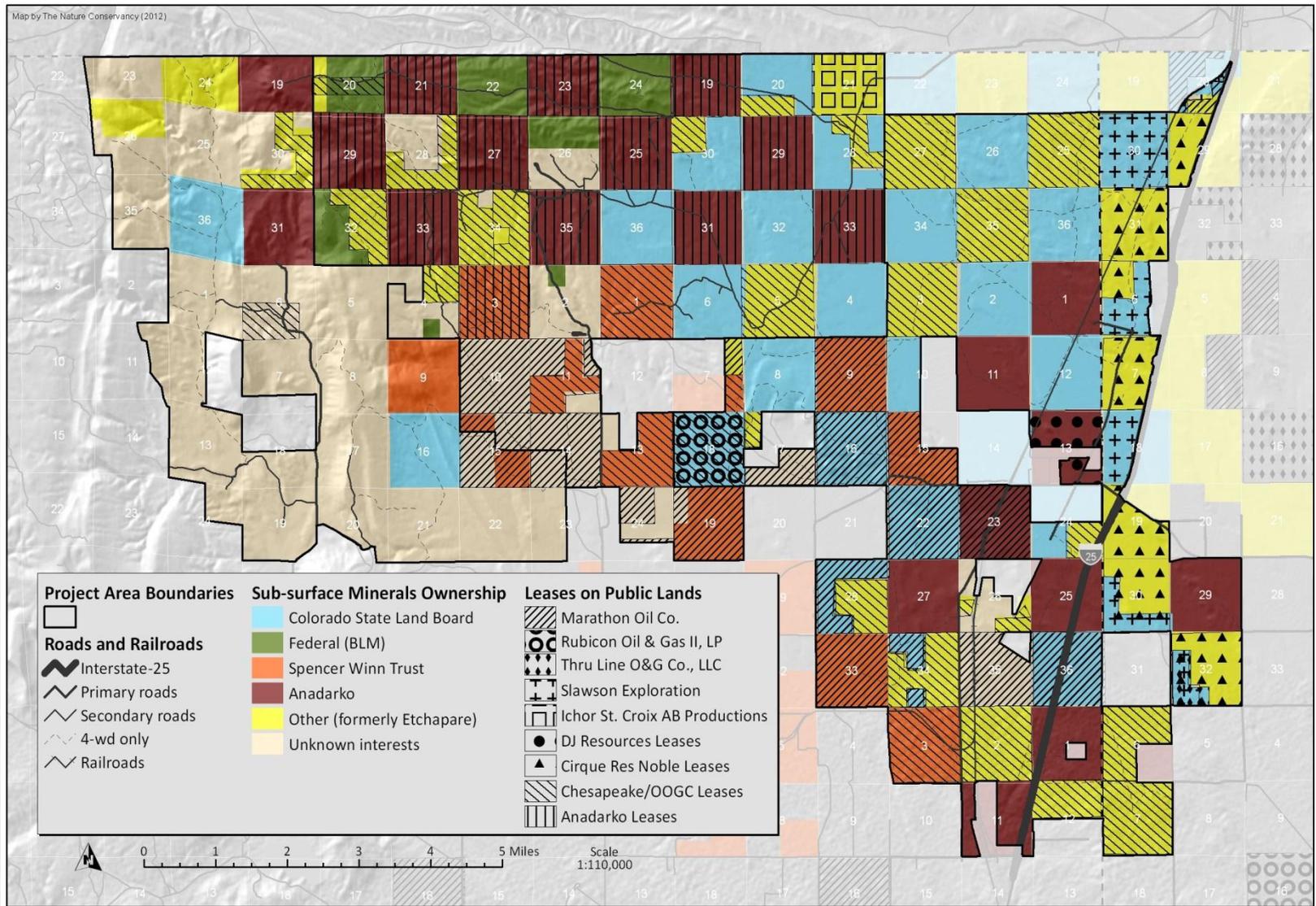
Energy by Design: Net Zero Impact



Project area: 60,000 acres



Mineral ownership and leases



Thank You, Technical Team

- TNC
 - **State Land Board**
 - **City of Fort Collins**
 - **Larimer County**
- Contract**
- MOU**

- Colorado Parks & Wildlife
- Colorado Natural Heritage Program
- Colorado State University
- Legacy Land Trust
- Marathon Oil
- Natural Resources Conservation Service
- Platte River Power Authority
- Rocky Mountain Bird Observatory
- U.S. Fish & Wildlife Service



Process



RESULTS



Surface Occupancy (S.O.) Zones

Highest Values/
Most Restrictive

No S.O.



Limited S.O.



Controlled S.O.



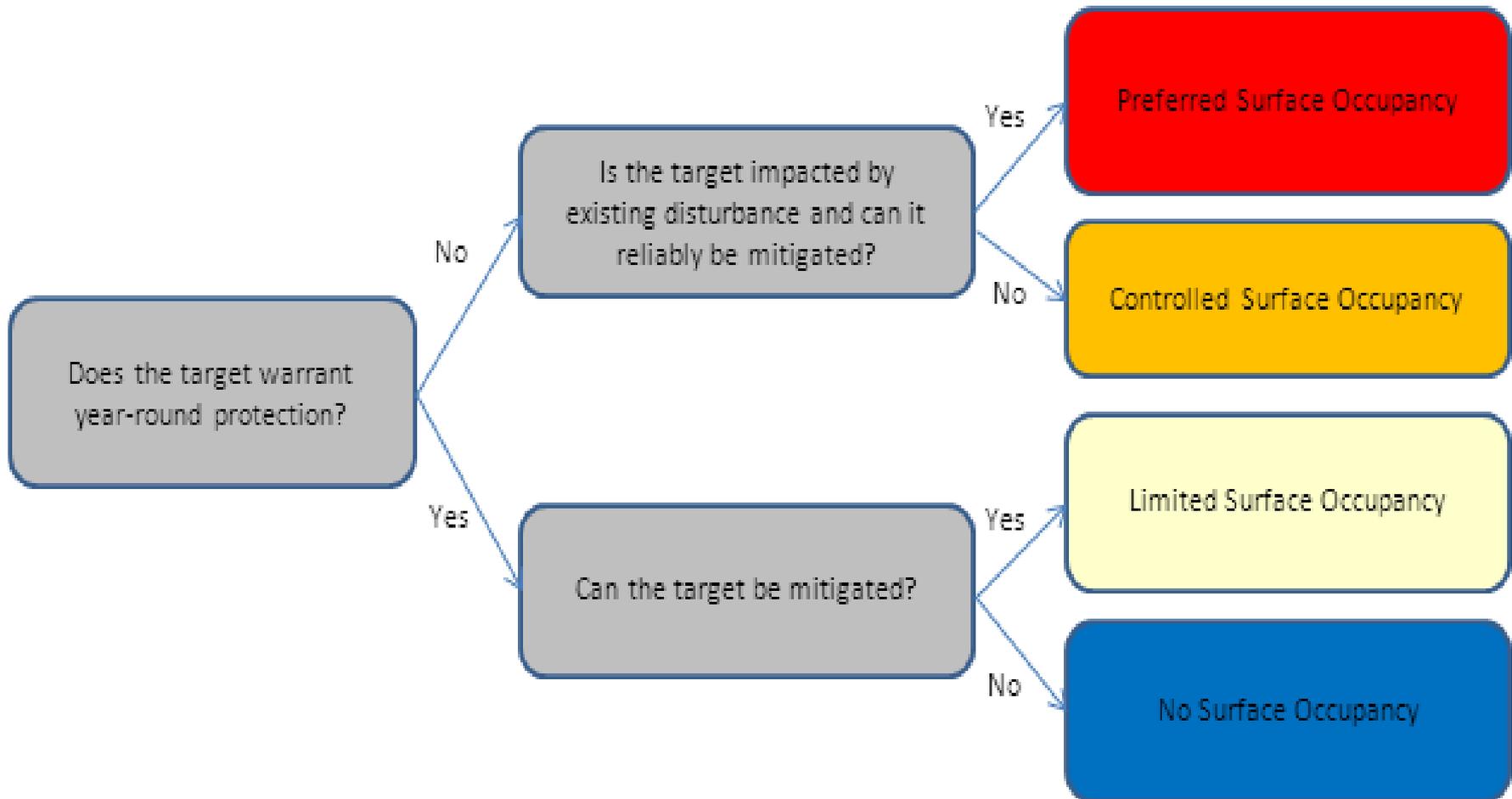
Preferred S.O.



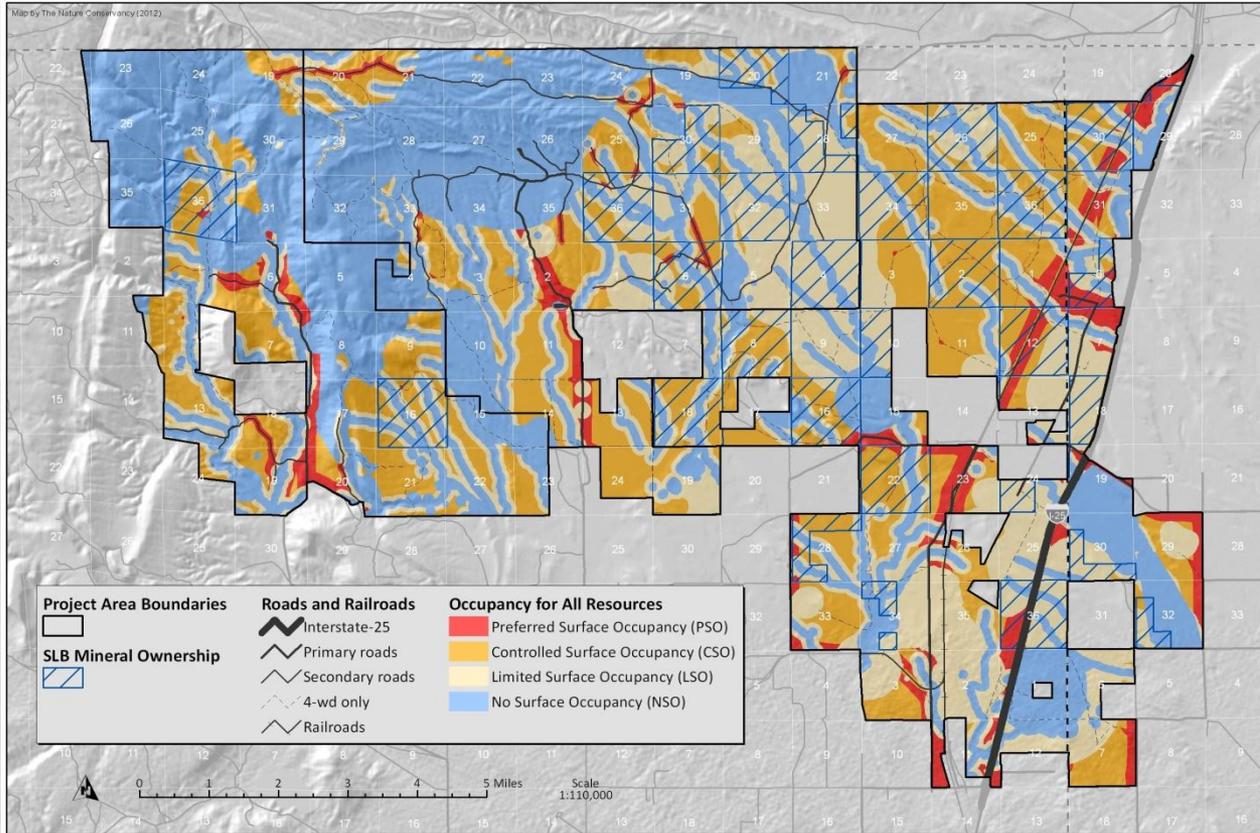
Lowest Values/
Least Restrictive



Surface Occupancy (S.O.) Zones



Surface Occupancy Zones



No



Limited

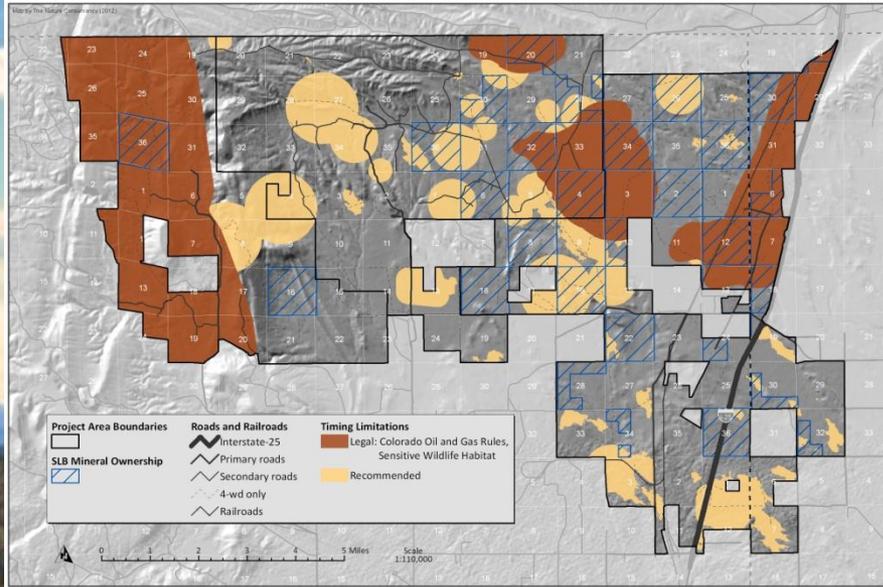


Controlled



Preferred

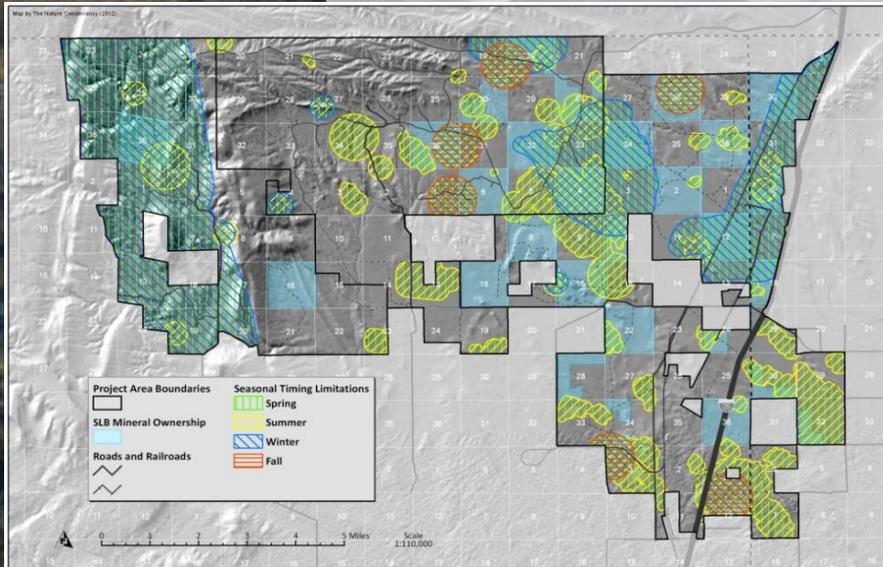
Timing limitations



Legal



Recommended



Surface development standards and mitigation

- Disturbance caps
- Compensatory mitigation fees
- Reclamation provisions
- City is creating Best Management Practices

Disturbance caps

- **Intent**
 - Provide for minimum number of well pads to balance access with conservation
 - SUAs to determine max. density allowed
- **Amounts**
 - Long-term: 3% per section or lease (4 pads)
 - Temporary: 1.25% (develop 1 pad at a time)
- **Implementation**
 - Temporary and long-term impacts will count toward allotted acres until reclaimed
 - Infrastructure sharing reduces acres by 50%.

Compensatory Mitigation Fees

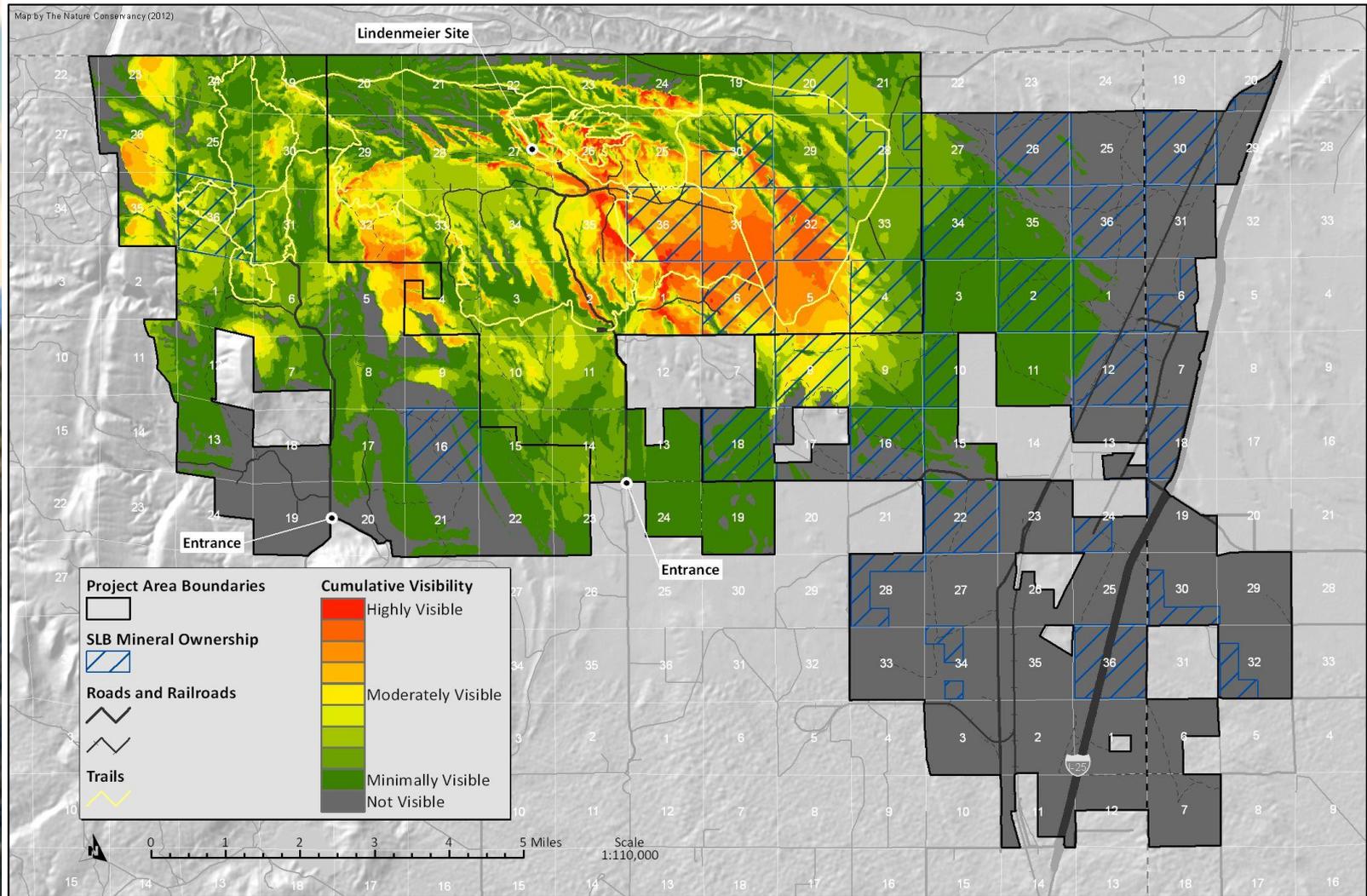
- **Intent**
 - Encourage fewer impacts in sensitive areas
 - Secure funds to achieve net zero impacts
- **Important**
 - Long-term impacts only
 - Funds managed by City and County

Surface occupancy area	General per-acre rate	Surface occupancy area multiplier	Surface occupancy area base rate	1 well pad		2 well pads		3 well pads		4 well pads	
				Multiplier	Final fee	Multiplier	Final fee	Multiplier	Final fee	Multiplier	Final fee
PSO	\$2,200	1.0	\$ 2,200	1.0	\$2,200	1.0	\$2,200	1.0	\$2,200	1.0	\$2,200
CSO	\$2,200	1.5	\$ 3,300	1.0	\$3,300	1.0	\$3,300	1.5	\$4,950	2.0	\$6,600
LSO	\$2,200	3.0	\$ 6,600	1.0	\$6,600	1.0	\$6,600	1.5	\$9,900	2.0	\$13,200

Reclamation standards

- Builds on oil and gas rules
- Bond \$10,000/acre
- Reference site
- Annual report to surface owner
- Standards
 - Topography and soils - replace
 - Vegetation composition and cover – at least 80% of reference site excluding weeds. Reflect composition of reference site.

Scenic and recreational values



Cultural resource potential

[Map not provided due to information sensitivity]



LESSONS & NEXT STEPS



Important lessons

- **Results**

- Diverse partners = stronger results
- Replicable methods
- Results strongest if grounded in literature
- Objective industry review is critical

- **Process**

- Dedicated project management and strong facilitation are key
- Thoughts from technical team members?
- Shorter timeframe desired

Next steps – Mountains to Plains

Phase I:
Energy by
Design Plan
(Led by TNC)

Phase II:
Oil and Gas
Leasing Plan
(Led by SLB)

Phase III:
Surface Use
Agreements
(Led by the
City/County)

Summary

- Project provides a foundation for providing reasonable access to oil and gas resources while protecting important biological, cultural, scenic and recreational values.
- Replicable process
- Thank you again to the Technical Team



Colorado butterfly plant in Project Area © Crystal Strouse



Black-footed ferret in Project Area (captive population) © Erik Rudolph



Bald eagle © Scott Copeland