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

1. Avoid
2. Minimize
3. Restore
4. Offset
Project area: 60,000 acres
Mineral ownership and leases
Thank You, Technical Team

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

- 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

- **No S.O.**
- **Limited S.O.**
- **Controlled S.O.**
- **Preferred S.O.**

Highest Values/
Most Restrictive

Lowest Values/
Least Restrictive
Surface Occupancy (S.O.) Zones

1. Does the target warrant year-round protection?
   - Yes → Can the target be mitigated?
     - Yes → Preferred Surface Occupancy
     - No → Controlled Surface Occupancy
   - No → No Surface Occupancy

2. Is the target impacted by existing disturbance and can it reliably be mitigated?
   - Yes → Preferred Surface Occupancy
   - No → Controlled Surface Occupancy

3. Can the target be mitigated?
   - Yes → Limited Surface Occupancy
   - No → No Surface Occupancy
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

<table>
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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