

Outline

- Update on planning process & public meetings
- Draft RMPA/EIS Alternatives
- Wildlife Timing Limitation Threshold Concept & DMS
- Air Resources Management Plan (Appendix J)

Planning Process

2012 Federal Register
Notice of Availability (NOA)



2012 Draft Resource Management Plan
Amendment/Environmental Impact Statement
(Draft RMPA/EIS)



90-Day Public Comment Period –
Ends January 28, 2012



Prepare
Proposed RMPA / Final EIS



Federal Register Notice of Availability &
30-Day Protest Period



60-Day Governor's Consistency Review
Period



Prepare Record of Decision (ROD) and
Approved RMPA

Public Participation

Public Meetings

- Open House Meetings the week of 9/24/12 in Meeker, Rangely, Silt, and Grand Junction (73 people attended)
- Wildlife Open House & DMS Demonstration meeting scheduled for 12/3/12 from 5-7pm in Meeker

Comments Received as of 11/28/2012

- 15,628 submissions (16 unique & 15,612 form letters)
- 133+ comments

Any questions regarding the planning process, schedule, or public involvement?

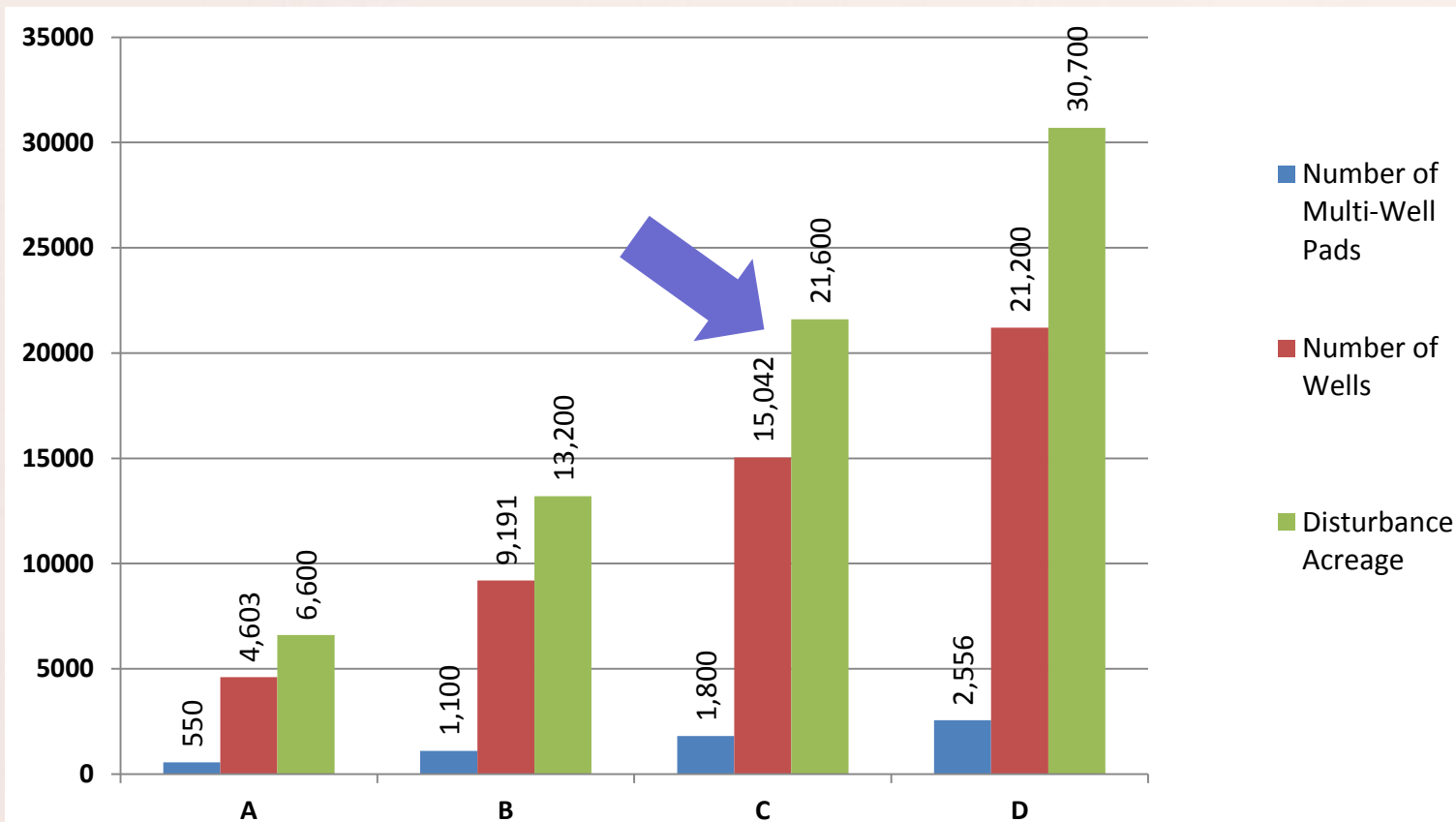
Amendment vs. Revision

The White River Field Office is amending its 1997 Resource Management Plan to address an increase in oil and gas activity.

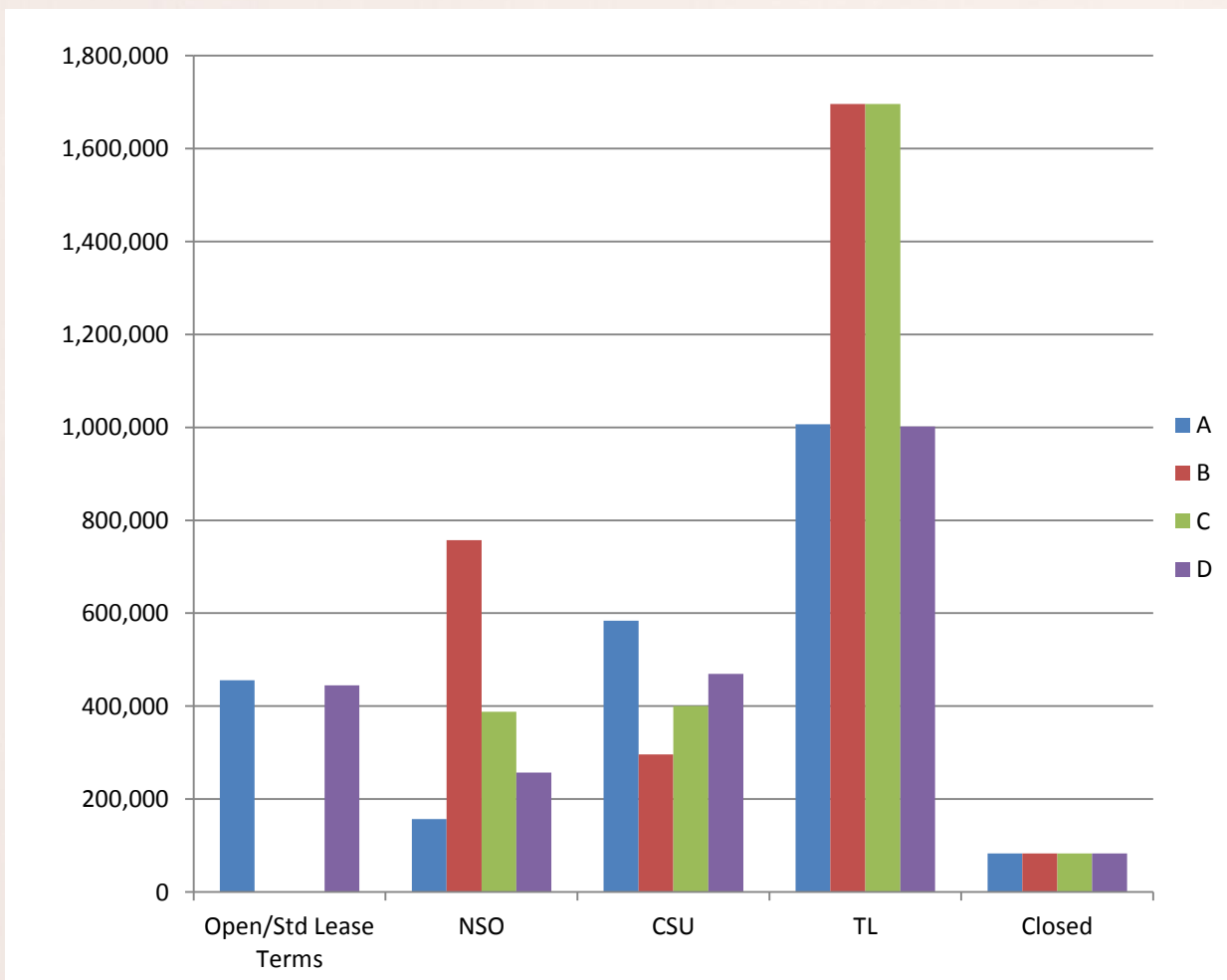
Differences between 1997 and now

- Increase in level of development
- Change in location of development
- Change in type of development

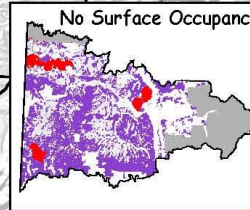
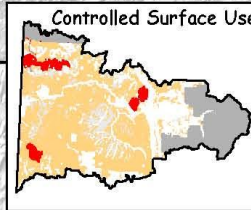
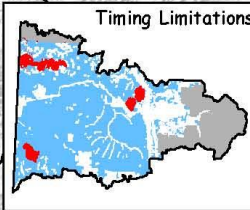
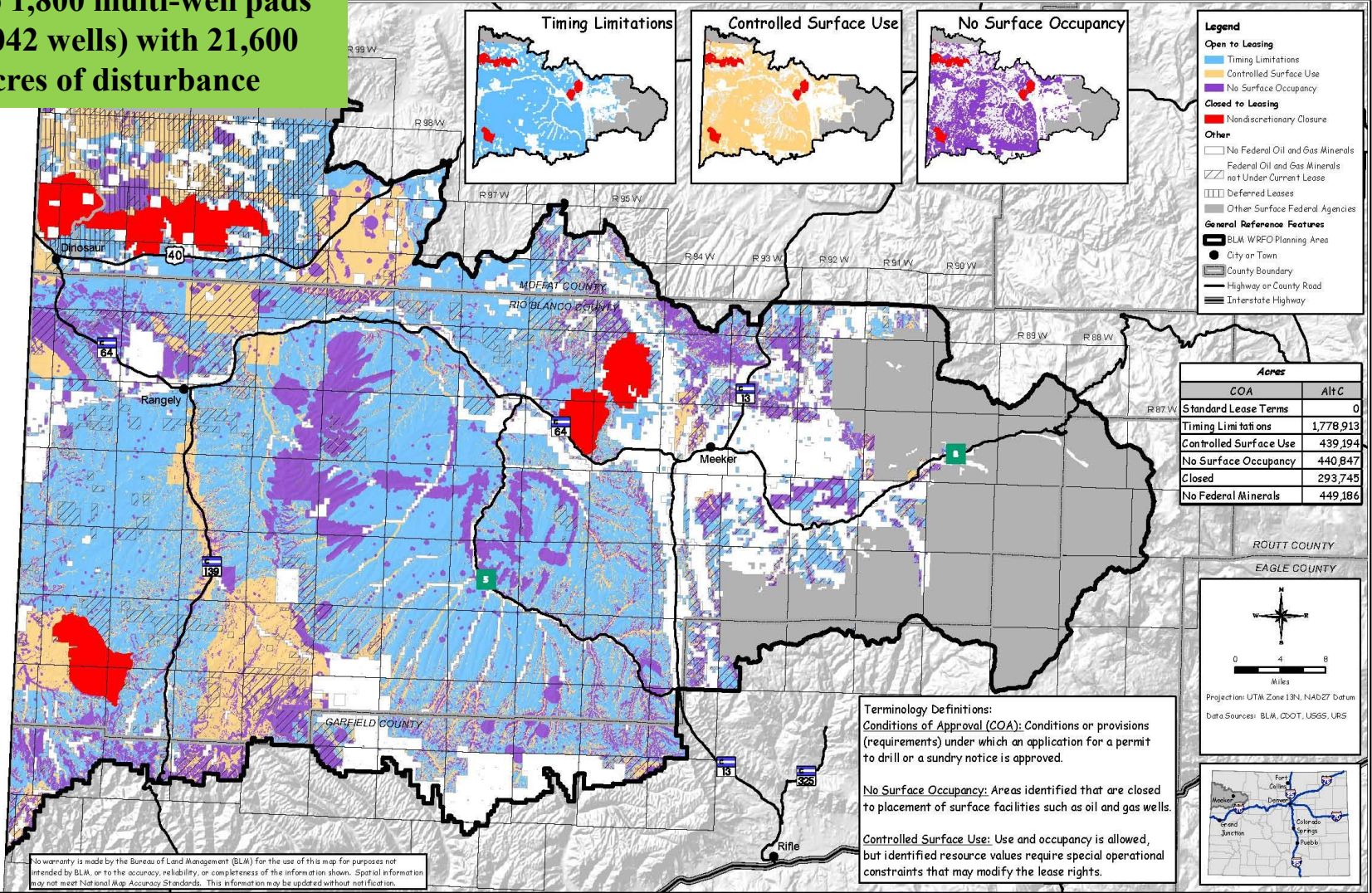
Alternatives



Acres Managed by Lease Stipulations



Up to 1,800 multi-well pads (15,042 wells) with 21,600 acres of disturbance



Legend

Open to Leasing

- Timing Limitations
- Controlled Surface Use
- No Surface Occupancy

Closed to Leasing

- Nondiscretionary Closure

Other

- No Federal Oil and Gas Minerals
- Federal Oil and Gas Minerals not Under Current Lease
- Deferred Leases
- Other Surface Federal Agencies

General Reference Features

- BLM WRFO Planning Area
- City or Town
- County Boundary
- Highway or County Road
- Interstate Highway

Acres	
COA	AHC
Standard Lease Terms	0
Timing Limitations	1,778,913
Controlled Surface Use	439,194
No Surface Occupancy	440,847
Closed	293,745
No Federal Minerals	449,186

ROUTT COUNTY
EAGLE COUNTY

Projection: UTM Zone 13N, NAD27 Datum
Data Sources: BLM, CDOT, USGS, URIS

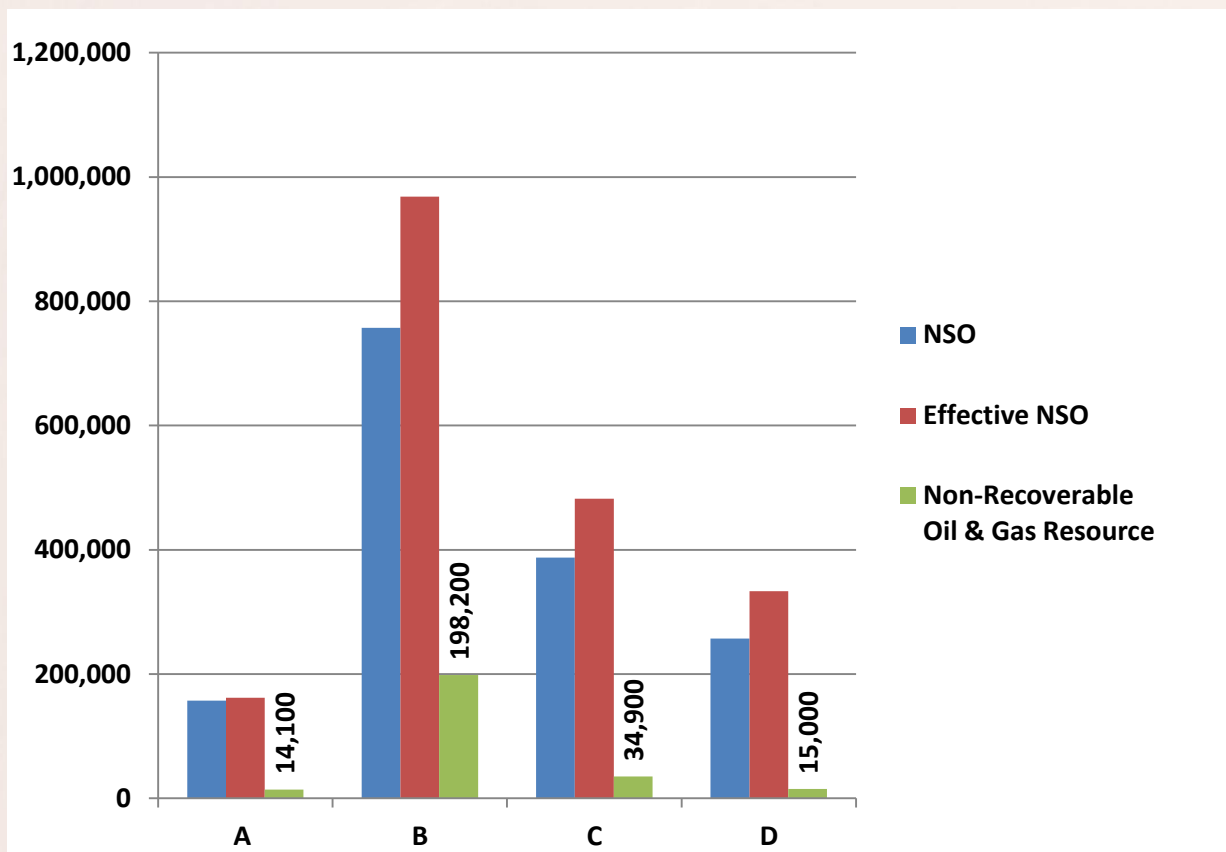
Terminology Definitions:
Conditions of Approval (COA): Conditions or provisions (requirements) under which an application for a permit to drill or a sundry notice is approved.
No Surface Occupancy: Areas identified that are closed to placement of surface facilities such as oil and gas wells.
Controlled Surface Use: Use and occupancy is allowed, but identified resource values require special operational constraints that may modify the lease rights.

No warranty is made by the Bureau of Land Management (BLM) for the use of this map for purposes not intended by BLM, or to the accuracy, reliability, or completeness of the information shown. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notice.

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Potential Non-Recoverable Oil & Gas Resource

Assumed current technology could drain resources from 2,900 ft from the edge of effective NSO areas.



Preferred Alternative vs. Proposed Amendment

- Alternative C = Preferred Alternative
- It is important to note that identification of a preferred alternative does not constitute a commitment or decision in principle, and there is no requirement to select the preferred alternative in the Record of Decision.
- Different aspects of the analyzed alternatives in the draft can also be “mixed and matched” to develop a complete alternative and proposed amendment in the Final EIS.

Any questions regarding
the alternatives?

Threshold Concept

What is it?

- A means to manage the extent of big game seasonal range that is subjected to adverse behavioral effects
- Limits on spatial extent of surface disturbance & activity levels
- Exception criteria for big game timing limitation stipulations

Benefits of Using Thresholds?

- Supports year-round oil and gas activities
- Encourages prompt reclamation
- Supports clustering development



Threshold Concept

How does it work?

- All of WRFO would have big game TL stipulations
- Mapped mule deer seasonal ranges can not overlap (modified CPW map)
- Adverse Behavioral Effects
 - Acute Effects
 - Collective Effects
- Thresholds Applied by:
 - Game Management Unit
 - Mule Deer Seasonal Range
 - Leaseholder/Unit



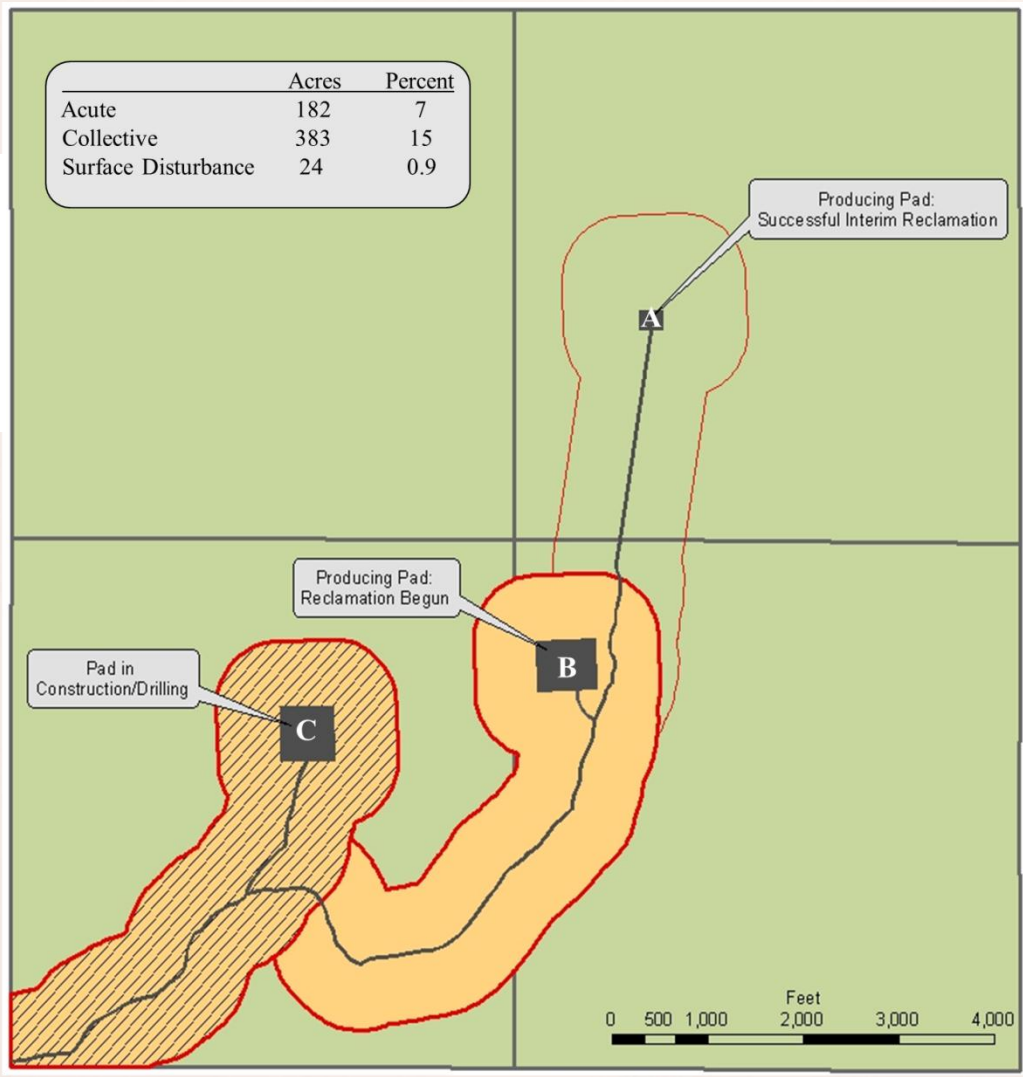
Gary Kramer

Threshold Concept Diagram

Thresholds applied

by:

- 1) leaseholder
- 2) GMU
- 3) seasonal range



Big Game Timing Limitations & Thresholds

	B	C
Timing Limitations	<p>Summer Range: May 15 - Aug 15 Severe Winter Range: Dec 1 - Apr 30 Winter Range: 90 day deferrals TL up to 120 days</p>	<p>Summer Range: May 15 - Aug 15 Severe Winter Range: Jan 1 - Apr 30 Winter Range: 60 day deferrals TL up to 90 days</p>
Acute Thresholds	<p>10% deer seasonal ranges 5% severe winter range/winter conc. area</p>	<p>25% deer seasonal ranges 10% severe winter range/winter conc. area</p>
Collective Thresholds	<p>20% deer seasonal ranges 10% severe winter range/winter conc. area</p>	<p>25% deer seasonal ranges 20% severe winter range/winter conc. area</p>
Buffers	<p>660 ft on winter ranges 1,300 ft on summer ranges</p>	<p>660 ft on all seasonal ranges</p>

Data Management System (DMS)

Jonah Infill Data Management System Manual

Home Reporting Operator.EnCana Search Locations

Location Entry Page: CAB 11-19

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Airport
- Anadarko
- Compressor Station
- Bridger
- Compressor Station
- CAB 11-19
- CAB 11-25
- CAB 11-30
- CAB 12-19

Downloads:

- ESRI Shapefile
- Microsoft Excel

Location Status:

Type: Well Pad
 Status: ! Rollover Not Met
 Latest Seeding: 10/01/2007 (A)
 Latest Quantitative Report: 05/24/2010
 Latest Qualitative Report: 06/10/2011
 Latest Spatial Report: 12/31/2009
 Disturbed Acreage: 4.69 acres
 Reclamation: 4.08 acres

Most Recent Status Report:

Collection Date: 06/10/2011
 Collection Method:
 Reviewed By BLM: No

Qualitative:

Is seed germination apparent?	Yes	✔
Is the area free of undesirable materials (trash, construction materials, liquids, etc)?	Yes	✔
Is the soil stable with no indications of subsidence, slumping and/or significant erosion?	Yes	✔
Are other undesirable species absent?	Yes	✔
Is there evidence of good reproductive capability?	No	!
<i>Explanation: Grass repro forbs only</i>		
Are noxious weeds absent?	Yes	✔
Stage of Reclamation:	Stage 2	
Stage Regressed:	No	✔

Aerial Imagery Courtesy BLM

Most Recent Photographs:

 07/10/2010	 07/10/2010	 07/10/2010
 07/10/2010	 07/10/2010	

- Input by both Industry and BLM
- Available for the public to view online

**Any questions regarding
the threshold concept or DMS?**

Results of Air Quality Modeling

- **No potential project impacts** above NAAQS (under all alternatives) for any criteria pollutants
 - Carbon Monoxide (CO)
 - Nitrogen Dioxide (NO₂)
 - Ozone (O₃)
 - Particulate Matter (PM_{2.5} and PM₁₀)
- **Potential cumulative impacts** above the NAAQS (under all alternatives) for:
 - NO₂ (1 hour)
 - PM_{2.5} (24 hour and annual)
 - PM₁₀ (24 hour and annual)

Air Resources Management Plan (Appendix J)

- Identifies future monitoring, modeling, and mitigation
- Annual review of the Air Resources Management Plan
 - Compare emissions data & oil and gas development activities to that analyzed in the RMPA/EIS (track actual emissions)
 - Evaluate oil & gas development projection data for the coming 3 to 5 year period
 - Evaluation of current monitoring data & trends
 - Measured concentrations approaching the NAAQS
 - Measured adverse impacts to air quality related values (AQRVs) at Class I or sensitive Class II areas

Air Quality – Monitoring

- BLM will continue to operate air monitoring stations in Meeker and Rangely (contingent upon funding)
- BLM will work with industry, CDPHE, FS, NPS, EPA and local counties to establish a comprehensive air monitoring network
- BLM may require project proponents to conduct additional air monitoring (pre-construction and/or life of the project)
 - Absence of existing representative data
 - Existing air quality conditions
 - Magnitude of potential air emissions
 - Proximity to Class I areas, sensitive Class II areas, and population centers

Air Quality – Modeling

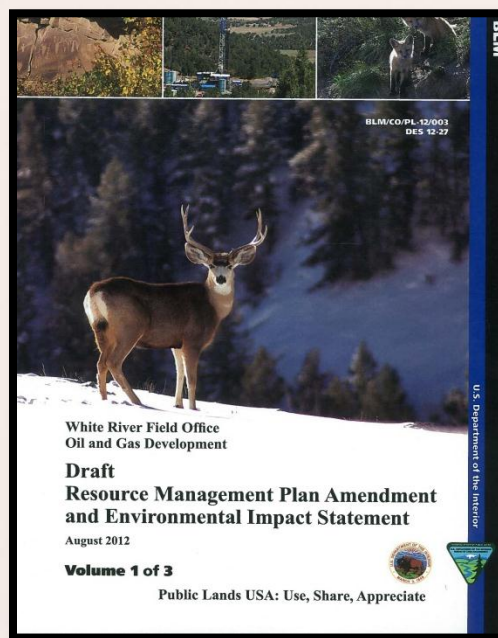
- Models are useful tools for predicting: project specific impacts to air quality, effectiveness of control measures, trends in regional concentrations of some air pollutants
- BLM would support and participate in regional modeling efforts through multi-state and multi-agency organizations
- BLM may require a project proponent to conduct air quality modeling
 - Existing air quality conditions
 - Magnitude of potential and existing emission sources
 - Proximity to Class I areas, sensitive Class II areas, population centers, or non-attainment areas

Air Quality – Mitigation

- The primary mechanism to reduce air quality impacts is to reduce emissions
- BLM will identify project-specific measures in response to identified impacts to air resources (see Appendix J, Table J-1 for example emission control strategies)
- BLM may require project proponents to submit a contingency plan that provides for reduced operations in the event of an air quality episode such as a monitored exceedance

**Any questions regarding
air resources management?**

Any other questions on the Oil & Gas Development Draft RMPA/EIS?





WHITE RIVER FIELD OFFICE OIL AND GAS RMPA/EIS



Greater Sage-Grouse



Alternative C (Preferred Alternative):

- Defer leasing on 96,100 acres on Blue Mountain
 - Only core area in WRFO per 2008 Statewide Conservation Plan
- CSU within 0.6 mi of leks
- Thresholds for GRSG timing limitations
 - Meeker and Northwest Colorado Populations have lower thresholds than the Piceance-Parachute-Roan (PPR) Population

Alternative B:

- PPR Population to have same (lower) thresholds as the other populations
- NSO within 0.6 mi of leks
- Defer leasing on Blue Mountain
- Increase timing limitations by a month for both winter and nesting habitat

Soil & Water Resources

Source Water Protection (Public Drinking Water Supply)

- Surface water: Rangely (Lease Notice)
- Groundwater Wells: Meeker, Dinosaur, Dinosaur NM Headquarters, and Massadona (NSO within ½ mile of wells)
- Additional protection (NSO) for the primary protection area for Meeker's primary aquifer

Other Management for Soil and Water Resources

Landslide Areas	NSO within 50 ft
Saline Soils	NSO (except Coal Oil Basin)
Slopes	35-50%: CSU; >50%: NSO
Water Features	CSU within 100 yr floodplain; 500 ft of perennial water, springs, wells, and wetlands (but NSO for impaired stream segments in MPA); 100 ft of ephemeral channels



Special Status Plants



- Federally Listed, Proposed, and Candidate Plants
 - NSO within 660 ft of occupied and suitable habitat
 - NSO within potential habitat
- BLM Sensitive Plants
 - NSO within 330 ft of occupied and suitable habitat
- Rights-of-ways
 - Exclusion areas: occupied habitat of listed plants
 - Avoidance areas: suitable and potential habitat for listed and candidate plants

Cultural Resources

Cultural Resource Project Plan

- Canyon Pintado NHD
- Dragon Trail/Douglas Arch

ROW Avoidance Areas & Stipulations

- Texas-Missouri-Evacuation Creek (CSU)
- Canyon Pintado NHD
- Duck Creek Wickiup Village (NSO)
- Thornburgh/Battle of Milk Creek Viewshed (CSU)
- Mellen Hill (NSO)
- Within 500 to 1,000 ft of rock art or standing architecture such as cabins, rock structures, or standing wickiups (CSU)



Lands with Wilderness Characteristics

- All Potential LWC polygons
 - $\geq 5,000$ acres with no visible intrusions (e.g., roads, facilities, etc)
 - Assume have characteristics until on-the-ground inventory completed
 - When possible, roads maintained as primitive road or two-track.
 - Lease Notice regarding efforts to maintain naturalness, outstanding opportunities for solitude, and outstanding opportunities for primitive and unconfined recreation
 - Vegetative screening and contouring.
 - Additional siting considerations to minimize visual impacts.
- Identified for retention of their resource values if $\geq 5,000$ acres and $\leq 20\%$ encumbered by leases set to expire by 2016
 - Estimate 15 out of 30 polygons to meet this criteria (still need inventory)
 - Avoidance Areas for ROWs under Preferred Alternative
 - Alt. B: Exclusion Areas for ROWs and NSO Stipulations

Livestock Grazing (Alt C)

- Recommend compensatory mitigation by oil & gas operators when development precludes effective implementation of a grazing plan
- Close affected allotments or portions of allotments (pastures) throughout period of intensive activity if development increases to a level where the two activities are incompatible
- Exclude livestock from development sites until reclamation vegetation is successfully established (minimum of 3 growing seasons)
 - On all well pads & related surface disturbance
 - When deemed necessary on linear ROWs



Document Navigation

- Chapter 1 – Purpose & Need
- Chapter 2 – Alternatives
- Chapter 3 – Affected Environment
- Chapter 4 – Environmental Consequences
- Chapter 5 – Consultation and Coordination
- Chapter 6 – References (Acronym List & Glossary)
- **Appendix A – Oil and Gas Leasing Stipulations & Lease Notices**
- Appendix B – BMPs and COAs
- Appendix C – Hazardous Materials Management Plan
- **Appendix D – Surface Reclamation Plan**
- Appendix E – Threshold and Temporal Analysis
- Appendix F – Air Quality Impacts
- Appendix G – Socioeconomic Technical Report
- **Appendix H – Oil and Gas Operations**
- Appendix I – Master Leasing Plans
- Appendix J – Air Resources Management Plan

How to Comment

- Comments due by January 28, 2013
- email: Colorado_WROGEIS@blm.gov
- fax: 970-878-3805
- mail: BLM – WRFO, 220 East Market Street, Meeker, Colorado, 81641

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.