Welcome

Welcome to the Bureau of Land Management's public meeting for the Previously Issued Leases on the White River National Forest Draft Environmental Impact Statement.

Meeting Agenda:

4:00 - 4:45 PM	45-minute open house
4:45 - 5:00 PM	15-minute presentation
5:00 - 5:20 PM	20-minute formal Q&A
5:20 - 6:05 PM	45-minute oral comment period
6:05 - 6:15 PM	Break
6:15 - 7:00 PM	45-minute oral comment period

While you are here, please take time to review displays, ask questions, and discuss the EIS with the BLM staff.

Written comments may be submitted tonight or at any point until January 8, 2016.

Thank you for joining us.

EIS Process and Schedule

2014	2014 - 2015	Winter 2015	Summer 2016	Summer/Fall 2016
Public Scoping	**Draft EIS**	**DEIS Public Comment**	**Final EIS**	**Record of Decision**

During **Public Scoping**, the public provided input regarding resource concerns. This input was used to identify issues that were addressed through alternatives development or EIS analysis.

The **Draft EIS** describes five leasing scenarios, and describes the effects of each alternative on the natural and human environment.

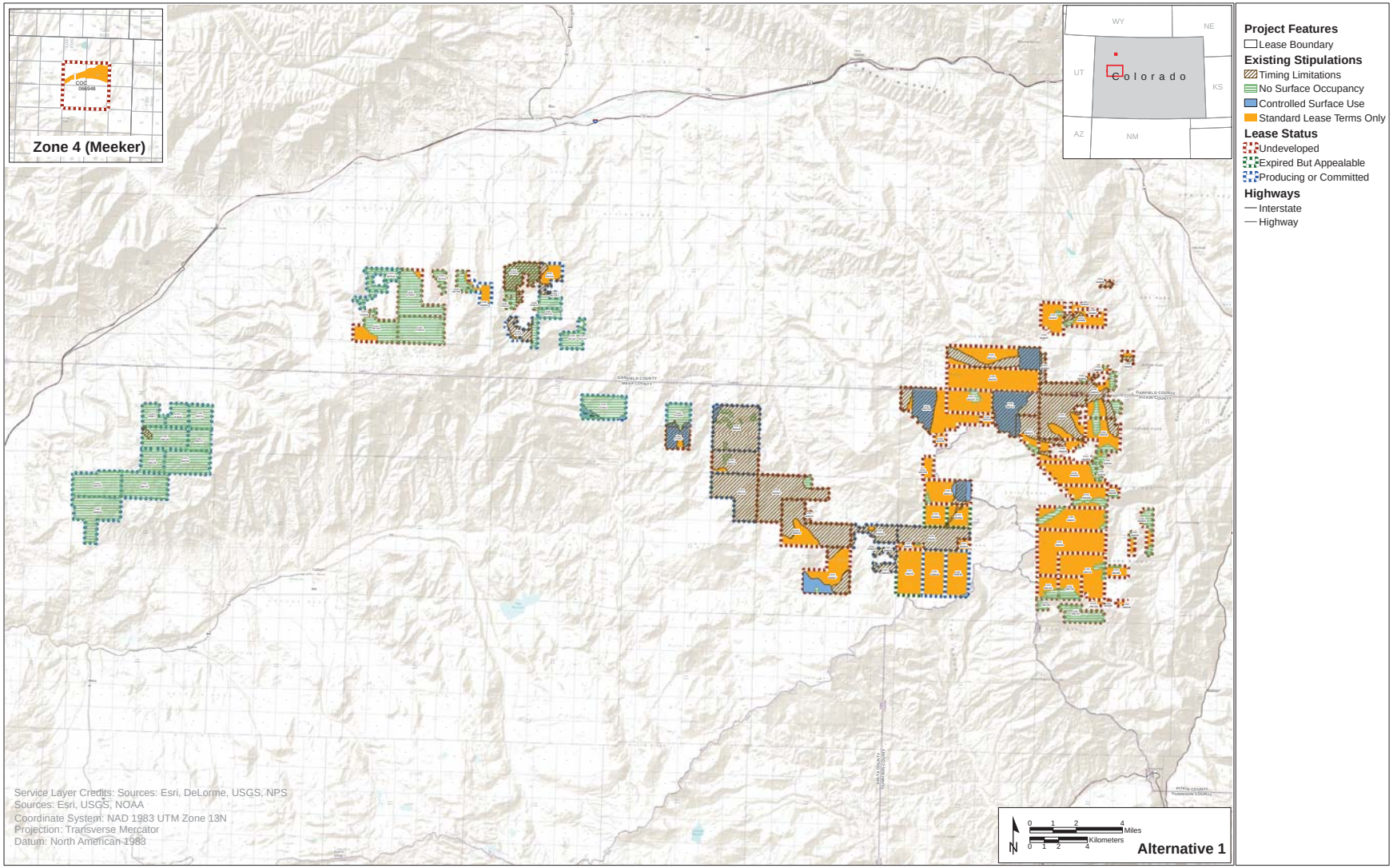
WE ARE HERE

The **DEIS Public Comment** period allows for public comment on the EIS's alternatives and analysis.

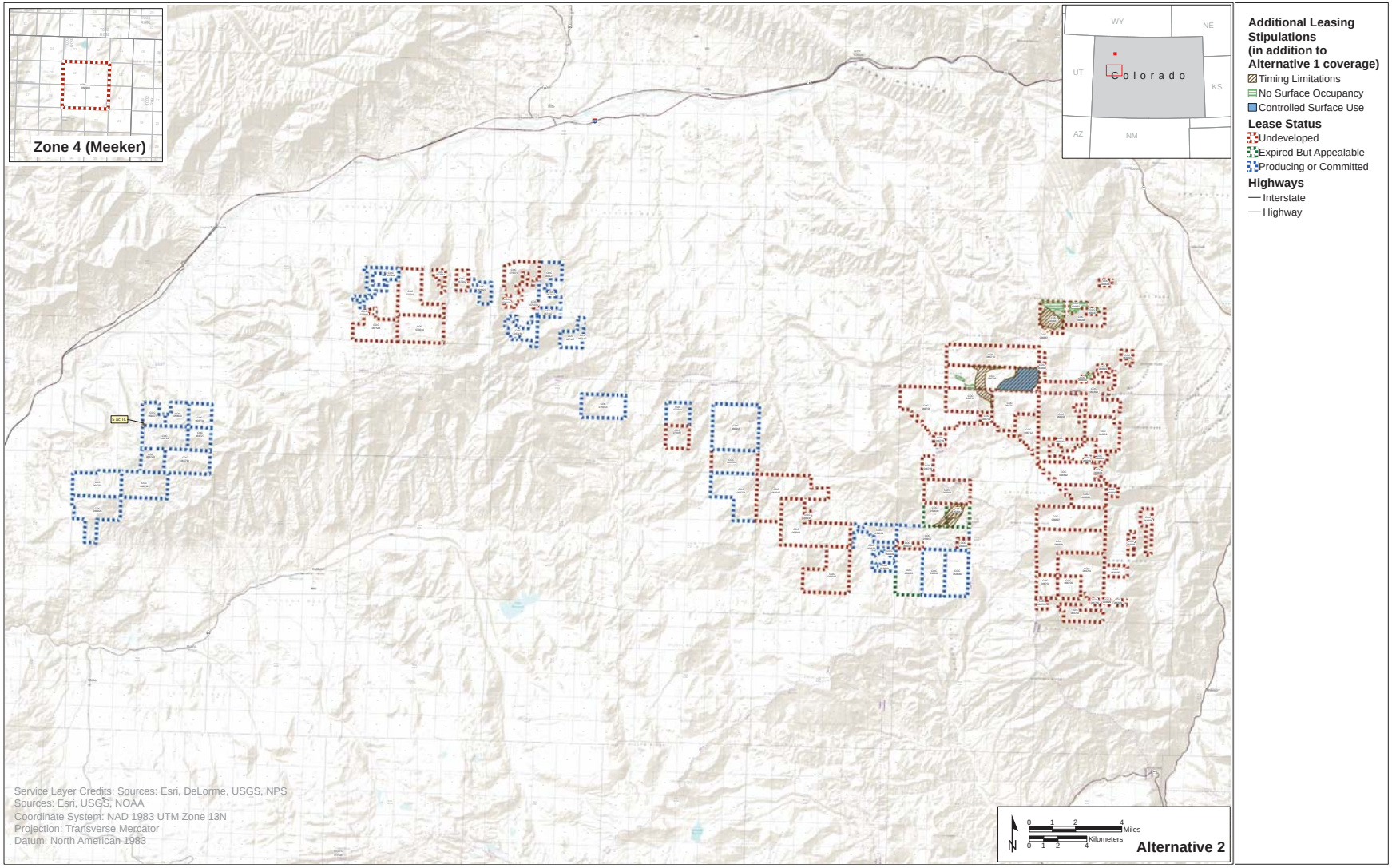
The **Final EIS** will be revised to reflect substantive comments, as well as providing responses to all public comments.

Following release of the Final EIS the BLM will publish a **Record of Decision** describing what will be implemented.

Alternative 1 Stipulation Coverage

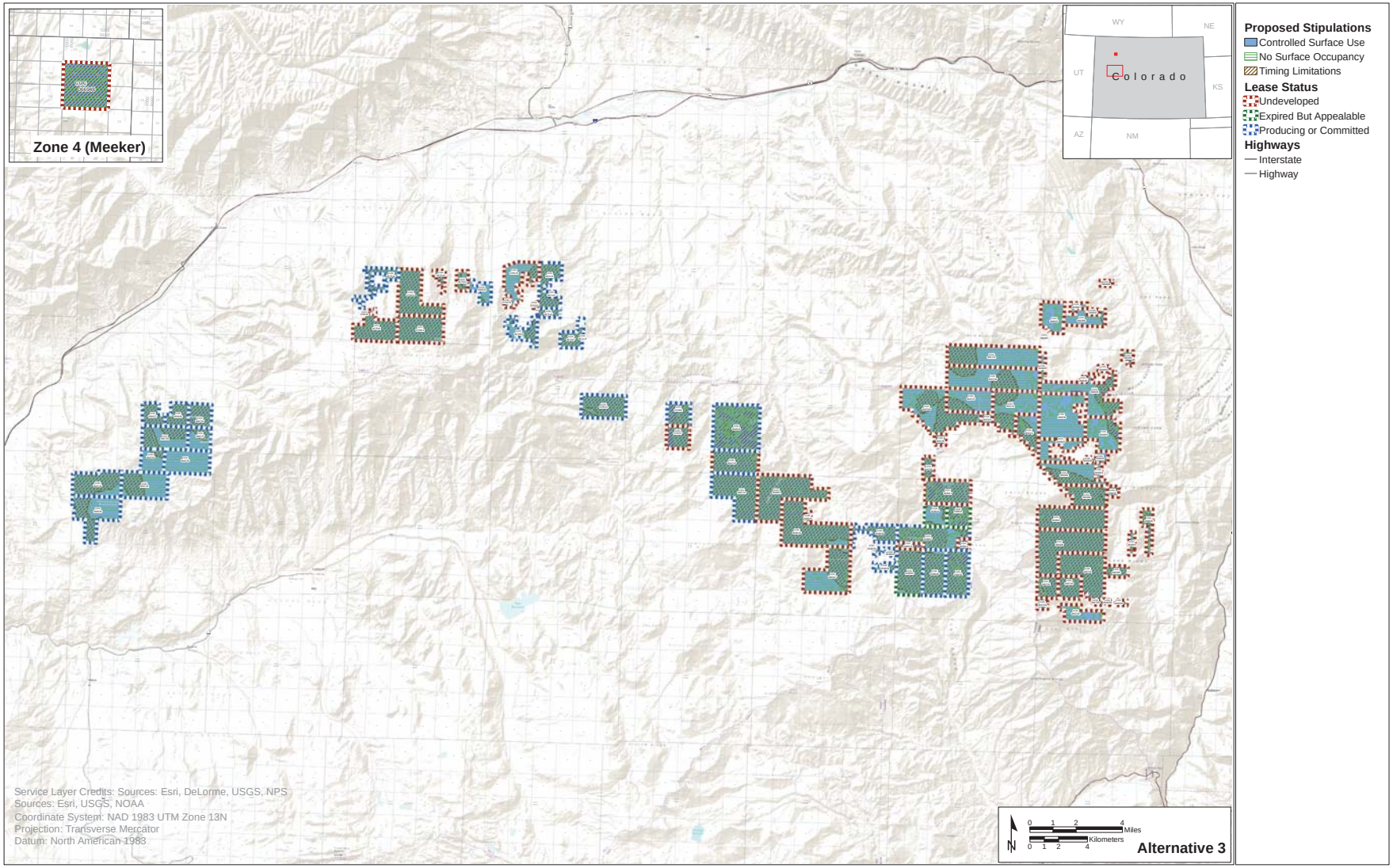


Alternative 2 Stipulation Coverage

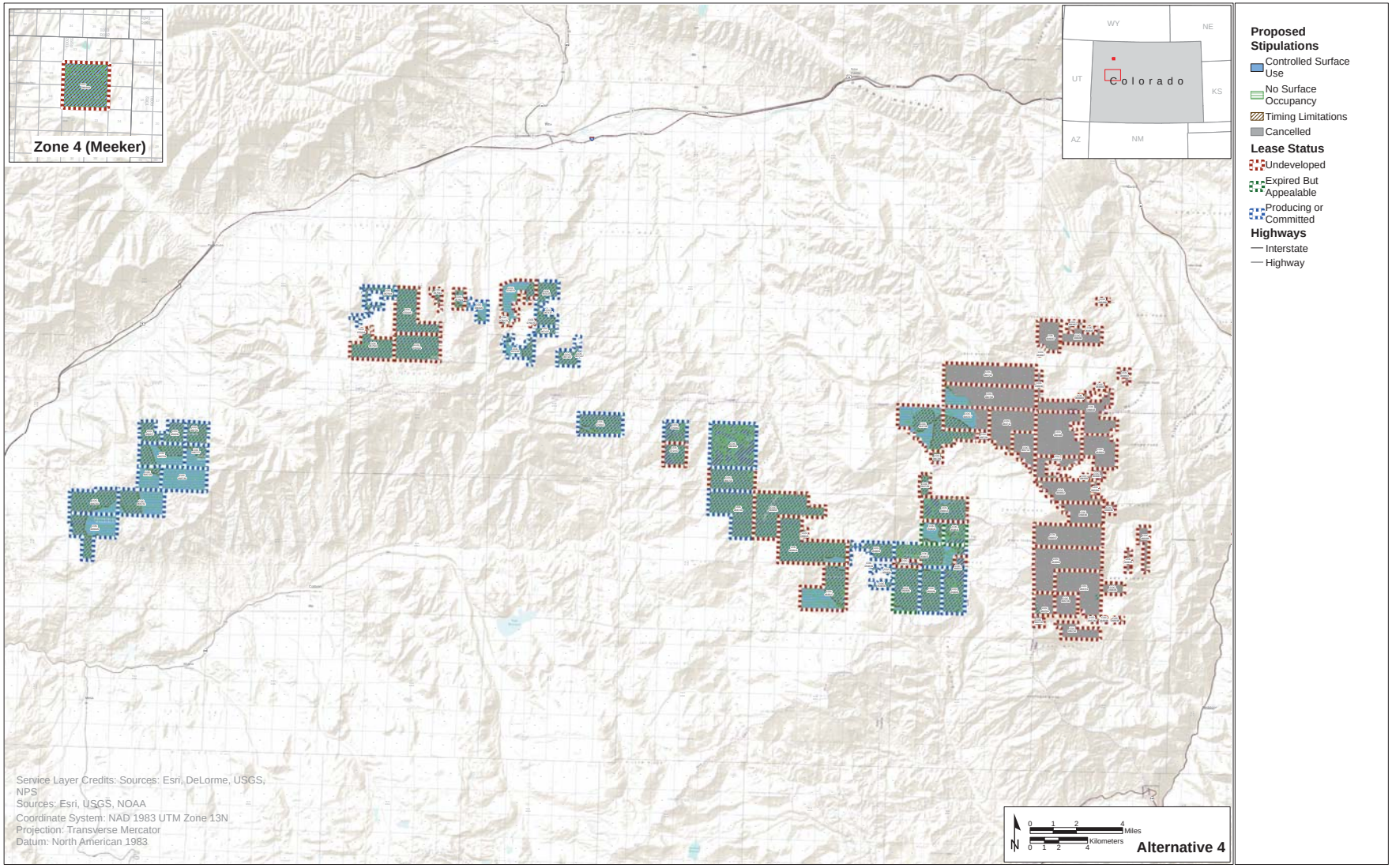


Alternative 2 is the same as Alternative 1 except that additional stipulations would be applied to eight leases to address inconsistencies between the decisions in the 1993 WRNF ROD and lease stipulations as they were issued.

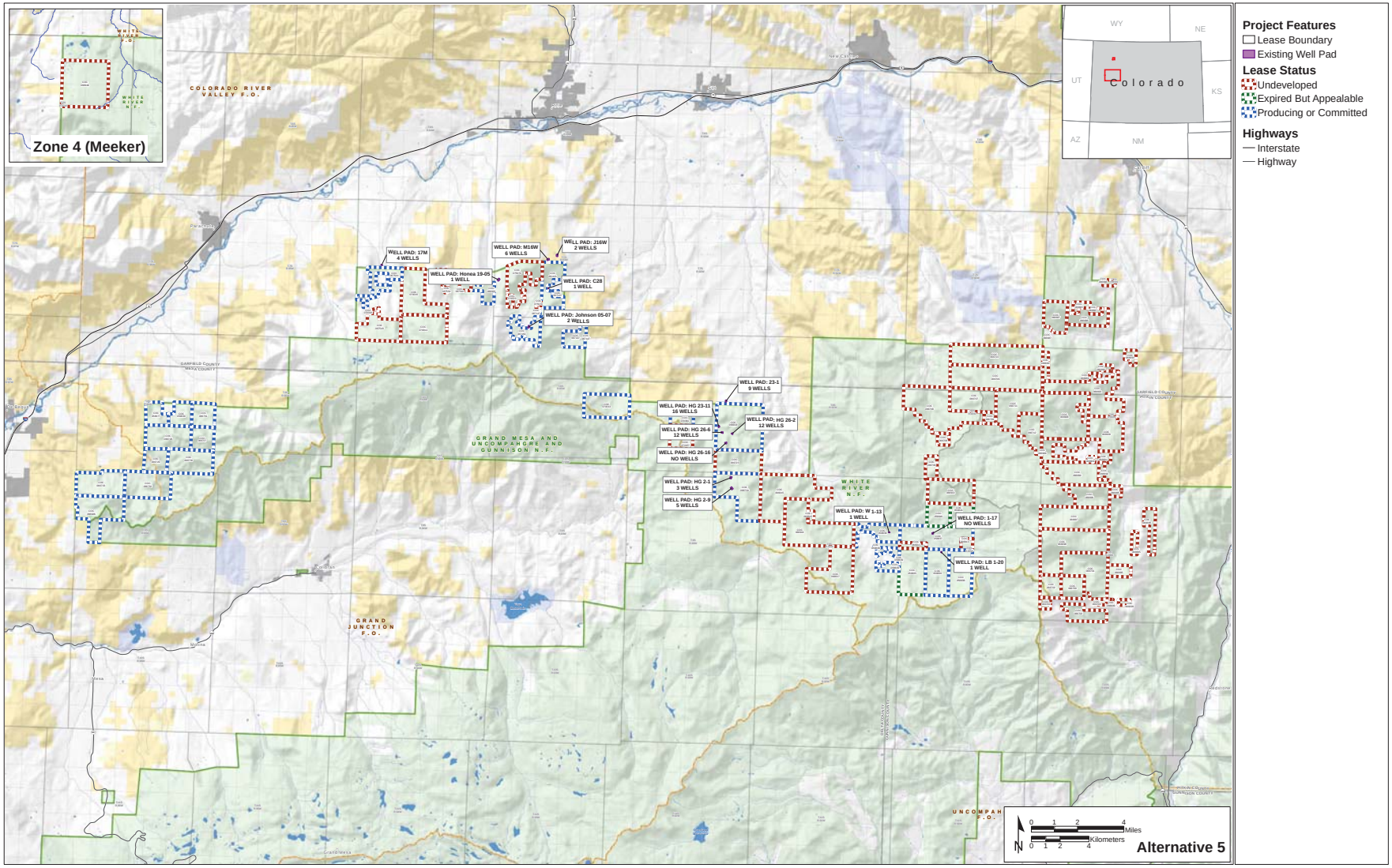
Alternative 3 Stipulation Coverage



Alternative 4 Stipulation Coverage

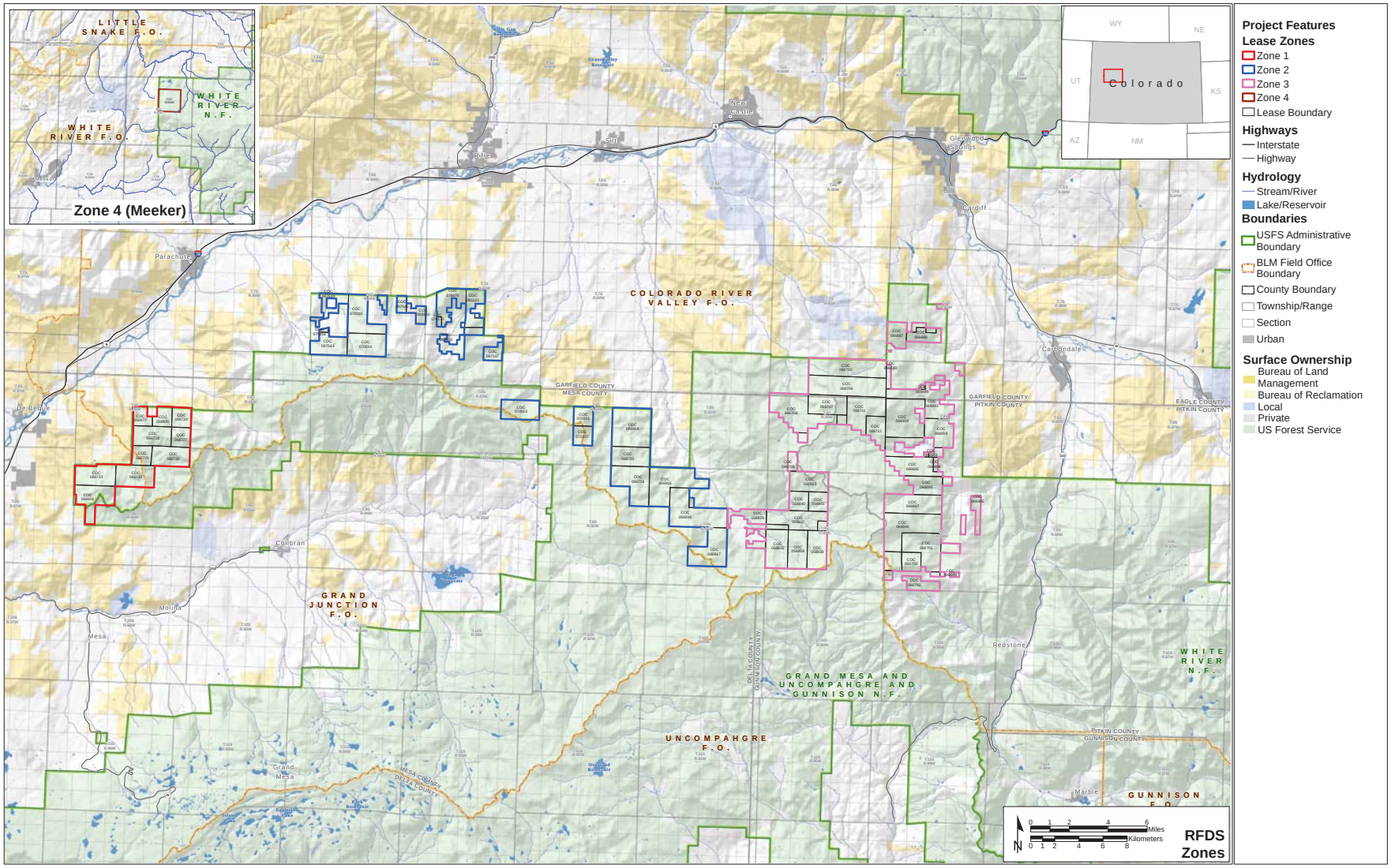


Alternative 5 Lease Cancellations



This map shows the existing wells and pads that would be removed under this alternative.

RFDS Zones


LITTLE SNAKE F.O.
WHITE RIVER N.F.
WHITE RIVER F.O.
Zone 4 (Meeker)
WY
NE
UT
Colorado
KS
AZ
NM
New Castle
Silt
Rifle
Glenwood Springs
Cardiff
Parachute
COLORADO RIVER VALLEY F.O.
Carbondale
GARFIELD COUNTY
MESA COUNTY
GARFIELD COUNTY
PITKIN COUNTY
EAGLE COUNTY
PITKIN COUNTY
De Beque
Collbran
Molina
Mesa
GRAND JUNCTION F.O.
Redstone
WHITE RIVER N.F.
DELTA COUNTY
GUNNISON COUNTY
GRAND MESA AND UNCOMPAHGRE AND GUNNISON N.F.
UNCOMPAHGRE F.O.
PITKIN COUNTY
GUNNISON COUNTY
Grand Mesa
MESA COUNTY
DELTA COUNTY
Marble
GUNNISON F.O.
0 1 2 4 6 Miles
0 1 2 4 6 8 Kilometers
N
RFDS Zones
Project Features
Lease Zones
Zone 1
Zone 2
Zone 3
Zone 4
Lease Boundary
Highways
Interstate
Highway
Hydrology
Stream/River
Lake/Reservoir
Boundaries
USFS Administrative Boundary
BLM Field Office Boundary
County Boundary
Township/Range
Section
Urban
Surface Ownership
Bureau of Land Management
Bureau of Reclamation
Local
Private
US Forest Service

What is a Reasonably Foreseeable Development Scenario?

The Reasonably Foreseeable Development Scenario (RFDS) is:

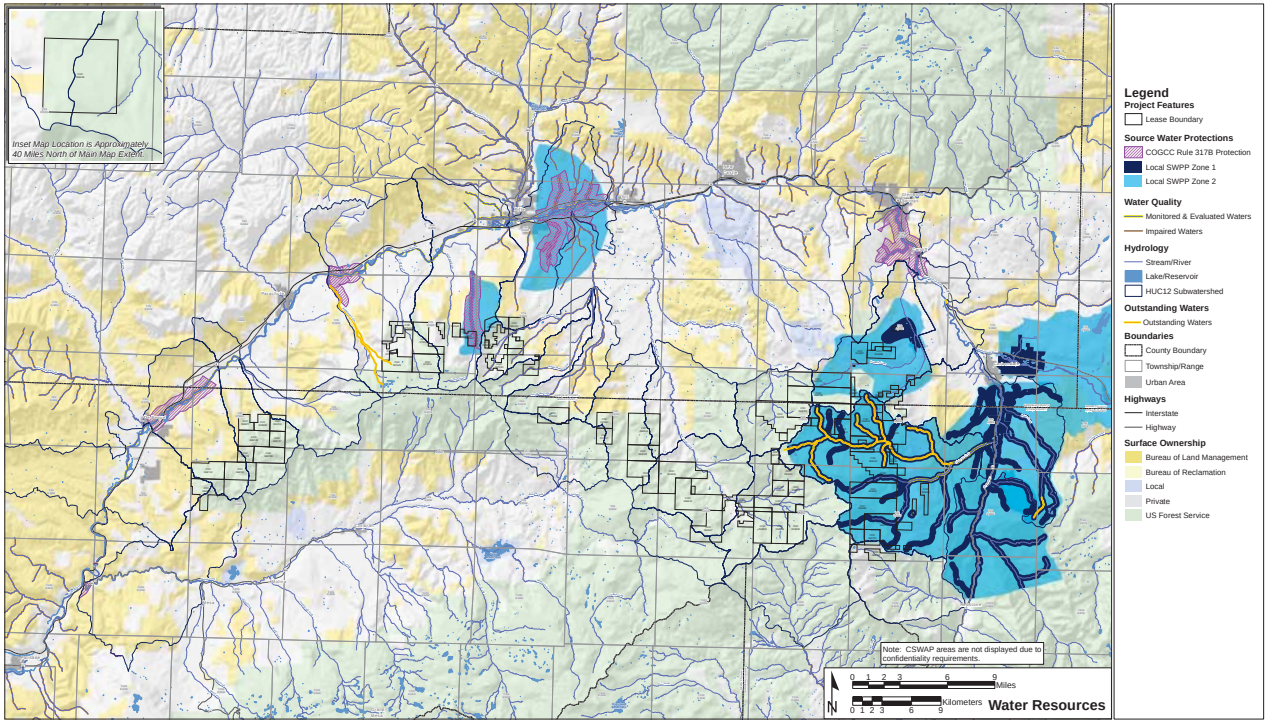
- A long-term projection of the likely potential future oil and gas development and production within a defined area and a defined period of time.
- An analysis assumption used to estimate surface disturbance, water use, mineral production and other development elements in the EIS.
- Not a decision; it does not approve any well development.
- Based on the USFS RFDS in the WRNF EIS.

Projected Wells and Development Assumptions by Alternative

Development Type	Alternative				
	1	2	3	4	5[1]
Vertical/Directional Wells (No.)	398.4	398.4	395.4	365.7	0
Horizontal Wells (No.)	18	18	18	17.4	0
Well Pads (No.)	59.5	59.5	59.1	54.7	0
Long-term/Short-term Surface Disturbance (acres)	893/386	893/386	886/383	821/355	0
Fresh Water Use (acre-feet)	1,158	1,158	1,152	1,079	0
Recycled Water Use (acre-feet)	3,168	3,168	3,152	2,960	0

[1] *There are 75 wells and 16 pads that would be reclaimed under Alternative 5.*

Water Resources



The Draft EIS describes effects on specific key water resources, including:

- State of Colorado Assessment and Protection (CSWAP) areas
- Colorado Oil and Gas Conservation Commission (COGCC) Rule 317B areas
- Local Source Water Protection Plans (SWPP) areas
- Perennial Streams
- Outstanding Waters
- Impaired Streams

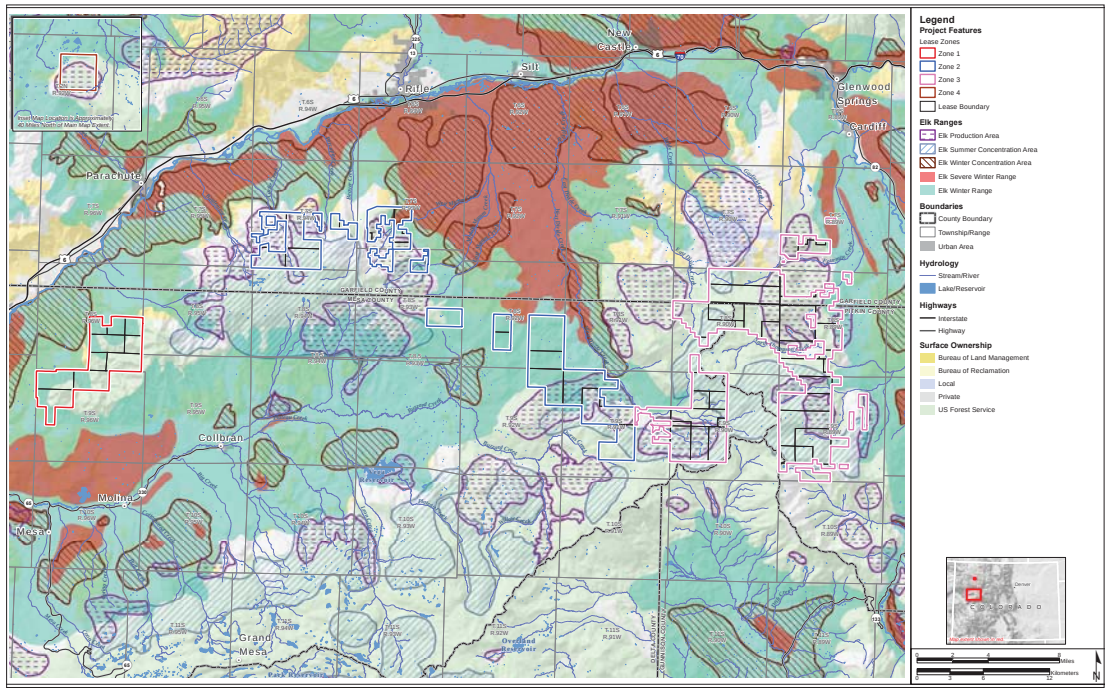
Lease Stipulations Offering Specific Coverage of Surface and Ground Water Resources by Alternative

Alternative 1 and 2	Alternative 3 and 4
None; however NSO stipulations for aquatic habitat would protect some water resources	• NSO — Public Water Supply Source Areas • NSO — Water Influence Zones • CSU — Groundwater Resources

Wildlife Resources

The Draft EIS describes effects on a variety of wildlife habitats including:

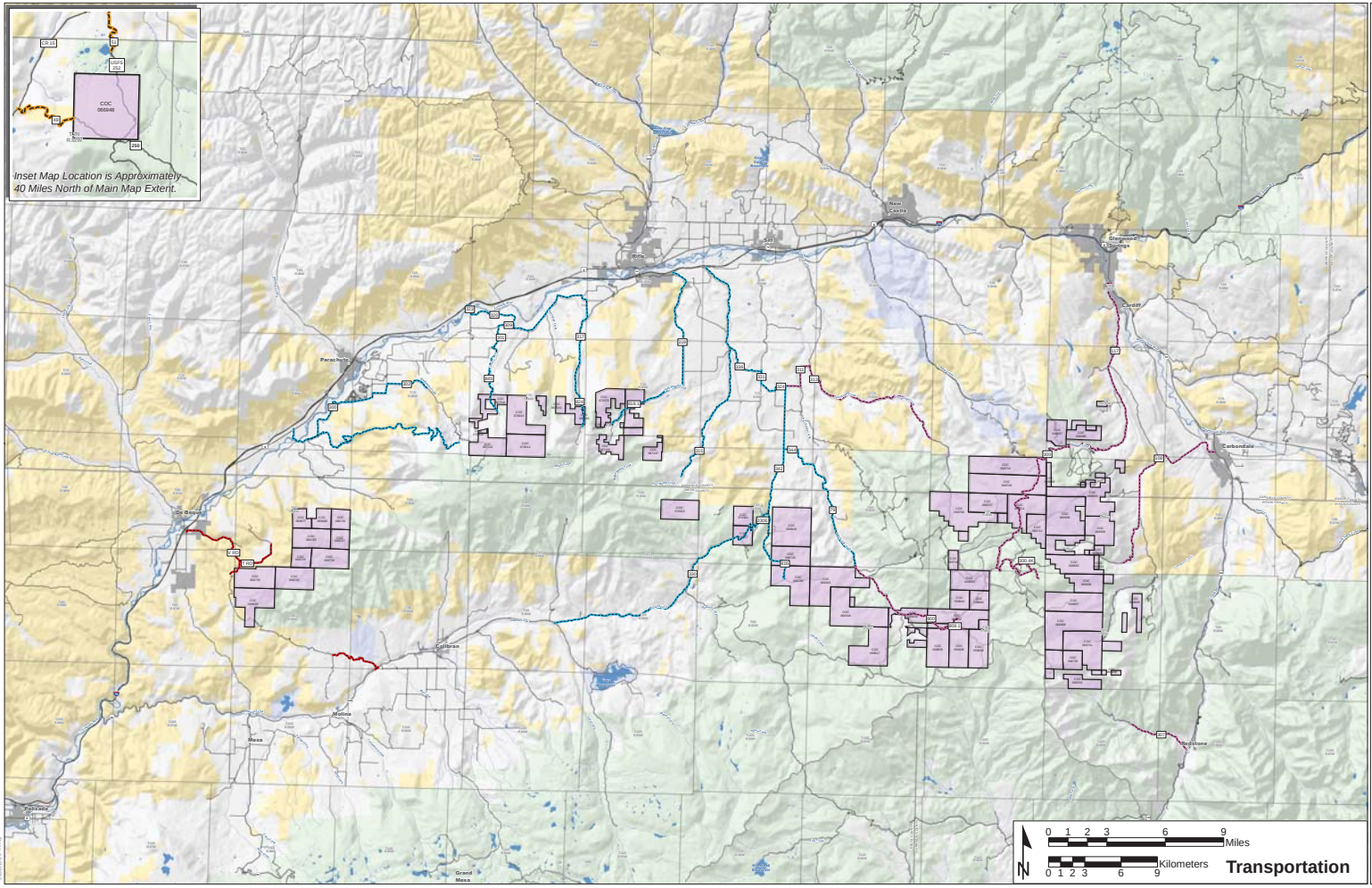
- Mule Deer
- Elk
- Moose
- Bighorn Sheep
- Black Bear
- Canada Lynx



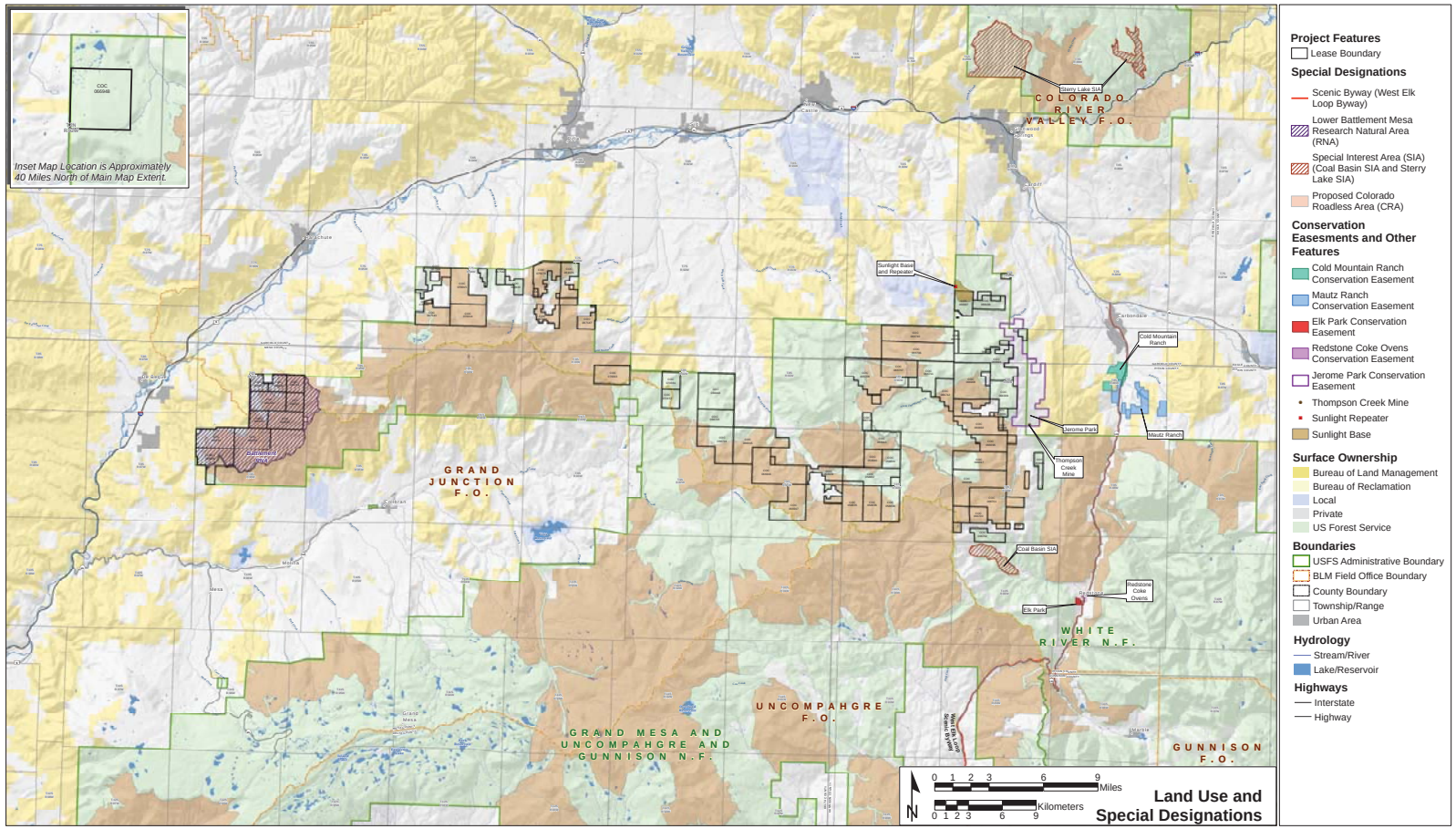
This example graphic shows the various elk habitats within and near the leases. See Section 3.7 of the Draft EIS for further detail on wildlife species and their existing habitats within the area.

Lease Stipulation Offering Specific Coverage of Wildlife Resources	Alternatives 1 and 2	Alternatives 3 and 4
No Surface Occupancy Stipulations		
Big Game Winter Range	●	
Critical Bighorn Sheep Habitats	●	
Federal and State TEPC Species	●	
Bighorn Sheep Migration Corridors/Water Sources		●
Bighorn Sheep Production		●
Bighorn Sheep Summer Concentration		●
Raptor Species Breeding Territories		●
TEPC Raptor Species		●
TEPC Wildlife Species/Wallace Creek Wildlife Seclusion Area		●
Controlled Surface Use Stipulations		
Elk Production Area (GMUGNF)	●	●
Big Game Migration Corridors		●
Big Game Production Areas		●
Big Game Summer Concentration		●
Big Game Winter Ranges		●
Sensitive Terrestrial/Avian/Invertebrate Species		●
Timing Stipulations		
Big Game Winter Range	●	●
Elk Production Area	●	
Big Game Summer Concentration		●
Raptor Species Breeding Territories		●

Assumed Transportation Routes



Land Use & Special Designations



NSO Stipulation Coverage and/or Cancellation (%) by Alternative

Resources		Alternative				
		1	2	3	4	5
Lower Battlement RNA (Zone 1)[1]		100	100	100	100	100
CRAs[2]	Zone 1	100	100	100	100	100
	Zone 2	49	49	100	100	100
	Zone 3	5	6	56	100	100

[1] Lower Battlement RNA occurs in Zone 1 only
[2] CRAs do not occur in Zone 4

Socioeconomics

Total Impacts from Projected Future Natural Gas Development by Alternative (2017-2036)

Factor		Alternative				
		1	2	3	4	5
Total Sales Revenue By County ($ million) 2017-2036	Garfield	$431.6	$431.6	$429.0	$415.3	-$40.2
	Mesa	$1,034.8	$1,034.8	$1,028.6	$1,013.2	-$148.1
	Pitkin	$82.2	$82.2	$81.7	$3.5	$0.0
	Rio Blanco	$32.0	$32.0	$31.8	$32.0	$0.0
Total Employment By County (job-years) 2017-2036	Garfield	1,192	1,192	1,184.9	1,192.8	-45.8
	Mesa	2,950.1	2,950.1	2,932.4	2,950.1	-212.2
	Pitkin	193.9	193.9	192.7	193.9	0.0
	Rio Blanco	79.2	79.2	78.7	79.2	0.0

Impacts from Projected Future Natural Gas Development; Annual Average Values by Alternatives (2017-2036)

Factor	Alternative				
	1	2	3	4	5[1]
New Well Construction (wells/yr)	20.8	20.8	20.7	19.2	0.0
Natural Gas Production (Bcf/yr)	15.6	15.6	15.5	14.4	-4.5
Sales Revenue ($ million/yr)	$79.0	$79.0	$78.5	$73.3	-$18.8
Direct Employment (FTE[2]/yr)	137.6	137.6	136.7	127.0	-15.0
Revenue to Counties ($ million/yr)	$5.7	$5.7	$5.6	$5.4	-$1.4

[1] *No new well construction; 75 wells abandoned with an average of 10 years of remaining production potential. Values shown for Alternative 5 are solely for the 2017-26 loss in natural gas production.*
[2] *FTE (full time eqivalent).*

Indirect impacts on socioeconomic resources could occur from reasonably foreseeable development that could impact natural gas revenues, local government revenues, recreation, grazing, commute patterns, and social conditions (e.g., local resident's quality of life and sense of place).

Most new wells are projected to be developed in Mesa County, which would therefore experience the greatest increase in employment and revenue from gas development.

NSO stipulations and closing areas to leasing would reduce the area available for future development. This could reduce future natural gas revenues due to lower levels of development and higher costs.