

**United States Department of the Interior
Bureau of Land Management**

**Proposed Resource Management Plan and
Final Supplemental Environmental Impact Statement
Colorado River Valley Field Office and Grand Junction Field Office**

Upper Colorado River District Office
2815 H Road
Grand Junction, Colorado 81506

DOI-BLM-CO-G020-2022-0001-RMP-EIS

VOLUME 2: Appendices A to I

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Appendix A

Acronyms and Abbreviations

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Appendix A. Acronyms and Abbreviations

ACEC	area of critical environmental concern
AEO	Annual Energy Outlook
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AIM	assessment, inventory, and monitoring
AR6	Sixth Assessment Report
AU	analytical unit
AUM	animal unit month
BLM	United States Department of the Interior, Bureau of Land Management
BLM-administered lands	surface acres administered by the Bureau of Land Management
BMP	best management practice
BOR	United States Department of the Interior, Bureau of Reclamation
CARMMS	BLM Colorado Air Resource Management Modeling Study
CARPP	Comprehensive Air Resource Protection Protocol
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
COA	condition of approval
COGCC	Colorado Oil and Gas Conservation Commission
COSO	Colorado State Office
CPW	Colorado Parks and Wildlife (formerly CDOW [Colorado Division of Wildlife])
CRCT	Colorado River cutthroat trout
CRVFO	Colorado River Valley Field Office
CSU	controlled surface use
DOI	United States Department of the Interior
ECMC	Colorado Energy & Carbon Management Commission
EIA	United States Energy Information Agency
EIS	environmental impact statement
Ej	environmental justice
EO	executive order
EPA	United States Environmental Protection Agency
ERMA	extensive recreation management area
ESA	Endangered Species Act of 1973
FAR	functioning at risk
FLPMA	Federal Land Policy and Management Act of 1976, as amended
Forest Service	United States Forest Service

Geothermal PEIS	Programmatic EIS for Geothermal Leasing in the Western US
GHG	greenhouse gas
GIS	geographic information system
GJFO	Grand Junction Field Office
GWP	global warming potential
HAP	hazardous air pollutant
HR	House of Representatives
I-70	Interstate 70
IEO	International Energy Outlook
IMPLAN	impact analysis for planning
IPCC	Intergovernmental Panel on Climate Change
IRA	Inflation Reduction Act of 2022
IWG	Interagency Working Group on the Social Cost of Greenhouse Gases
LAU	lynx analysis unit
LBCWHR	Little Book Cliffs Wild Horse Range
LHA	land health assessment
MAGICC	Model for the Assessment of Greenhouse Gas Induced Climate Change
MMI	multi-metric index
Mt	megatonnes (1 million metric tons)
NEPA	National Environmental Policy Act of 1969, as amended
NF	nonfunctional or not functioning
NHPA	National Historic Preservation Act of 1966
NOI	notice of intent
NPA	national programmatic agreement
NRCS	United States Department of Agriculture, Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSO	no surface occupancy or surface-disturbing activities
NWSRS	National Wild and Scenic Rivers System
OHV	off-highway vehicle
ONRR	United States Department of the Interior, Office of Natural Resources Revenue
ORV	outstandingly remarkable value
PBO	programmatic biological opinion
PEIS	programmatic environmental impact statement
PFC	proper functioning condition (land health)
PILT	payment in lieu of taxes
RFD	reasonable foreseeable development
RMP	resource management plan
ROD	record of decision
ROW	right-of-way (lands and realty)

SC-GHG	social cost of greenhouse gases
SHPO	State Historic Preservation Office
SRMA	special recreation management area
SSA	species' status assessment
SSP	shared socioeconomic pathway
SWA	State wildlife area
TL	timing limitation (seasonal restriction)
UCRD	Upper Colorado River District
US	United States
USC	United States Code
USFWS	United States Department of the Interior, Fish and Wildlife Service
USGS	United States Geological Survey
VRI	visual resource inventory
VRM	visual resource management
WEO	World Energy Outlook
WSA	wilderness study area
WSR	wild and scenic river

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Appendix B

State of Colorado's 303 (D) List of Impaired
Waters and Monitoring and Evaluation List in the
CRVFO Planning Area

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Appendix B. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the CRVFO Planning Area

WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
Lower Colorado River Basin					
COLCLC01	Main stem of the Colorado River from the confluence with the Roaring Fork River to immediately below the confluence with Rifle Creek	Colorado River from Paradise Creek to below the confluence with Rifle Creek	Sediment	Temperature, Arsenic (Total)	H/L
		Colorado River from Roaring Fork to Paradise Creek	Sediment, Chloride	Temperature, Arsenic (Total)	H/L
COLCLC02a	Main stem of the Colorado River from immediately below the confluence with Rifle Creek to immediately above the confluence of Rapid Creek	All	Sediment	Arsenic (Total)	L
COLCLC04a	All tributaries, including wetlands, to the Colorado River from the confluence with the Roaring Fork River to a point immediately below the confluence with Parachute Creek, except for the specific listings in Segments 4b, 4c, 4d, 4e, 5, 6, 7a, 7b, 8, 9a, 9c, 10, 11a - h, and 12a	Tributaries to Colorado River, Roaring Fork to Parachute Creek, except for Mamm Creek and Alkali Creek	Temperature, total Phosphorus, Sulfate	Selenium (Dissolved)	M
		Mamm Creek and its east, middle, and west Mamm Creek tributaries from the sources to the confluence with the Colorado River	Temperature, Total Phosphorus, Selenium (Total)	Sulfate, Selenium (Dissolved), Macroinvertebrates	L/M/M
		South Canyon Creek sections above hot springs	Sulfate, Total Phosphorus	Iron (Total), Selenium (Dissolved)	H/M
COLCLC04b	South Canyon Hot Springs	All	Dissolved Oxygen, Lead (Dissolved)	N/A	N/A
COLCLC04c	The main stem of South Canyon Creek from the South Canyon Hot Springs to the confluence with the Colorado River	South Canyon Creek from South Canyon Hot Springs to the Colorado River	<i>E. Coli</i> (May-October), Iron (Total)	Arsenic (Total)	L

B. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the CRVFO Planning Area

WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COLCLC04e	Main stem of Dry Creek including all tributaries and wetlands from the source to immediately above the Last Chance Ditch	All	Cadmium (Dissolved), Copper (Dissolved), Selenium (Dissolved)	N/A	N/A
COLCLC07a	Main stem of Mitchell, Canyon, Elk, Garfield, Beaver, and Cache Creeks, including all tributaries and wetlands, from the boundary of the White River National Forest to their confluences with the Colorado River. Battlement Creek from the most downstream boundary of the BLM-administered lands to the confluence with the Colorado River.	Garfield Creek and its tributaries from the headwaters to the confluence with the Colorado River	Iron (Total)	N/A	N/A
		Elk Creek and its tributaries from the White River National Forest boundary to the confluence with the Colorado River	N/A	Cadmium (Total)	L
COLCLC07b	Main stem of Divide Creek, including all tributaries and wetlands, from the boundary of the White River National Forest to the confluence with the Colorado River	All	Arsenic (Total)	N/A	N/A
COLCLC10	West Rifle Creek, including all tributaries and wetlands, from the source to Rifle Gap Reservoir. East Rifle Creek, including all tributaries and wetlands, from the White River National Forest boundary to Rifle Gap Reservoir. Rifle Creek, including all tributaries and wetlands, from Rifle Gap Reservoir to the confluence with the Colorado River.	East Rifle Creek from the White River National Forest boundary to Rifle Gap Reservoir. Rifle Creek from Rifle Gap Reservoir to the Colorado River	<i>E. coli</i>	Arsenic (Total), Macroinvertebrates	L/H
		West Rifle Creek and tributaries	<i>E. coli</i>	Iron (Total), Arsenic (Total)	H/L

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WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COLCLC11c	Main stem of Parachute Creek from the confluence of the West and East Forks to the confluence with the Colorado River. All tributaries and wetlands to Parachute Creek on the west side of Parachute Creek from the confluence to the East and West Forks to the confluence with the Colorado River.	All	N/A	Arsenic (Total)	H
COLCLC20	Rifle Gap Reservoir, Harvey Gap Reservoir, and Vega Reservoir	Rifle Gap Reservoir	N/A	Fish (Mercury), Arsenic (Total)	H/H
		Harvey Gap Reservoir	N/A	Temperature, Arsenic (Total)	H/H
Upper Colorado River Basin					
COUCEA02	Main stem of the Eagle River from the source to the compressor house bridge at Belden	Main stem of the Eagle River from the source to Peterson Creek	N/A	Arsenic (Total)	H
		Eagle River below Peterson Creek to compressor house bridge at Belden	N/A	Zinc (Dissolved), Copper (Dissolved), Arsenic (Total)	H/H/H
COUCEA03	All tributaries to the Eagle River, including wetlands, from the source to the compressor house bridge at Belden, except for the specific listing in Segment 4 and those waters included in Segment I	All	N/A	Arsenic (Total)	L
COUCEA05a	Main stem of the Eagle River from the compressor house bridge at Belden to a point immediately above the Highway 24 Bridge near Tigiwon Road	Main stem of the Eagle River from the compressor house bridge in Belden to a point located 600 feet upstream of Rock Creek	N/A	Arsenic (Total)	H
		Main stem of the Eagle River from a point located 600 feet upstream of Rock Creek to a point immediately above the Highway 24 Bridge near Tigiwon Road	N/A	Iron (Dissolved), Cadmium (Dissolved), Arsenic (Total)	L/H/H

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WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COUCEA05b	Main stem of the Eagle River from a point immediately above the Highway 24 Bridge near Tigiwon Road to a point immediately above the confluence with Martin Creek	All	N/A	Arsenic (Total)	H
COUCEA05c	Main stem of the Eagle River from a point immediately above Martin Creek to a point immediately above the confluence with Gore Creek	All	N/A	Arsenic (Total), Iron (Dissolved)	H/H
COUCEA06	All tributaries to the Eagle River, including all wetlands, from the compressor house bridge at Belden to a point immediately below the confluence with Lake Creek, except for the specific listings in Segments I, 7a, 7b, and 8	Lake Creek from below the confluence with East and West Lake Creek to the mouth	N/A	Arsenic (Total), Macroinvertebrates (Provisional)	L/L
		Beaver Creek from the confluence with Wayne Creek to the mouth	N/A	Arsenic (Total), Macroinvertebrates (Provisional)	L/L
		Red Sandstone Creek from the USFS boundary to the north side of I-70 Frontage Road	N/A	Arsenic (Total)	L
		Red Sandstone Creek from the north side of I-70 Frontage Road to the confluence with Gore Creek	N/A	Arsenic (Total), Macroinvertebrates (Provisional)	L/L
		Black Gore Creek adjacent to I-70 above Miller Creek.	N/A	Arsenic (Total), Macroinvertebrates	H/H
		Rock Creek from the source to the confluence with the Eagle River	N/A	Arsenic (Total), Zinc (Dissolved), Copper (Dissolved), Cadmium (Dissolved)	L/H/H/H

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WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COUCEA06 (cont.)	(cont.)	All tributaries to the Eagle River, including all wetlands, from above the compressor house bridge at Belden (39.526879, -106.394950) to a point immediately below the confluence with Lake Creek, except for the specific listings in Segments: 1, 7a, 7b, and 8. With other exceptions to Black Gore and Rock Creek.	N/A	Arsenic (Total)	L
		Black Gore Creek from a point immediately below its confluence with Miller Creek to a point immediately above its confluence with Timber Creek.	N/A	Arsenic (Total), Sediment	L/H
		Black Gore Creek from a point immediately below its confluence with Timber Creek to the confluence with Gore Creek	N/A	Arsenic (Total)	L
COUCEA07a	Main stem of Cross Creek from the source to a point immediately below the Minturn Middle School, except for those waters included in Segment I	All	Copper (Dissolved)	N/A	N/A
COUCEA08	Main stem of Gore Creek from the confluence with Black Gore Creek to the confluence with the Eagle River	All	N/A	Macroinvertebrates (Provisional), Arsenic (Total)	L/L
COUCEA09a	Main stem of the Eagle River from Gore Creek to a point immediately below the confluence with Squaw Creek	Eagle River from Gore Creek to the confluence with Berry Creek	N/A	Arsenic (Total)	L
		Eagle River from the confluence with Berry Creek to the confluence with Squaw Creek	N/A	Arsenic (Total)	L
		Eagle River from Squaw Creek to Ute Creek	N/A	Arsenic (Total)	L
		Eagle River from Ute Creek to Rube Creek	N/A	Arsenic (Total)	H

B. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the CRVFO Planning Area

WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COUCEA09c	Main stem of the Eagle River from a point immediately below the confluence with Rube Creek to the confluence with the Colorado River	Main stem of the Eagle River from a point immediately below the confluence with Rube Creek to Warren Gulch (39.6785, -106.7645).	Nitrite	Arsenic (Total)	L
		Main stem of the Eagle River from a point immediately below the confluence with Warren Gulch (39.6785, -106.7645) to the confluence with the Colorado River	N/A	Nitrite, Arsenic (Total)	H/L
COUCEA10a	All tributaries to the Eagle River, including all wetlands, from a point immediately below the confluence with Lake Creek to the confluence with the Colorado River, except for specific listings in Segments 10b, 11, and 12, and those waters included in Segment 1	All tributaries to the Eagle River, including all wetlands, from a point immediately below the confluence with Lake Creek to the confluence with the Colorado River, except for specific listings in Segments 10b, 11, and 12, and those waters included in Segment 1	Dissolved Oxygen	N/A	N/A
		Eby Creek and tributaries	Selenium (Dissolved), Arsenic (Total)	Sulfate	L
COUCEA12	Main stem of Brush Creek, from the source to the confluence with the Eagle River, including the East and West Forks	All	Dissolved Oxygen	N/A	N/A
COUCRF02	Main stem of the Roaring Fork River, including all tributaries and wetlands, from the source to a point immediately below the confluence with Hunter Creek, except for those tributaries included in Segment 1	All	Copper (Dissolved)	N/A	N/A

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WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COUCRF03a	Main stem of the Roaring Fork River, from a point immediately below the confluence with Hunter Creek, to a point immediately below the confluence with the Frying Pan River. All tributaries to the Roaring Fork River, including wetlands, from a point immediately below the confluence with Hunter Creek to the confluence with the Colorado River, except for those tributaries included in Segment 1, 3b, 3d, and 4-10b.	Roaring Fork from the confluence with Hunter Creek to the confluence of Trentaz Gulch	Arsenic (Total)	N/A	N/A
		West Sopris Creek and tributaries	Arsenic (Total)	N/A	N/A
		Capitol Creek	Arsenic (Total)	N/A	N/A
		Cattle Creek from Fisher Creek to the mouth	Arsenic (Total)	N/A	N/A
		Main stem of the Roaring Fork River, from a point immediately below the confluence with Trentaz Gulch, to a point immediately below the confluence with the Frying Pan River. All tributaries to the Roaring Fork River, including wetlands, from a point immediately below the confluence with Hunter Creek to the confluence with the Colorado River, except for those tributaries included in Segments: 1, 3b, 3d, 4-10b, West Sopris, Capital, Roaring Fork, Cattle Creek, and Three Mile Creek portions	Arsenic (Total)	N/A	N/A
		Three Mile Creek, including all tributaries, from the source to the Roaring Fork River	Temperature	N/A	N/A
COUCRF03b	Main stem of Red Canyon and all tributaries and wetlands from the source to the confluence with the Roaring Fork River, except for Landis Creek from its source to the Hopkins Ditch Diversion	Landis Creek from the Hopkins Ditch (39.522138, -107.223479) to its confluence with Red Canyon	Iron (Total)	N/A	N/A

B. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the CRVFO Planning Area

WBID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COUCRF03c	Main stem of the Roaring Fork River from a point immediately below the confluence with the Frying Pan River to the confluence with the Colorado River	Roaring Fork below the confluence with the Crystal River to the mouth	N/A	Temperature	H
		Roaring Fork River from the Frying Pan River to the Crystal River	N/A	Temperature	H
COUCRF03d	Main stem of Cattle Creek, including all tributaries and wetlands, from the source to the most downstream White River National Forest boundary	Cattle Creek from Bowers Gulch to the most downstream White River National Forest boundary	N/A	Macroinvertebrates (Provisional)	L
COUCRF07	All tributaries to the Frying Pan River, including all wetlands, except for those tributaries included in Segment I	South Fork Frying Pan River from the transbasin diversion to the confluence with an unnamed tributary (39.251280N, -106.594420W)	N/A	Macroinvertebrates (Provisional)	H
COUCRF12	All lake and reservoir tributaries to the Roaring Fork River, except for specific listings in Segment I I	Ruedi Reservoir	N/A	Arsenic (Total)	L
COUCUC03	Main stem of the Colorado River from the outlet of Lake Granby to the confluence with Roaring Fork River	Colorado River from Gore Canyon to Derby Creek	N/A	Temperature	H

Source: CDPHE 2021b

Appendix C

State of Colorado's 303 (D) List of Impaired
Waters and Monitoring and Evaluation List in the
GJFO Planning Area

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Appendix C. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the GJFO Planning Area

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
Lower Colorado River Basin					
COLCLC02a	Main stem of the Colorado River from immediately below the confluence with Rifle Creek to immediately above the confluence of Rapid Creek	All	Sediment	Arsenic (Total)	L
COLCLC02b	Main stem of the Colorado River from a point immediately above the confluence with Rapid Creek to immediately above the confluence of the Gunnison River	Main stem of the Colorado River from Rapid Creek to Gunnison River except for the Humphrey Backwater area	Sediment	N/A	N/A
		Humphrey Backwater area	Sediment, Manganese (Dissolved), Nitrite, Sulfate	Arsenic (Total), Selenium (Dissolved)	L/H
COLCLC03	Main stem of the Colorado River from immediately above the confluence of the Gunnison River to the Colorado-Utah state line	All	N/A	Iron (Total)	H
COLCLC13a	All tributaries to the Colorado River, including wetlands, from a point immediately below the confluence of Roan Creek to the Colorado/Utah border, except for the specific listings in Segments 13b through 19.	Sulphur Gulch and tributaries	Copper (Dissolved), Iron (Total), Lead (Dissolved), Selenium (Dissolved)	N/A	N/A

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COLCLC13b	All tributaries to the Colorado River, including wetlands, from the Government Highline Canal Diversion to a point immediately below Salt Creek, and downgradient from the: Government Highline Canal, Orchard Mesa Canal No. 2, Orchard Mesa Drain, Stub Ditch, and northeast Colorado National Monument boundary	Salt Creek and tributaries below the lake and reservoir, including Mack Wash	N/A	Sediment, Selenium (Dissolved), Iron (Total)	L/M/M
		Adobe Creek, Leach Creek, and tributaries below canal	N/A	<i>E. coli</i> , Selenium (Dissolved), Iron (Total)	H/M/M
		Indian Wash	NA	Selenium (Dissolved), Iron (Total)	M/M
		Unnamed tributary to the Colorado River from its source to its confluence with the Colorado River near 39.081, - 108.592	<i>E. coli</i>	Selenium (Dissolved), Iron (Total)	M/M
		All tributaries to the Colorado River from Government Highline Canal Diversion to below Salt Creek, and downgradient from: Government Highline Canal, Orchard Mesa Canal No. 2, Orchard Mesa Drain, Stub Ditch and northeast Colorado National Monument boundary, except: Salt, Adobe, Leach Creeks, Indian Wash, Unnamed Tributary, and Mack Wash	<i>E. coli</i>	Selenium (Dissolved), Iron (Total)	M/M
COLCLC14b	Clear Creek, including all tributaries and wetlands, from a point immediately below the confluence with Tom Creek to the confluence with Roan Creek. Roan Creek, including all tributaries and wetlands, from a point immediately above the confluence with Clear Creek to a point immediately below the confluence with Kimball Creek	All	Iron (Total), <i>E. coli</i>	N/A	N/A

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COLCLC14c	Main stem of Roan Creek, including all tributaries and wetlands, from a point immediately below the confluence with Kimball Creek to the confluence with the Colorado River	North, South, and main stem of Dry Fork, including tributaries	Arsenic (Total)	Manganese (Dissolved), Selenium (Dissolved)	L/L
		Roan Creek and tributaries, including: Conn Cr, Logan Wash, Bloat Gulch, and Gibler Gulch	Arsenic (Total)	Manganese (Dissolved), Iron (Total)	L/H
COLCLC15a	Main stem of Plateau Creek from its source to the inlet of Vega Reservoir. All tributaries and wetlands to Plateau Creek from its source to a point immediately above the confluence with Buzzard Creek. Kimball Creek, Grove Creek, Big Creek, Cottonwood Creek, Bull Creek, Spring Creek, Coon Creek, and Mesa Creek, including all wetlands and tributaries, from their sources to their confluences with Plateau Creek. The main stem of Buzzard Creek, including all tributaries and wetlands, within the Grand Mesa National Forest.	All	Iron (Total)	Arsenic (Total)	L
COLCLC15c	Main stem of Plateau Creek from the outlet of Vega Reservoir to a point immediately below the confluence with Buzzard Creek	All	N/A	Arsenic (Total)	L
COLCLC15d	Main stem of Buzzard Creek from the Grand Mesa National Forest boundary to its confluence with Plateau Creek	All	N/A	Arsenic (Total)	L
COLCLC16	Plateau Creek, including all tributaries and wetlands, from a point immediately below the confluence with Buzzard Creek, to the confluence with the Colorado River, excluding specific listings in segment 15	All	Iron (Total)	N/A	N/A

C. State of Colorado's 303 (D) List of Impaired Waters and Monitoring and Evaluation List in the GJFO Planning Area

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COLCLC17a	Main stem of Rapid Creek, including all tributaries and wetlands, from its source to a point immediately below the confluence with Cottonwood Creek including Kruzen Springs	Rapid Creek, including all tributaries and wetlands, from its source to below the confluence with Cottonwood Creek (39.130512, -108.301028), including Kruzen Springs	N/A	Arsenic (Total)	L
COLCLC19	All lake and reservoir tributaries to the Colorado River from a point immediately below the confluence of the Colorado River and Parachute Creek to the Colorado-Utah border, except for specific listings in segments 9b, 13c, 20, and 21. This segment includes Highline Reservoir.	West Lake in James M. Robb Colorado River State Park	N/A	Selenium (Dissolved)	H
COLCLC20	Rifle Gap Reservoir, Harvey Gap Reservoir, and Vega Reservoir	Vega Reservoir	N/A	Arsenic (Total)	H
Gunnison River Basin					
COGULG02	Main stem of the Gunnison River from Highway 65 (38.772574, -108.002634) to the confluence with the Colorado River	Main stem of the Gunnison River from a point immediately above the confluence with the Uncompahgre River to the confluence with the Colorado River.	Sediment	<i>E. coli</i> , Sulfate, Arsenic (Total)	H/L/L
COGULG04a	All tributaries to the Gunnison River, including all wetlands which are not within National Forest boundaries, from the outlet of Crystal Reservoir to the confluence with the Colorado River, except for specific listings in the North Fork of the Gunnison River sub-basin, the Uncompahgre River sub-basin, and in Segments: 3, 4b, 4c, 5a, 5b, 6a, 6b, 6c, 7, 8a, 8b, 10, and 12.	Whitewater Creek from below Brandon Ditch to the confluence with the Gunnison River	N/A	Manganese (Dissolved), Sulfate	L/L
		All tributaries to the Gunnison River, including all wetlands, to which a TMDL does apply and which they are not within National Forest boundaries, from the outlet of Crystal Reservoir to the confluence with the Colorado River, except for: specific listings in the North Fork of the Gunnison River sub-basin, Uncompahgre River sub-basin, Segments (3, 4b, 4c, 5 through 8b, 10a, 10b, and 12), Cummings Gulch, Whitewater Creek below Brandon Ditch, Wells Gulch, and Peach Valley Creek.	Iron (Total), <i>E. coli</i>	N/A	N/A

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COGULG04b	All tributaries to Reeder, Hollenbeck, and Juniata Reservoirs, and the main stem of Kannah Creek below the point of diversion for public water supply (38.961321, -108.229830)	All tributaries to Reeder, Hollenbeck and Juniata Reservoirs, excluding Kannah Creek.	Iron (Total)	N/A	N/A
		Main stem of Kannah Creek below the point of diversion for public water system (38.961321, -108.229830)	Iron (Total)	N/A	N/A
COGULG06a	Main stem of Escalante Creek from the National Forest boundary to the Delta/Montrose County line (38.668215, -108.328144); main stem of Little Dominguez from the National Forest boundary to Big Dominguez Creek; main stem of Big Dominguez from the National Forest boundary to the Gunnison River.	Main stem of Escalante Creek from the National Forest boundary to the Delta County line; main stem of Little Dominguez from the National Forest boundary to Big Dominguez Creek; main stem of Big Dominguez from the National Forest boundary to the Gunnison River.	<i>E. coli</i>	N/A	N/A
COGULG16	All lakes and reservoirs that are tributaries to the Gunnison River, from the outlet of Crystal Reservoir to the confluence with the Colorado River, and not within National Forest boundaries, excluding the listings in the North Fork of the Gunnison sub-basin, the Uncompahgre River sub-basin, and Segments 9, 13, and 19. This segment includes: Poison Springs Reservoir, Dry Fork Reservoir, Delta Reservoir, Winkler Reservoir, Desert Reservoir, Alkali Reservoir, Cheney Reservoir, Juniata Reservoir, Hollenbeck Reservoir, Reeder Reservoir, Enochs Lake, Gobbo Reservoir, Schrader Reservoir, and King Reservoir.	Maggio Ponds	Arsenic (Total)	N/A	N/A
		Peters Ponds 1, 2, 3, and 4.	Selenium (Dissolved)	N/A	N/A

Waterbody ID	Segment Description	Portion	Colorado's Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COGULD05	Main stem of West Creek from the source to the confluence with the Dolores River. Roc Creek, including all tributaries and wetlands from the Manti-La Sal National Forest boundary to the confluence with the Dolores River. La Sal Creek, including all tributaries and wetlands, from the Utah/Colorado border to the confluence with the Dolores River. Mesa Creek, including all tributaries and wetlands, from the Uncompahgre National Forest boundary to the confluence with the Dolores River.	Main stem of West Creek from the source to the confluence with the Dolores River	N/A	Arsenic (Total)	L

Source: CDPHE 2021b

Appendix D

Wells Forgone and Average Annual Economic
Effects Per Well from Forgone Well Development

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Appendix D. Wells Forgone and Average Annual Economic Effects Per Well from Forgone Well Development

The potential number of wells reduced (forgone) because of restrictions by alternative is shown in the following table. **Table D-1** shows the total for the combined field offices over a 20-year period and the number per year.

Table D-1. Number of Wells Forgone from the Potential Over 20 Years and Per Year							
	A	B	C	D	E	F	G
CRVFO	0	56	56	0	58	76	56
GJFO	0	3	369	5	541	703	293
Total	0	59	425	5	599	779	349
Per Year	0	2.95	21.25	.25	29.95	38.95	17.46

Table D-2 describes the average annual economic effects per well from forgone well development using 2022 dollars. The table is for the combined CRVFO and GJFO decision areas. The effects of reduced oil and gas production in terms of forgone employment from foreseeable fluid mineral development annually would be approximately 11 jobs (most of which would be attributable to indirect employment)¹ per well. Losses in total labor income² per well annually would be approximately \$516,000. The total value added³ that would be forgone on an annual basis per well would be approximately \$748,000. (See **Section 3.9.2, Social and Economic Conditions**, for additional information.)

¹ Note: Employment numbers represent employment over a one-year timeframe and no permanent employment. Additionally, this analysis does not assess net jobs, rather it presents total or gross jobs that would be supported by the forecast level of development. A person employed during project construction could, for example, have been employed elsewhere in the state beforehand, and, as a result, not all gross jobs represent a net additional job. A net jobs analysis would subtract job losses in other areas from the direct job gains of the new project to identify only the net increase in jobs.

² Labor income is defined as the sum of employee compensation (wages and benefits) and proprietor income. It represents the total value of all forms of employment income paid throughout a defined economy during a specified period of time.

³ Value added is equivalent to the industry’s contribution to gross domestic product. It represents the difference between output and the cost of intermediate inputs throughout a defined economy during a specified time period. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Total value added over the 20-year period is the sum of value added for each 5-year increment.

Table D-2. Combined CRVFO and GJFO Average Annual Economic Effects per Well from Forgone Well Development (2022 dollars) under All Alternatives

Indicator	Total Annual Contributions (Drilling and Completion per Well)	A		B		C		D		E		F		G	
		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)		Contributions (Drilling and Completion for All Wells)	
		Total Annual Contributions	Total for 20-Year Period	Total Annual Contributions	Total for 20-Year Period	Total Annual Contribution	Total for 20-Year Period	Total Annual Contributions	Total for 20-Year Period	Total Annual Contributions	Total for 20-Year Period	Total Annual Contributions	Total for 20-Year Period	Total Annual Contributions	Total for 20-Year Period
Employment	-11	0	0	-33	-657	-237	-4,732	-3	-56	-333	-6,669	-433	-8,670	-194	-3,888
Labor Income (\$)	-516,255	0	0	-1,522,953	-30,459,069	-10,970,428	-219,408,550	-129,064	-2,581,277	-15,461,850	-309,236,992	-20,100,404	-402,008,089	-9,014,500	-180,289,998
Value Added (\$)	-748,119	0	0	-2,206,951	-44,139,026	-15,897,530	-317,950,608	-187,030	-3,740,595	-22,406,166	-448,123,327	-29,128,016	-582,560,326	-13,063,145	-261,262,902
Total Output (\$)	-2,287,910	0	0	-6,749,335	-134,986,696	-48,618,090	-972,361,793	-571,978	-11,439,551	-68,522,908	-1,370,458,150	-89,079,780	-1,781,595,596	-39,949,926	-798,998,516

Appendix E

Economic Modeling Technical Approach

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Appendix E. Economic Modeling Technical Approach

The following provides an overview of the approach to economic modeling used to support the socioeconomic analysis for the supplemental EIS covering the BLM RMP for the Colorado River Valley and Grand Junction Field Offices in western Colorado. In addition to a description of model inputs and rationale regarding how they were derived, modeled results are also presented. The economic region was defined as the following four counties within the State of Colorado: Eagle, Garfield, Mesa and Pitkin Counties. The proposed action was analyzed. It would entail the closure of areas with no known, very low/low, or medium potential for oil and gas development. To support the analysis of socioeconomic impacts within the supplemental EIS, an input-output model, Impact Analysis for Planning (IMPLAN), was utilized. The model provides a quantitative representation of the production relationships between individual economic sectors. It was used to simulate economic effects on local economies from implementation of the action. Model inputs included direct spending in the oil and gas sector-related spending that would be forgone under the proposed action. Resulting in estimated local economic impacts by alternative that were presented in the analysis in the supplemental EIS.

PRODUCTION ESTIMATES

Production estimates were derived from EIA-reported reference case oil and gas supply for the lower 48 and onshore category in the Rocky Mountain region. High and low crude oil and natural gas production values for Garfield County, specifically, were used as benchmarks against which to develop a range of expected production for each 5-year increment over the 20-year planning period for the four-county study area.

DEVELOPMENT ESTIMATES

Approximate per-well development costs were derived based on industry sources (who provided estimated costs for vertical or directional wells). By examining estimates of reasonably foreseeable development in the two reasonable foreseeable developments (RFD) for the decision area, a total of 599 wells, was estimated to be forgone over the 20-year period 2009 to 2028 under Alternative E as a result of the proposed action to close areas with no-known, low, and medium oil or gas potential to future oil/gas leasing. Extrapolating the annual average well development number of 29.9 wells per year to the 20-year period 2023 to 2042 would yield the same number. Therefore, it is estimated that the potential development of a total of 599 new oil and gas wells would be forgone as a result of the proposed action under Alternative E. Given that IMPLAN is a linear model, and assuming that Alternative F would result in further reductions in federal lands available to oil and gas development (corresponding to an estimated 779 new oil and gas wells forgone), a multiplier may be applied to the modeled results, which would yield a change in economic impacts proportional to the change in lands available for mineral production. Similarly, management scenarios resulting in fewer wells forgone on an annual basis, as under Alternative G (which contains closures corresponding to an estimated 349 new oil and gas wells forgone over the 20-year period) can be calculated on the same linear basis.

ECONOMIC SECTOR ATTRIBUTION OF COSTS

Per well costs for well drilling and completion activities were compiled from previous socioeconomic analyses and an attribution of development costs per sector was undertaken. These costs are provided in **Table E-1** below.

Table E-1. Per-Well Costs for Well Drilling and Completion Activities (2022 dollars)

Activity	Per-Well Cost / (% of Total Cost)	
	Drilling	Completion
Site preparation	\$41,851 / (7%)	\$29,894 / (5%)
Drilling Rig	\$59,788 / (10%)	\$65,766 / (11%)
Support & Engineering Services	\$322,853 / (54%)	\$239,150 / (40%)
Consumables & Tangibles	\$107,618 / (18%)	\$89,681 / (15%)
Proppant	—	\$89,681 / (15%)
Equipment Rental	\$23,915 / (4%)	\$47,830 / (8%)
Transportation	\$17,936 / (3%)	\$35,873 / (6%)
Communication	—	—
Legal	\$23,915 / (4%)	—

IMPLAN MODEL INPUTS

Once sector-specific costs were determined on a per-well basis for all drilling and completion activities, costs were input into the model and the four-county area encompassing Eagle, Garfield, Mesa and Pitkin Counties was identified as an appropriate geography for capturing modeling economic effects of closing federal lands to mineral entry under the proposed action. **Table E-2** details the specific industry sectors, which were ascribed to each of the well drilling and completion activities based on the associated raw materials, labor force type, and other contributing elements necessary to support the industrial activity.

Table E-2. Well Drilling and Completion Activities and Associated IMPLAN Sectors

Activity	Industry Sector (IMPLAN Code)	Description
Site preparation	264	Oil and gas field machinery and equipment manufacturing
Drilling Rig		
Support & Engineering Services	446	Funds, trusts, and other financial vehicles
Consumables & Tangibles	36	Support activities for oil and gas operations
Proppant	214	Miscellaneous nonmetallic mineral products manufacturing
Equipment Rental	20	Oil and gas extraction
Transportation	515	Commercial and industrial machinery and equipment repair and maintenance
Communication		
Legal	446	Funds, trusts, and other financial vehicles

Note: Both site preparation and drilling rig activities were assigned to IMPLAN sector 264 as these activities closely align with those establishments engaged in oil and gas machinery and equipment manufacturing. Both transportation and communication activities were assigned to IMPLAN sector 515 as these activities closely align with commercial and industrial machinery and equipment repair and maintenance.

MODELED RESULTS

Several economic indicators were modeled for the effect of forgone contributions on the economy from the proposed reduction in federal lands available for mineral production. These include: employment; labor income; value added; and total output. Results obtained from modeling indicate that the proposed removal of wells

would result in an estimated loss of up to 11 jobs (most of which would be attributable to indirect employment)¹ and over \$2.2 million in total economic contributions per well, per year, over the 20-year planning timeframe. **Tables E-3a through E-3c** display modeled economic effects in the form of forgone contributions to the economy from the proposed reduction under Alternatives E, F and G.

Table E-3a. Modeled Economic Effects per Well from Forgone Well Development (2022 dollars), under Alternative E

Indicator	Total Annual Contributions (Drilling and Completion, per well)	Total Annual Contributions (Drilling and Completion, all wells)	Total for 20-Year Period (Drilling and Completion, all wells)
Employment	-11	-333	-6,669
Labor Income	-\$516,255	-\$15,461,850	-\$309,236,992
Value Added	-\$748,119	-\$22,406,166	-\$448,123,327
Total Output	-\$2,287,910	-\$68,522,908	-\$1,370,458,150

Table E-3b. Modeled Economic Effects per Well from Forgone Well Development (2022 dollars), under Alternative F

Indicator	Total Annual Contributions (Drilling and Completion, per well)	Total Annual Contributions (Drilling and Completion, all wells)	Total for 20-Year Period (Drilling and Completion, all wells)
Employment	-11	-433	-8,670
Labor Income	-\$516,255	-\$20,100,404	-\$402,008,089
Value Added	-\$748,119	-\$29,128,016	-\$582,560,326
Total Output	-\$2,287,910	-\$89,079,780	-\$1,781,595,596

Table E-3c. Modeled Economic Effects per Well from Forgone Well Development (2022 dollars), under Alternative G

Indicator	Total Annual Contributions (Drilling and Completion, per well)	Total Annual Contributions (Drilling and Completion, all wells)	Total for 20-Year Period (Drilling and Completion, all wells)
Employment	-11	-194	-3,888
Labor Income	-\$516,255	-\$9,014,500	-\$180,289,998
Value Added	-\$748,119	-\$13,063,145	-\$261,262,902
Total Output	-\$2,287,910	-\$39,949,926	-\$798,998,516

¹ Note: Employment numbers represent employment over a one-year timeframe and not permanent employment. Additionally, this analysis does not assess net jobs, rather it presents total or gross jobs that would be supported by the forecast level of development. A person employed during project construction could, for example, have been employed elsewhere in the state beforehand, and, as a result, not all gross jobs represent a net additional job. A net jobs analysis would subtract job losses in other areas from the direct job gains of the new project to identify only the net increase in jobs.

The calculation of economic effects associated with forgone mineral production utilized projections published in the EIA's annual analysis of domestic mineral production. Both high and low projections for each county for both oil (in bbls) and gas (in mcf) were obtained from the EIA, from which 5-year averages were drawn to estimate projected losses in production. Specifically, forecast high and low crude oil and natural gas production values for Garfield County, were used as benchmarks against which to develop expected production for each 5-year increment over the 20-year planning period and for the four-county study area. These forecast production estimates were derived from oil and gas supply data reported by the EIA for the lower 48 states, onshore category, in the Rocky Mountain region. **Figure E-1** illustrates the method for calculating these average production losses for one of the four five-year periods.

Figure E-1. Calculation of Estimated Annual Projected Production Losses (2023 to 2027)

Total County Projections - Oil - High O&G Supply (bbls)					
GARFIELD	1,348,980.73	1,617,244.40	1,832,147.86	1,931,312.25	1,986,523.86
MESA	83,467.13	100,065.74	113,362.72	119,498.44	122,914.62
RIO BLANCO	4,003,247.72	4,799,349.46	5,437,098.98	5,731,380.14	5,895,226.61
5-Year Average (Garfield):	1,506,461.55 (bbls)				
Total County Projections - Oil - Low O&G Supply (bbls)					
GARFIELD	1,340,234.44	1,260,500.58	1,255,468.45	1,253,021.19	1,239,181.76
MESA	82,925.96	77,992.49	77,681.13	77,529.71	76,673.41
RIO BLANCO	3,977,292.14	3,740,673.21	3,725,739.80	3,718,477.29	3,677,407.26

To obtain estimates of forgone revenues, the 2021 Henry Hub Spot Price per mcf of natural gas (\$3.96) and the Lower 48 states reference case wellhead price per barrel for crude oil (\$67.00) was assigned to production estimates for each of the 5-year periods. **Figure E-2** illustrates the method for calculating these estimates of forgone revenues over the 20-year timeframe.

Figure E-2. Calculation of Estimated Annual Revenue Losses from Forgone Production

Period	Average annual production (oil) - bbls	Average annual production (gas) - mcf	Annual Revenue (oil) (2021\$)	Annual Revenue (gas) (2021\$)	Total Annual Revenues (2021\$)	Apply assumption that 10% of production revenues are spent locally
2023–2027	1,506,461.55	418,444,861.36	\$100,932,923.90	\$1,658,445,882.54	\$1,759,378,806.43	\$175,937,880.64
2028–2032	1,646,758.78	446,754,630.57	\$110,332,837.97	\$1,770,647,571.50	\$1,880,980,409.47	\$188,098,040.95
2033–2037	1,702,201.34	438,103,212.43	\$114,047,489.93	\$1,736,358,922.94	\$1,850,406,412.87	\$185,040,641.29
2038–2042	1,742,381.09	436,762,468.08	\$116,739,533.28	\$1,731,045,075.98	\$1,847,784,609.27	\$184,778,460.93
			Multiplier is \$67.00 (in 2021\$). Source: EIA, 2022 (Average oil price per bbl [Lower 48 reference case wellhead price barrel, Gulf	Multiplier is \$3.96 (in 2021\$). Source: EIA, 2022 (Average gas price per mcf [Henry Hub Spot Price])		

Appendix F

Response to Public Comments on the
Draft Supplemental EIS

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Appendix F. Response to Public Comments on the Draft Supplemental EIS

F.1 INTRODUCTION

The Bureau of Land Management (BLM) prepared a Supplemental Environmental Impact Statement (SEIS) for the 2014 Colorado River Valley Field Office (CRVFO) Resource Management Plan (RMP)/Final EIS and 2015 Grand Junction Field Office (GJFO) RMP/Final EIS. This appendix documents the results of the public comment analysis process for the SEIS.

F.1.1 Description of the Public Comment Process

The BLM published the draft supplemental EIS for a 90-day public comment period from August 4 to November 1, 2023. In-person public meetings were held in Glenwood Springs and Grand Junction, Colorado, on September 12th and 13th, respectively. A total of 38 people attended the meeting in Glenwood Springs, and 30 people attended the meeting in Grand Junction. A virtual meeting was held on September 13, with 34 attendees.

Following processes at 40 CFR 1503.4(a), the BLM considers substantive comments timely submitted during the public comment period. The agency may respond to individual comments or groups of comments. In the final environmental impact statement, the agency may respond by:

1. Modifying alternatives including the proposed action.
2. Developing and evaluating alternatives not previously given serious consideration by the agency.
3. Supplementing, improving, or modifying its analyses.
4. Making factual corrections.
5. Explaining why the comments do not warrant further agency response, recognizing that agencies are not required to respond to each comment.

F.1.2 Nature of Comments Received and the Comment Analysis Process

A total of 373 total letter submissions were received during the public comment period on the draft supplemental EIS, including 7 letters which contained non-unique, preformulated language that appeared elsewhere in letter submissions. There were 366 unique submissions, from which 407 unique substantive comments were derived.

F.1.3 Methodology

During the comment period, letter submissions were received via mail or by hand, and online comments were submitted through the ePlanning website. All commentary received from the public was entered into the BLM comment analysis and response application (CARA) database. All comments received were considered and were used to identify potential changes for the final supplemental EIS; however, only those determined to be substantive were analyzed. Substantive comments raise, debate, or question a point of fact or policy, question the accuracy of information, or question the methodology or assumptions. Comments that merely support or oppose a proposal or that merely agree or disagree with BLM policy are not considered substantive.

Additionally, the BLM's National Environmental Policy Act (NEPA) handbook identifies substantive comments as those which:

- question, with reasonable basis, the accuracy of information in the EIS or EA;
- question, with reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis;
- present new information relevant to the analysis;
- present reasonable alternatives other than those analyzed in the EIS or EA; or
- cause changes or revisions in one or more of the alternatives.

Comments on the draft SEIS that failed to meet the above descriptions were considered non-substantive.

After a complete review and consideration of public comments on the supplemental EIS, the BLM identified substantive comments and developed summary statements to capture over-arching concerns. These summaries or "concern statements" provided the fundamental basis upon which to develop succinct responses as well as, where necessary, to make revisions or additions to the final supplemental EIS.

F.2 PUBLIC COMMENTS AND BLM RESPONSES

Most submissions were focused on suggestions for specific alternatives or alternative elements, statements pertaining to the reasonably foreseeable development (RFD) scenario, and detailed input pertaining to various resource topics analyzed in the draft supplemental EIS such as air quality and climate, social and economic conditions, and special designations.

F.2.1 Concern Statements (Summaries of Substantive Comments) and BLM Responses

Table F-1 includes the “concern statements” which are summaries of similar substantive comments as well as the BLM’s response to those comments.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
1	Mesa County; National Association of Royalty Owners, Rocky Mountain Chapter; Western Energy Alliance	ACEC Management	Commenters expressed concern over the apparent lack of rationale in the SEIS for including new ACECs in the Preferred Alternative, calling for BLM to conduct a new ACEC Report to ensure the relevance and importance criteria are still valid.	The Bureau of Land Management (BLM) is not creating new Areas of Critical Environmental Concern (ACEC) through the SEIS process. Alternative G closes five existing ACECs to leasing and designates two new expansion areas to existing ACECs (and closes them to leasing) due to cultural and other resource concerns, which is within the scope of the SEIS. More information on specific ACECs and how closing them to future oil and gas leasing would impact ecological and cultural resources are included in section 3.7.2 of the SEIS. Closing ACECs to oil and gas leasing helps the BLM focus management in areas that are suitable to oil and gas development.
2	Mesa County; Western Energy Alliance	ACEC Management	Commenters suggested that BLM consider allowing oil and natural gas resources under proposed ACECs to be developed through the use of no surface occupancy and controlled surface use stipulations on future leases, which they stated would protect the resource values in proposed ACECs.	Through the land use planning process, the BLM closes areas of land to future oil and gas leasing to protect resources and to communicate management priorities concerning which areas should be the focus of oil and gas development. The closure of designated Areas of Critical Environmental Concern to future oil and gas leasing is consistent with management in the 2015 CRVFO and GJFO Approved Resource Management Plans. Closing the ACECs to leasing protects surface and subsurface resources and values and provides more durable protection since stipulations can be waived, modified, or excepted. Livestock grazing and any existing leases within these areas would be subject to valid existing rights. No surface occupancy and controlled surface use stipulations would also be applied to other uses to prevent disturbance within ACECs that may damage relevance and importance criteria. More information on specific ACECs and how closing them to future oil and gas leasing would impact ecological and cultural resources are included in section 3.7.2 of the SEIS.
3	Western Environmental Law Center; Private individuals	Cumulative Impacts (Climate Change)	Commenters stated that allowing oil and gas leasing to continue in the planning area would be in conflict with efforts to reduce greenhouse gas emissions from federal oil and gas sources.	It is BLM policy as derived from various laws, including the Mineral Leasing Act of 1920, as amended (30 United States Code [USC] 181 et seq.) and the Federal Land Policy and Management Act (FLPMA) of 1976 (43 USC 1701 et seq.), to encourage development of mineral resources to meet national, regional, and local needs. The action alternatives were designed to fulfill the purpose of and need for the CRV/GJFO RMP/Supplemental EIS (outlined in Section 1.2, Purpose and Need), meet the BLM’s multiple-use mandates of FLPMA (43 USC 17 1716), and achieve the BLM’s mission to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative greenhouse gas (GHG) emissions are disclosed for each alternative, consistent with the Council on Environmental Quality (CEQ)’s Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that “A projection of a proposed action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.” Cumulative impacts have been updated in the Proposed RMP/Final SEIS to disclose GHG emissions at additional scales. The SEIS GHG and Climate Change analysis provides data and information describing overall projected future global trends for various economic (demand) scenarios and how federal oil and gas would fit within these scenarios while the world transitions to cleaner energy sources. As described for the SEIS, the world will demand fossil fuels through the next ~ 30 years regardless of BLM’s decisions for new leasing and allowing new federal oil and gas development / production in Colorado is not only a viable source of revenue for local, state, and federal economies, it could have an overall benefit for global GHG emissions levels (and regional air quality) as Colorado has greatly enhanced its oil and gas regulations in recent years. In addition, a brief summary for the Environmental Protection Agency (EPA)’s latest rulemaking (OOOOb and OOOOc) has been included for the SEIS that further supports that there is very little methane (and few volatile organic compounds) that could be feasibly controlled for Colorado-based oil and gas sources. The SEIS (section 3.5.1) has been updated to incorporate data and information from BLM’s latest Annual GHG Report (version 2022).

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
4	BlueRibbon Coalition; Colorado Offroad Trail Defenders	Areas with special designation / travel management	Commenters expressed concern that the establishment of new special designations would place excessive limits on motorized and mechanized recreation opportunities.	Designating the Castle Peak Addition Wilderness Study Area (WSA) will not impact motorized use by the public, as motorized use within the proposed WSA is only authorized for BLM administrative use under current management. Additionally, travel management decisions would not be impacted by managing additional areas for the protection of wilderness characteristics through this SEIS process. Motorized use and mechanized use, limited to designated routes, will be allowed in the additional units identified to be managed as lands with wilderness characteristics. Designating an ACEC as closed to leasing does not include changes to travel management. New ACECs designated under Alternative G (Grand Hogback and Pyramid Rock expansions) only contain administrative routes, and public access will not be impacted by these designations. Travel in the Grand Hogback and proposed Pyramid Rock expansion (Zone 2) under Alternative G is limited to designated routes, which allows for route designations that align with area management priorities. The Pyramid Rock ACEC Zone 1 has a closed travel management designation to all uses except for administrative, which is also included in Alternative G. Land use within these areas is further described in table 2.3-1.
5	City of Glenwood Springs; Colorado Department of Natural Resources; Environmental Advocacy NGO Consortium; DHM Design; Eagle County; Honu Studio; Office of Rep. Diana DeGette; Protegete Piceance; Public Employees for Environmental Responsibility; Routt County Commissioners; The Mountain Pact; Wilderness Workshop	Designation of section 202 WSAs	Commenters expressed support for the establishment of special designations under Alternative F, citing specific lands with wilderness characteristics, including lands with wilderness characteristics adjacent to existing wilderness study areas (WSAs), which could be identified as a Section 202 WSA.	Section 201 of FLPMA requires BLM to inventory all public lands and their resources and values on a continuing basis, including wilderness characteristics. As described in Section 3.7.1 of the SEIS, BLM acknowledges the requirement under Section 202 to develop, maintain, and revise land use plans for public lands; and that these plans set the framework for management, use, and protection of the planning area. As described in BLM Manual 6320, Considering Wilderness Characteristics in the Land Use Planning Process, “the Bureau has full discretion in how to manage an area that possesses wilderness characteristics,” including as Wilderness Study Areas (WSAs) under a non-impairment standard. The BLM administers all WSAs under the management policies for WSAs (BLM Manual 6330, Management of Wilderness Study Areas) to avoid impairing the suitability of such areas for preservation as wilderness. Activities that would impair wilderness suitability are prohibited unless that use is grandfathered or a valid existing right that predates the BLM’s designation of the area as a WSA. The BLM has discretion to modify Section 202 WSA designations through its land use planning process. The Castle Peak Adjacent wilderness characteristics unit is included as a proposed Section 202 WSA designation under Alternatives F and G of the SEIS. As described in Section 3.7.1, BLM proposes a new Wilderness Study Area designation here due to strong community support for additional protections, manageability of the area as WSA, and the benefits of WSA protection here over other conservation tools, such as lands with wilderness characteristics or ACEC. Other lands with wilderness characteristics in the planning area, including other areas adjacent to existing FLPMA Section 603 Wilderness Study Areas, do not possess the same factors as found in the Castle Peak Adjacent unit. Under the 2015 Colorado River Valley Approved Resource Management Plan, WIL-MA-01 directs BLM to manage a 3,900-acre Castle Peak Adjacent wilderness characteristics unit for protection of wilderness characteristics. BLM completed inventory work for this unit prior to the development and release of Manual 6310, Conducting Wilderness Characteristics Inventory of BLM Lands. Some of the boundaries of this Castle Peak Adjacent unit were inconsistent with the policy described in this manual. BLM updated the inventory for this area during the summer of 2023 and identified a unit containing approximately 7,000 acres as lands with wilderness characteristics.
6	Environmental Advocacy NGO Consortium; Colorado Wildlife Federation, Inc.; Eagle County; Grand Junction Broadband, Great Old Broads for Wilderness; Town of Palisade; Private individuals	Designation of ACECs and Closure of Wildlife Habitats to Oil and Gas Leasing	Commenters expressed support for the establishment of special designations under Alternative F, citing specific areas which would be identified as ACECs. Commenters also noted the agency preferred alternative should carry forth both the wildlife emphasis areas analyzed under Alternative F.	Through the EIS process, BLM has identified areas important to cultural, wildlife, and botanical resources. These are areas that the BLM has identified in the alternatives as being closed to oil and gas leasing. Closing areas to oil and gas leasing would allow the BLM to protect sensitive resources and decrease impacts from development on those resources. The BLM may also use closures to communicate which areas are prioritized for other uses besides mineral development. Commenters suggested a variety of locations and wildlife habitats for closure to oil and gas leasing; these areas are already included in the range of alternatives (most notably in Alternative F). The BLM considered the designation and expansion of Areas of Critical Environmental Concern under some of the alternatives in this planning effort, which would provide special management attention to important historical, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards. Consistent with the purpose and need, two ACECs would be expanded and closed to leasing under the proposed alternative. More information on specific ACECs and how closing them to future oil and gas leasing would impact ecological and cultural resources are included in section 3.7.2 of the SEIS. Section 3.5.5 has been updated to correct the reference to 10 wildlife emphasis areas.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
7	Eagle County; Pitkin County; Save West Mamm Creek Coalition; Slow Food Western Slope; Private individuals	Support for Alternative F: Climate Change	Commenters stated that the broad closures considered in Alternative F would align best with efforts to reduce greenhouse gas emissions from federal oil and gas sources.	The BLM notes commenters' support for broad closures to oil and gas leasing under Alternative F due to the associated reductions in greenhouse gas emissions. As discussed in Section 3.5.I of the SEIS, BLM Colorado's air resources adaptive management approach allows BLM to not be too concerned or precise with projecting well counts specific to an alternative for planning-level purposes. BLM Colorado Air Resources uses several analysis tools to authorize new federal oil and gas development / operations under plans including regional air quality modeling studies, annual reports and an online emissions inventory tool. For our modeling studies, we project various levels of future oil and gas development / operations using up-to-date trend data and information and use our Annual Report to track how actual oil and gas compares to the levels that we projected for the air quality impact studies to deduce how federal oil and gas is likely impacting air quality in "real-time." This approach was vetted with EPA and other Federal land managers in 2014-2015 to alleviate the need to model RFDs and 20-year oil and gas projections for many of our RMPs as BLM Colorado is committed to update its modeling platform every few years with newer oil and gas projection data and information for the latest changes in regulations. BLM's online emissions inventory tool is used to gather project-specific data that then feeds back into the overall "big picture" system that evaluates how BLM oil and gas is impacting overall air quality and GHGs. This process requires BLM Colorado to be proactive and potentially do more work over the life of the Plans but allows for a clearer picture of our impacts.
8	Colorado Department of Natural Resources; Eagle County; Environment Colorado; Grand Junction Broadband, Great Old Broads for Wilderness; Honu Studio; Office of Rep. Diana DeGette; Pitkin County; Slow Food Western Slope; The Mountain Pact; The Wilderness Society; Western Slope Group; Wilderness Workshop; Private individuals	Support for Alternative F: Closure to leasing, various	Commenters expressed general support for Alternative F.	BLM notes commenters' support for alternative F.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
9	Environmental Advocacy NGO Consortium; Eagle County; Roaring Fork Audubon; Colorado Wild; The Pew Charitable Trusts; Western Environmental Law Center; Private individuals	Inventory and Management of Lands with Wilderness Characteristics Units	Commenters called for BLM to update the existing lands with wilderness characteristics inventory, complete a full inventory of lands with wilderness characteristics, or, at a minimum, adopt the protections under Alternative F for lands with wilderness characteristics. Commenters requested that BLM respond to the citizen's inventory submissions for lands with wilderness characteristics that the agency has received. Additionally, commenters requested that BLM revoke any existing waivers to stipulations on leases within lands with wilderness characteristics.	Section 201 of FLPMA requires the BLM to prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values, including wilderness resources. Since completing the 2015 CRVFO and GJFO Approved Resource Management Plans, the BLM continued to update the lands with wilderness characteristics inventories in both field offices. As part of the SEIS planning effort, both the CRVFO and GJFO are working to complete wilderness characteristics inventories for the entire planning area to ensure decisions to manage wilderness resources are made with the most current data. Data provided in citizen's inventory submissions, in areas such as Bangs Canyon and Cone Mountain Canyons in the GJFO and King Mountain, Castle Peak, and Red Hill in CRVFO, among others, are used to inform the ongoing wilderness characteristics inventory work throughout the planning area. Section 1.6.A.2.d. of BLM Manual 6320 - Considering Wilderness Characteristics in the BLM Land Use Planning Process provides examples of land use plan decisions appropriate to protect wilderness characteristics. BLM policy does not identify a specific management protocol for protecting wilderness characteristics, but rather leaves flexibility for land use plans to contain management actions to achieve protection. The exact management actions required to protect wilderness characteristics depends on potential threats and wilderness characteristics found in an area. For example, in an area where outstanding opportunities for solitude were found due to the presence of ample vegetative screening from dense timber, it may be determined through the planning process to include a decision to exclude uses or activities such as commercial or personal-use wood cutting. This type of decision may not be required in other lands with wilderness characteristics. Discussion of revocation of waivers to stipulations on existing leases in lands with wilderness characteristics is outside the scope of this SEIS. Existing leases within the planning area would be subject to valid existing rights.
10	Town of Palisade	Watershed Management	Commenters supported the closure of the Palisade Municipal Watershed to fluid mineral leasing under Alternative F.	BLM notes commenters' support for the closure of the Palisade Municipal Watershed to fluid mineral leasing under Alternative F. Closure of the Palisade Municipal Watershed is included in Alternative G. Alternative G would update lease stipulations for municipal watersheds within the GJFO. The municipal watersheds or source water protection areas for Grand Junction, Palisade, Jerry Creek, Mesa/Powderhorn, and Collbran would be managed under GJFO-NSO-6. The Grand Junction and Palisade municipal watersheds would remain closed to leasing, but Alternative G would replace the current NSO-5 with NSO-6 in these areas. Alternative G would retain the existing GJFO-CSU-4 lease stipulation for Jerry Creek, Mesa/Powderhorn, and Collbran. See Appendix H for lease stipulation exhibits.
11	Pitkin County; Protegete Piceance; Roaring Fork Audubon; Colorado Wild; Save West Mamm Creek Coalition; Wilderness Workshop; Private individuals	New Alternative: No Leasing	Commenters called for BLM to consider a No Leasing alternative.	A no-leasing alternative would be very similar to Alternative F, which would close 95 percent of the decision area to future fluid mineral leasing. Much of the high-potential area currently has existing leases that would not be affected by decisions stemming from this SEIS. The Mineral Leasing Act (30 U.S.C. § 21a) directs the “orderly and economic development of domestic mineral resources . . . to help assure satisfaction of industrial, security and environmental needs,” and a no leasing alternative would be inconsistent with this directive.
12	National Park Service National Trails Office	National Trails	Commenters called for trail inventory to be completed along the Old Spanish National Historic Trail (NHT) to comply with the National Trails System Act of 1968. Commenters asserted that the proposed 50-meter buffer is inadequate where the NHT's congressional alignment has not been inventoried.	BLM notes commenters' preference for trail inventory to be completed along the Old Spanish National Historic Trail (NHT). While inventory work has been completed along segments of the trail within the Grand Junction Field Office, future inventory in accordance with BLM Manual 6280-1 is required. Additional discussion has been included in section 3.7.4 to explain that additional site-specific NEPA analysis would be conducted prior to authorizing any implementation actions which may impact the Old Spanish NHT and the BLM has the authority to require mitigation to avoid or minimize impacts during that site-specific NEPA evaluation.

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13	Private individuals	Analysis Methods (Visual Resources and Traffic Along Oil and Gas Access Roads)	Commenters expressed concerns regarding the effects on scenery created by road cuts as well as the impacts of vehicle traffic to public health and safety and wildlife habitat.	Section 102(a)(8) of FLPMA directs BLM manage public lands in a manner that will protect scenic values. Additionally, Section 101(b) of the National Environmental Policy Act of 1969 requires measures be taken to “assure for all Americans...aesthetically pleasing surroundings.” As described in Section 3.5.9 of the SEIS, all BLM-administered surface acreage is inventoried for scenic values and BLM manages visual values through the designation of Visual Resource Management (VRM) classes. VRM classes provide the visual management standards for the design and development of future projects and for rehabilitation of existing projects with visual design considerations incorporated into all surface disturbing projects regardless of size or potential impact, including the construction of new roads. Refer to section 3.8.1 for a discussion about potential impacts to public health and safety and wildlife habitat from increased traffic on access roads.
14	Western Environmental Law Center; Private individuals	Oil and Gas Development (site-specific/unit management)	Commenters requested that BLM clarify in the SEIS that lessees' surface use rights are subject to the RMP's terms, including terms provided for by land use plans either revised or amended after a lease is issued, and reaffirm the agency's authority to deny unit proposals in the new plan (as well as to provide explicit guidance and systematic review on unit size, unit suspensions, unitization, lease suspensions, and lease extensions associated with unit management) stating that such clarification in each of these areas is necessary to ensure that the administration and management of oil and gas units furthers the public interest and the intent of the program.	Valid existing rights would be honored with the rights given at the time the lease was granted as described in Section 1.4.3 on pp. 11-12 of the CRVFO RMP and Appendix B, Section B.1 on p. B-3 of the GJFO RMP. Lease notices and lease stipulations from the Approved RMPs would be applied to all new leases and to expired leases that are reissued. Unitization is described 43 CFR 3180 and would not be affected by the planning decisions made in this document.
15	Amphibian Refuge; Western Environmental Law Center; Roaring Fork Audubon; Colorado Wild	Fish and Wildlife/Special Status Species	Commenters requested a description of existing the amphibian environment and requested classification of the northern leopard frog as a BLM sensitive species. Commenters also generally requested updated/increased analysis of sensitive species, including BLM Sensitive species and the gray wolf, and inclusion of findings in CNHP's Climate Change Vulnerability Assessment (2015)	The Colorado BLM State Director’s Sensitive Species List was updated in 2023 to include several new wildlife species, all of which are discussed in the FEIS. Any species included on the prior version of this list from 2015 were discussed in the 2014/2015 CRVFO and GJFO Proposed RMP/FEIS documents, which can be found on ePlanning. This FEIS incorporates by reference everything covered in those documents. The roundtail chub, Colorado River cutthroat trout, golden eagle, canyon tree frog, northern leopard frog, midget faded rattlesnake, and burrowing owl are all included on the BLM Colorado Sensitive Species list. Bighorn sheep are also analyzed alongside other big game in the 2014-15 CRVFO and GJFO SEIS. The Canada lynx and gray wolf are federally listed and have been analyzed in a BA through consultation with the US Fish and Wildlife Service, as well as in the FEIS. All of these are species of special concern during BLM planning processes, and series of NSOs, CSUs, and TLs included in the 2015 GJFO and CRVFO RMPs provide specific protections to known habitat for these species during the fluid minerals permitting and leasing processes.

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16	Western Energy Alliance Private Individuals	Recreation	Commenters expressed concern over the apparent lack of supporting rationale for assertions that closing areas to mineral development would result in the creation of new recreational opportunities.	The BLM is not asserting that closing areas to mineral development would result in the creation of new recreational opportunities, nor singling out recreation as an alternative use as the basis for decisions under this plan. As described in section 3.6.I, “The BLM considers impacts to Recreation Setting Characteristics (RSCs) when evaluating site specific development proposals. RSCs are grouped into physical, social and operational RSCs. Oil and gas development has the potential to impact the physical, social and operational setting of BLM lands. Naturalness and remoteness are physical RSCs that can be impacted by oil and gas development. Social RSCs that can be impacted include encounters with other people and evidence of land use. Operational RSCs include public access, signs / information and management controls / regulations.” The BLM is disclosing quantifiable impacts that oil and gas development would have on recreation setting characteristics. Additional information was added to the section 3.6.I Recreation & Visitor Services, Direct and Indirect Impacts and Alternative E to provide examples on how oil and gas development impacts recreation setting characteristics.
17	Grand Mesa National Forest	Wild horses	Commenters requested additional information pertaining to existing wild horse herd numbers.	As of winter, 2024, there are about 220 horses on the Little Book Cliffs Wild Horse Range. The appropriate management level is 90 to 150 horses. A gather is planned for fall, 2024. Management of wild horses is outside of the scope of this project.
18	Mesa County; Office of Rep. Dan Newhouse	FLPMA and Multiple Use	Commenters stated that limits on production of oil and gas were inconsistent with FLPMA because implementing such limits would not allow public lands to be managed for multiple use.	The alternatives presented in the supplemental EIS are consistent with the Federal Land Policy and Management Act (FLPMA), which provides direction to the BLM on how to prepare land use plans. Section 103 includes definitions of key terms. "Principal or major uses" of public lands includes mineral exploration and production but also domestic livestock grazing, fish and wildlife development and utilization, rights-of-way, outdoor recreation, and timber production. The US Supreme Court has said “Multiple use management” is a deceptively simple term that describes the enormously complicated task of “striking a balance among the many competing uses to which land can be put” (Norton v. Southern Utah Wilderness Alliance, 542 US 55 (2004)). As defined in FLPMA, multiple use means "the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."
19	Mesa County; Associated Governments of Northwest Colorado; Western Energy Alliance	Helium	Commenters request that BLM establish an exemption for helium recovery.	Helium resources were reviewed and the area most conducive to economical helium extraction was left open to fluid mineral leasing in Alt G. An exemption for helium would not be appropriate at the RMP level, as helium is a constituent of the total raw fluid. Downhole separation does not exist; therefore, the hydrocarbons are produced along with the inert gasses.
20	National Association of Royalty Owners, Rocky Mountain Chapter	Private Minerals	Commenters expressed concern that closing Federal minerals adjacent to privately owned mineral rights would effectively block private minerals from development.	Access to private surface and private minerals would be unaffected by this planning effort as the management of these resources is regulated by the State of Colorado. The BLM does not have jurisdiction over development on private lands except for sub-surface mineral rights (split-estate) under private lands. In cases of FEE/FEE/FED development, the operator can choose whether to penetrate into the Federal mineral lease, while still producing private mineral zones independently. The privately held or state held mineral estate can continue to be drilled into and produced from private or state surface, without drilling into the Federal mineral estate. Developing private or state mineral estate adjacent to federal mineral estate can be achieved with alternate rig siting on private or state surface lands, using directional or horizontal drilling targeted to the private or state fluid minerals.

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21	Western States and Tribal Nations Natural Gas Initiative; Western Energy Alliance; Office of Rep. Dan Newhouse	Cumulative Impacts (Global Energy Security)	Commenters stressed that the BLM must consider global energy security and carefully weigh the environmental, economic, and energy security impacts associated with natural gas production.	The BLM recognizes the national and global factors impacting energy security and weigh those economic and energy security impacts. The BLM also recognizes the impact potential of air quality and emissions as adequately analyzed in Section 3.5.1 and the similarly broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency-wide emissions related to fossil fuel actions on public land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in the SEIS NEPA analysis and provides the information necessary to properly assess agency-wide, nationwide, and global impacts. The BLM has disclosed to the greatest extent feasible the potential impacts as part of a larger context.
22	Wilderness Workshop	Inventory and Management of Lands with Wilderness Characteristics	Commenters requested that specific areas be considered for lands with wilderness characteristics, including along the Ute Sweetwater trail.	<p>Section 201 of FLPMA requires the BLM to prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values, including wilderness resources. Since completing the 2015 CRVFO and GJFO Approved Resource Management Plans, the BLM continued to update the lands with wilderness characteristics inventories in the field offices. As part of the SEIS planning effort, both the CRVFO and GJFO are working to complete wilderness characteristics inventories for the entire planning area to ensure decisions to manage wilderness resources are made with the most current data.</p> <p>Section 202 of FLPMA provides the BLM with broad discretion and authority in deciding how to manage public lands, including management for the preservation of inventoried wilderness resources. The BLM protects wilderness resources with a range of prescriptions under Section 202. Lands with wilderness characteristics may be managed under a non-impairment standard (Section 202 WSA), managed with wilderness characteristics as a priority over other resources, or managed to emphasize other multiple uses while applying restrictions to minimize impacts to wilderness characteristics. The SEIS presents a range of alternatives that include several of these management prescriptions to protect wilderness resources on BLM-managed public lands throughout the planning area.</p>

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23	Western Energy Alliance	Closing Areas to Oil and Gas Development	Commenters expressed concern over blanket closures to leasing and development based on potential for oil and gas development. While commenters acknowledged that the Court found that BLM failed to assess an alternative with widespread closure to mineral leasing, they emphasized that the Court did not require that the BLM adopt or implement such management. Commenters suggested that the BLM could either use lease stipulations to protect other resources or could identify targeted areas for closure (e.g., SRMAs). Commenters noted that the Energy Policy Act of 2005 and Energy Policy Conservation Act Amendments of 2000 require the use of the least restrictive means necessary to protect other resources. Commenters also noted the BLM's 2005 Land Use Planning Handbook recommends that closures be implemented when resources cannot be protected with even the most restrictive lease stipulations.	<p>The closures to leasing and development considered by the BLM are consistent with the BLM’s discretion under the Mineral Leasing Act, multiple use mandate under FLPMA, and responsibility under NEPA to consider reasonable alternatives. The Mineral Leasing Act gives the BLM broad discretion to decide whether to lease lands for oil and gas development. BLM has complete discretion to decide which parcels are offered for lease sale.</p> <p>The BLM makes lands available for leasing in conjunction with the BLM’s duties under the FLPMA, which dictates the framework under which BLM manages public lands. FLPMA requires that “the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.” 43 U.S.C. § 1701(a)(8). The BLM Land Use Planning Handbook, H-1601-1 , further provides that the BLM must manage public lands in a manner that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; that will provide for outdoor recreation and human occupancy and use; and that recognizes the Nation’s need for domestic sources of minerals, food, timber, and fiber from the public lands by encouraging collaboration and public participation throughout the planning process. Consistent with the BLM Land Use Planning Handbook, H-1601-1, the BLM closes lands where it determines that other land uses or resource values cannot be adequately protected with even the most restrictive lease stipulations and appropriate protection can be ensured only by closing the lands to leasing. The principle of multiple use does not require that the BLM to prioritize development over other uses and the BLM has substantial discretion to decide how to achieve the multiple use and sustained yield objectives. Accordingly, BLM must apply management measures that not only impose the least restrictions to development, but also utilize and protect resource values in the combination that will best meet the present and future needs of the American people.</p> <p>Under NEPA, the BLM is under no obligation to consider every possible alternative to a proposed action but must analyze a reasonable range of alternatives. The BLM may reject alternatives that are it has in good faith rejected as too remote, speculative, or impractical or ineffective. See, e.g., <i>Colorado Envtl. Coalition v. Dombeck</i>, 185 F.3d 1162, 1174 (10th Cir. 1999). In <i>Wilderness Workshop v. United States BLM</i>, 342 F. Supp. 3d 1145, 1167 (D. Colo.), the U.S. District Court for the District of Colorado reviewed the BLM's 2015 Colorado River Valley Field Office ROD and Approved RMP in light of the BLM’s responsibilities under the FLPMA, MLA, and NEPA. The court specifically rejected the BLM’s decision not to analyze a closure of low and medium potential minerals, stating: “it seems a reasonable alternative would be to consider what else may be done with the low and medium potential lands if they are not held open for leasing.” (quoting <i>Rocky Mtn. Oil & Gas Ass’n v. Watt</i>, 696 F.2d 734, 738 n.4 (10th Cir. 1982)). The court found that the BLM violated NEPA by failing to closely study an alternative that closes low and medium potential lands when there is even a small chance of them being leased.</p> <p>The primary purpose of this planning action is for the BLM is to analyze additional alternatives with respect to the lands that are allocated as open or closed to oil and gas leasing in the planning decision areas, and to provide additional analysis of greenhouse gas emissions associated with the fluid mineral management alternatives considered in the final EISs and the supplemental EIS. The action alternatives, including the closure to leasing analyzed in Alternatives E, F, and G were designed to address these planning issues and maintain other resource values for future generations.</p>
24	Western Energy Alliance	Existing Wells in Areas Outside of High Potential Areas	Commenters expressed concern about the number of existing wells (and associated production of natural gas and oil) within areas classified as either no-known, low, or medium potential areas.	The wells used in examples from Western Energy Alliance are in existing lease areas. Leases currently held by production will remain open to development and will not be affected by potential closures. In addition, medium potential areas that are either adjacent to (CRVFO) or surrounded by (GJFO) high potential areas would remain open for oil and gas leasing.
25	Western Energy Alliance	New alternative: Hybrid	Commenters requested that BLM analyze a new alternative based on best available science, technological advancements, and existing and producing wells in and adjacent to the Piceance Basin.	<p>Refer to Appendix G for additional information about using the existing Reasonably Foreseeable Development scenarios to characterize mineral development potential.</p> <p>The BLM has analyzed, and selected as the proposed alternative, a hybrid Alternative G that incorporates aspects of the previously analyzed alternatives (A-F). This alternative incorporates the best available science and the input of cooperators and the public.</p>

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26	Western Energy Alliance Roaring Fork Audubon; Colorado Wild	Relationship to other state/local laws, regulations, and policies	Commenters expressed concern regarding the possible redundancy of protections in the RMP that would be duplicative of existing regulations under Colorado Parks and Wildlife and the Colorado Energy and Carbon Management Commission regarding protection of municipal watersheds and state parks.	The BLM has the authority to manage leasing of mineral resources on federal lands, which may include split estate lands where the federal government owns the mineral rights. In this case, BLM owns the sub-surface mineral rights for the state parks identified as closed to leasing. As a result, closing these areas to leasing is within BLM's jurisdiction. BLM has the authority to close the portions of municipal watersheds that are on BLM lands to leasing. State and local authorities have the authority to manage water quality and availability for each municipal watershed.
27	Private individuals	Watershed management: West Mamm Creek	Commenters requested no leasing in the watershed area of West Mamm Creek.	DOI-BLM-CO-G020-2023-0048-EA (West Mamm Creek Pipeline) was posted on ePlanning for public comment during the same timeframe as the EIS, and comments on development of the existing leases are most helpful when made directly to the associated planning efforts.
28	Western Environmental Law Center	Relationship to other planning efforts	Commenters requested BLM defer allocation of lands as open to leasing until determinations are made in sage-grouse habitat, to be determined according to Gunnison/ Greater Sage Grouse RMPA and Big Game RMPA, which are ongoing efforts.	Coordination with other ongoing planning efforts, including the 2024 Gunnison sage-grouse, greater sage-grouse, and big game RMPA/SEIS efforts, is described in Sections 1.7, 2.2.2 and 3.4.3 of this SEIS. Comprehensive resource management decisions being considered in other planning efforts (e.g., Big Game, GUSG, GRSB) are being considered holistically and cumulative analysis will address impacts where these decisions intersect (see Appendix J, Multi-Plan Fluid Minerals Specialist Report) to prevent inconsistencies in how these decisions will amend each field office's RMP. This supplemental EIS does not analyze fluid mineral leasing decisions for the specific purpose of the three RMP amendments (i.e., specific to wildlife habitat). If this supplemental EIS is completed prior to the other RMP amendments, the RMP amendments will amend the CRVFO and GJFO RMPs as appropriate. Management direction specific to big game, greater sage-grouse, or Gunnison sage-grouse, including any that may be less or more restrictive, could be amended through those planning processes. If any of the RMP amendments are approved prior to this supplemental EIS, those decisions will remain in effect, unless the supplemental EIS decision closes an area not closed by the RMP amendment decision.
29	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters called for BLM to distinguish levels of greenhouse gas emissions between project alternatives to allow for a comparison of the magnitude of impacts.	The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative GHG emissions are disclosed for each alternative, consistent with the CEQ's January 9, 2023 Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that "A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects." Cumulative impacts have been updated in the SEIS to disclose GHG emissions at additional scales. As described for the SEIS, instead of creating GHG emissions projections on hypothetical levels of new federal oil and gas development / production assigned for each field office that ultimately depends on prices and demand, the updated GHG emissions and climate change analysis leveraged the Energy Information Administrations' (EIA) model projections for various price / demand scenarios providing a wide enough range to describe the potential new oil and gas that could occur while operating under the various alternatives. The complex EIA model takes into consideration market (prices and demand) fluctuations at the global scale and is updated regularly (annually for long-term outlook and more frequently for short-term outlooks) with current data. The SEIS (section 3.5.1) has been updated to incorporate data and information from BLM's latest Annual GHG Report (version 2022).
30	Grand Mesa National Forest	Oil and gas	Commenters requested a description of the assumptions used to derive the estimate of wells forgone under both Alternatives E and F.	As described under Section 3.6.2 Energy and Minerals, the potential number of wells reduced (forgone) because of restrictions vary by alternative. Table 3.6-10 (CRVFO Number of Potential Wells Forgone over 20 Years due to Restrictions) and Table 3.6-12 (GJFO Number of Potential Wells Forgone over 20 Years due to Restrictions) shows these differences. The CRVFO has the potential for 58 forgone wells under Alternative E, 76 forgone wells under Alternative F, and 56 forgone wells under Alternative G. The GJFO has the potential for 541 forgone wells under Alternative E, 703 forgone wells under Alternative F, and 293 wells forgone under Alternative G.

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31	Colorado Offroad Trail Defenders	Designation of section 202 WSAs	Commenters expressed opposition to the designation under Alternative F of new Section 202 WSAs, stating that BLM's authority to designate new WSAs expired in 1993 and has not been renewed.	<p>As described in Section 3.7.1 of the SEIS, the BLM acknowledges Section 202 requirements to develop, maintain, and revise land use plans for public lands; and that these plans set the framework for management, use, and protection of the planning area. Additionally, under Section 603, Congress provided the BLM 15 years to complete a wilderness inventory of BLM-administered lands. Inventories conducted under Section 201 served as the basis for the wilderness review required under Section 603 of FLPMA. Following completion of the Section 603 wilderness review, the BLM's obligation to inventory for the presence or absence of wilderness resources on BLM-administered lands continued under Section 201 of FLPMA. Section 202 of FLPMA further provides the BLM with broad discretion and authority in deciding how to manage public lands, including management for the preservation of inventoried wilderness resources. The BLM continues to have discretion under Section 202 to designate a WSA (Section 202 WSA) and manage such areas of land to protect wilderness resources, including under a non-impairment standard.</p> <p>The BLM administers all WSAs under the management policies for WSAs (BLM Manual 6330, Management of Wilderness Study Areas) to avoid impairing the suitability of such areas for preservation as wilderness. Activities that would impair wilderness suitability are prohibited unless that use is grandfathered or a valid existing right that predates the BLM's designation of the area as a WSA. The BLM has discretion to modify Section 202 WSA designations through its land use planning process. This is in contrast with Section 603 WSAs, which the BLM must continue to manage under the terms of that provision until action by Congress. BLM's policy for management of Wilderness Study Areas can be found at https://www.blm.gov/sites/default/files/uploads/mediacenter_blmmanual6330.pdf.</p>
32	Environmental Advocacy NGO Consortium; Western Environmental Law Center	Consistency with other Federal rules and planning efforts	Commenters cited concurrent rulemaking processes and suggested delaying the issuance of a final RMP SEIS pending their conclusion to ensure consistency with those final rules.	<p>At the time of publication of the draft supplemental EIS, ongoing rulemaking processes included the BLM's Proposed Conservation and Landscape Health Rule, Proposed Rule on Fluid Mineral Leases and Leasing Process, and Proposed Renewable Energy Rule. Rules proposed by other agencies included the EPA's Methane Reduction Rule and the Council on Environmental Quality's Phase II NEPA regulation changes. Commenters also noted that the BLM must consider various other concurrent planning efforts such as the Western Solar Plan Programmatic EIS, the West-Wide Energy Corridor Review, and Colorado's Big Game and Sage-Grouse RMP amendments.</p> <p>The proposed action would be consistent with ongoing Federal rulemaking efforts. The primary focus of the supplemental EIS is to evaluate areas which should be closed to fluid mineral leasing and development, which is not in conflict with the Conservation and Landscape Health Rule. Other rules are focused more on implementation decisions such as the conditions under which the BLM would issue a specific lease (e.g., royalty rates, rentals, minimum bids, and bonding rates in the Fluid Mineral Leases and Leasing Process Rule) or specific conditions under which wells may operate (e.g., reducing methane emissions in the EPA's Final Rule for Oil and Natural Gas Operations). The supplemental EIS also complies with NEPA implementation regulations. A discussion of concurrent land use planning efforts is included in sections 2.2.2 and 3.4.3. The Western Solar Plan Programmatic EIS is not discussed because that planning effort is not changing any management decisions related to development of fluid minerals. The West-Wide Energy Corridor Review is not included because it does not include either the CRVFO or the GJFO.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
33	Western Environmental Law Center	Analysis Methods (Air Quality and Climate Change)	Commenters indicated that the SEIS did not adequately apply existing agency guidance for prioritizing action on climate change subject to Secretarial Order 3399, including approaches to mitigate the impacts of climate change, and that, overall, the analysis of GHG and climate change in the SEIS was inadequate.	The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative greenhouse gas (GHG) emissions are disclosed for each alternative, consistent with the CEQ's Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that "A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects." Cumulative impacts have been updated in the SEIS to disclose GHG emissions at additional scales. As described in section 3.5.1 of the SEIS, closures would have a local-scale impact and potentially reduce new federal oil and gas development. Federal oil and gas related GHG emissions associated with the scenario with the highest projected level of future oil and gas production and new development would likely result in minimal global impacts, for any alternative with lower levels of future federal oil and gas activity (and emissions), global impacts would be further insignificant. See response for Concern ID #3. The SEIS relies on several pieces of information to determine whether mitigation for upstream (BLM has not authority over downstream sources and most midstream activities) sources is necessary and would ultimately reduce global fossil fuel impacts on climate change. It was concluded that for all alternatives, new BLM federal oil and gas in the two field offices would have little impact to future global GHG emissions levels and climate change, and the existing stringent CDPHE regulations leave very few feasible upstream oil and gas emissions to control. The SEIS (section 3.5.1) has been updated to incorporate data and information from BLM's latest Annual GHG Report (version 2022).
34	Western Environmental Law Center	Alts: general comments	Commenters stated that assessing the relative magnitude of area (acreage) amongst alternatives gives the misleading impression that the new Alternatives (E and F) are significantly more restrictive than the previous alternatives assessed in the FEIS (Alternatives A, B, C, and D) when the amount of future fluid mineral leasing available under these new alternatives is not significantly different than the previous alternatives because the areas that remain open to future leasing are the areas where there is high potential for development.	The BLM acknowledges that potential impacts vary depending upon the analysis issue and metric used to compare alternatives. The BLM has provided an analysis of the potential impacts of the various alternatives in both acreages available for leasing and in potential numbers of wells reduced (forgone) because of restrictions on leasing. For some resource issues, such as wildlife habitat, the analysis of potential impacts to acres of habitat is the more meaningful metric use to compare alternatives. For other resource issues, such as socioeconomics, the analysis of potential wells that may be developed is a more relevant method to compare alternatives. The BLM has tailored the impacts analysis to specific issues. As described under Section 3.6.2 Energy and Minerals, the potential number of wells reduced (forgone) because of restrictions varies by alternative. Table 3.6-10 (CRVFO Number of Potential Wells Forgone over 20 Years due to Restrictions) and Table 3.6-12 (GJFO Number of Potential Wells Forgone over 20 Years due to Restrictions) shows these differences. Within the CRVFO, the alternatives range from 0 wells foregone under Alternative A to 75 wells under Alternative F. Within the Grand Junction Field Office, the alternatives range from 0 wells foregone under Alternative A to 703 wells under Alternative F.
35	Western Environmental Law Center; Private individuals	Water	Commenters expressed concern of lack of discussion, identification, updated impact analysis, and in some cases protections to water resources. Some commenters are specifically concerned about effects to groundwater, quality and quantity of water in current drought conditions, and the use of water resources during oil and gas development in open leasing areas under Alternative F.	Water use and protections would remain the same under alternatives A through F. Alternative G adopts NSO-6 that was included in Alternative C of the 2015 GJFO FEIS, which expands protection of municipal watersheds and source water protection areas. NSO-6 continues to include the Palisade and Grand Junction municipal watersheds and adds the Collbran and Mesa\Powderhorn source water protection areas as well as the Jerry Creek watershed. Other stipulations from Alternative B have also been included in Alternative G. The application of best management practices, drilling conditions of approval, and surface conditions of approval would also be in place to protect surface and groundwater resources. These protections are placed upon wells and well pads during the application process.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
36	Western Environmental Law Center	Authority for Requiring Mitigation	Commenters request the BLM reiterates its authority to require additional mitigation, apply conditions of approval, or deny proposals on existing leases.	The BLM discusses the ability to require mitigation or conditions of approval on site-specific project proposals throughout the supplemental EIS (e.g., sections 3.5.1 air resources, 3.5.2 soils, 3.5.3 water resources, 3.5.5 fish and wildlife, 3.5.6 special status species, 3.5.8 cultural resources, 3.5.9 visual resources, and 3.6.2 energy and minerals). All implementation decisions must be in conformance with the RMP and the BLM may either modify or deny proposals that are not in conformance (43 CFR 1610.5-3). The BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis. All mitigation/conservation measures not already required as stipulations would be analyzed in a site-specific NEPA document, and be incorporated, as appropriate, into conditions of approval of the permit, plan of development, and/or other use authorizations. In discussing surface use rights, 43 CFR 3101.1-2 states that the lessee has the right “to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource” but lessees are still subject to lease stipulations, nondiscretionary statutes, and “such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed”. Lessees are also required to conduct operations in a manner that not only “results in maximum ultimate economic recovery of oil and gas with minimum waste” but also “protects other natural resources and environmental quality” (43 CFR 3162.1). The BLM may require relocation of proposed operations by more than 200 meters and may prohibit surface disturbing operations for more than 60 days when such action has been deemed necessary, through a site-specific NEPA analysis, to minimize adverse impacts to other resource values, land uses, or users. The Interior Board of Land Appeals (IBLA) has also upheld the BLM's authority to impose more stringent protection measures on approval of development plans or permits than provided for in lease stipulations when supported by current science and analyzed through the NEPA process. (See, <i>William P. Maycock</i> , 177 IBLA 1 (2009); <i>Yates Petroleum Corp.</i> , 176 IBLA 144 (2008)).
37	US Environmental Protection Agency, Region 8	Water: Inclusion of Riparian Mapping	Commenters requested leasing exclusion zones be developed for wetlands, riparian areas, streams, stream crossings, and meadows using public spatial data sources such as the USGS National Hydrography Dataset and USFWS National Wetlands Inventory.	The alternatives include NSO and CSU stipulations that provide protections to wetlands, riparian areas, and streams. These areas are generally narrow and best suited for protection under these types of restrictions. Mineral leases would continue to be subject to existing regulations for protection of municipal watersheds and stipulations protecting high priority habitats, wetlands, and sensitive riparian areas.
38	Private individuals	Alternative F: Water	Commenters expressed support of Alternative F's protections for water resources, including protections for community water sources and proposed designations for Wild and Scenic Rivers (WSR).	BLM notes commenters' preference for elements contained under Alternative F, specifically protections for water resources, including protections for community water sources and proposed designations for Wild and Scenic Rivers (WSR). Mineral leases would continue to be subject to existing regulations for protection of water resources.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
39	Environmental Advocacy NGO Consortium	Special status species	Commenters request clarification and consistency across alternatives regarding Gunnison Sage-grouse.	<p>As described in section 2.2.2, the BLM is completing three separate RMP amendments which consider decisions related to oil and gas leasing and development for 1) big game corridors and other important habitat, 2) Gunnison sage-grouse, and 3) greater sage-grouse. This supplemental EIS does not analyze fluid mineral leasing decisions for the specific purpose of the three RMP amendments (i.e., specific to wildlife habitat). If this supplemental EIS is completed prior to the other RMP amendments, the RMP amendments will amend the CRVFO and GJFO RMPs as appropriate. Management direction specific to big game, greater sage-grouse, or Gunnison sage-grouse, including any that may be less or more restrictive, could be amended through those planning processes. If any of the RMP amendments are approved prior to this supplemental EIS, those decisions will remain in effect, unless the supplemental EIS decision closes an area not closed by the RMP amendment decision.</p> <p>As described in Section 2.5, Alternatives Considered but Eliminated from Further Consideration, "The BLM is currently developing an EIS for RMP amendments for Gunnison Sage-grouse and Greater Sage-grouse. Because the BLM has ongoing planning efforts comprehensively considering the management of Gunnison and Greater Sage-grouse, the BLM will consider appropriate management actions in those specific EISs, rather than in this supplemental EIS, to avoid conflicting decisions and to address management of those resources more comprehensively."</p> <p>Data used in concurrent planning efforts on GRSG and GUSG were aligned at the time of analysis for this 2024 FEIS, and all analysis of these species included in the FEIS has been done in coordination with those efforts. However, each planning effort has a different timeline, and data may change due to refinement during analysis during those concurrent efforts. The greater sage-grouse DEIS was made available for public comment on 3/15/24 and can be found online at: https://eplanning.blm.gov/eplanning-ui/project/2016719/570. The Gunnison sage-grouse DEIS was made available for public comment on 11/9/23 and can be found online at: https://eplanning.blm.gov/eplanning-ui/project/2019031/570</p>
40	Environmental Advocacy NGO Consortium; Colorado Wildlife Federation, Inc.	Alts: Alternatives not considered (new alternative suggestions, Special status species)	Commenters requested additional analysis and protections within Sage-grouse critical and suitable habitat, and within lek.	<p>As described in section 2.2.2, the BLM is completing three separate RMP amendments which consider decisions related to oil and gas leasing and development for 1) big game corridors and other important habitat, 2) Gunnison sage-grouse, and 3) greater sage-grouse. This supplemental EIS does not analyze fluid mineral leasing decisions for the specific purpose of the three RMP amendments (i.e., specific to wildlife habitat). Management direction specific to big game, greater sage-grouse, or Gunnison sage-grouse, including any that may be less or more restrictive, could be amended through those planning processes. As described in Section 2.5, Alternatives Considered but Eliminated from Further Consideration, "The BLM is currently developing an EIS for RMP amendments for Gunnison Sage-grouse and Greater Sage-grouse. Because the BLM has ongoing planning efforts comprehensively considering the management of Gunnison and Greater Sage-grouse, the BLM will consider appropriate management actions in those specific EISs, rather than in this supplemental EIS, to avoid conflicting decisions and to address management of those resources more comprehensively."</p> <p>The greater sage-grouse DEIS was made available for public comment on 3/15/24 and can be found online at: https://eplanning.blm.gov/eplanning-ui/project/2016719/570. The Gunnison sage-grouse DEIS was made available for public comment on 11/9/23 and can be found online at: https://eplanning.blm.gov/eplanning-ui/project/2019031/570</p>
41	Environmental Advocacy NGO Consortium	Inventory and Management of Lands with Wilderness Characteristics	Commenters expressed concern that BLM is prioritizing oil and gas over other important values like wilderness character, particularly in the South Shale Ridge area.	<p>Section 202 of FLPMA provides the BLM with broad discretion and authority in deciding how to manage public lands, including management for the preservation of inventoried wilderness resources. The BLM protects wilderness resources with a range of prescriptions under Section 202. Lands with wilderness characteristics may be managed under a non-impairment standard (Section 202 WSA), managed with wilderness characteristics as a priority over other resources, or managed to emphasize other multiple uses while applying restrictions to minimize impacts to wilderness characteristics. The SEIS presents a range of alternatives that include several of these management prescriptions to protect wilderness resources on BLM-managed public lands throughout the planning area.</p> <p>Alternative G does not propose South Shale Ridge for management as lands with wilderness characteristics; under this alternative approximately, 29,100 acres or 85% of the inventoried land with wilderness characteristics unit contains a No Surface Occupancy (NSO) stipulation. While BLM would emphasize other uses in this inventoried unit, there would be restrictions in place to minimize impacts to wilderness characteristics.</p> <p>Refer to section 3.5.10 for discussion about potential impacts to lands with wilderness characteristics from oil and gas development.</p> <p>BLM's policy for management of Wilderness Study Areas can be found at https://www.blm.gov/sites/default/files/uploads/mediacenter_blmpolicymanual6330.pdf.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
42	Environmental Advocacy NGO Consortium	Special status species	Commenters expressed concern regarding the clarity of the analysis of suitable and occupied habitats for listed and special status species under each alternative and requests BLM apply the strictest protections from oil and gas leasing for these habitats.	<p>The BLM and its partner organizations, including CPW and USFWS, work together to maintain and update inventory of occupied and suitable habitat for special status species (prioritizing federally listed species, species designated as sensitive by BLM Colorado, and species of special concern as listed in the 2014/15 GJFO and CRVFO EISs and updated in this SEIS). This habitat data is used to designate ACECs as well as stipulations listed in the 2015 GJFO and CRVFO RMPs. As stated in Section 1.3, this supplemental EIS does not reanalyze other potential decisions, that were analyzed in the 2014 and 2015 Final EISs. Mineral leases would continue to be subject to existing stipulations, including those which provide for the protection of special status species.</p> <p>Data relating to special status species have been updated for inclusion in the 2024 FEIS with the most current internal data (in coordination with concurrent planning efforts) as well as the most current data releases from partner organizations.</p>
43	Mesa County	ACEC Management	Commenters requested clarification regarding apparently duplicative management layers, citing as an example the lower portion of the Dolores River which is identified for both inclusion in the National Wild and Scenic River System ("NWSRS") and an ACEC.	<p>Through the land use planning process, BLM may designate ACECs to highlight areas where special management attention is needed to protect and prevent irreparable damage to important historic, cultural, and/or scenic values; fish, wildlife, or other natural systems or processes; or to protect human life and safety from natural hazards. Special management attention provided for ACECs are used to protect the relevant and important (R&I) values of an area from potential adverse effects. ACECs may be designated within areas with other special designations, such as Wilderness Study Areas (WSAs) or Wild and Scenic Rivers (WSRs), to allow for specific protection for those R&I values for which the ACEC is designated if determined the protection under other special designations is insufficient.</p>
44	Mesa County	Wild and Scenic Rivers	Commenters expressed concerns regarding WSR designations, specifically noting that designations should not be used to amend or restrict legally established lease rights, nor should they create unnecessary regulatory burdens or de facto restrictions on Mesa County citizens or adjacent property owners. Furthermore, commenters noted the lack of supporting materials showing that the BLM assessed the availability of unappropriated waters in the proposed steam segments.	<p>The BLM is required under the Wild and Scenic Rivers Act to identify all rivers on BLM-administered lands that possess free-flowing condition and outstandingly remarkable values and therefore may have potential for addition to the National Wild and Scenic Rivers System (NWSRS). Once study rivers are identified for their eligibility and suitability for designation, BLM policy directs the agency to make management decisions through land use planning that would protect and/or enhance the free-flowing condition, water quality, and outstandingly remarkable values of suitable rivers until Congress designates the river as a component of the NWSRS or releases the river for other uses.□New leases, licenses, and permits under mineral leasing laws may be made in BLM-identified study rivers, but consideration should be given to applying conditions necessary to protect the values of the river corridor in the event it is subsequently included in the NWSRS. Existing leases, licenses, and permits may be renewed and are subject to valid existing rights. Refer to section 3.7.3 for discussion about Wild and Scenic Rivers in the planning area.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
45	Western Environmental Law Center; Private individuals	Range of Alternatives	Commenters requested that BLM analyze additional alternatives, such as one that would focus on climate and air quality, protecting usable groundwater, or preserving the likely chance of avoiding 1.5 degrees Celsius warming and mitigates the local warming which has already exceeded this threshold.	<p>The purpose of this supplemental EIS is to broaden the range of alternatives in the 2015 CRVFO and GJFO Approved RMPs with respect to the lands that are allocated as open or closed for oil and gas leasing, rather than to eliminate a significant use of public lands in the CRVFO and GJFO. The supplemental EIS presents a range of alternatives that include proposed closure of areas to leasing based on development potential and resource conflicts.</p> <p>It is BLM policy, as derived from various laws, including the Mineral Leasing Act of 1920, as amended (30 United States Code [USC] 181 et seq.) and the FLPMA of 1976 (43 USC 1701 et seq.), to encourage development of mineral resources to meet national, regional, and local needs. The action alternatives were designed to fulfill the purpose of and need for the CRV/GJFO RMP/Supplemental EIS (outlined in Section 1.2, Purpose and Need), meet the BLM’s multiple-use mandates of FLPMA (43 USC 17 1716), and achieve the BLM’s mission to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. A "no leasing" alternative would not meet the purpose and need because it would not honor valid existing lease rights within the planning area.</p> <p>The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative GHG emissions are disclosed for each alternative, consistent with the CEQ’s Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that “A projection of a proposed action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.” Cumulative impacts have been updated in the SEIS to disclose GHG emissions at additional scales. See response for Concern ID #3. No additional alternatives are necessary as the current alternatives provide for a wide-range of local federal oil and gas development and production but as described in the SEIS, any possible alternative (including complete closure) would likely not affect future global GHG emissions levels and climate change. The SEIS GHG emissions analysis uses global emissions projections and climate modeling under the ~ 1.5 degrees C scenario for describing potential impacts associated with an adequate range of future projected emissions that cover all possible alternatives. A brief summary for EPA's latest rulemaking (OOOOb and OOOOc) has been included for the F-SEIS and it is described that this new regulation along with Colorado-specific requirements supports that there is very little methane (and VOC) that could be feasibly controlled for Colorado-based oil and gas sources making Colorado-based oil and gas some of the cleanest in the world. The SEIS (section 3.5.1) has been updated to incorporate data and information from BLM's latest Annual GHG Report (version 2022). The BLM would continue to implement Conditions of Approval for Surface Use and Drilling to protect surface waters and groundwater.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
46	US Environmental Protection Agency, Region 8 Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters suggested that the use of a regional modeling study for the Western U.S. to characterize regional air quality is not adequate to support an analysis of the air quality impacts that could be expected under the Preferred Alternative because it does not provide for field office level source apportioned effects.	<p>The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative GHG emissions are disclosed for each alternative, consistent with the CEQ’s Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that “A projection of a proposed action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.” Cumulative impacts have been updated in the proposed RMPA/final EIS (PRMPA/FEIS) to disclose GHG emissions at additional scales.</p> <p>The BLM’s approach recognizes that there are adverse environmental impacts associated with the development and use of fossil fuels on climate change; it quantifies potential GHG emission estimates and discusses potential climate change impacts qualitatively, thus effectively informing the decision-maker and the public of the potential for GHG emissions and the potential implications of climate change. This approach presents the data and information in a manner that follows many of the guidelines for effective climate change communication developed by the National Academy of Sciences (National Research Council 2010). It makes the information more readily understood and relatable to the decision-maker and the general public.</p> <p>The SEIS (section 3.5.1) has been updated to include data, information including future year ~2032 air quality and related values (visibility, deposition) predictions from BLM’s latest Regional Air Quality Modeling Study. As described for the SEIS, source apportionment modeling was included for the Study where new federal oil and gas in western Colorado was modeled separately. Existing, non-federal and Tribal oil and gas was also modeled in separate source groups. Western Colorado new federal oil and gas specific impacts are described for the SEIS. Field Office specific impacts can easily be deduced by zooming into the 12-km grid cells that cover the Field Offices and assuming that the western Colorado impacts are just associated with oil and gas in these Field Offices although there would be small contributions from WRFO to communities in the subject Field Offices. See more details regarding BLM Regional Modeling Study following this link (see "Quick Links"): https://www.blm.gov/programs/air-resources/colorado National Research Council. (2010). Informing an effective response to climate change: Washington D.C.,The National Academies Press.</p>
47	Private individual	Analysis Methods (Air Quality and Climate Change)	Commenters request a review of literature related to climate change, with a particular emphasis on the effects of grazing.	<p>The BLM routinely completes livestock management related environmental assessments and have found that BLM's stake in the overall livestock GHG emissions contribution is small and would have minimal impacts on climate change. BLM Colorado will continue to prepare brief analysis and discussion for grazing related assessments. The SEIS (section 3.5.1) has been updated to incorporate data and information from BLM's latest Annual GHG Report (version 2022) that provides a broader cumulative analysis of GHG emissions and climate change.</p>

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48	Western Environmental Law Center; Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters requested that BLM use a more thorough analysis of methane emissions that would result from development and a review of literature related to climate change. Commenters provided references for the Bakken and Permian Basin Study as well as an overall study regarding flaring. Commenters requested the BLM add stipulations that mandate the use of best available methane reduction technologies in a manner that would render it compliant with EPA's new rules.	Mineral leases would continue to be subject to existing stipulations, including those which provide for the use of best available methane reduction technologies in compliance with Federal regulations. The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative GHG emissions are disclosed for each alternative, consistent with the CEQ's Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that "A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects." Cumulative impacts have been updated in the SEIS to disclose GHG emissions at additional scales. The BLM's approach recognizes that there are adverse environmental impacts associated with the development and use of fossil fuels on climate change; it quantifies potential GHG emission estimates and discusses potential climate change impacts qualitatively, thus effectively informing the decision-maker and the public of the potential for GHG emissions and the potential implications of climate change. This approach presents the data and information in a manner that follows many of the guidelines for effective climate change communication developed by the National Academy of Sciences (National Research Council 2010). It makes the information more readily understood and relatable to the decision-maker and the general public. See response for Concern ID #33. It is likely that there is very little upstream (where BLM has authority) methane "wasted" to feasibly control as a result of CDPHE's recent regulation enhancements. The commenter references studies for Basins where oil is the most sought-after resources. That is not the case for the Piceance Basin where natural gas is the primary resource. The infrastructure for those other Basins has not historically been adequate to capture the co-produced natural gas from oil wells. That is not the case for gas wells in the CRVFO-GJFO. BLM Colorado is currently requesting operators to monitor for methane (they have an option to monitor for TVOCs, methane or a specific HAP) to meet Regulation 7 requirements to provide CDPHE (and BLM) with methane emissions data that in turn could be used to update regulations and conduct methane reduction tracking analyses with respect to overall Colorado GHG goals. National Research Council. (2010). Informing an effective response to climate change: Washington D.C., The National Academies Press.
49	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters requested that additional details regarding past and existing monitored air quality values and trends be reported in the SEIS, as well as maps of the monitoring sites that are relevant to the field offices, a table of background air pollutant concentrations using the most recent data, and an air quality trends analysis.	The SEIS (section 3.5.1) has been updated with affected environment data and information from BLM Colorado's latest annual report that includes discussion for air quality and related values (visibility, deposition) trends through year 2022.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
50	Colorado Department of Natural Resources; Environmental Advocacy NGO Consortium; Protegete Piceance; Western Environmental Law Center; Private individuals	Analysis Methods (Environmental Justice)	Commenters stated that the SEIS did not adequately address the issue of public health through the environmental justice analysis, requested the BLM to expand its consideration of screening tools, standards, and data sources to include those at the state level, and suggested the use of the Colorado EnviroScreen EJ Mapping Tool as an additional tool to characterize effects on Disproportionately Impacted Communities and urged the BLM to consider the state of Colorado’s EJ Task Force Recommendations. Commenters noted that minority populations are underrepresented in publicly available data sets, particularly in Garfield County and that some towns in the area exceed “meaningfully greater” environmental justice minority criteria.	<p>The BLM identifies, discloses, and analyzes potential impacts on public health in the SEIS, including in Section 3.9.1 and Section 3.5.1. In Section 3.9.1, Public Health and Safety, the SEIS describes impacts from transport of sediments and chemical pollutants to surface waters; and impacts on the public from noise and light pollution, periodically heavy truck traffic on access roads, and fugitive dust emissions. In Section 3.5.1, Air Resources and Climate, a discussion of volatile organic compounds and Hazardous Air Pollutants (HAPs) is provided which summarizes data published by the Garfield County Public Health Department and contained in the Garfield County 2020 Air Quality Monitoring Report.</p> <p>The SEIS was updated in Section 3.5.1 to provide additional detail and discussion to identify disadvantaged areas for ozone and particulate matter using EPA’s EJScreen indices. Other emissions data added from BLM’s 2023 Regional Air Quality Modeling Survey shows maximum modeled cumulative ozone 8-hour concentrations and contributions from new federal oil and gas in the two Colorado source groups to all areas in Colorado including Class I areas as well as contributions to future cumulative ozone concentrations associated with all other source groups modeled including new Tribal and total non-federal oil and gas emissions sources. Updated information in section 3.5.1 also addresses air toxics cancer risk due to cumulative oil and gas development operations. For conducting future project-level analyses under the plans, project-specific emissions inventories would be developed using operator-provided data and information when details about a proposed action are known, including exact physical location. Those refined project-level air quality and related values analyses would be conducted considering EJ and any local disadvantaged communities. Project-specific mitigation could be required based on details for a proposed action including how close sensitive receptors (residences, etc.) are to emissions sources, complex topography and duration of emissions with respect to ambient air quality standards.</p> <p>The BLM also acknowledges Colorado regulations, priorities, policies, and data tools related to Environmental Justice, particularly Colorado HB21-1266 and recommendations from the Colorado Environmental Justice Action Task Force. The SEIS was updated in Section 3.9.3, Environmental Justice to acknowledge that BLM considered additional screening tools including the Colorado Department of Public Health and Environment’s Colorado EnviroScreen tool, legislation, and EJ guidance and recommendations provided by the Environmental Justice Action Task Force. In addition, Section 3.9.3 of the SEIS discloses that the exact level and intensity of EJ impacts cannot be determined in the context of an RMP supplemental EIS. This is because information on future site-specific factors (for example, additional oil and gas well locations and their proximity to potential EJ populations) is not currently available at this planning level of analysis. The degree to which any implementation impacts would disproportionately or adversely affect EJ populations would be determined at the site-specific scale in future NEPA analyses.</p> <p>The BLM updated EJ data in Section 3.9.3 to reflect the most recent data and to also update the reference populations from statewide to non-metro to more accurately align with the economics of the study area. As a result of using the updated reference populations, Garfield County met the criteria for the meaningfully greater analysis, and therefore has meaningfully greater minority populations identified. The analysis presented in the SEIS adequately analyzed potential environmental justice communities of concern and complies with the requirements set forth in CEQ guidance, Executive Order 12898, and BLM policy (as contained in BLM’s Land Use Planning Handbook and BLM’s IM 2022-059) determining whether proposed actions would have disproportionately high and adverse environmental impacts to environmental justice populations of concern. The BLM uses tools and resources outlined in EJ guiding documents such as the BLM IM 2022-59 Addendum to the IM to identify EJ populations, including EPA’s EJScreen.</p> <p>The analysis presented in the SEIS complies with the requirements set forth in CEQ guidance, Executive Order 12898, and BLM policy (as contained in BLM’s Land Use Planning Handbook and BLM’s IM 2022-059) determining whether proposed actions would have disproportionately high and adverse environmental impacts to environmental justice populations of concern. BLM uses tools and resources outlined in EJ guiding documents such as the BLM IM 2022-59 Addendum to the IM to identify EJ populations, including EPA’s EJScreen.</p>
51	Grand Mesa National Forest	Analysis Methods (Air Quality and Climate Change)	Commenters requested more clarification of the impacts based on the number of wells across all alternatives.	The SEIS (section 3.5.1) has been updated with data, information and results from BLM's latest Regional Air Quality Modeling Study that includes details for the oil and gas projections modeled (new well counts, etc.). The SEIS discussion has been updated to describe how input and output for the Regional Modeling Study can be extrapolated across the Alternatives.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
52	Grand Mesa National Forest	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the air quality analysis contained in the SEIS incorporate the interim guidance for analyzing greenhouse gas (GHG) and climate change effects of proposed actions under the National Environmental Policy Act (NEPA) issued by the Council on Environmental Quality (CEQ) on January 9, 2023.	The BLM analyzes potential impacts, including cumulative impacts, from climate change and GHG in detail in the SEIS. The SEIS complies with EO 13990. Section 5 of EO 13990 emphasized how important it is for Federal agencies to “capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account” and established an Interagency Working Group on the Social Cost of Greenhouse Gases (IWG). In February 2021, the IWG published Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990 (IWG, 2021). This is an interim report that updated previous guidance from 2016. For Federal agencies, the best currently available estimates of the SC-GHG are the interim estimates of the social cost of carbon dioxide (SC-CO2), methane (SCCH4), and nitrous oxide (SC-N2O) developed by the IWG on the SC-GHG. Select estimates are published in the IWG Technical Support Document and the complete set of annual estimates are available on the Office of Management and Budget’s website. The IWG’s SC-GHG estimates are based on complex models describing how GHG emissions affect global temperatures, sea level rise, and other biophysical processes; how these changes affect society through, for example, health, agricultural, or other effects; and monetary estimates of the market and nonmarket values of these effects. The SC-GHG estimates and overall GHG analysis in the SEIS are consistent with CEQ’s latest 2023 guidance on addressing climate change in NEPA analysis and BLM’s policy for addressing SC-GHG.
53	Grand Mesa National Forest	Coal	Commenters request that BLM review the discussion pertaining to coal in Section 3.6.2 of the SEIS, which incorporated by reference information from the 2014 RMP/EIS and include any new information that should be considered for the analysis of cumulative effects.	There are no new coal leases or any new coal developments within the CRVFO or GJFO so there isn't any new information to consider.
54	US Environmental Protection Agency, Region 8	Analysis Methods (General)	Commenters recommended that the BLM provide more detail in the impact analysis. Commenters noted that the RMP stage of analysis provides an opportunity to examine impacts at a broad scale, which may be overlooked at the project level. Commenters also noted that that the BLM may defer site-specific analysis until the application for permit to drill (APD) stage, which is typically not subject to public review.	The BLM’s analysis of oil and gas development occurs in three distinct steps, all of which involve various levels of public notification. The first, as in this supplemental EIS, is at the landscape level where the BLM is considering the impacts of broad management decisions and, in this planning effort, the potential impacts of which areas would be open or closed to fluid mineral leasing. Public involvement for an EIS is required for both scoping (announced via a Notice of Intent) and for public comment on the draft supplemental EIS (announced via a Notice of Availability). The next level of analysis occurs during the leasing stage. The BLM typically announces opportunities for public input during scoping and review of the environmental assessment (EA) with a press release. At the leasing stage, the BLM’s analysis focuses on specific lease parcels and becomes more detailed as we have a better understanding of which resources may be impacted by development and can apply appropriate lease stipulations. The final level of analysis occurs once industry proposes site-specific development proposals. It is at this stage in the process, where the BLM can conduct the most detailed analysis since the exact location and design of the proposed development is known. The decision on whether to offer a formal scoping opportunity or public comment is at the discretion of the Field Manager and is often informed by the perceived level of public interest. Regardless, all projects are posted on the BLM’s ePlanning NEPA register. In addition, any member of the public may contact the field office and request to be notified of any future actions that they are interested in and the BLM will contact them directly about those projects/topics.

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55	The Wilderness Society	Use of best available science and information	Commenters asked that BLM consider several informational resources and studies that were provided during the public scoping phase through comments submitted by the following entities: Colorado Wildlands Project, The Wilderness Society, Wilderness Workshop, Rocky Mountain Wild, National Parks Conservation Association, Defenders of Wildlife, Conservation Colorado, Sheep Mountain Alliance, Western Colorado Alliance, Earthjustice, Conservation Lands Foundation, Great Old Broads for Wilderness – Grand Junction Broadband, and Audubon Rockies.	In regard to comments for Air Resources (Air Quality and GHGs) including Attachment K, see BLM response for Concern ID #61. As it pertains to Attachment J and other comments related to Socioeconomics, BLM considered the information in the SEIS, and has accounted for socioeconomic impacts in the SEIS through an adequate and reasoned methodology, which is based on future development assumptions per the RFD. Refer to Appendix G for a description of the reasoning for the use of the existing RFDs to characterize mineral development potential. The SEIS does already characterize, at least to some extent, existing market forces for the oil and gas industry in the decision area, including employment and other socioeconomic trends.
56	Grand Mesa National Forest	Analysis Methods (Social and Economic Conditions)	Commenters pointed to a specific calculation presented in the socioeconomic analysis and requested review and confirmation to ensure the accuracy of the information presented.	The Final SEIS (section 3.9.2) now contains an in-text correction and clarification that, since Alternative F would result in an increase of 30 percent more federal lands closed to mineral production, it is estimated that the resulting economic effects could be expressed as a multiple of 1.3 for each of the effects described under Alternative E.
57	Environmental Advocacy NGO Consortium; The Mountain Pact	Relationship with executive orders	Commenters requested that the proposed action align with the goals set forth in Executive Order 14008 "Executive Order on Tackling the Climate Crisis at Home and Abroad".	<p>The BLM has accounted for climate impacts in the SEIS through a reasoned methodology whereby direct, indirect, and cumulative GHG emissions are disclosed for each alternative, consistent with the CEQ's Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84 Federal Register 30097), which states that "A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects." Cumulative impacts have been updated in the proposed RMPA/final EIS (PRMPA/FEIS) to disclose GHG emissions at additional scales.</p> <p>The BLM's approach recognizes that there are adverse environmental impacts associated with the development and use of fossil fuels on climate change; it quantifies potential GHG emission estimates and discusses potential climate change impacts qualitatively, thus effectively informing the decision-maker and the public of the potential for GHG emissions and the potential implications of climate change.</p>
58	Western Environmental Law Center	Relationship with State regulations and policies	Commenters requested that BLM demonstrate consistency with State of Colorado policies, statutes, and regulations addressing climate and related issues, in particular 2021 House Bill 21-1266 (requiring a 60% reduction in greenhouse gas emissions from the oil and gas sector) and House Bill 21-1189 (requiring the monitoring of toxic air pollutants).	The latest CDPHE oil and gas regulation updates were primarily aimed at meeting State GHG emissions reduction goals for oil and gas development. It is likely that there is very little upstream (where BLM has authority) methane wasting / emissions that will occur as a result of the latest regulations. It is possible that CDPHE would need to require additional emissions controls for the oil and gas sector. BLM Colorado is currently requesting operators to monitor for methane (they have to option to monitor for TVOCs, methane of a HAP) to meet Regulation 7 requirements to provide CDPHE (and BLM) with methane emissions data that in turn could be used to update regulations and conduct methane reduction tracking analyses with respect to overall Colorado GHG goals. BLM Colorado requires that oil and gas operators submit project-specific details into our online emissions inventory system and would continue to review each project separately to ensure that operators are adequately accounting for the latest regulation requirements. A brief summary for EPA's latest rulemaking (OOOOb and OOOOc) has been included in section 3.5.1 and it is described that this new regulation along with Colorado-specific requirements supports that there is very little methane (and VOC) that could be feasibly controlled for Colorado-based oil and gas sources making Colorado-based oil and gas some of the cleanest in the world.

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59	Associated Governments of Northwest Colorado; Mesa County; Colorado Office of Rep. Dan Newhouse; The Daily Sentinel Grand Junction; Colorado Western Energy Alliance; Western Environmental Law Center; Western States and Tribal Nations Natural Gas Initiative; Private individuals	Reasonable Foreseeable Development (RFD)	Commenters objected to the use of the 2008 and 2012 Reasonably Foreseeable Development (RFD) reports as a basis for the decision to close areas with no, low, or medium potential to future leasing, suggesting that the reports are outdated given their reliance on a USGS assessment from 2002. Commenters requested that BLM update the RFD for the planning area and reclassify what is no-known, low, medium, and high potential based on the most current USGS assessment from 2016 as well as meeting with oil and gas operators to identify additional relevant data sources can be used to create updated RFDs.	The 2016 assessment was reviewed by the field office team and was found to be a more in-depth analysis of the Mancos/Mowry TPS. Though the USGS assessments have shown increased estimates of fluid mineral reserves in the Mancos/Mowry Total Petroleum System (TPS), and Mesaverde TPSs in the Piceance Basin, the published RFDs are still valid because the deeper Mancos and Niobrara formations have not been targeted for drilling in the decision area since 2016. Market conditions and state regulations appear to have affected fluid mineral development more than geology and estimated reserves. Approximately 85 percent of the Piceance Basin fluid mineral reserves would be captured within the High Potential and Medium Potential adjacent to High potential, and not closed under other planning efforts, that would still be open to new leasing under Alternative G of the SEIS. The 2016 USGS Assessment updated previous estimates of total recoverable fluid minerals from the 2002 assessment, but the formation locations did not change. The BLM reviewed the USGS assessments and recent development trends and determined that the RFDs remain valid and appropriate to inform land management decisions. Refer to Appendix G for additional discussion of the RFDs and USGS assessments.
60	Mesa County	Analysis Methods (Air Quality and Climate Change)	Commenters stated that the analysis of air quality and GHG effects in the SEIS was deficient because it did not consider changes to oil and gas technology, monitoring, and regulatory compliance that has been required since the passage of Colorado State Senate Bill 19-181.	There were updates for the F-SEIS including discussion related to the latest oil and gas regulation enhancements, and how federal oil and gas is (and will) be affected by the latest technological evolutions and regulations. BLM Colorado requires that oil and gas operators submit project-specific details into our online emissions inventory system, and develops emissions inventories based on the provided data and information for all processing including site construction, drilling fracking, traffic, product storage and on-site production phase equipment including heaters and engines. BLM uses the input and output that account for the latest technologies and regulations to conduct air quality analyses and make NEPA decisions. This process will continue for future oil and gas projects under the Plans. These operator-specific data are also used to inform emissions inventories for broad-scale (CARMMS, Regional Modeling Study) modeling studies that describe potential quasi and cumulative air quality impacts that could be associated with new federal oil and gas.

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61	Protegete Piceance; Save West Mamm Creek Coalition; Western Environmental Law Center; Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters requested additional analysis regarding air quality and climate related impacts on disproportionately impacted communities (DICs), including localized health risks, for each alternative, stating that existing data such as local air quality monitoring sites do not support statements in the SEIS that regional air quality is stable or improving. Specifically, the commenters state that visibility monitoring and trends from Interagency Monitoring of Protected Visual Environments (IMPROVE) data show worsening visibility trends in many of the impacted protected areas in the planning areas. Commenters also discuss BLM 2020 annual report analysis that describes that new oil and gas for the CARMMS "low" scenario is being exceeded and that new cumulative oil and gas developed exceeds the DAT for CARMMS 2.0. Commenters requested stronger guidance and the development of standards with specific stipulations aimed at protecting DICs from oil and gas production, including but not limited to minimum 1-mile setback requirements from communities.	<p>See response for Concern ID #49, #50, #60, and #85. The F-SEIS (section 3.5.1) has been updated with data, information and results from BLM's latest Regional Air Quality Modeling Study. For the F-SEIS update, GIS was used with DIC data (layers) along with Regional Modeling Study data to create information specifically describing how existing and future projected oil and gas could impact DIC in the subject Field Offices and nearby areas. With regards to the CARMMS 2.0 modeling analysis being used to inform for potential new oil and gas impacts, the modeled impacts for the CARMMS 2.0 "low" showed that BLM contribution to cumulative air quality conditions would be well below significant impact levels and if oil and gas is tracking above the "low" scenario levels does not mean that new federal oil and gas would be significantly impacting air quality conditions for areas in and around the Field Offices. The DAT was used for comparison purposes only as the DAT is applicable for individual projects and not for comparing cumulative (multiple projects) levels to.</p> <p>Table 7-3 of the BLM 2021 GHG Report shows the projected "time to exhaust the global carbon budget in years" with and without total U.S. future federal oil and gas development and supply. As shown in the table, the difference (in years) to exhaust the cumulative GHG budget with and without future federal oil and gas is minimal ranging from 7.98 to 12.97 with federal oil and gas and 8.06 to 13.09 without federal oil and gas, meaning that without federal oil and gas, the global carbon budget exhaustion would occur approximately 1-2 months (~ 0.12 of a year) later.</p> <p>As described within the "Air Quality and Related Values (non-GHGs)" sub-section of this SEIS, BLM Colorado conducts project-level assessments using operator provided input specific for each project and refined analysis tools. Depending on the design features and plans for a proposed action, mitigation could be required to reduce air pollutant emissions for activities within a mile of a sensitive receptor (residence, etc.). As operators evolve to cleaner technologies and follow best management practices, oil and gas exploration and production could responsibly occur within a mile of a public ambient receptor; the BLM would continue to determine potential setback / mitigation at the project-level analysis stage.</p>

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62	Mesa County; Western States and Tribal Nations Natural Gas Initiative	Analysis Methods (Air Quality and Climate Change)	Commenters stated that the analysis of air quality effects should consider the net carbon reduction benefits of natural gas produced from western U.S. basins such as the planning area, which provides cleaner baseload power to displace higher carbon fuels and foster renewable energy deployment by balancing intermittency issues. Comments noted that reduced production in western Colorado would result in increased production in states with less stringent regulatory requirements, resulting in greater adverse effects to air quality and GHG emissions. Commenters also requested that relevant climate-related literature pertaining to exports of liquified natural gas (LNG) be reviewed, stating that similar benefits would occur from LNG production and export from within the region.	Information related to much of the request was included in the draft SEIS. Information was added for the final SEIS (section 3.5.1) that further supports this discussion.
63	Western Environmental Law Center; Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters recommended discussing each Alternative's potential GHG emissions in the context of state, national and international GHG emissions reduction goals and constructing alternatives for leasing and development that are aligned with scientific climate thresholds. Commenters request that BLM develop a CRVFO-GJFO GHG emissions budget and use latest available climate science.	See responses to previous comments including those for Concern ID # 3 and Concern ID #29. With regards to Planning Area specific budget, the SEIS discusses the likelihood of global GHG emissions level impacts associated with that under BLM authority for the two Field Offices and as described, the upstream (portion under BLM's authority) is very small and not expected to cause any changes in global GHG emissions levels and climate over the life of the Plans. Therefore, a budget specific to upstream federal oil and gas emissions for the subject Field Offices would not be useful in helping to inform future decision-making by the BLM.
64	Western Energy Alliance	Analysis Methods (Air Quality and Climate Change)	Commenters suggested that the air quality analysis provide greater context for the level of GHG emissions expected under each alternative by including additional comparisons to other familiar metrics, such as the annual average GHG emissions occurring from vehicles.	Updates were made for the SEIS (section 3.5.1) including estimated GHG emissions equivalences for the range of projected GHG emissions presented using EPA's equivalencies calculator.

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65	Colorado Department of Natural Resources	Analysis Methods (Air Quality and Climate Change)	Commenters stated that the analysis of air quality and GHG effects in the SEIS was deficient because it did not provide an analysis or discussion of the differences in potential air quality impacts between the alternatives and called for the inclusion of estimated well counts for the alternatives and discussion of how the scenarios included in referenced RMPs/Final EISs are different from the new alternatives.	The SEIS (section 3.5.1) has been updated with data, information and results from BLM's latest Regional Air Quality Modeling Study that includes details for the oil and gas projections modeled (new well counts, etc.). The SEIS discussion has been updated to describe how input and output for the Regional Modeling Study can be extrapolated across the Alternatives.
66	Associated Governments of Northwest Colorado; Mesa County; Western Energy Alliance; Western States and Tribal Nations Natural Gas Initiative	Analysis Methods (Social and Economic Conditions)	Commenters called for the SEIS to include more information acknowledging the role oil and gas exploration and production play in economic development through tax contributions and employment and for a more robust analysis of effects to the economy from closures, timing limitations, and other restrictions. They also suggested several economic reports which provide relevant data.	The BLM adequately analyzed social and economic impacts in the socioeconomics (Section 3.9.2) of the SEIS. The analysis provides a detailed discussion of existing socioeconomic conditions within the socioeconomic study area including population demographics, economic and workforce conditions, and revenues derived from mineral extraction. The BLM provides detailed employment and income data and adequately analyzed the importance of industries to the local economy. Employment and labor earnings in specific industry sectors such as mining (includes oil and gas) by county are included. As stated in the SEIS, the mining sector share (including oil and natural gas) of the 2.6 million overall employment in Colorado was about 0.8 percent in 2020 (an estimated 21,614 workers) across the four-county area. The four-county area has a history of oil and gas development and the ties with this industry are most notable in Garfield and Mesa County, which has levels of employment in the mining industry (3.2 percent and 1.8 percent, respectively) that are well above state levels (0.8 percent). The discussion also provides details, where available, pertaining to the specific contributions from BLM-administered lands and resources, including federal minerals; and an overview of populations for future EJ considerations. Section 3.9.2. also provides a detailed discussion of how local economies benefit directly and indirectly from expenditures and revenues generated by a variety of activities on BLM-administered lands within the four-county study area. The nature and type of effects on social and economic conditions are adequately analyzed in terms of how management actions would affect fluid mineral development and production, particularly the potential economic impact of jobs, income, economic output, and tax revenues. Further, development of mineral resources is of primary importance in the study area economy. Details of the contributions of these resources are discussed in Section 3.6.2, Energy and Mineral Development. The BLM has added relevant references from commenters to the final SEIS.

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67	Mesa County	Analysis Methods (Social and Economic Conditions)	Commenters indicated in the SEIS that BLM has evaluated the cumulative effects of all pending BLM plans and how the various closures, timing limitations, and other restrictions proposed will impact the economic and socioeconomic viability of Mesa County. When combined, nearly every part of the 73% of Mesa County managed by federal land managers faces some form of restriction. While this may not be the intention, the comprehensive impacts of these restrictions on Mesa County need careful consideration by decision-makers.	The BLM is considering the cumulative impacts of this SEIS. Appendix J provides additional details regarding the cumulative impacts of the combined plans. The BLM adequately analyzed social and economic impacts in the socioeconomics (Section 3.9.2) of the SEIS. The analysis provides a detailed discussion of existing socioeconomic conditions within the socioeconomic study area including population demographics, economic and workforce conditions, and revenues derived from mineral extraction. BLM provides detailed employment and income data and adequately analyzed the importance of industries to the local economy. Employment and labor earnings in specific industry sectors such as mining (includes oil and gas) by county are included. As stated in the SEIS, the mining sector share (including oil and natural gas) of the 2.6 million overall employment in Colorado was about 0.8 percent in 2020 (an estimated 21,614 workers) across the four-county area. The four-county area has a history of oil and gas development and the ties with this industry are most notable in Garfield and Mesa County, which has levels of employment in the mining industry (3.2 percent and 1.8 percent, respectively) that are well above state levels (0.8 percent). The discussion also provides details, where available, pertaining to the specific contributions from BLM-administered lands and resources, including federal minerals; and an overview of populations for future EJ considerations. Section 3.9.2. also provides a detailed discussion of how local economies benefit directly and indirectly from expenditures and revenues generated by a variety of activities on BLM-administered lands within the four-county study area. The nature and type of effects on social and economic conditions are adequately analyzed in terms of how management actions would affect fluid mineral development and production, particularly the potential economic impact of jobs, income, economic output, and tax revenues. Further, development of mineral resources is of primary importance in the study area economy.
68	Western Energy Alliance	Analysis Methods (Social and Economic Conditions)	Commenters indicated in the SEIS that BLM should conduct a proper socio-economic assessment regarding the true impact of Alternative E on decreased production; lost jobs; less federal, state, and local tax revenue; and indirect economic effects.	The BLM adequately analyzed social and economic impacts of all alternatives. Alternative E was adequately analyzed in Section 3.9.2 Social and Economic Conditions, particularly for employment, labor income, value added from forgone fluid mineral, and estimated annual oil and gas royalty revenues. Direct, indirect, and induced impacts were adequately analyzed, and details are provided in this section.
69	Western Energy Alliance	Inter-agency consultation/ coordination	Commenters expressed concern over BLM's right to administer leasing closures for areas managed by state and local agencies, such as municipal watersheds and state parks, and requests removal of these local government managed areas from the SEIS's oil and gas leasing closures.	The BLM has the authority to manage leasing of Federal mineral resources, which may include split estate lands where the federal government owns the mineral rights but not the surface estate. Closing these areas to leasing is within BLM's jurisdiction. When developing land use plans, the BLM's management must be consistent with the plans, policies, and programs of other Federal agencies, State and local governments, and Indian tribes as long as that guidance is also consistent with Federal laws and policies applicable to public lands (43 1610.3-2(a)). When the BLM publishes the final supplemental EIS, it will formally request a "consistency review" by the Governor of Colorado. The Governor has 60-days to inform the BLM of any management actions within the proposed RMP alternative that he finds inconsistent with any State or local plans, policies, or programs (431610.3-2(e)). The BLM must address any consistency concerns prior to issuing the Record of Decision.
70	Western Energy Alliance	Wind and Solar Energy Development	Commenters expressed concern over BLM's lack of analysis of land impacts caused by wind and solar energy development.	Discussion of wind and solar energy development are outside the scope of this SEIS. BLM is developing an updated plan to guide responsible solar energy development on public lands through the Utility-Scale Solar Energy Development PEIS/RMPA (DOI-BLM-HQ-3000-2023-0001-RMP-EIS) which would help accelerate and continue momentum for the clean energy economy. Information on this planning effort is available here: https://eplanning.blm.gov/eplanning-ui/project/2022371/510 .

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71	Environmental Advocacy NGO Consortium; Grand Valley Outdoor Recreation Coalition; Honu Studio; The Wilderness Society; Private individuals	Analysis Methods (Social and Economic Conditions)	Commenters called for additional context in the discussion of nonmarket values to describe the beneficial effects that a reduction in oil and gas leasing would have on public health and safety. Additionally, commenters pointed to research indicating that communities can benefit from economic activity related to tourism and recreation, as opposed to oil and gas development, and that rural western counties with a higher dependence on extractive industries show lower income and employment growth compared to other non-extractive resource dependent communities.	BLM's IM 2013-131 encourages but does not require quantification of nonmarket values. The qualitative analysis in the SEIS of nonmarket values is sufficient to inform management decisions, particularly given that nonmarket values are just one of many analysis perspectives and types of values the BLM must consider when choosing between the action alternatives given the requirement under FLPMA to manage public lands for multiple uses. The BLM manages for multiple uses and sustained yield as required by Section 202(c)(2) of the FLPMA which requires the BLM to integrate physical, biological, economic, and other sciences in developing land use plans (43 USC 1712(c)(2)), and these uses include extractive as well as recreation, conservation, and other non-extractive uses. The BLM acknowledges the research indicating that communities can benefit from economic activity related to tourism and recreation and acknowledges that communities in the planning area are impacted by outdoor recreation. Tourism and recreation make significant contributions to the economy of the local economy, as described in Section 3.9.2. Sections 3.6.1 and 3.9.2 analyze the potential impacts that the planning decisions would have on recreation and tourism in local communities across alternatives. More detail is described in the 2014 and 2015 Proposed RMPs/Final EISs (BLM 2014, Recreation and Visitor Services, pages 3-149 through 3-158; BLM 2015a, Recreation and Visitor Services, pages 3-187 through 3-197). BLM incorporates EJ efforts into the planning process by identifying potential areas where proposed action(s) could have disproportionately high and adverse impacts on the health of minority populations, low-income communities, and tribes or their surrounding environment, and documenting findings and recommended solutions, as outlined in Section 3.9.3. Nonmarket values and ecosystem services were adequately analyzed and considered in the evaluation of the alternatives in Section 3.9.2. NEPA does not require a cost-benefit analysis (40 CFR 1502.23), although it does require consideration of economic and social effects (40 CFR 1508.8(b)) and does not customarily do so for associated NEPA analyses. The analysis notes that the potential for localized impacts on quality-of-life indicators due to loss in oil and gas development also could occur depending upon the level of anticipated reduction. BLM-administered actions that change development levels or have population growth-inducing effects could change the social setting and nonmarket contributions for communities and groups of interest is also noted. Public Health and Safety is adequately addressed in Section 3.9.1.
72	Private individuals	Public outreach	Commenters expressed support for the BLM's current efforts to engage communities in public meetings, including providing translation services, and encourages the BLM to increase community engagement opportunities utilizing the CDPHE EJ Task Force Recommendations guide.	The BLM acknowledges the positive feedback on our outreach efforts. Thank you.
73	Private individuals	Mapping and GIS-related comments	Commenters state that in-text tables are not adequate to understand oil and gas development potential in the planning area or the oil and gas leasing alternatives and requests map figures be added for those resource uses.	For Alternative G, the BLM has prepared additional maps depicting some of the resource-specific closures (Appendix I). In addition, the BLM has made GIS data of these areas available.

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74	The Wilderness Society; Private individuals	Analysis Methods (Social and Economic Conditions)	Commenters suggested more information characterizing socioeconomic differences among residents within Mesa and Garfield County, particularly the contrast between the eastern and western areas of Garfield County in terms of employment in extractive industries, be included in the SEIS and also highlighted that other industries such as construction, healthcare, retail, and education are vital.	The SEIS now contains additional detail characterizing socioeconomic differences among residents within Garfield county, particularly the contrast between the eastern and western areas of the county in terms of employment in extractive industries. The BLM adequately analyzed social and economic impacts in the socioeconomics (Section 3.9.2) of the SEIS, particularly employment and labor income by industry. Table 3.9-4 and 3.9-5 in the SEIS show employment and earnings by industry across the four-county area. Construction, healthcare and social assistance, retail trade, and educational services represented 31% of total employment in the socioeconomic area and represented 35.7% of total earnings in the socioeconomic area in these four industries.
75	Environmental Advocacy NGO Consortium; Private individuals	Areas recommended for closure to leasing	Commenters suggested additional areas to be managed as closed to leasing. Commenters specifically noted the following;; areas with high natural resources, watersheds, and wildlife values such as Thompson Creek and Deep Creek; areas with existing and potential outdoor recreation uses including Red Hill in Carbondale, the Hogback area of New Castle and Rifle, the Crown near Carbondale, the North Fruita Desert, areas along the Colorado River corridor from Dotsero northward to Gore canyon, and any SRMAs and ERMAs that overlap important wilderness or wildlife designations; any proximity to neighborhoods, schools, critical habitat, wilderness characteristics, and water sources.	The purpose of this supplemental EIS is to broaden the range of alternatives in the 2015 CRVFO and GJFO Approved RMPs with respect to the lands that are allocated as open or closed for oil and gas leasing, rather than to eliminate a significant use of public lands in the CRVFO and GJFO. The BLM considered closures of SRMAs, ERMAs, LWCs, and ACECs within the range of alternatives. A summary of selected closures and associated rationale are included in section 2.2.6.
76	Private individuals	Protection of Riparian Areas	Commenters requested additional restrictions in areas of high potential for drilling. Restrictions include requiring sufficient setbacks from live water bodies and riparian areas and eliminating the potential for industrial discharges into any waterbody.	Both RMPs include No Surface Occupancy stipulations with buffers around various water bodies: <ul style="list-style-type: none">major rivers: Colorado, Gunnison, and Dolores Rivers in the GJFO (hydrology river NSO CO) and Colorado, Roaring Fork, Crystal, Frying Pan, Eagle, and Piney (CRVFO-NSO-4).streams and riparian areas: GJFO-NSO-2, GJFO-NSO-5, and CRVFO-NSO-5.

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77	Private individuals	Analysis Methods (Environmental Justice)	Commenters called for BLM to adopt Alternative F because it was most protective of Disproportionately Impacted Communities outlined in Colorado’s House Bill 23-1233 and because Alternative E is not protective of Disproportionately Impacted Communities or “Environmental Justice Populations.”	<p>The BLM notes the commenter's support for Alternative F, with the rationale that it is the most protective of Disproportionately Impacted Communities. The BLM also notes the commenter's apparent suggestion for the identification of disproportionately impacted (DI) communities based on the definition in Colorado's Environmental Justice Act (HB21-1266). Reference by the commenter to House Bill 23-1233 (Electric Vehicle Charging and Parking Requirements) is assumed to be unintentional.</p> <p>Executive Order 12898 requires each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” (EO 12898, 59 Federal Register 7629).</p> <p>The SEIS incorporates updated BLM direction on the identification of EJ communities through adherence to Instruction Memorandum (IM)2022-059, released on September 22, 2022, which recognizes the diversity of communities, projects, and processes requires the flexibility to adopt multiple approaches or select more sensitive or context-specific approaches. To identify communities of potential EJ concern within the study area, and to provide a basis for the analysis of action(s) which could have disproportionately high and adverse impacts on the health of minority populations, low-income communities, and tribes or their surrounding environment, the BLM used US Census Bureau data to analyze EJ populations in each county. As the decisions under consideration by the BLM are programmatic in nature and would not result in on-the-ground planning decision or actions (e.g., the BLM is not approving an application for permit to drill to start drilling), the scope of the analysis was conducted at a regional, programmatic level. As a result, the site-specific determination of significant adverse impacts on environmental justice populations is not appropriate and would be determined in a subsequent NEPA analysis prior to development.</p>
78	Environmental Advocacy NGO Consortium; Private individuals	ACEC Management	Commenters call for increased ACEC designations for lands meeting the required qualifications to increase protections of listed and special status species, paleontological resources, and culturally significant lands within those areas.	The BLM analyzed a broad range of alternatives for ACECs based upon the 2014 and 2015 RMPs/FEISs ACEC Report and public comments. Alternative G would expand two existing ACECs based upon new information and Tribal consultation.
79	Environmental Advocacy NGO Consortium; Private individuals	Alternative Suggestion (Environmental Justice)	Commenters called for the SEIS to analyze an additional alternative that closes areas to leasing that are within or have the potential to impact communities of environmental justice concern.	See response for Concern ID # 61. The SEIS adequately addressed environmental justice communities of concern in Sections 3.5.1 Air Resources and Climate and 3.9.3 Environmental Justice. BLM considered areas of potential EJ concerns using EPA’s EJ Indexes at or above the 80th percentile screening thresholds. The information provided in the SEIS provides for adequate analysis and supports the rationale for not needing an additional alternative specific to EJ and air quality.
80	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the SEIS disclose the Reasonably Foreseeable Development (RFD) for oil and gas for each field office under each Alternative and develop a corresponding emissions inventory for each alternative.	<p>Refer to Appendix G for additional discussion about the existing RFD and USGS assessments.</p> <p>As described for the SEIS, the approach for making future oil and gas projections was unique for the air resources (including GHG and climate change) discussion. Instead of creating new hypothetical federal oil and gas development / production scenarios / RFDs, the updated GHG emissions and climate change analysis leveraged the Energy Information Administrations' model projections for various price / demand scenarios to provide a wide range of potential new oil and gas development / production that could occur while operating under the Alternatives. The complex EIA model takes into consideration market (prices and demand) fluctuations at the global scale and is updated regularly (annually for long-term outlook and more frequently for short-term outlooks) with current data.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
81	US Environmental Protection Agency, Region 8; Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the SEIS evaluate how the alternatives relate to the results from air modeling studies to present reasonable estimates of impacts to future air quality under each Alternative.	The SEIS (section 3.5.1) has been updated to include data, information and results from BLM's latest Regional Air Quality Modeling Study. As described for the SEIS, source apportionment modeling was included for the Study where new federal oil and gas in western Colorado was modeled separately. Existing, non-federal and Tribal oil and gas was also modeled in separate source groups. Western Colorado new federal oil and gas specific impacts are described for the SEIS. The SEIS also discusses how input and output for the Regional Modeling Study can be extrapolated across the Alternatives. See more details regarding BLM Regional Modeling Study following this link (see "Quick Links"): https://www.blm.gov/programs/air-resources/colorado . Phase 2 of the Regional Modeling Study includes an ozone sensitivity analysis for five areas within the Rocky Mountain Region including two areas in Colorado (Piceance and DJ Basins). Reports for sensitivity analyses are expected summer 2024 and the BLM is planning to host a technical workgroup meeting / call with partners including EPA to discuss results for the Regional Modeling Study once the ozone sensitivity analysis reports have been provided to the BLM; EPA Region 8 will be contacted with information related to meeting.
82	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the SEIS present an analysis of reasonable near-field air quality impacts that may result from development and production of wells estimated under each alternative and outline the activities that may approach or exceed the National Ambient Air Quality Standards (NAAQS).	As described in the draft and for the final SEIS (section 3.5.1), BLM Colorado follows its protocol that requires development of project-specific emissions inventory and completion of impacts analysis for each proposed action.
83	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the SEIS summarize air quality and Air Quality Related Values (AQRVs) at Class I areas near the field offices, which include Flat Tops, Maroon Bells-Snowmass, West Elk, and Black Canyon of the Gunnison Wilderness areas.	The SEIS (section 3.5.1) has been updated with affected environment data and information from BLM Colorado's latest annual report that includes discussion for values / trends through year 2022. See response for Concern ID # 81 regarding updates for the F-SEIS related to potential impacts to Class I areas.
84	US Environmental Protection Agency, Region 8	Analysis Methods (Air Quality and Climate Change)	Commenters requested that the SEIS identify the population centers and other sensitive receptors located close to the areas open to leasing for each alternative and identify the air quality impacts that will be avoided under each alternative.	See responses to previous comments including those for Concern ID #61 and Concern ID #81.
85	US Environmental Protection Agency, Region 8	Alternative Suggestion (Climate-Related Lease Stipulations)	Commenters requested that the SEIS identify lease stipulations to mitigate the climate-related impacts of oil and gas development and combustion which could include requirements for GHG emissions offsets (such as offsets of downstream emissions from combustion) or climate change impacts fees.	See responses for Concern IDs #3, #33 and #45. It was concluded for the SEIS that projected federal oil and gas related emissions (including downstream) would have minimal impacts to global GHG levels and climate change. Due to the Colorado-specific regulations and the latest EPA rulemaking, there will be very little upstream (where BLM has authority) GHG emissions left to feasibly control. Consistent with the Inflation Reduction Act, the BLM is currently implementing and has many more plans / commitments to complete restoration projects and build climate change resiliency for BLM managed ecosystems and lands. An overall system that allows for responsible cleaner Federal oil and gas development and production while the world transitions to cleaner energy while building climate change resiliency is likely the best-fit adaptive GHG and climate change management approach but is out of the scope of this SEIS.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
86	Western Environmental Law Center; Private individuals	Analysis Methods (Air Quality and Climate Change)	Commenters stated that BLM must account for the extensive greenhouse gas emissions from wastewater storage. Storage containers vent methane, benzene, and other volatile compounds into the atmosphere without any regulations on emission limits for these sites. The SEIS must be rigorous in evaluating these impacts and determining ways to mitigate them. The BLM should take real steps to improve its current climate analysis by using more current data sources than were analyzed in the draft and by considering local climate impacts.	Please see responses to Concern IDs #58, #60 and #81. In the Regional Modeling Study, emissions specific to all applicable oil and gas related development (drilling, fracking, etc.) and production activities including wastewater storage were included in the emissions inventories modeled. Production phase produced water (byproduct) storage tanks are regulated by the CDPHE. The SEIS incorporates BLM's latest Annual GHG that is based on more recent climate science studies and literature.
87	US Environmental Protection Agency, Region 8	Preference for a Specific Alternative	Commenters requested that the BLM select Alternative F as the preferred alternative because it represents the most environmentally protective option given that it includes the areas of environmental concern that were raised during the public scoping process and used to limit the total leasable area.	The BLM notes commenters' preference for elements contained under Alternative F, specifically that it includes areas of environmental concern that were raised during the public scoping process and used to limit the total leasable area. In the Record of Decision, the BLM is required to identify all alternatives analyzed in detail. While the draft supplemental EIS identified a preferred alternative that best met the planning guidance (43 CFR 1610.4-7), the ROD must identify the environmentally preferable alternative (40 CFR 1505.2(a)(2)). The environmentally preferable alternative best promotes the national environmental policy in Section 101 of NEPA. This is ordinarily the alternative that causes the least damage to the biological and physical environment and best protects, preserves and enhances the resources that are present. The BLM is not required to select the environmentally preferable alternative as the approved RMP and may consider not only environmental impacts but also socioeconomic impacts when choosing which alternative to select as the approved RMP.
88	US Environmental Protection Agency, Region 8	Rationale for Selected Alternative	Commenters recommended expanding on the rationale for designating the Preferred Alternative in the Final SEIS and including a discussion that describes how individual potential impacts in different resource areas (e.g., natural, economic, cultural, etc.) were weighed against one another	The BLM has provided information on the rationale for the selection of Alternative G as the Proposed RMPs in section 2.2.6
89	US Environmental Protection Agency, Region 8	Mitigation Measures	Commenters requested that the BLM include compensatory mitigation in the SEIS to offset existing and future oil and gas development.	A site-specific NEPA analysis would be conducted prior to authorizing any implementation actions and the BLM has the authority to require mitigation to avoid or minimize impacts during that site-specific NEPA evaluation. See response to concerns #33 and #36. As described for air pollutants and GHG analysis in the SEIS, there is very little upstream residual emissions left to control or offset as a result of the latest CDPHE (and EPA) regulation updates. BLM's analysis suggests that downstream emissions would vary little as a result of BLM's decision. The Inflation Reduction Act has supported multiple projects for BLM Colorado ultimately providing for land restoration and building resilience in the face of climate change. The first step of the mitigation hierarchy is to avoid impacts. The SEIS considers which areas should be open or closed to oil and gas leasing and development. By closing certain areas, the BLM is avoiding impacts in those locations.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
90	Environmental Advocacy NGO Consortium Colorado Department of Natural Resources	Alts: Alternatives not considered (new alternative suggestions)	Commenters requested that BLM keep geothermal resources open to leasing, but not grant exceptions to fluid mineral leasing prescriptions for geothermal in identified lands with wilderness characteristics units.	Availability of land for geothermal development is not tied to oil and gas development potential in alternative G. Areas closed to leasing for specific resource concerns (e.g., lands with wilderness characteristics) are closed to geothermal development, and fluid mineral stipulations in the 2015 RMPs would apply.
91	Environmental Advocacy NGO Consortium	Areas of Tribal Significance	Commenters requested that BLM incorporate additional management prescriptions outlined in Alternative F to ensure all areas identified as significant to Tribes would be closed to oil and gas development.	The BLM notes commenters' preference for elements contained under Alternative F, specifically that all areas identified as significant to Tribes would be closed to oil and gas development.
92	Environmental Advocacy NGO Consortium	Management of WSAs	Commenters requested that the SEIS include language to ensure that WSAs would be managed for protection as lands with wilderness characteristics, as under Alternative C from the 2014/2015 RMPs, if released by Congress from consideration for wilderness designation, stating that this would ensure that all WSAs within the planning area are adequately managed for protection regardless of future potential congressional release.	As described in Section I.1 of BLM manual 6330 – Management of BLM Wilderness Study Areas, “WSAs that are released by Congress from wilderness study will no longer be subject to [manual 6330] and will be managed under general BLM management authorities found in FLPMA (43 U.S.C. 1701 et seq.) and associated regulations and policies, including applicable land-use plans.” Should Congress release any Wilderness Study Areas in the planning area, the BLM would update the wilderness characteristics inventory for lands that were formerly WSAs as per section 201 of FLPMA. If these lands were determined through this inventory to qualify as lands with wilderness characteristics, the BLM would apply appropriate management through subsequent land use planning processes.
93	Environmental Advocacy NGO Consortium; The Pew Charitable Trusts	ACEC Management	Commenters requested that the SEIS clarify that all ACECs designated in the 2015 RMPs for CRV and GJ will remain designated and closed to mineral leasing in the agency's final SEIS and also include management guidelines that would protect the values for which the ACEC is designated.	The BLM has updated the alternatives tables in section 2.3 to clarify the three categories of decisions before the BLM regarding ACECs: 1) retain closures for existing designated ACECs, 2) close existing designated ACECs that are currently open to oil and gas leasing, and 3) designating new ACEC expansion areas and closing those areas to oil and gas leasing. The BLM has also clarified the various management decisions for ACECs in Alternative G in section 2.2.6, which includes retaining closures of existing ACECs and expanding the boundaries and leasing closures for some of them.
94	BlueRibbon Coalition	Alternatives: Recreation	Commenters requested that the SEIS analyze an alternative that protects dispersed camping and analyzes increasing such recreational opportunities.	Alternatives that include additional protections for dispersed camping and increase recreational opportunities would be beyond the scope of this planning effort. As stated in Section I.2, Purpose and Need, "The purpose of this supplemental EIS is to broaden the range of alternatives in the 2015 CRVFO and GJFO Approved RMPs with respect to the lands that are allocated as open or closed for oil and gas leasing. The purpose is also to provide additional air quality analysis for the fluid mineral management alternatives considered in the 2014 CRVFO Final EIS and the 2015 GJFO Final EIS and in this supplemental EIS.

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
95	Private individuals	Wild and Scenic Rivers	Commenters requested that the SEIS include additional WSR designations, specifically mentioning the Crystal River, Deep Creek, and the Dolores River.	<p>The BLM completed the suitability phase of a wild and scenic rivers (WSR) evaluation as part of the resource management plan (RMP) revision processes for stream segments within the Colorado River Valley and Grand Junction Field Offices. The Colorado River Valley Field Office wild and scenic rivers suitability report can be found in Appendix C of the 2015 CRVFO ARMP; the Grand Junction Field Office suitability report can be found in Appendix C of the 2015 GJFO ARMP.</p> <p>Segments on BLM-administered lands along both Deep Creek and the Dolores River were found to be suitable for inclusion in the National Wild and Scenic Rivers System (NWSRS). The USFS White River National Forest determined 39 miles of the Crystal River to be eligible for inclusion in the NWSRS; USFS has not completed a suitability analysis along this portion of the Crystal River. While these stream segments are found to be eligible and/or suitable for inclusion in the NWSRS, only Congress (or the Secretary of the Interior under special circumstances) can formerly designate a river as Wild and Scenic. As described in BLM Manual 6400 – Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, Planning, and Management, “to the extent possible under existing legal authorities, the BLM’s policy goal for eligible and suitable rivers is to manage their free-flowing condition, water quality, tentative classification, and any outstandingly remarkable values to assure a decision on suitability can be made for eligible rivers; or in the case of suitable rivers, until Congress designates the river or releases it for other uses.” The SEIS presents a range of alternatives that include management to protect stream segments found eligible and suitable for inclusion in the NWSRS.</p>
96	Western Environmental Law Center; Roaring Fork Audubon; Colorado Wild	Special Status Species: Plants	Commenter requesting increased/updated analysis, including use of CNHP's 2015 Climate Change Vulnerability Assessment, of sensitive plant species in planning area	<p>While the BLM has not directly cited the use of CNHP's 2015 Climate Change Vulnerability Assessment in the SEIS or 2014/2015 Proposed RMP/Final EIS, the BLM Colorado State Office uses this assessment to update the BLM – Colorado special status species list. This document provides narrative justification for the addition, removal, or retention of taxonomic entities on the BLM – Colorado sensitive species list. The most recent list was updated in November 2023.</p> <p>As stated in section 3.5.6 Special Status Species of the SEIS, most of the special status plant habitat in the western portion of the CRVFO decision area is already leased for fluid minerals development from the 2014 analysis. In regard to the remaining unleased lands within special status plant habitat, Alternatives E, F, and G would further reduce direct and indirect impacts to these species in both CRVFO and GJFO compared with all the alternatives analyzed from the 2014/2015 Proposed RMP/Final EIS. In addition to all special designated areas closed to fluid mineral leasing under Alternative C, oil and gas development potential areas with no known, low, and medium potential would also be closed. Alternative F would close the largest area to oil and gas leasing, including Pyramid Rock and Mount Logan ACEC.</p> <p>For both CRVFO and GJFO, an NSO stipulation would continue to prohibit surface occupancy and surface-disturbing activities within 200 meters of habitat areas for those plant species listed under the ESA as threatened or endangered, and for federal proposed or candidate plant species. Habitat areas include designated critical habitat, currently or historically occupied habitat, suitable habitat near occupied habitat, and habitat necessary for the maintenance or recovery of the species. An NSO stipulation would also continue to apply to BLM sensitive plant species that occur within ACEC boundaries for 100 meters. BLM sensitive plant species occurring outside ACECs would have a CSU constraint to surface-disturbing activities within 100 meters. Impacts on special status plants from oil and gas activity would be mitigated to the extent possible with COAs. The BLM would consult with the USFWS on any activities that may affect ESA-listed plants.</p>

Concern ID	Individual(s) and Organization(s)	Issue Category	Concern Statement	BLM Response
97	Protegete Piceance	Analysis Methods (Air Quality and Climate Change)	Commenters want BLM to establish clear and enforceable mitigation measures tied to DICs and should periodically review and update measures to align with evolving national and state commitments to address air quality and climate impacts based on an updated analysis. Commenters noted BLM should incorporate guidance, direction, and stipulations in the proposed alternative specifically aimed at avoiding, minimizing, and mitigating impacts to DICs.	See response for Concern ID #61 . Regional Modeling Study 2032 results have been added for the F-SEIS and includes discussion on potential impacts to DICs. In addition, see response for Concern ID #85 regarding additional mitigation measures.
98	The Daily Sentinel Grand Junction, Colorado	Consistency of data in SEIS	Commenters requested clarification about estimates of areas currently leased for oil and gas development.	The BLM has updated data and checked for consistency of calculations and information representation throughout the SEIS.
99	Mesa County	Analysis Methods (Social and Economic Conditions)	Commenters expressed concern that a reduction in oil and gas development may impact access to public lands if the County is expected to fund road maintenance.	The BLM adequately analyzed transportation facilities (Section 3.8.1) and social and economic impacts in the socioeconomics (Section 3.9.2) of the SEIS. The analysis provides a detailed discussion of existing socioeconomic conditions within the socioeconomic study area including revenues derived from mineral extraction and their impacts on provision of services. Additionally, Section 3.8.1 outlines that closing an area to future leasing is expected to reduce road-related impacts associated with oil and gas development, resulting in as lower traffic volumes, less travel by large trucks or heavy equipment, less noise and fugitive dust from vehicular travel, less potential transport of sediments to surface waters, less disturbance of wildlife along roads and adjacent areas, and more. Actions that would limit or restrict transportation project design (for example, area use closures, VRM designations, and NSO stipulations) would result in impacts on transportation and access.
100	Pitkin County	GIS correction	Commenter requested clarification/correction of GIS shapefile	Correction made to shapefile

F.2.2 Individual Substantive Comments

Table F-2 provides the specific text of the substantive comments used to develop the concern statements.

* The name “Environmental Advocacy NGO Consortium” is used by the BLM to identify comments, appendices, and supplemental information submitted under common letterhead by the following organizations: Colorado Wildlands Project, The Wilderness Society, Wilderness Workshop, Rocky Mountain Wild, National Parks Conservation Association, Defenders of Wildlife, Conservation Colorado, Sheep Mountain Alliance, Western Colorado Alliance, Earthjustice, Conservation Lands Foundation, Great Old Broads for Wilderness – Grand Junction Broadband, and Audubon Rockies.

Concern ID	Organization/ Individual	Letter Number	Comment Text
I	Mesa County	85	In the proposed [CRVFO] RMP, BLM considered a Greater Sage-Grouse ACEC that was dropped from the final RMP and ROD. In the proposed [GJFO] RMP, BLM considered eight ACECs-Atwell Gulch, Badger Wash, Glade Park-Pinyon Mesa, John Brown Canyon, Mt. Garfield, Plateau Creek, Prairie Canyon, and South Shale Ridge- that it did not carry forward into the final approved RMP and ROD. Eight short years later, BLM is now including these ACECs in the draft RMP and Supplemental EIS for these two field offices. BLM has failed to provide any compelling evidence as to why, after such a short period of time, it has included these ACECs in the Preferred Alternative. Further, BLM is preparing this supplemental SEIS for purposes of complying with a judicial ruling involving greenhouse gas emissions. None of these ACECs has anything to do with greenhouse gas emissions and therefore should not be revisited with the update to the RMP/SEIS. The Trades strongly recommend that BLM not include these ACECs in the Preferred Alternative for the final RMP and SEIS.
I	Western Energy Alliance	134	Areas of Critical Environmental Concern It is unclear why all of the Areas of Critical Environmental Concern ("ACEC") proposed in this RMPA were not designated in the 2015 RMP. If the conditions have not changed, it is likely that the ACECs still do not warrant designation. If conditions have changed, the BLM should conduct a new ACEC Report to ensure the relevance and importance criteria are still valid. Again, BLM needs to utilize the most current, accurate data available in making a decision that will have a large impact on public lands in western Colorado.
I	Western Energy Alliance	306	Fundamentally, BLM has provided no additional information or analysis on the resource values in these ACECs that justifies their inclusion in the final RMP and EIS. BLM should construct an alternative G for the final RMP/EIS that does not carry these ACECs forward.
I	National Association of Royalty Owners, Rocky Mountain Chapter	306	Removal of the nine additional Areas of Critical Environmental Concern (ACEC). Just eight short years ago, BLM issued Records of Decisions (ROD) and approved RMPs for CRVFO and GJFO that did not include the nine ACECs now proposed in Alternative E. BLM has not provided sufficient information to demonstrate why these ACECs now require the most restrictive land management designation of "closed" to leasing.
I	National Association of Royalty Owners, Rocky Mountain Chapter	313	On June 12, 2015, BLM published the Record of Decision (ROD) and approved RMP for the CRVFO. In the proposed RMP, BLM considered a Greater Sage-Grouse ACEC that was dropped from the final RMP and ROD. On August 24, 2015, BLM published the ROD and approved RMP for the GJFO. In the proposed RMP, BLM considered eight ACECs—Atwell Gulch, Badger Wash, Glade Park-Pinyon Mesa, John Brown Canyon, Mt. Garfield, Plateau Creek, Prairie Canyon, and South Shale Ridge—that it did not carry forward into the final approved RMP and ROD. Eight short years later, BLM is now including these ACECs in the draft RMP and Supplemental EIS for these two field offices. BLM has failed to provide any compelling evidence as to why, after such a short period of time, it has included these ACECs in the Preferred Alternative.
I	Mesa County, Colorado	313	Further, BLM is preparing this supplemental SEIS for purposes of complying with a judicial ruling involving greenhouse gas emissions. None of these ACECs has anything to do with greenhouse gas emissions and therefore should not be revisited with the update to the RMP/SEIS. Rocky Mountain NARO strongly recommends that BLM not include these ACECs in the Preferred Alternative for the final RMP and SEIS.
2	Mesa County, Colorado	134	While the restrictions imposed on ACECs are not as stringent as those associated with Wilderness Designations or Wilderness Study Areas, they do impose limitations on other activities such as grazing, development, rights-of-way, surface use, timing limitations, or as in this case, the restriction of fluid mineral extraction. The additional layer of "management" often becomes further restrictive when used as a blanket restriction in range-wide plans. For instance, in the Approved RMPA/Record of Decision for Solar Energy Development in Six Southwestern States, all ACEC's are exclusion zones along with Special Recreation Management Areas, Extensive Recreation Management Areas, Wilderness Study Areas, etc. Mesa County is opposed to any ACEC which impedes valid existing grazing or water rights. Further, given that a substantial portion of Mesa County's acreage within the proposed ACECs is already held by lease, we oppose any amendments or restrictions placed on existing lease rights through the introduction and enforcement of new lease conditions in the form of Conditions of Approval ("COA's), No Surface Occupancy ("NSO"), etc. for drilling permits.

Concern ID	Organization/ Individual	Letter Number	Comment Text
2	Western Energy Alliance	306	<p>The Trades strongly recommend that BLM not include these ACECs in the Preferred Alternative for the final RMP and EIS. BLM should consider that the resource values in these proposed ACECs can be protected through the use of no surface occupancy and controlled surface use stipulations on future leases. BLM has done so in the past,[18] and it would be irrational and contrary to FLPMA's multiple-use mandate to do otherwise. As discussed above, technological advancements in drilling and completions enable the oil and natural gas under these ACECs to be developed without disturbing the surface. If operators can access the minerals under these ACECs without disturbing surface land within those ACECs, they should be allowed to do so. Failing to allow such development would be arbitrary and capricious and contrary to FLPMA because such restrictions would not provide any additional protection, but it would impact mineral development.</p> <p>[18] See Price Field Office Record of Decision and Approved Resource Management Plan, at 43 (Oct. 2008) ("Special management for the above ACECs is identified in the Approved RMP to protect the relevant and important (relevant and important) values. For example, Muddy Creek and Segers Hole are managed to protect the relevant and important scenic values. Management actions include an NSO stipulation for oil and gas leasing and other surface disturbing activities" (emphasis added)), https://eplanning.blm.gov/public_projects/lup/67041/83197/99802/Price_Final_Plan.pdf.</p>
3	Western Environmental Law Center et al.	304	<p>2016 global analysis found that the carbon emissions that would be released from burning the oil, gas, and coal in the world's currently operating fields and mines would fully exhaust and exceed the carbon budget consistent with staying below 1.5°C . The reserves in currently operating oil and gas fields alone, even excluding coal mines, would likely lead to warming beyond 1.5 degrees. An important conclusion of the analysis is that no new fossil fuel extraction or infrastructure should be built, and governments should grant no new leases or permits for extraction and infrastructure. Many of the world's existing oil and gas fields and coal mines will need to be closed before their reserves are fully extracted in order to limit warming to 1.5 degrees. In short, the analysis established that there is no room in the carbon budget for new fossil fuel extraction or infrastructure anywhere, including in the United States, and much existing fossil fuel production must be phased out to avoid catastrophic damages from climate change. As a result of this conclusion any additional development must be considered significant under NEPA.</p>
3	Williams, Megan	224	<p>BLM's 2021 GHG Report includes an emissions analysis (Section 7.0) that evaluates the timelines for federal fossil fuel GHG emissions to consume the global carbon budgets associated with 1.5- and 2.0-degrees C of warming. Table 7-3 of the Report shows the time to exhaust the budget for federal oil and gas GHG emissions associated with 1.5-degree C of warming ranges from 8-13 years. If this is an accurate analysis, it does not align with BLM's proposed action / preferred Alternative E, where oil and gas leasing would continue in the planning areas and BLM would be allowing for future oil and gas development projects, typically with 20-30-year project timelines. BLM must reconcile future leasing with its nearer-term timelines for exhausting BLM-authorized GHG emissions from federal oil and gas sources.</p>
4	Colorado Offroad Trail Defenders	17	<p>Each of the new areas proposed for management to protect wilderness characteristics (or as a Sec. 202 WSA in alternative F) either contains existing designated motorized routes and mountain bike trails or is immediately adjacent to them. The SEIS does not disclose how motorized and mechanized use will be managed within these areas, but we must presume that most of them would be closed to these uses. If so, a significant number of existing motorized and mechanized trails could be closed by these designations -- a significant negative impact on recreation that is not discussed anywhere in the SEIS. This is a critical oversight that must be corrected.</p>
4	Colorado Offroad Trail Defenders	17	<p>At minimum the BLM must disclose how many miles of existing motorized and mechanized routes within these areas would be closed by these wilderness characteristics designations and analyze what effects those closures would have on the quality of recreational opportunities in these areas. The BLM also should provide maps clearly showing the location and boundaries of each of these areas in relation to existing designated routes. We note that even if no designated motorized routes are within the wilderness characteristics areas themselves, such areas have a detrimental effect even on adjacent routes outside of their boundaries, as the mere existence of such adjacent routes is deemed a threat to their wilderness character, resulting in significant pressure to close them in travel management proceedings. Dead-end motorized routes that are cherry-stemmed into areas managed for wilderness character are particularly threatened by these areas, as anti-motorized wilderness advocates frequently target such routes in campaigns calling for their closure in the name of filling in gaps and thereby enhancing or "completing" the wilderness character areas.</p>
4	Colorado Offroad Trail Defenders	17	<p>While we take no position on the primary subject of the Supplemental EIS, oil and gas leasing, COTD strongly opposes the addition of multiple new areas managed for the protection of wilderness characteristics and/or Wilderness Study Areas as proposed in the new alternatives E and F. While almost all of the analysis in the SEIS is focused on oil and gas leasing, these actions would have significant detrimental effects on motorized and mechanized recreation that are not disclosed or analyzed anywhere in the project record. The section analyzing the impacts of the proposed action on recreation only discusses the impacts of prohibiting oil and gas leasing on recreation and does not analyze the impacts of new de facto wilderness designations on motorized and mechanized recreation.</p>
4	Colorado Offroad Trail Defenders	17	<p>If the BLM wishes to amend the existing RMPs for these two field offices to largely eliminate oil and gas leasing, so be it. However, the designation of massive new areas managed as de facto wilderness is not necessary to achieve that goal and will have severe unintended side effects on motorized and mechanized recreation opportunities throughout western Colorado. We strongly oppose all of the actions in alternatives E and F with respect to areas managed for wilderness characteristics, and ask the BLM to select the no-action alternative regarding them.</p>
4	BlueRibbon Coalition	358	<p>Any approach to travel management that presumes the superiority of non-motorized forms of recreation like hiking over motorized recreation, or that justifies closing motorized access on the basis that people can still hike on those routes, is inherently discriminatory toward people with disabilities. Any large-scale closures of existing routes would unfairly and inequitably deprive people with disabilities of the ability to recreate in the area using the only means available to them. It is imperative that the BLM consider the access needs of disabled users in drafting the alternatives for this travel plan and ensure that people with disabilities who depend on motorized means do not lose access.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
4	BlueRibbon Coalition	358	We support any additional comments that encourage the BLM to designate the maximum number of routes and areas in the project area as open. Many of our members are organizations with extensive on-the-ground experience. We strongly advocate against the "conservation alternative", Alternative C, as this area is already surrounded by and includes, wilderness areas and highly restrictive management areas. BLM should not approve the 14,100-acre expansion to the Pyramid Rock ACEC or any other new ACEC's. For this reason BRC supports a modified Alternative D. ACEC's are ill-defined and managed broadly and differently and often don't comply with BLM's multiple use mandate. There should be no new recommended Wilderness. All areas that should be managed as wilderness already are and the agency should not be trying to close access to recommend and mange more areas as wilderness.
5	Schenk, Sherry	365	I support the designation of the lands around Castle Peak as a WSA and ask that you consider adding additional WSA designation to areas that have the appropriate wilderness characteristics.
5	Public Employees for Environmental Responsibility	93	PEER fully supports Alternative F, which closes the most areas to oil and gas leasing, including those lands that have no known potential, low, and medium potential, all Wilderness Study Areas (WSA), SRMS's, ERMA's, the maximum number of ACECs, lands in designated habitat of special status species, protecting the Grand Junction and Palisade and other municipal watersheds, and lands with wilderness characteristics. We enthusiastically support the designation under Alternative F, of the Castle Peak Addition lands with wilderness characteristics as a Section 202 WSA.
5	Public Employees for Environmental Responsibility	93	The growing loss of wild places with healthy, functioning natural areas is driving a record-shattering loss of species. Protecting the climate and biodiversity is one of the most important things the BLM can do. In support of these goal, a significant tool is for BLM to designate new "wilderness study areas" (WSA) pursuant to §202 of the Federal Land Policy and Management Act (FLPMA). WSA are the often the first step towards lands being considered by congress for designation of wilderness. WSAs become part of the National Landscape Conservation System-highlighting their durability and importance among our nation's treasured lands. BLM staff treat WSAs differently than other administrative designations, as the agency is legally required to manage them under FLPMA's "non-impairment" standard-a strict mandate intended to protect the wilderness character of these areas. Under the Federal Onshore Oil and Gas Leasing Reform Act, WSAs are statutorily off-limits to oil and gas leasing. No new §202 WSAs have been designated since 2003. As a result, millions of acres of roadless BLM-managed public lands across the West remain unprotected and at risk from fossil fuel development and off-road vehicle damage. Designating and managing roadless, wilderness-quality public lands as WSAs under § 202 will protect intact roadless lands as WSAs and assist in addressing climate change by providing carbon sequestration benefits, conserve water resources and reduce fugitive dust emissions. Protecting public land as WSAs keeps fossil fuels in the ground and eliminates the release of climate damaging pollution related to the exploration, production, and combustion of those extractive resources. As the nation's largest federal land manager, the BLM has the responsibility to take decisive action to address the climate crisis. We commend the BLM in asserting its authority to designate wilderness study areas under FLPMA § 202-an action that will result in durable protection for large swaths of roadless public lands. The proposed designation under Alternative F, is a great step forward for Colorado, where preservation will help address climate change and protect biodiversity.
5	Protegete Piceance	165	We are strongly supportive of the wildlife habitat and wilderness quality land protections included in Alternative F and encourage the BLM to adopt all of these planning components, including the designation of the Castle Peaks Wilderness Study Area.
5	DHM Design	173	We are also encouraged to see the BLM considering an expansion to the Castle Peak Wilderness Study Area in Eagle County in Alternative F and advocate for that Area to remain in the final plan. The diverse ecosystems of Castle Peak, ranging from 8,000 to 11,000 ft, provide for a wide variety of recreational opportunities, and the abundant water and diverse terrain also provides outstanding habitat for prized elk and mule deer. We believe these lands offer greater value for those qualities than their subsurface minerals, and recognize that traditional energy production on our public lands is a major contributor to greenhouse gas emissions, which is already harming our region and state's economy. We are pleased that the BLM is incorporating future costs of carbon dioxide emissions in their planning and that you recognize the extreme negative impacts climate change could have for our businesses and local economy.
5	Eagle County	187	I strongly support BLM's proposal to use administrative protections to manage wildlands in Eagle County under Alternative F. For example, I would like to see the Castle Peak Addition managed as a WSA under Section 202 of the Federal Land Policy and Management Act. 43 U.S.C. § 1712. This would provide long term and meaningful [1] protection for the unique wilderness characteristics that remain in Castle Peak. I also support continued WSA management for Bull Gulch and Hack Lake, and continued management to prioritize protection of wilderness characteristics for the Flat Tops Addition and Pisgah Mountain. [1] See Draft SEIS at 3-122.

Concern ID	Organization/ Individual	Letter Number	Comment Text
5	Environmental Advocacy NGO Consortium ¹	316	BLM should also designate all lands with wilderness characteristics contiguous with existing WSAs as WSAs, excluding roads and maintained mechanized trails designated as open to motorized and/or mechanized use as per the existing GJFO and CRVFO travel management plans. BLM has previously identified numerous parcels of WSA-contiguous LWCs across both field offices, as detailed below. These areas, similar to the Castle Peak additions considered in Alternative F of the SEIS, are BLM-identified wilderness quality lands contiguous with existing WSAs. These units contain, contribute to, and expand the wilderness characteristics present in their adjoining WSAs: - Castle Peak Addition LWC (Castle Peak WSA), - Bull Gulch WSA Contiguous LWC (Bull Gulch WSA) - Flat Tops Addition LWC (Hack Lake WSA) - Pine Ridge LWC (Little Book Cliffs WSA) - DeBeque Rim LWC (Little Book Cliffs WSA) - Winter Flats LWC (Little Book Cliffs WSA) - Redrock LWC (Little Book Cliffs WSA) - Head of Main Canyon (Little Book Cliffs WSA) - East Demaree LWC (Demaree Canyon WSA) - Demaree South LWC (Demaree Canyon WSA) - West Creek LWC (The Palisade WSA) These wilderness quality lands, with small amendments to cut out existing designated mechanized and motorized routes should be designated as Section 202 WSAs and managed under a non-impairment standard consistent with BLM Manual 6330, to maintain the area's suitability for preservation as wilderness.[21] Using Section 202 authority to create new WSAs would largely be in line with current management and ensure consistency for land managers in the future. [21] BLM Manual 6330 - Management of Wilderness Study Areas.
5	Environmental Advocacy NGO Consortium	316	Flat Tops Addition/Hack Lake: Flat Tops Addition is a 3,500 acre LWC unit contiguous with the Hack Lake WSA, which is in turn contiguous with the Flat Tops Wilderness. The Flat Tops Addition is currently being managed to protect its wilderness character as per the CRVFO RMP and is closed to fluid mineral leasing, managed to prohibit surface occupancy and surface disturbing activities, and closed to new trail or road construction. No designated motorized routes exist in the unit. Flat Tops Addition/Hack Lake has been long proposed for formal wilderness designation, including in numerous iterations of Representative Diana DeGette's Colorado Wilderness Act since its initial introduction in 1999.
5	Environmental Advocacy NGO Consortium	316	Grand Hogback: BLM's inventory of Grand Hogback recognizes that the unit "has been managed over the years predominantly for non-motorized types of recreation due to its limited public access and rugged topography". Yet, although BLM considered protective management for Grand Hogback in Alternative C of the Proposed Final RMP/FEIS of the CRVFO RMP, BLM ultimately chose not to specifically manage to protect the area's wilderness character. Despite the fact that the unit has historically been open to oil and gas leasing and development in a mapped area of "high potential" for oil and gas, the area's rugged topography and important natural and recreational values have resulted in less than 200 acres on the periphery of the 11,300 acre unit currently under lease. Grand Hogback should be closed to oil and gas leasing and designated as a WSA, excluding the recently developed Grand Hogback bike trail system. Grand Hogback has been long proposed for formal wilderness designation, including in every successive version of Representative Diana DeGette's Colorado Wilderness Act since 2001.
5	Environmental Advocacy NGO Consortium	316	Pisgah Mountain: BLM currently manages Pisgah Mountain to protect its wilderness characteristics, excluding certain designated open motorized routes. This management includes several prescriptions that are similar to management as a WSA, including being closed to fluid mineral leasing, managed to prohibit surface occupancy and surface disturbing activities, and closed to new trail or road construction. Pisgah Mountain has been long proposed for formal wilderness designation, including in numerous iterations of Representative Diana DeGette's Colorado Wilderness Act since 2013
5	Environmental Advocacy NGO Consortium	316	The 6,800 acres adjoining Castle Peak WSA are by no means the only wilderness quality lands in the planning area suitable for designation as a WSA. Numerous LWC units in both field offices have similar wilderness qualities as those found at Castle Peak. We urge BLM to consider the following list of LWC units for designation as WSAs. These areas have documented wilderness characteristics, several of them have been managed to protect those wilderness characteristics since at least the completion of the GJFO and CRVFO RMPs, and are manageable as WSAs based on current management or management considered in this SEIS. Any designated open motorized routes or designated and maintained mechanized trails should be exempted from WSA management and drawn out of these units (e.g., cherry-stemmed or used to form boundaries of the WSA)
5	Environmental Advocacy NGO Consortium	316	Deep Creek: Deep Creek is currently managed to protect its wilderness character as per the 2015 CRVFO RMP. The area is entirely unroaded and overlaps with the Deep Creek ACEC, which was designated to protect its outstanding scenic and geologic values; portions of Deep Creek within the Deep Creek LWC have also been found suitable for inclusion in the Wild & Scenic Rivers System. Current management of Deep Creek is much in line with WSA management including VRM Class I designation, closure to fluid mineral leasing, prohibition of surface occupancy or surface disturbing activities, and ROW exclusion.
5	Environmental Advocacy NGO Consortium	316	Thompson Creek: Thompson Creek has been the focus of conservation efforts for over 50 years. Beginning in the 1970s, Thompson Creek was given special status as a Natural Environment Area (NEA), and in 1985 portions of the area were designated as an Area of Critical Environmental Concern (ACEC) to preserve its geological, cultural, scenic values and natural ecological conditions. In 1980, BLM identified over 8,800 acres of wilderness quality lands at Thompson Creek but did not recommend the unit for designation as a WSA because of a determination that the area's relatively small size prevented outstanding opportunities for solitude or primitive and unconfined recreation. However, in 2011, BLM inventoried Thompson Creek and determined that 8,200 acres met the criteria as LWC and the area has been managed to protect its wilderness values since the completion of the 2015 CRVFO RMP. Despite high occurrence potential, we note that the area remains unleased for oil and gas development. However, protecting the area's unique natural values has broad-based support. Adjacent National Forest lands have been withdrawn from availability for future leasing, and the Secretary of Interior is considering administrative withdrawal of Thompson Creek and surrounding areas from availability for leasing. Thompson Creek has been long proposed for formal wilderness designation, including in every successive version of Representative Diana DeGette's Colorado Wilderness Act since its initial introduction in 1999. Because Thompson Creek does contain a small number of designated mechanized and motorized routes, designation of this area as a WSA should exclude the designated routes that are maintained to ensure relatively regular and continuous use, such as the Lorax Trail.

¹ Colorado Wildlands Project, The Wilderness Society, Wilderness Workshop, Rocky Mountain Wild, National Parks Conservation Association, Defenders of Wildlife, Conservation Colorado, Sheep Mountain Alliance, Western Colorado Alliance, Earthjustice, Conservation Lands Foundation, Great Old Broads for Wilderness – Grand Junction Broadband, and Audubon Rockies

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5	Environmental Advocacy NGO Consortium	316	UnawEEP: BLM has been managing UnawEEP to protect its wilderness character since the completion of the 2015 GJFO RMP. UnawEEP has been long proposed for formal wilderness designation, including in every successive version of Representative Diana DeGette's Colorado Wilderness Act since its initial introduction in 1999. - Maverick Canyon: As per the 2015 GJFO RMP, BLM manages nearly 18,000 acres of the 20,500 acre Maverick Canyon LWC to protect the area's outstanding wilderness resources (the remaining acreage is managed as part of the Dolores River Riparian ACEC). Maverick Canyon LWC contains no designated open motorized routes. BLM should designate as a WSA all the inventoried lands with wilderness characteristics at Maverick Canyon, including those currently managed to protect their wilderness values, and the remaining LWC acres overlapping with the Dolores River Canyons SRMA.
5	Office of Rep. Diana DeGette	321	Finally, I strongly urge BLM to consider designating other lands with wilderness characteristics as Section 202 WSAs, especially lands proposed for wilderness designation in the Colorado Wilderness Act. Designating these additional areas as Wilderness Study Areas will ensure the protection of their wilderness characteristics and offer consistent and durable management prescriptions, while providing broader management flexibility than designated wilderness.
5	Wilderness Workshop	342	Expand the Castle Peak Wilderness Study Area in Eagle County and consider designating additional WSAs as appropriate for wilderness quality lands.
5	Routt County Commissioners	310	Additionally, Routt County supports BLM's decision to utilize its authority under Section 202 of the Federal Land Policy and Management Act (FLPMA) to protected wilderness Study Areas (WSAs) in Alternative F. WSAs represent a meaningful tool that BLM should use when appropriate. Protected wilderness-quality lands allows for adaptive management, which is critical to supporting climate resilient landscapes that may continue to support robust wildlife populations, healthy watersheds, and a diverse recreational experience on public lands.
5	City of Glenwood Springs	168	In particular we support additional protections for land containing wilderness characteristics by exercising BLM's full authority under Sec. 202 of the Federal Land Policy and Management Act (FLPMA). Many of these special places contain important wildlife habitat and recreational opportunities that our residents and visitors alike use and cherish. Places like Deep Creek, Castle Peak, Grand Hogback, Thompson Creek, and the Crown are regionally significant landscapes and features that warrant maximum protection. And closer to Glenwood Springs, we fully support the designation and protection of the Glenwood Springs Debris Flow Area of Critical Environmental Concern (ACEC) to ensure that the City and its watersheds are protected from development in these steep and unstable areas. With this proposed management plan, the BLM has an opportunity to scale down climate pollution while scaling up conservation and offsetting oil and gas development - existing and future - with management considerations proposed in the draft like protecting additional lands with wilderness characteristics, Areas of Critical Environmental Concern, wildlife habitat areas and migration corridors. We hope BLM takes full advantage of this opportunity.
5	DHM Design	173	Some examples of special areas that Alternative E and/or Alternative F proposes closing to oil and gas that should be incorporated into the final plan include: The Grand Hogback, Red Hill, The Crown Thompson Creek, Lower Dolores River Canyons, The Book Cliffs, North Fruita Desert.
5	Colorado Department of Natural Resources	305	We appreciate the BLM's proactive approach to use its existing authority to designate and conserve areas of special environmental concern within the planning area. To this end, we support the proposed expansion of the Castle Peaks Wilderness Study Area (WSA) as well as the inclusion of Areas of Critical Environmental Concern (ACEC). These special designations will help ensure the conservation of natural resources and wilderness characteristics for all Coloradans to enjoy.
5	Environmental Advocacy NGO Consortium	316	BLM should use its authority to designate new Wilderness Study Areas during this planning process. We are pleased to see BLM confirming its longstanding authority under FLPMA Section 202 to designate lands as WSAs to ensure their durable conservation management. [19] WSAs provide the most consistent and durable opportunity to protect wilderness characteristics and undisturbed public lands through collaborative land use planning processes, such as the CRV and GJ SEIS. Designating an area as a WSA under FLPMA Section 202 is consistent with BLM's mandate to manage public lands for multiple use, including preservation of wilderness resources, while ensuring decisions about the future of these lands are made with consideration of public input. WSAs designated administratively through NEPA processes offer ample opportunities for public input, collaboration with local communities, and transparent decision-making. [19 - 43 U.S.C. § 1712. See, e.,g., Sierra Club v. Watt, 608 F. Supp. 305 (E.D. Cal. 1985); The Wilderness Soc'y, et al., 81 IBLA 181 (1984).] We emphasize that BLM can and should continue to designate new WSAs, including Castle Peak WSA, as analyzed in Alternative F. The existing Castle Peak WSA was designated in 1981 and has been managed to protect its outstanding wilderness characteristics for over 40 years. However, the boundaries for the WSA were drawn to exclude certain human impacts that no longer exist on the ground or otherwise no longer have substantially noticeable impacts on the wilderness character of adjoining public lands, including roads that have been closed to motorized use since the completion of the Castle Peak Travel Management Plan in 1997. In 2011, BLM again confirmed the wilderness character of adjoining BLM lands in its Lands with Wilderness Characteristics Assessment and Inventory for the Colorado River Valley Field Office, which found an additional 3,906 acres of lands with wilderness characteristics contiguous with the Castle Peak WSA. Yet, these boundaries are now inconsistent with current policy for delineating boundaries for wilderness quality lands, including utilizing section lines instead of qualifying boundary delineation features such as constructed and maintained roads. In 2014, new citizens' inventory efforts led to the submission of new information detailing that the true qualifying acreage of lands with wilderness characteristics contiguous with the WSA was 6,800 acres.[20] We are pleased to see that BLM is finally considering designating wilderness quality lands adjoining Castle Peak WSA as a wilderness study area; however, BLM has yet to consider the updated boundaries for this unit as proposed in the 2014 citizens' inventory report. BLM should update their inventory of this area and designate the entirety of the qualifying lands as a Wilderness Study Area. [20] See Attachment C - Previously submitted citizen LWC inventory information for CRVFO, pp. 51 - 62.
5	Office of Rep. Diana DeGette	321	Additionally, I applaud the BLM's proposal to expand the Castle Peak Wilderness Study Area (WSA) as shown in Alternative F. In a February 2023 letter I co-led addressed to Secretary Haaland, which was signed by forty members of the U.S. House of Representatives, I called on the BLM to assert its authority under the Federal Land Policy and Management Act (FLPMA) Section 202 to designate new Wilderness Study Areas (WSAs) and to give priority to the designation of Areas of Critical Environmental Concern (ACECs). I urge the BLM to include the expansion of Castle Peak WSA in any final decision.

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5	Office of Rep. Diana DeGette	321	Certain units proposed for wilderness designation in the Colorado Wilderness Act fall within the planning area of Alternative F of the Supplemental EIS, including the Sewemup Mesa, the Palisade, Unaweep, South Bangs Canyon, North Bangs Canyon, Demaree Canyon, Little Book Cliffs, Grand Hogback, Assignment Ridge, Flat Tops Addition, Bull Gulch, Castle Peak, Pisgah West, and Pisgah East. Notably in Alternative F, the Bureau of Land Management (BLM) recommends closing new oil and gas leasing in Sewemup Mesa, the Palisade, Unaweep, South Bangs Canyon, North Bangs Canyon, Demaree Canyon, Little Book Cliffs, Assignment Ridge, Flat Tops Addition, Bull Gulch, Castle Peak, Pisgah West and Pisgah East, and Grand Hogback. I support this recommendation and urge the BLM to include these closures in any final decision.
5	The Mountain Pact	332	Alternative F most effectively scales down climate pollution, while scaling up conservation by designating new Areas of Critical Environmental Conservation and protecting additional Lands with Wilderness Characteristics. It also proposes the expansion of the Castle Peak Wilderness Study Area in Eagle County. We are supportive of these management considerations, and ask the BLM to consider designating additional Wilderness Study Areas as appropriate for wilderness quality lands in the planning area.
5	Honu Studio	339	We are also encouraged to see the BLM considering an expansion to the Castle Peak Wilderness Study Area in Eagle County in Alternative F and expect that will continue to be a part of the final plan. The diverse ecosystems of Castle Peak, ranging from 8,000 to 11,000 ft, provide for a wide variety of recreational opportunities, and the abundant water and diverse terrain also provides outstanding habitat for prized elk and mule deer.
6	Eagle County	187	<p>I further support BLM's proposal under Alternative F to protect several ACECs in Eagle County, including Blue Hill[2], Bull Gulch[3], Deep Creek[4], Abrams Creek[5], Colorado River Seeps[6], Dotsero Crater[7], East Eagle Greater Sage-grouse habitat[8], Hardscrabble-Mayer Gulch[9], and the McCoy Fan Delta[10]. These areas all retain the relevance and importance criteria necessary to qualify as ACECs, and the unique and sensitive values in these areas deserve special management attention to protect and prevent irreparable damage. If Alternative F is not chosen, at a minimum, I urge the BLM to incorporate protection of these areas into whichever alternative is selected.</p> <p>[2 Located northwest of Burns and west of McCoy. Designated as a sensitive area for cultural and Native American resources with the potential to contribute to understanding of history and prehistory. Also classified as a critical watershed due to severely erosive soils. Erosion could destroy and degrade cultural and water resources in the area. See U.S. Dept. of Interior, Bureau of Land Management, Glenwood & Kremmling Field Offices, Glenwood Springs and Kremmling Field Offices RMP Evaluation of Proposed Areas of Critical Environmental Concern (Nov. 2007), at 11. Available for download at https://eplanning.blm.gov/public_projects/lup/68506/110860/135752/21_Appendix_E_ACEC_Report.pdf.]</p> <p>[3 See id., at 11-12 (designated for high scenic value and to maintain the natural appearing landscape adjacent to the Colorado River. The area is characterized by diverse topography, unique geologic forms, and sharp contrasting colors. The area also retains habitat for sensitive plant species, including Harrington's Penstemon).]</p> <p>[4 Id., at 12 (designated to protect outstanding landforms within the canyon, vegetation and water features which give it high scenic value. The canyon is dramatic and unique. Several geologic faults and unusual erosional formations are found within the canyon, as well as a high concentration of cave and karst resources. The landscape maintains a high degree of naturalness. Meets the importance criteria for more than locally significant qualities and qualities that make the area fragile, sensitive, rare, irreplaceable, unique, and vulnerable to adverse change).]</p> <p>[5 Id., at 21-22 (nominated for rare and sensitive wildlife resources. Abrams Creek contains a genetically pure population of native, wild, naturally reproducing Colorado River cutthroat trout that have been identified as a Core Conservation Population. The watershed supports vital ecosystem processes and maintains crucial habitats important for the long-term survival of this fish species. Core Conservation Populations are important in the overall conservation of the species and are given the highest priority for protection. Given the genetic purity of these fish, the population is unique and irreplaceable).]</p> <p>[6 Id., at 25 (nominated to protect two significant plant communities: Betula occidentalis/Mesic grass and Artemisia tridentata/Leymus cinereus. These plant communities are in exemplary condition. They are rare within the state and relatively rare globally. The Colorado Natural Heritage Program (CNHP) indicated that "This may be one of the most pristine low elevation riparian areas in Eagle County").]</p> <p>[7 Id., at 15-16 (Dotsero Crater represents the youngest known volcanic event in Colorado estimated to be from approximately 4,150 to 4,700 years old. The distinct crater is approximately 800 feet deep and 1/3 mile across with an associated lava flow that extends almost one mile to the south crossing I-70).]</p> <p>[8 Id., at 31 (nominated to protect Greater sage grouse habitat and a small population of Greater sage grouse that still rely on lands in northern Eagle County. This habitat deserves heightened protection and this population of birds may require special management to ensure survival).]</p> <p>[9 Id., at 20-21 (nominated to protect one of the highest known concentrations of Harrington's penstemon).]</p> <p>[10 Id., at 16 (the McCoy Fan Delta consists of fluvial and marine deposits record depositional events that occurred along the western margin of the Ancestral Front Range. Marine deposits in the area have yielded abundant fossils that include invertebrates, vertebrates, and plant species. The McCoy fan delta is among the best exposed deltaic deposits in the Rocky Mountains and allows for study and observation of paleontological resources and the sedimentary processes that occurred in the geologic past).]</p>
6	Environmental Advocacy NGO Consortium	316	As emphasized in our scoping comments, we support closing the Grand Hogback ACEC to future oil and gas development. This area is a prime example of wilderness quality lands previously being locked up for potential development, which never occurred. The decision to close this area to future development is consistent with realistic management of the area given previously existing leases have expired (aside from the one remaining existing lease). The agency should keep this in mind when making allocation decisions on other wilderness quality lands.

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6	Environmental Advocacy NGO Consortium	316	<p>Wildlife Emphasis Areas</p> <p>Like other special designations, BLM must ensure that the SEIS does not result in the loss of any special management areas. Therefore, the agency's preferred alternative in the SEIS should carry forth both the wildlife emphasis areas analyzed under Alternative C and E, in addition to those designated in the 2015 RMPs. BLM must ensure Glade Park, Sunnyside, and Winter Flats Wildlife Emphasis Areas are designated for protection under the final decision in the Grand Junction Field Office, as proposed in Alternative F, to be consistent with the 2015 Grand Junction RMP. [58] BLM should also clarify throughout the SEIS that there are more than six wildlife emphasis areas proposed to be designated, and reconcile the acreage listed as well. [59] Alternative C, E, and F all propose to designate 10 areas. [58] SEIS p. 2-13; Grand Junction Field Office Approved RMP (2015), p. 41. [59] SEIS pp. 3-49 and 3-50.</p>
6	Environmental Advocacy NGO Consortium	316	<p>Collectively, the proposed ACECs in Alternative F contain habitat and occurrences of species that are listed under the ESA or otherwise categorized as at-risk. Attachment G lists the at-risk species and habitats contained within each proposed ACEC. Given that oil and gas development, if allowed in these places, poses a direct threat to these species and habitats, BLM should designate all the ACECs proposed in Alternative F and close them to leasing. Further, BLM should designate these ACECs to meet its obligations to recover listed species and conserve at-risk species that have habitat or live within the proposed ACECs pursuant to Section 7(a)(1) of the ESA and BLM Manual 6840.</p>
6	Environmental Advocacy NGO Consortium	316	<p>Additionally, BLM must ensure the Indian Creek ACEC (2,300 acres) designation from the 2015 Grand Junction RMP is carried into the Final SEIS. [33] We also support Alternative F's designation of the Colorado River Riparian, Coon Creek, Gunnison River Riparian, Hawxhurst Creek, Nine-mile Hill Boulders, Pyramid Rock Expansion, and Reeder Mesa ACECs in the Grand Junction Field Office.</p> <p>[33] Grand Junction Field Office Approved Resource Management Plan, p. 203. Available online at: https://eplanning.blm.gov/public_projects/lup/55944/67731/73684/4_GJFO_Approved_RMP.pdf.</p>
6	Eagle County	187	<p>The new alternatives E & F represent a step in the right direction. Both alternatives will scale down climate pollution while scaling up conservation - a win-win for our public lands, wildlife habitat, western communities and Colorado's future. However, Alternative F does significantly more to protect our local public lands from the unprecedented stresses of climate change, habitat loss, drought, and increased visitation and recreational pressures. This is why I strongly urge the BLM to select alternative F, or at the very minimum, include critical Areas of Critical Environmental Concern and other protections from alternative F (detailed below) into the alternative ultimately selected by the agency.</p>
6	Colorado Wildlife Federation, Inc.	274	<p>It is important that closures include, as specified in Alternative F, the two bighorn sheep production areas in the GJFO in high oil and gas development potential areas along Piceance Creek northeast of Palisade (1,500 acres), as shown in Table 2.3-2. It is an uncontroverted biological fact that bighorn sheep - especially ewes and lambs - exhibit high fidelity to their range. "Bighorn sheep behavior patterns are extremely rigid and ritualized and play an important role in population persistence. Studies suggest that bighorns do not adjust well to perturbations in these behavioral patterns."</p> <p>John Beccham, et.al., Rocky Mountain Bighorn Sheep: A Technical Conservation Assessment, U.S. Dept. of AG., FOREST SERVICE, ROCKY MOUNTAIN REGION, SPECIES CONSERVATION PROJECT, available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5181936.pdf.</p> <p>The Colorado Energy and Carbon Management Commission (ECMC), formerly the Colorado Oil and Gas Conservation Commission, recognizes that production areas of our state mammal must be undisturbed. Its Rule 1202(c)P. requires no surface occupancy in bighorn sheep production areas. ECMC Rule 1202 (d)(1) addresses bighorn sheep migration corridors and winter range and provides Oil and Gas Development Plans "that cause the density of Oil and Gas Locations to exceed 1 per square mile in High Priority Habitats" listed in this rule require a CPW-approved Wildlife Mitigation Plan or other CPW-approved conservation plan and compensatory mitigation for Wildlife Resources.</p>
6	Colorado Wildlife Federation, Inc.	274	<p>We also urge protection of Alternative F's 800 acres of native trout crucial habitat in the high oil and gas development potential areas in GJFO and 2000 acres in CRVFO.</p>
6	Colorado Wildlife Federation, Inc.	274	<p>CWF had issued comments during the scoping phase on July 25, 2022 and expressed appreciation for preliminary Alternative E which would close the mineral estate BLM manages in these two field offices with no-known, low and medium oil and gas development potential. Although we commend preferred Alternative E, we favor Alternative F. Direct and indirect benefits to wildlife are greater in scope in Alternative F with designation of a slightly greater number of acres in high priority habitats that will benefit big game (Table 3.5-20), as well as eight additional ACECs. The direct and indirect benefits to wildlife enumerated in the draft SEIS from the extent of closures are needed to address accelerated challenges of decreasing quality and connectivity of habitats, in part due to climate change that necessitates ongoing analyses of likely climate resilient habitats, exponential increase in our state's population spawning more and more development and fragmentation of habitats, and the march of invasive species across our public lands. In addition, economic benefits from big game hunting within the four-county study area (Table 3.9-16) factor into the importance of the extent of closures listed in Alternative F.</p>

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6	Environmental Advocacy NGO Consortium	316	We are pleased to see that Alternative E designates and carries over management from ACECs analyzed as closed to leasing under the previous RODs' Alternative Cs. [30] At a minimum, we support the ACEC designations proposed in both Alternatives C & E (with the clarification that Alternative E, as it stands, is missing the existing designated ACECs listed below). We have created Attachment G to depict this information [30] Under Alternative C and E, the following ACECs would be designated within CRV Field Office: Blue Hill, Bull Gulch, Deep Creek, Greater Sage-grouse Habitat, Thompson Creek, and within Grand Junction Field Office: Atwell Gulch, Badger Wash, Dolores River Riparian, Glade Park-Pinyon Mesa, John Brown Canyon, Juanita Arch, Mt. Garfield, Plateau Creek, Prairie Canyon, Pyramid Rock, Roan and Carr Creeks, Rough Canyon, Sinbad Valley, South Shale Ridge, The Palisade, Unaweep Seep. See BLM 2014 Record of Decision for Colorado River Valley, p. 2-118 - 2-137 and BLM 2015a Record of Decision for Grand Junction Field Office, p. 2-413 - 2-439.
6	Town of Palisade	361	We are also glad to see additional protective measures being taken in Alternative E and F to protect regionally significant landscapes and wildlife habitats. These designations are important because they provide essential core habitat and migration corridors that enable wildlife species and entire ecosystems to survive and thrive. As an agritourism hub we appreciate the benefits that public land protections bring to our economy and community.
6	Grand Junction Broadband, Great Old Broads for Wilderness	368	Designation of Areas of Critical Environmental Concern (ACEC's) has been a neglected conservation strategy in recent years. I applaud the identification of additional ACEC's in both of the new alternatives, E and F. I would encourage the inclusion of most of the areas identified in alternative F in the final RMP. Proposed ACEC's of particular importance include those that protect habitat for threatened, endangered or rare species, including the following areas: Coon Creek, Hawkhurst Creek, Plateau Creek- all support rare native Colorado River cutthroat trout. Colorado River cutthroat trout occupy less than 10 percent of their historic range. Protecting these vulnerable streams will protect a limited resource important to both anglers and conservationists. Protecting streams and their adjacent riparian areas will provide shade and food resources not only for fish but for the 75 percent of all wildlife species that utilize riparian habitat for their life cycle. Roan and Carr Creeks and Abrams Creek - support genetically pure populations of Colorado River cutthroat trout. There are few streams remaining in Colorado with genetically pure populations of Colorado River cutthroat trout. Colorado Parks and Wildlife considers these remnant populations to be of particularly high value as a source for reintroducing this species into other streams. Colorado River and Gunnison River- support threatened, endangered, sensitive and rare fish and plants. The Colorado River is designated critical habitat for several Federally and state endangered fish species. Protecting the adjacent riparian habitat provides additional protection for the Colorado River by providing shade and filtering of runoff into the river. The Colorado and Gunnison Rivers are a primary food source for the Bald eagle and cottonwood trees within its riparian area provide nesting and roosting habitat for these birds. Dolores River and Colorado River Seeps- both protect significant plant communities and sensitive plant species. The Dolores River provides habitat for three native fish species of concern: roundtail chub, flannelmouth sucker and bluehead sucker. Unaweep Seep expansion -The Unaweep Seep is a unique wetland habitat within a unique canyon providing one of three locations for the Unaweep fritillary butterfly and habitat for rare plants.. Protecting additional ground water sources that feed the seep will benefit the unique rare assemblage of species that occur there. Glade Park-Pinyon Mesa - Gunnison sage-grouse -The Gunnison sage-grouse is a Federally threatened species, existing in 8 small populations in southeastern Colorado and southwestern Utah. The Pinyon Mesa population, while small and isolated, is important to maintain for genetic diversity of the species. Greater sage-grouse habitat - a BLM sensitive species. Populations of the Greater sage-grouse have declined dramatically over the past 50 years, in large part due to changes in habitat quality. Protecting high value habitat for this species will help ensure its long-term survival and reduce the need for Federal listing as a threatened species.
6	Schenk, Sherry	147	In the following list, I want to explain about areas that I have been to within the boundaries of the Grand Junction Field Office and the reasons that I ask that this areas be protected with ACEC designation. I believe that they all qualify for ACEC designation in order to protect the rare and endangered plant species, rare and endangered fish, birds, and mammals, areas with high value to tribal members, paleontology resources, or areas with high scenic value.
6	Schenk, Sherry	147	Atwell Gulch: Several years ago I volunteered to help the GJFO Ecologist team count species of rare plants at Atwell Gulch. We worked in a couple areas counting the number of De Beque phacelia we saw, monitoring their condition, and noting anything that might be impacting their growth , such as cattle, bighorn sheep and deer moving through the area. We also looked for other rare and endanger plants. I don't know how many years this monitoring and counting has been going on, but if this area is identified an ACEC the research could be ongoing and receive more protection.
6	Schenk, Sherry	147	Nine Mile Hill Boulders (I am also not a paleontologist) - As work was done on the end of the Tabeguache jeep trail that would allow access to hwy. 141, we also looked at the parking area to the south. If you look carefully it was possible to seepetrified wood pieces, and what appeared to be fossilized dinosaur bones in the boulders on the hill. Those patio elements need to be protected by ACEC designation.
6	Schenk, Sherry	147	Rough Canyon Expansion - The currently identified area has a historic petroglyph panel which has at times been damaged by spray paint and other forms of graffiti. While hiking in the surrounding areas friends and I identified what we think were several Wik e up structures. The area just feels like there are ancient native American relics in the area (flint flakes were noted). Betsy Chapoose who is a historian from the Ute tribe in Utah spoke to students from Mt. Garfield middle school there describing plants that were collected in the area, reasons protecting the area was important to members of the tribe, and the tribes desire to have the petroglyphs be protected. I am not trained as an archaeologist, but it seems there are many things to be protect here.
6	Schenk, Sherry	147	Badger Wash - I think I have been here, but need to see where it is located on a map to be sure.
6	Schenk, Sherry	147	Dolores River corridor - I have enjoyed several rafting trips along the Dolores River. On rare years when the water is high there are several challenging rapids to negotiate. In this area there are also a number of birds who nest and produce young including peregrine falcons. Because river corridors have a more consistent water supply available to native plants there is a healthy population along the corridor including some rare and endangered plants.

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6	Schenk, Sherry	147	Gunnison River - This area was examined in a number of trips during the time of creating the management plan for Dominguez- Escalante NCA. While hiking in the area particularly on the east side of the river a number of populations of hookless cactus were observed. There are many bird species that live along the river, fish there, and reproduce in the tall trees along the river (bald eagles, herons, etc.). The eagles are particular active flying along the Gunnison river corridor and people who live in homes of the bluffs above the river enjoy watching their flight.
6	Schenk, Sherry	147	Mt. Garfield - I recently went to Palisade art galleries and noted a number of art pieces there that portray Mt. Garfield. A visual image of Mt . Garfield is used on many of the publications the City, County, and Visitor Center puts out to advertise the Grand Valley. From the top of Mt. Garfield one can see a 360 degree spectacular view of all of the Grand Valley. Making the climb to the top of Mt. Garfield is challenging, but the view from the top gives a definite reward for the energy expended.
6	Schenk, Sherry	147	Plateau Creek- I don't know anything about the fish species in this river, but do see eagles in the trees, occasionally have been lucky enough to see bighorn sheep along the banks of the river.
6	Schenk, Sherry	147	Pyramid Rock expansion- This area has been protected for some time, but there is need for the expansion. The rare and endangered plants there will over time extend the area they are living in through natural seed dispersal. processes. The native American artifacts there are also fairly easily to access and thus need protection. *Pyramid Rock is close to the road which is the main entrance to a very large area so affords easy access to anyone who wants to explore what is there..
6	Schenk, Sherry	147	South Shale Ridge, Roan and Carr creeks - There is a reported population of cutthroat trout in these areas (I'm not a fishing person , so have not seen these fish). I have enjoyed hikes on the lower slopes of South Shale Ridge. Because it is such a prominent land feature here with a good water supply there appears to be a number of wildlife species who seasonally travel through the area.
6	Schenk, Sherry	147	The Palisade - This rock feature is so prominent in the Gateway area that it is often used in logos for businesses located here. Climbers enjoy trying to climb the walls. There are rare plants found near the base of the Palisade and along the river corridor itself.
6	Schenk, Sherry	147	Unaweep Seep- Because it is so unusual to see a wetlands area right along the highway (hwy.141), people stop to see what they might find there. We once did a driving trip to look at various potential ACEC designation areas. We stopped at Unaweep Seep and people were amazed at the number of butterflies they saw and the number of bird calls they were hearing.
6	Schenk, Sherry	365	The Dolores River corridor holds many different birds of treasures that should have additional protection through ACEC or Wild and Scenic River designation.
6	Moran, Mary	129	I am especially concerned about oil and gas impacts to wildlife habitat, particularly non-game wildlife. These impacts include destruction of habitat from well pads, unreclaimed wells, toxic pools of fluids, dust, and the roads to those wells. Roads and disturbance bring noise that interferes with wildlife, invasive weeds that diminish native vegetation that wildlife relies on, and people that disturb wildlife. It is rare for a road to disappear. Even those roads that most people would consider gone are usually a corridor of invasive weeds, slowly spreading away from the road corridor. Prime wildlife habitat should be off limits to oil and gas leasing. Riparian areas, critical to a disproportionate number of wildlife species, should have a buffer around them that is off-limits to leasing.
7	Eagle County	187	<p>The broad closures considered in Alternative F also better align with science based climate targets. Eagle County is working to reduce climate emissions by 50% by 2030. Our community is already experiencing the negative [12] consequences of climate change. From impacts to our recreation-based economy and our water supply, to local wildlife populations and threats from wildfire, we are on the front lines. As a nation, the time for us to act to avoid the most severe impacts from climate change is now. Since "[f]ossil fuel production on public lands accounts for nearly a quarter of all U.S. greenhouse gas emissions," the BLM should at least consider closing [13] the entire planning area to new leasing.</p> <p>[12] See Eagle County "Climate Action" webpage ("Resiliency's Climate Action team works to implement the Eagle County Environmental Policy and Climate Action Plan in county operations and within the larger community. Our shared community goal is to reduce greenhouse gas emissions 50% percent by 2030."), available at https://www.eaglecounty.us/departmentservices/resiliency/climate_action/index.php#collapse4212b0.</p> <p>[13] U.S. Dept. of Interior, Fact Sheet: President Biden to Take Action to Uphold Commitment to Restore Balance on Public Lands and Waters, Invest in Clean Energy Future (Jan. 27, 2021), available at https://www.doi.gov/pressreleases/fact-sheet-president-biden-take-action-uphold-commitment-restore-balance-public-lands#:~:text=Fossil%20fuel%20extraction%20on%20public,threatens%20cultural%20and%20sacred%20sites.</p>
7	Pitkin County	314	<p>Outdoor recreation and amenity development play an enormous role in Pitkin County's economy. The environmental consequences of by oil and gas come at a significant economic cost. The Colorado Fiscal Institute estimates that between 2020-2030 more than \$13 billion in economic damages will result from CO2 emissions emitted by Colorado's oil and gas industry assuming the CO2 emission targets set by the state are met.[3] In the event state level emissions reductions are not met, economic damages will be higher.</p> <p>[3] See https://www.coloradofiscal.org/wp-content/uploads/2023/01/OG-paper-1-5-23-final.pdf</p> <p>We support Alternative F in fully closing lands in the Thompson Divide to future leasing during the pendency of the RMP and including the Thompson Divide Area of Critical Environmental Concern ("ACEC") and the surrounding Lands with Wilderness Characteristics ("LWC"). We also support protection for sensitive plant species at the top of the Crown as proposed within the Crown Ridge ACEC in Alternative F. We reiterate our position that a complete closure to future leasing would be prudent.</p>

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7	Slow Food Western Slope	333	As a chapter of Slow Food USA, Slow Food Western Slope desires our local producers to continue with sustainable practices that minimize the impact of climate change. We support Alternative F, since it prioritizes conservation over energy extraction, thereby addressing a key factor in climate change. Regenerative agriculture and other farming practices can also help boost the natural carbon cycle and increase carbon sequestration in natural systems and processes. And this is true on our public lands, conservation of natural places is a leading priority to stabilizing our climate. But this benefit reaches far beyond just the federal estate, and by protecting the natural landscapes on our public lands both the climate and all downstream users will benefit today and in the future as well. The best ways to address climate change is to eliminate emissions and through conservation. Other strategies will fail unless we also do these two things. By reducing the availability of public lands for fossil fuel development and scaling up conservation the BLM is taking the two most important steps it can to address this crisis threatening the Southwest and world.
7	Save West Mamm Creek Coalition	335	I'm pleased with BLM's Alternative F, which does a better job scaling down climate pollution while scaling up conservation, though it does not go far enough in an area where Communities, Wildlife and Ecosystems are suffering from 2 degrees of warming, fragmentation and destruction of Habitat, water source pollution, lower life expectancy, increased Health Risk (i.e. higher incidence of heart disease / asthma) associated with Oil & Gas Development.
7	Laybourn, Royal	153	The viability of our two sustainable local, small family businesses would be directly benefited as a result by the type of goals outlined in Alternative F. Alternative F would offer the best policies to address the pressing demand to make a significant effect to deal with protection of clean air and water as well as dramatic reduction in limiting the devastating effects of climate change that threaten our regional plant communities, wildlife, and streams & rivers. Land use policy is the best tool available to preserve natural resources and improve & sustain our western quality of life.
7	Ramirez, Jasmin	166	Overall, the BLM has made good progress in addressing community concerns about climate change, supporting a more sustainable transition away from fossil fuels, and strengthening environmental protections. Closing oil and gas (O&G) leasing on no known, low, and moderate potential lands and strengthening environmental protections for wilderness quality lands are positive steps we are strongly supportive of. However, we are concerned that the BLM's preferred alternative (Alternative E) continues to leave disproportionately impacted communities (DICs) behind and fails to adequately address environmental justice (EJ) concerns and impacts faced by our communities.
7	Stone, Jim	334	Alternative F must be considered for what it is NOT. Alternative F would not contribute to climate change! Oil and gas extraction is a major contributor to greenhouse gases. We have to address climate change. Global warming is an emergency!--floods, droughts, more frequent and extended heat waves, forest fires, etc. We have to change. If these BLM lands of western Colorado remain available for drilling, then we are saying we are willing to continue to rely, to great peril to the planet, on fossil fuels. However, we don't have to rely on fossil fuels. Wind and solar are cheaper, and they are rapidly winning over the energy sector. Renewables must become America's energy source. Wind and solar don't contribute to climate change
7	WV., Eli	336	Although this is just the draft phase of the plan, the direction laid out in Alternative F does several important things that we support. 1. Scales up conservation and scales down fossil-fuel development on our public lands These steps are the two most critical and effective strategies to mitigate and adapt to increasing temperatures and risks of drought from climate change. 2. Listens and responds to years of community input, comment and action from farmers, townspeople and visitors: Residents from across western Colorado, from Eagle to Fruita, Grand Junction and Glenwood Springs, have called for years on the BLM to prioritize conservation over energy extraction. For agritourism businesses, and the farms that support them, conservation of public lands protects natural capital that brings visitors, provides more certainty, and secures water supplies. 3. Aligns public lands management with the future not the past: Our success at protecting natural capital will be of far greater value to the future than will have been one company's profits from speculative leasing or oil and gas drilling and extraction. The values these lands contribute to replenish our water supplies, secure wildlife habitat, and attract visitors, for example, are already of greater value than their use for oil and gas development. Western Slope residents like their counterparts across the state and nation favor conservation-based management of public lands as numerous polls, surveys and agency comment periods have shown. Oil and gas development is, of course, highly impactful and degrades other values and impacts other users.
7	WV., Eli	336	This plan should prescribe management that helps rebalance agency priorities to better ensure the long-term viability of western Colorado beyond just the 20-year plan framework. Science states unequivocally that we have a rapidly closing window for action to avert even worse impacts from climate change. This plan should, and Alternative F would, help provide the grounding for that urgently needed response.
7	Holzmann, Vance	348	I would like the BLM to pick option F for closing most of the leasing to oil and gas industries. California has been taking a strong stance on switching to electric vehicles. Colorado can drive other states even farther with their climate change alternatives with this initiative that BLM has proposed. Other states will want to make themselves look better after hearing about this project. This could be a catalyst for other places across the country to make a promise like this option F to close the majority of land for oil and gas.
7	Rechel, Eric	364	We need to address global warming climate change. To do this I support Alternative F for the BLM's new RMP.
7	Geshin, Betsy	366	I support Alternative F as it will protect the land from oil and gas development the most. Everyone should be scaling back their use of fossil fuels, no using more. We want to save our wildlife habitat.
8	Eagle County	187	Additionally, I support the oil and gas leasing closures proposed in Alternative F. As the Draft SEIS confirms, there is no federal oil and gas production within Eagle County, nor any reasonably foreseeable potential for development. Closure of lands in Eagle County makes good sense. It will allow BLM to focus its limited resources on maintaining the values that make public lands in Eagle County such an important community resource, and it will eliminate any threat of speculative leasing that wastes agency resources without any real public benefit.

Concern ID	Organization/ Individual	Letter Number	Comment Text
8	Environment Colorado	303	Thank you for proposing a new management plan for public lands in western Colorado. The area contains some of the most popular recreation opportunities and picturesque landscapes in the United States, such as Dolores River Canyon Country, Book Cliffs, Grand Hogback and Castle Peak. It is also home to the famed Rocky Mountain bighorn sheep, native trout in rivers and endangered species such as the humpback chub. Oil and gas leasing on these lands would harm the wildlife and their habitat and would interfere with recreational activities from rafting to hiking and camping. We strongly urge you to adopt Alternative F to prevent oil and gas drilling on approximately 1.8 million acres of public lands. This plan will preserve a beautiful landscape for generations to come.
8	Environment Colorado	309	We urge the Bureau of Land Management to adopt Alternative F of the Colorado River Valley Field Office and Grand Junction Field Office Supplemental EIS. Alternative F would protect 95%, nearly 2 million acres, of the planning area from future oil and gas leasing and is the best choice for conserving nature on our public lands. We support including a 3,900 acre expansion to the Castle Peak Wilderness Study Area (WSA) in Eagle County and protecting popular recreation areas such as the Dolores River Canyon, Book Cliffs and Grand Hogback. The Dolores River Canyon area is one of Colorado's most intact wildlands with some of the state's best recreation opportunities. Book Cliffs is a unique habitat for numerous wildlife species like black bears, blue and sage grouse, and other species in Colorado's mountainous environments. Grand Hogback is a geological formation spanning 90 miles through the state. It is well known for its steep scenic cliffs that dominate the views of the local area. Many endangered or sensitive species have very sensitive habitats and limited distributions.[1] Alternative F would maximize protection for species such as the Rocky Mountain Bighorn Sheep, native trout and the humpback chub by closing mineral leasing in their respective habitats. We ask you to act to protect as much nature as possible when selecting a new management plan. Alternative F is the right choice for Colorado and will ensure the protection of these lands for future generations to come. [1] https://www.blm.gov/colorado-threatened-endangered-species
8	Pitkin County	314	Pitkin County continues to support the closure of lands in the Thompson Divide to future leasing. While Pitkin County recognizes and appreciates the substantial closure of lands to leasing within Pitkin County identified in Alternative E, we support Alternative F. [1] Polling shows strong support for conservation on our public lands: 71% of Coloradans "prefer that leaders place more emphasis on protecting water, air, wildlife habitat, and recreation opportunities over maximizing the amount of land available for drilling and mining." [2] Pitkin County residents have strongly prioritized protection of public lands from the unprecedented stresses of climate change, habitat loss and deleterious wildlife impacts, drought and increased visitation pressures. We are regularly reminded by our shared constituents that conservation of our public lands is critically important. Protecting wildlands benefits wildlife, provides for more sustainable recreation, and mitigates the impacts of climate change. Because federal public lands comprise so much of Pitkin County's land area, the County relies on federal land manager partners to maintain the integrity of these wildland habitats and watersheds, and to use legislative and administrative designations and other tools at their disposal. Clean air, water and healthy public lands are among our most important assets, and Pitkin County looks forward to ensuring that this long term management plan will help protect these values and uses. [1] In our review of the GIS shapefiles for Alternative F within Pitkin County, there are tiny areas which appear as leasable between Thompson Creek Road and South Thompson Creek Road as shown in blue on Ex. A. These areas are not visible on the static pdf maps for Alternative F. We believe these are remnants of polygons from a larger GIS geoprocessing operation and not leasable areas under Alternative F. If this understanding is incorrect, let us know as it will materially change our position. [2] https://www.coloradocollege.edu/newsevents/newsroom/2023/state-of-the-rockies-2023-poll-shows-widespread-support-for-conservation-on-despite-a-rise-in-other-concerns.html
8	Western Slope Group	292	Please include the management directives listed in Alternative F in the Final Plan, closing areas to new oil and gas leasing that have no known, low, and medium potential, as well as high potential areas that possess other important resources and values.
8	Western Slope Group	292	The BLM's consideration of a broader range of alternatives is commendable. Although Alternative E is the BLM's preferred alternative, Alternative F does more to scale down climate degradation while scaling up conservation. Alternative E does close many areas to leasing with low or no mineral development value, however, it would continue to maintain areas as open to leasing that have significant conservation value. Including the provisions of Alternative F in the Final Plan will help ensure that public lands and resources are managed in a sustainable way and will protect wildlands, recreation zones, critical wildlife habitat and community water sources. Alternative F is an opportunity to use the federal conservation tools available to the BLM to protect pristine landscapes and habitat.
8	Colorado Department of Natural Resources	305	The Departments of Natural Resources and Public Health and Environment support the BLM's consideration of the new Alternatives E and F, which close the areas with no known, low, and medium oil and gas development to potential leasing and reduce the acres available for leasing in the high oil and gas development potential areas. Alternative E would close 568,300 acres in the CRVFO and 998,000 acres in the GJFO to future fluid mineral leasing. Alternative F would close 687,200 acres in the CRVFO and 1,157,000 acres in the GJFO to future fluid mineral leasing. This supplemental EIS focuses future production in areas with the most benefit to federal taxpayers and limits surface disturbance and other environmental impacts in areas with low resource potential.
8	Ramirez, Jasmin	166	Adapt the preferred alternative to ensure no more than 16% of high suitability lands are open to O&G development and that appropriate setbacks and stipulations are incorporated for existing leases to avoid and mitigate impacts when activities occur within a mile or less of communities, and to include all recommended planning components of Alternative F.
8	McGregor, Andrew	289	Watershed wide protections are best addressed in Alternative F. It is essential in a drying climate to protect community water sources along the length of the CRVFO corridor. Virtually all municipal and unincorporated communities in the corrido, as well as 40 million people downstream, depend on a healthy watershed, including the main stem of the Colorado River, for their water supply. Concentrating the drilling in a smaller area insures protection of the watershed. As flows continue to diminish on average annually, water quality becomes a greater concern and therefore requires greater protection.
8	McGregor, Andrew	289	In summary, I believe that Alternative F provides for the best future of these public lands that the lifeblood of our local economy. Please include the provisions of Alternative F, to the extent possible, in the Final EIS.

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8	Office of Rep. Diana DeGette	321	Among the alternatives you are considering for the PRMP, I write to urge your selection of Alternative F primarily because it eliminates new oil and gas activity to the furthest extent while at the same time offering new protections for valuable public lands along Colorado's Western Slope.
8	The Mountain Pact	332	Some examples of special areas that Alternative F proposes closing to oil and gas that should be incorporated into the final plan include: The Grand Hogback Red Hill The Crown Thompson Creek Lower Dolores River canyons The Book Cliffs The North Fruita Desert The Upper Colorado River corridor
8	The Mountain Pact	332	By adopting the management proposed in Alternative F, the Bureau of Land Management has an opportunity to embrace the America the Beautiful initiative and help conserve and restore more of our nation's lands and waters for residents, wildlife, and future generations. Limiting oil and gas development on BLM lands, identifying and protecting additional Lands with Wilderness Characteristics as well as increasing the designations of Areas of Critical Environmental Concern (ACECs) is essential to providing continued opportunities for outdoor recreation, equitable access to nature, and ultimately safeguarding the climate. As the largest land manager in the nation, the Bureau of Land Management must play a leading role in protecting our public lands for the future. 71% of Coloradans "prefer that leaders place more emphasis on protecting water, air, wildlife habitat, and recreation opportunities over maximizing the amount of land available for drilling and mining." Protected public lands are tremendous assets to Western Colorado communities. They play a critical role in our way of life. They help make the communities where we live what they are, while contributing to a healthier and better tomorrow for future generations. Alternative F provides the best path forward for lands under the management of the Colorado River Valley and Grand Junction Field Offices to support our outdoor recreation economy, mitigate the impacts of climate change, and preserve nature.
8	The Mountain Pact	332	Many of the BLM lands located in our region are favorites for visitors and residents alike for camping, fishing, mountain biking, and hiking. Yet, many of these areas were left open to oil and gas leasing in the previous Resource Management Plans for the Colorado River Valley and Grand Junction Field Offices. We applaud the BLM for listening to the voices of our communities during the scoping portion of this process and developing Alternative F, which proposes closing lands with no, low, and medium oil and gas potential in addition to other high value recreation and conservation lands like Lands with Wilderness Characteristics, Areas of Critical Environmental Concern, and Special Recreation Management Areas to new oil and gas development, while simultaneously proposing important new conservation protections for wildlands and wildlife.
8	Slow Food Western Slope	333	Protecting natural resources and values they provide protects the water supplies and other natural systems our farms rely upon, and this supports the workers and the businesses that rely on these farmers. But conservation of public lands also protects the golden goose that attracts the visitors who shop at our markets, stop by our wineries, or enjoy a farm to table meal at one of our cafes. People come here to raft or hunt, and they stay a few extra days to enjoy some music or farm tours. All of this economic activity and all it helps to generate, and our operations would be diminished through the development or degradation of the public lands that surround us. We urge that the Bureau of Land Management look to the future, to sustaining farms and rural Colorado for the long-term, and to adopt the conservation oriented vision of Alternative F in the Piceance SEIS.
8	Honu Studio	339	Alternative F still allows for parts of the planning area to be available for new oil and gas leasing. In our view, it's essential that we don't expand the "footprint" of oil and gas production and keep development concentrated in already leased areas. Leasing on low to no potential oil and gas lands hurts Western Colorado's recreation economy by tying up lands that might otherwise be managed for recreational or conservation purposes. Instead, your final plan must ensure that energy development aligns harmoniously with other considerations, including recreation and conservation.
8	Honu Studio	339	The Colorado Fiscal Institute predicts \$13 billion in economic damages from oil and gas industry emissions in this decade, even if Colorado meets its emissions reduction goals. That is \$1.3 billion a year in costs. Considering the state only earned an average of \$41 million a year in oil and gas royalties since 2003, the costs of oil and gas development outweighs the benefits. Now is the time for the BLM to set a new direction - one that reflects the shift from an extractive regional economy to a recreation and tourism-based one that better aligns with how people value and utilize these lands. Alternative F provides the best path forward for lands under the management of the Colorado River Valley and Grand Junction field offices. Our businesses are relying on your leadership and recognition that our economy is evolving. We urge the BLM to enact a final management plan that reflects the conservation and recreation management considerations proposed and helps advance our outdoor economy on the Western Slope.
8	Honu Studio	339	We, the undersigned businesses are writing in support of the Bureau of Land Management's proposal for lands in the Colorado River Valley and Grand Junction field offices, as outlined in Alternative F of the draft Supplemental Environmental Impact Statement. This plan would better balance conservation, recreation, and a host of other public land values that were often overlooked in favor of oil and gas development. The economic stability of the Western Slope, and our businesses, are dependent on access and conservation of the spectacular mesas, canyons, and high desert that offers invaluable recreational opportunities and vital habitat for many important wildlife species.
8	Wilderness Workshop	342	I urge the BLM to capitalize on the opportunity presented in this SEIS process to ensure meaningful protections for the public lands that are such an important asset to local communities and our way of life in Western Colorado. Of the alternatives under consideration, Alternative F provides the best path forward for lands under the management of the Colorado River Valley and Grand Junction field offices, so I write to ask BLM to include as many provisions from Alternative F as possible in the final plan.
8	Environmental Advocacy NGO Consortium	316	Not only does Alternative F provide more protection from the impacts of new leasing, the areas that are protected in Alternative F have more acres in the top 30% ERV lands than Alternative E. In fact, Alternative F protects all the top 30% ERV lands from fluid mineral leasing, whereas Alternative E protects only 72% of the highest ERV lands.

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8	Environmental Advocacy NGO Consortium	316	Considering the high value of BLM land in general (compared to all other land types in the area), Alternative F is a reasonable and necessary level of protection of an otherwise rare resource.
8	Environmental Advocacy NGO Consortium	316	Given the pressing need for protecting the most intact BLM lands and preserving corridors for wildlife species of conservation concern, we strongly recommend the protections described in Alternative F.
8	Grand Junction Broadband, Great Old Broads for Wilderness	368	Alternative F does a better job of managing for climate change and for conservation by closing designated habitat for threatened and endangered species, critical habitat for native trout, important bird areas, lands with wilderness characteristics, eligible wild and scenic river segments, potential ACEC's and other areas of high conservation value. These areas should be protected from oil and gas development to meet the BLM's obligation to protect the health and resilience of ecosystems across public lands. The impacts of oil and gas development on public land are not compatible with maintaining healthy ecosystems and should be restricted to areas of low conservation value.
8	Not Provided	351	I didn't always grow up with camping and hiking as a regular thing. This was something I didn't learn I could do until a neighbor invited me to go for a hike along Mamm Creek and the Hogback. Unfortunately, enjoying our public lands in this way is something that is not common among the Latino population. However, it is something that more and more people are learning that they can access this space as well. I hope that families and future generations can continue to enjoy our tranquil natural spaces. This is a space that provides not only an outlet for recreation, but also improves the physical and mental health of our communities. Please protect our lands. I am writing to ask BLM to include as many provisions of Alternative F as possible in the final plan.
8	Schank, Sherry	365	It is my belief that the new alternatives represent a more balanced approach to managing the BLM lands in the region and they give greater consideration to the values and uses of public lands focus on maintaining long term healthy land environments. The 2 new alternatives give more support for reversing the effects of climate change on these and surrounding lands. Alt F does a better job of scaling back climate related pollution and also offers many supports to conservation of these lands - to wildlife living in these areas, to the people living in western communities and to the cumulative climate impacts across the country and the world. Closing oil and gas leasing on lands having no known, low or medium potential simply make sense. Why would energy companies want to lease lands with minimum potential and to waste the monies needed to create the infrastructure any oil and gas production would require? Leasing lands with potential could be more productive and considerably less costly. Closing the no low medium lands, various kinds of recreation activities, and protects the natural conditions of these lands which often is the reason many of us choose to live here.
8	Dehaan, Asa	343	Wildlife: Having conducted wildlife research in the area, I can affirm the significance of the habitat the BLM lands provide. Alternative F's proposals to shield critical habitats from disruptive oil and gas development will ensure that species like the mule deer, elk, and the greater sage grouse can continue to be a testament to the rich biodiversity of our region.
8	Environmental Advocacy NGO Consortium	316	BLM must prioritize protection of natural resource values where they exist and adhere to the agency's multiple use and sustained yield mandate in developing the SEIS. A decision which leaves the majority of the planning area open to oil and gas development negates the effectiveness of long-term viability of conservation measures. BLM's Alternative F properly closes a significant portion of the planning area to future development. However, the development anticipated under this alternative is concerning and out of line with climate science. We support Alternative F's proposed management to close additional lands to oil and gas development. [98] We would propose to extend closure to oil and gas development in the following areas: - All lands with wilderness characteristics that are not included within BLM's existing inventory (i.e., citizen submitted inventory) - All Colorado Parks and Wildlife (CPW) high priority habitats, as well as important big game winter range and migration corridors identified by the State of Colorado. BLM must ensure consistency for these areas within the field office via the forthcoming CO Big Game RMP Amendment. CPW's "Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado" is attached to these comments as Attachment L. - Any areas identified as having renewable energy development potential from the forthcoming Solar Programmatic EIS. - All suitable habitat for threatened, endangered, proposed, and candidate species as well as suitable habitat for species ranked by NatureServe as G1-G3, S1-S3, or N1-N3. [99] Potential Conservation Areas (PCAs) identified by Colorado National Heritage Program. - Areas where development could impact Colorado National Monument. BLM should conduct scenic, soundscape, night sky and air quality analysis specific to the Monument and close areas as necessary to protect those and other resources of the monument. BLM should also consider impacts to the Monument as the park landscape is a prehistoric and historic cultural resource and include the National Park Service as a consulting partner. - Usable water sources and areas at risk of groundwater contamination from oil and gas development. Information regarding these resources is available in a report from hydrology experts attached as Attachment M. [98] SEIS pp 2-3 - 2-4; see also Table 2.3-1, Table 2.3-2, Figure 2.6-2. [99] Definitions of NatureServe Conservation Status Ranks, available online at: https://help.natureserve.org/biotics/content/record_management/Element_Files/Element_Tracking/ETRACK_Definitions_of_Heritage_Conservation_Status_Ranks.htm
8	Borges, Kent	65	I also ask the BLM to protect lands with the highest conservation values such as wilderness character, wildlife habitat, watersheds, and cultural or historic sites in the planning area from oil and gas extraction. These would include the Dolores River, Grand Hogback, Upper Colorado and Roaring Fork Valleys, Grand Junction Book Cliffs as well as an expanded Castle Peak Wilderness Study Area in Eagle County, among others.

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9	Environmental Advocacy NGO Consortium	316	Bangs Canyon - BLM has been managing over 20,000 acres of Bangs Canyon to protect its wilderness character since at least 2015. A citizens' inventory of the Bangs Canyon area in 2014 identified some 27,300 acres as LWC. While the Tabeguache Trail now likely divides this unit into two separate units, each unit still meets the size criteria for LWC. BLM should update its wilderness inventory for the entire Bangs Canyon area, as proposed by the public in 2015, and designate all qualifying lands on either side of the Tabeguache Trail as a WSA (management of the wilderness resources in Bangs Canyon should not close the popular Tabeguache Trail). Bangs Canyon has been long proposed for formal wilderness designation, including in every successive version of Representative Diana DeGette's Colorado Wilderness Act since its initial introduction in 1999.
9	Eagle County	187	Decisions on the designation and management of WSAs and LWC's should be based on the latest and most accurate inventory of lands with wilderness characteristics. The existing LWC inventory that informed the 2016 Resource Management Plan was flawed and relied on outdated inventory guidance. In particular, the proposed expansion of Castle Peak WSA should designate all adjoining LWC consistent with updated inventory findings.
9	Eagle County	187	Decisions on the designation and management of WSAs and LWC's should be based on the latest and most accurate inventory of lands with wilderness characteristics. The existing LWC inventory that informed the 2016 Resource Management Plan was flawed and relied on outdated inventory guidance. In particular, the proposed expansion of Castle Peak WSA should designate all adjoining LWC consistent with updated inventory findings.
9	Environmental Advocacy NGO Consortium	316	In addition to updating existing inventories to better comply with Manual 6310, BLM should also respond to citizens' inventory submissions. Since the completion of the GJ and CRV RMPs, citizens have submitted numerous LWC inventories in the SEIS planning area. We appreciate that BLM has made efforts in recent years to update inventories in response to citizens' inventory submissions, and to consider citizens' submissions in this SEIS. Yet many citizens' inventories, dating as far back as 2013, have yet to be addressed by BLM. In the GJFO, these include Bangs Canyon, Bangs West, Cone Mountain Canyons, Cow Ridge, Granite Creek, Horse Mountain, Munger Creek, Spink Canyon, Spring Canyon. In the CRVFO, these include Hogback East, Horse Creek, Lucky Gulch, Castle Peak WSA Contiguous, and Red Hill West.
9	Environmental Advocacy NGO Consortium	316	BLM should also revoke any existing waivers to stipulations on leases within LWC, to ensure protective measures are properly imposed. Moving forward, any waivers granted for existing leases in LWC should be part of an open public process. Additionally, careful consideration and implementation of all available minimization and mitigation measures is important for existing leases within LWCs. These measures include delaying and/or phasing development, requiring technologies that minimize disturbance and impacts, and considering compensatory mitigation for development that does occur.
9	Environmental Advocacy NGO Consortium	316	BLM can and should protect wilderness-quality lands that are encumbered by existing leases Existing leases within the field offices must not affect BLM's decision to close areas to new leasing throughout this environmental analysis. Leases are issued for 10-year terms and frequently expire without being developed. It is unreasonable for BLM to make long-range planning decisions based on short-term resource commitments. Closing an area to leasing would not impact BLM's ability to manage an existing lease were it to go into development. On the other hand, opening an area to leasing does impact BLM's ability to manage other multiple uses in the area.[24] The most reasonable approach is to close areas to leasing that have important natural resources, such as wilderness characteristics, thereby minimizing resource conflicts by preventing additional leasing while existing leases run their course. This approach would also increase decision space over time, enabling BLM to better protect wilderness-quality lands and other important resources over the long term. [24] See e.g., CRVFO, Proposed RMP/Final EIS (Feb. 2014) at 4-423 (confirming that by leaving the Grand Hogback open to mineral leasing, wilderness characteristics "would be likely to change or degrade through the life of the plan"), available at https://eplanning.blm.gov/public_projects/lup/68506/110860/135739/08_Chapter_4_Environmental_Consequences_508.pdf (last accessed 10/27/23).}
9	Western Environmental Law Center et al.	304	Comments also asked that an updated Lands with Wilderness Characteristics (LWC) inventory inform the SEIS, noting that BLM failed to complete a full LWC inventory prior to finalizing the 2015 GJ and CRV RMPs. The comments provided LWC inventory data from citizen groups to assist agency analysis. The Draft SEIS does not say that BLM has completed a full LWC inventory that is compliant with BLM Manual 6310.
9	Environmental Advocacy NGO Consortium	316	Alternatives B, C, E and F of the Draft SEIS are based on a list of, and boundaries for, LWCs that are outdated because of recent BLM inventory updates. Since the completion of the 2015 CRVFO Proposed RMP/Final EIS and GJFO Proposed RMP/Final EIS, BLM has modified the boundaries to several LWC units in both field offices, and found new LWC units, through their FLPMA-obligated ongoing wilderness inventory processes. For example, in 2017, BLM updated the LWC inventory for several areas across the GJFO including for LWC units that are listed in Table 2.3-2 of the Draft SEIS that would be closed to leasing in Alternative E, including Hunter Canyon and East Salt Creek. As a result of this inventory update, Hunter Canyon no longer exists as a standalone LWC unit, and East Salt Creek has new boundaries. Both units have at least partially been incorporated with new boundaries into the larger single Book Cliffs South LWC unit. In addition to reassessing previous inventories and responding to citizens' inventory submissions as mentioned above, BLM should ensure that the Final SEIS incorporates updated LWC inventory data for all units, and that management prescriptions are applied to the new boundaries.

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9	Environmental Advocacy NGO Consortium	316	<p>Lands with wilderness characteristics outside of designated WSAs should be closed to leasing and managed for the protection of wilderness characteristics</p> <p>Both Alternative E and Alternative F would apply new management protections for inventoried lands with wilderness characteristics. Alternative E would close to leasing and manage for the protection of wilderness character the list of LWC units analyzed in Alternative C of the CRVFO and GJFO Proposed Final RMP/FEISs. Alternative F would close all inventoried LWC units to fluid mineral leasing and manage all inventoried LWC for the protection of wilderness character.</p> <p>Under the current RMPs, BLM is managing to protect only around 20% (79,500 acres) of the total acreage of inventoried lands with wilderness characteristics (352,380 acres) in the planning area. This constitutes just 5% of the BLM-managed public lands in the planning area. Meanwhile, nearly 100% of the planning area with high potential for oil and gas remains open to leasing and development. This is not a balanced or an appropriate weighting of the value of wilderness-quality lands. Under Alternative E, BLM would only slightly increase protections for wilderness quality lands, resulting in protective management for 217,100 acres of lands with wilderness character, or around 13% of the BLM-managed surface in the planning area. Alternative E clearly does not go far enough in protecting these valuable wilderness resources, and could result in the loss of considerable wilderness quality lands, particularly in the Book Cliffs. These lands are highly valued for their outstanding wildlife habitat, primitive recreation opportunities, and as effective mitigation to heavily developed and impacted surrounding public lands.</p> <p>Unlike Alternative E, Alternative F is based on a true and updated accounting of the wilderness resources in the planning area, including units and boundaries recently inventoried by BLM, and could result in protective management for all the remaining acreage of wilderness quality lands in the planning area, constituting a total of around 476,640 acres (combined WSAs and inventoried LWCs); this constitutes almost exactly 30% of the surface lands managed by BLM in the planning area. This is important in the context of President Biden's commitment to protect 30% of our nation's lands and water by 2030. The success of this 30x30 initiative will hinge on utilizing opportunities like this SEIS to ensure that more acres will be managed to maintain a primarily natural state, providing connectivity corridors and habitat for wildlife and ensuring clean water and air for local communities.</p> <p>We support Alternative F's approach to managing wilderness quality lands. However, it is imperative that BLM update its LWC inventory first, by responding to outstanding citizens' inventories, inventorying all qualifying lands contiguous with existing WSAs, and reassessing existing inventory units to ensure that the conclusions made therein are consistent with guidance in BLM Manual 6310. If BLM is not able to complete this thorough review of wilderness resources prior to the completion of the SEIS, the SEIS should include language explicitly committing BLM to completing these efforts within a year of the signing of the ROD, incorporating any updated boundaries into the management prescriptions applied through this SEIS, and protecting any citizens' proposed inventory units until BLM updates and responds to those submission.</p>

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9	Environmental Advocacy NGO Consortium	316	<p>BLM should apply uniform, protective management prescriptions to all lands with wilderness characteristics not designated as WSAs. Under Alternative E and Alternative F, BLM would manage certain inventoried lands that have wilderness characteristics for the protection of their wilderness character. Specific management prescriptions for these lands would be as described under Alternative C of the GJFO and CRVFO Proposed Final RMP/FEISs from 2015. We support this approach to managing lands with wilderness characteristics, with minor tweaks in the proposed management to better align management across planning areas and to ensure that management of wilderness quality lands is sufficient to ensure that future actions do not degrade wilderness characteristics. BLM should strive to create uniform management for managed LWCs across the planning area. Alternatives E & F currently rely on the management prescriptions analyzed in the Alternative Cs of the respective GJFO and CRVFO Proposed Final RMPs/FEISs. While similar, the management prescriptions analyzed in these alternatives differ between GJFO and CRVFO. For example, under these alternatives, the LWC in the GJFO would be closed to motorized and mechanized use, while in the CRVFO "motorized and mechanized use would be minimized" while prohibiting new permanent or temporary roads or trails. Similarly, in the GJFO, all LWC would be managed as VRM I unless otherwise noted, whereas in CRVFO, LWC would be managed as VRM II unless otherwise noted. BLM should align management for LWCs across field offices wherever possible. Management prescriptions for LWC should always include:</p> <ul style="list-style-type: none">- Closed to fluid mineral leasing, with no exceptions (e.g., geothermal or helium)- Prohibit surface occupancy or surface disturbing activities- ROW exclusion- VRM Class I- Closed to motorized vehicles, over-the-snow (OTS) travel and mechanized use, with exceptions for certain existing designated open motorized and mechanized routes <p>Where travel management route designations have been completed, BLM should strive to exclude existing popular designated motorized or mechanized routes from the motorized and mechanized closure area. Trails such as the Lorax Trail in the Thompson Creek LWC, the North Fruita Desert trails inside of the Book Cliffs South LWC unit, and the Hunter Canyon jeep trail in the Book Cliffs South LWC unit should be exempted from OHV closures in LWCs. However, management objectives should be explicit to ensure that future conflicting motorized and mechanized use, including new permanent or temporary motorized or mechanized road or trail construction or designation is prohibited, and that existing linear disturbances, such as closed roads, are prioritized for restoration to enhance and protect wilderness character.</p> <ul style="list-style-type: none">- Prohibit the construction of new or temporary roads or trails- Closed to wood product sales and harvest- Closed to mineral material disposal- Closed to non-energy leasable mineral exploration and development- Recommended to the Secretary of the Interior for withdrawal from mining laws for locatable mineral development or exploration- Prioritize restoration of closed roads or trails to enhance wilderness character
9	Environmental Advocacy NGO Consortium	316	<p>For both reassessed previous inventories, and new inventories responding to citizens' submission, BLM should clarify how it plans to incorporate new wilderness characteristics information into the Final SEIS. Review and consideration of this inventory should be completed prior to the record of decision (ROD) being published. If the BLM's LWC inventory update cannot be completed and incorporated into this planning process prior to the signing of the ROD, BLM should include language committing to updating the LWC inventory within one year of the signing of the ROD, and committing to deferring any surface disturbing activities or leasing in any wilderness inventory unit until the inventory is updated according to guidance in BLM Manual 6310. This language would provide the public necessary assurance that BLM will update required wilderness inventories in a timely manner and ensure that wilderness qualities are not lost prior to the agency completing the inventory process.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
9	Environmental Advocacy NGO Consortium	316	<p>Wilderness inventories must be maintained and updated on a continuing basis and relevant citizen-submitted data is to be evaluated in a timely manner.[13] This includes the "necessary forms for each area" including photo logs, route analysis forms and inventory area evaluations.[14] Manual 6310 reiterates that, "[r]egardless of past inventory, the BLM must maintain and update as necessary, its inventory of wilderness resources on public lands." [15] The 2015 GJ Approved RMP committed BLM to maintaining an ongoing LWC inventory, updating and completing inventories after the signing of the ROD, and making the results of those subsequent inventories available to the public.[16] Additionally, the 2015 GJ RMP committed BLM to considering additional protections for newly identified LWC through future NEPA processes. This SEIS is just such an opportunity and is an appropriate venue to consider new management prescriptions for existing and newly identified LWC across the planning area. It is our understanding that BLM is in the process of updating its wilderness inventory in both field offices, as indicated in Table 3.5-36 and Table 3.5-38 in the Draft SEIS, primarily in response to citizens' lands with wilderness characteristics inventories received over the last ten years.[17] While we appreciate BLM's efforts to fulfill its obligations to maintain a wilderness inventory and respond to citizens' wilderness inventories, BLM must also reassess its own previous inventories, particularly those conducted over a decade ago, where on the ground conditions have changed, or where those inventories are not compliant with BLM Manual 6310 guidance. Both the CRV and GJ RMPs, and subsequently the baseline conditions and impacts analyses in this SEIS, rely on wilderness inventories that are not compliant with BLM Manual 6310 or are otherwise outdated and inaccurate. Previous comments submitted on those RMPs have highlighted deficiencies in these inventories [18], including faulty boundary delineation, improper assessments of naturalness, and arbitrarily narrow interpretations of outstanding opportunities for solitude or primitive and unconfined recreation. BLM must reassess its own previous inventories and make appropriate changes to bring those inventories in compliance with current guidance for conducting wilderness characteristics inventories in BLM Manual 6310, particularly for areas where citizens have repeatedly pointed out these flaws in wilderness assessment, including Bangs West, Cow Ridge, Horse Mountain, Maverick Canyon, Munger Creek, Granite Creek, Sewemup Mesa (aka Cone Mountain Canyons), Snyder Flats, Spring Canyon, Spink Canyon in GJFO, and King Mountain, Blowout Hill, and Castle Peak in the CRVFO.</p> <p>[13] BLM Manual 6310 § 1.4. [14] Manual 6310, Appendices A-D. [15] Id. [16] Grand Junction Field Office Approved Resource Management Plan (Aug 2015), p. 13. [17] Draft SEIS pp. 3-86 - 3.87. [18] See Attachments A1, A2, and B to these comments.</p>
9	Environmental Advocacy NGO Consortium	316	<p>BLM must complete an updated inventory of lands with wilderness characteristics across the planning area to inform the NEPA process. In compliance with FLPMA, BLM is directed to maintain an inventory of LWC on a continuing basis, including during land use planning, or when the public identifies wilderness characteristics as an issue during a NEPA process or submits new information concerning wilderness resources.[11] NEPA also imposes a continuing obligation on agencies to take a hard look at new circumstances or information relevant to environmental impacts of proposed actions.[12]</p> <p>[11] BLM Manual 6310 § 1.6(A). [12] See e.g., 40 C.F.R. §§ 1500.1 (Agencies must consider relevant environmental information), 1502.9 (agencies must consider new circumstances and information).</p>
9	Environmental Advocacy NGO Consortium	316	<p>Protection of wilderness resources is in line with BLM's authority. Under the Federal Land Policy and Management Act (FLPMA), BLM is obligated to inventory and consider management of lands with wilderness characteristics (LWC).[1] FLPMA's mandate to maintain an inventory of public lands resources is the foundation on which all further management decisions are built, from land use allocations to site-specific project planning. Protection of wilderness resources is consistent with FLPMA's definition of multiple use, which identifies the importance of various aspects of wilderness characteristics and requires BLM's consideration of the relative values of these resources but "not necessarily to the combination of uses that will give the greatest economic return." [2]</p> <p>[1] 43 U.S.C. § 1711(a); see also Ore. Natural Desert Ass'n v. BLM, 625 F.3d 1092, 1122 (9th Cir. 2008) (holding that "wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711"). [2] 43 U.S.C. § 1702(c). Instruction Memorandum 2011-154 and BLM Manuals 6310 and 6320 contain mandatory guidance on implementing FLPMA's requirements. Manual 6320 requires BLM to consider lands with wilderness characteristics in land use planning, both in evaluating the impacts of management alternatives on lands with wilderness characteristics and in evaluating alternatives that would protect those values. BLM Manual 6320 directs BLM to "[c]onsider the benefits that may accrue to other resource values and uses as a result of protecting wilderness characteristics."</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
9	The Pew Charitable Trusts	331	<p>Establishing an Accurate Baseline Inventory of Lands with Wilderness Characteristics (LWCs) Recommendation: BLM has not completed its LWC inventory and thus remains out of compliance with Manual 6310. We urge the BLM to clarify how it will complete the LWC inventory, including accounting for the citizen LWC inventory for the GJ and CRV field offices.</p> <p>Section 201 of the Federal Lands Policy and Management Act (FLPMA), 43 U.S.C. § 1711 (a), requires the BLM to maintain a current inventory of its resources, including regularly updating this inventory. Section 202 of FLPMA 43 U.S.C. § 1712 (a) requires the BLM to incorporate this information as it develops, maintains, and updates land use plans that determine how different landscapes and resources will be managed. These resources include LWCs. As the U.S. Court of Appeals for the Ninth Circuit held in Oregon Natural Desert Association v. Bureau of Land Management (Case No. 05-35931), "wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711. BLM's land use plans, which provide for the management of these resources and values, are to 'rely to the extent it is available, on the inventory of the public lands, their resources, and other values.'" 43 U.S.C. § 1711 (c) (4). The lands governed by the CRV and GJ RMPs contain significant acres of public lands that possess naturalness and outstanding opportunities for solitude and/or primitive recreation. Instruction Memorandum (IM) 2011-154 and Manuals 6310 (Conducting Wilderness Characteristics Inventory on BLM Lands) and 6320 (Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process) further outline the requirement for and process associated with evaluating LWCs. The IM directs BLM to "conduct and maintain inventories regarding the presence or absence of wilderness characteristics, and to consider identified lands with wilderness characteristics in land use plans and when analyzing projects under [the National Environmental Policy Act (NEPA)]." Manual 6310 requires BLM to maintain an updated inventory of LWCs, prior to land use planning. Manual 6320 requires BLM to consider LWCs during land use planning, evaluating both the impacts of management alternatives on LWCs and a range of alternatives that would protect those values.</p> <p>Manual 6310 states that LWCs must meet three basic criteria: areas must be 5,000 acres or more of contiguous public land without the presence of roads (as defined in the Manual); landscapes must be affected primarily by the forces of nature, and any work of human beings must be substantially unnoticeable; areas must provide outstanding opportunities for solitude and/or primitive and unconfined recreation. Additionally, they may possess supplemental values that further enhance the area. BLM policy is to disclose its inventory of LWCs prior to the publication of a Draft RMP, as this inventory is intended to assist the agency and to inform public input regarding proposed management decisions that affect these areas. Additionally, IM 2013-106 instructs that field offices should finalize the wilderness characteristics inventory and make findings available to the public as soon as practicable after completion and before the inventory data is used to inform decisions.</p>
9	The Pew Charitable Trusts	331	<p>Furthermore, two nonprofit organizations-the Wilderness Workshop and the Colorado Wildlands Project- submitted extensive LWC inventory information to BLM during the public comment period on the GJ Draft RMP in 2013 and subsequently submitted several LWC inventories for the CRV Field Office. Pew has incorporated these inventories, by reference, into our comments. These citizen's LWC inventories closely followed the protocols and criteria in BLM Manual 6310 and met the minimum standards for review of new information. We appreciate that BLM has made efforts to respond to these inventories but note that many citizen inventories remained unaddressed. BLM must clarify how it will respond to this information, including the incorporation of changes, as appropriate, to the agency's own LWC inventory.</p>
9	The Pew Charitable Trusts	331	<p>Without an updated inventory of resources on public lands, baseline information will not be sufficient to permit adequate impact analysis. Establishment of baseline conditions is a requirement of NEPA, which directs agencies to "describe the environment of the areas to be affected or created by the alternatives under consideration." See 40 C.F.R. § 1502.15. In Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988), the Ninth Circuit states that "without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." The court further held that "[t]he concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process." Conducting an accurate and comprehensive LWC inventory as directed by BLM Manual 6310 is BLM's current policy for establishing the baseline conditions required by NEPA and analyzing potential impacts to those baseline conditions. While Pew appreciates that the BLM has conducted additional LWC inventory work since the 2015 RMPs, we noted in our scoping comments dated June 25, 2022, that the agency had not completed an updated inventory of LWCs in the GJ and CRV Field Offices. An updated inventory still has not been done, which puts the BLM out of compliance with Manual 6310. We recognize that BLM has made some allowances for this deficiency in alternative F of the SEIS, including six units in CRV and one unit in GJ that have been identified in the citizens' inventory as containing wilderness characteristics, and indicating that the agency may document additional areas during forthcoming inventory. This approach is not satisfactory as a practice and remains out of compliance with BLM's Manual 6310. We respectfully request that BLM clarify how it will complete its LWC inventories and make the findings publicly available before making management decisions for these lands.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
9	The Pew Charitable Trusts	331	Protections Of Lands with Wilderness Characteristics Recommendation: The BLM should carry forward the full suite of LWC units, as outlined in Alternative F, in the proposed final plan and record of decision, and ensure adequate management prescriptions to protect their wilderness characteristics, including closing LWCs in the GJ and CRV field office to oil and gas leasing, and other surface-disturbing activities. As the BLM completes additional inventories, lands found to contain wilderness characteristics should also be subject to management prescriptions that protect their wilderness character. As noted above, Manual 6320 requires BLM to consider LWCs in land use planning, both in evaluating the impacts of management alternatives on LWCs and in evaluating a range of alternatives that would protect those values. Examples of management prescriptions that will most effectively protect LWCs in the GJ and CRV field offices include, but are not limited to: - Withdrawal from mineral entry; - Closure to leasing, or allow leasing only with no surface occupancy, and with no exceptions, waivers, or modifications; - Designate as right-of-way exclusion areas; - Close to construction of new roads; - Designate as closed to motor vehicle use, as limited to motor vehicle use on designated routes, or as limited to mechanized use on designated routes; - Close to mineral material sales; - Designate as Visual Resource Management Class I or II; - Restrict construction of new structures and facilities unrelated to the preservation or enhancement of wilderness characteristics or necessary for the management of uses allowed under the land use plan; - Retain public lands in federal ownership The LWCs within the GJ and CRV field offices are treasured by hikers, hunters, wildlife viewers and many others who visit our public lands to experience nature and Colorado's spectacular wild lands. In addition to providing backcountry recreation opportunities, LWCs harbor important wildlife habitat, riparian areas, cultural resources and other resources of the public lands that could be negatively impacted by oil and gas leasing and development.
9	Roaring Fork Audubon and ColoradoWild	352	Lands with Wilderness characteristics provide refugia for native biodiversity and consequently sites where ecosystems are functioning and resilient. Yet, BLM failed to complete a full inventory of Lands with Wilderness Characteristics (LWCs) prior to finalizing the 2015 GJ and CRV resource management plans. Although Alternative F does propose broad closures to protect all lands found to possess wilderness character, without a thorough BLM inventory of LWCs in the planning area, BLM must, at minimum, choose Alternative F to ensure new leasing does not permanently impair wilderness resources that have not been inventoried or adequately considered for protection by the agency.
10	Town of Palisade	361	We fully support the closure of the Palisade Municipal Watershed to fluid mineral leasing as contemplated in Alternative F and explained on page 3-34 of the DSEIS. The town owns significant surface acreage in its watershed containing infrastructure that provides clean drinking water to its residents. The area is managed pursuant to C.R.S. 31-15-707(1)(b) and Chapter 14 of the Palisade Municipal Code. However, some of this area is split estate with subsurface minerals managed by the federal government. Additionally, public lands further upstream from town-owned property feed into the town's system and have been threatened by oil and gas development in the past. As such, we hope to see this larger watershed basin fully closed to future leasing activities to protect one of our town's most important resources - water.
10	Colorado Wildlife Federation, Inc.	274	CWF notes that Alternative F also would provide within GJFO boundaries, one half-mile buffer to fluid mineral leasing, 5 miles upstream for 4 municipal water diversions and we are puzzled as to why this safeguard was not included in the preferred alternative.
10	Rock, Joanne	127	The identification, source and impact of the use of all water sources that are anticipated to be used on those 24,000 acres in Plan F for oil and gas operations needs to be specifically identified and "setbacks" around surface water, flowing bodies of water, pools of water and protection from potential contamination of underground aquifers from "produced" water should be written into the plan.
10	US Environmental Protection Agency Region 8	328	We therefore recommend that the Final SEIS incorporate proximity to valuable wetland resources into any limited leasing Alternative.
11	Protegete Piceance	165	The SEIS currently stipulates that active oil and gas leases will not be affected by this decision. Alternative E, the BLM's preferred alternative would leave 93% of high potential lands open to leasing. Alternative F, closes all but 16% percent of high potential lands to future leasing, but would not impact active leases that are concentrated on high potential lands. As a result, there would be little difference between Alternative F and the original range of alternatives in terms of actual number of leased wells into the future. In fact, an analysis by Megan Williams concludes Alternative E would only reduce the number of wells drilled in the CRVFO over the next 20 years by 2 wells. Within the CRVFO high potential lands directly overlay and surround several communities, ag lands, and watersheds. The proximity of oil and gas development the BLM is authorizing under the current range of alternatives will perpetuate environmental injustices on disproportionately impacted communities (DICs) the BLM has identified in the plan and more broadly. To sufficiently address the impacts of oil and gas on DICs we believe the BLM should consider a no leasing alternative.

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11	Pitkin County	314	<p>Pitkin County is working to reduce climate emissions and urging partners to make similar commitments.[4] This aligns with science based climate targets. Since "[f]ossil fuel production on public lands accounts for nearly a quarter of all U.S. greenhouse gas emissions,"[5] it would be advisable for the BLM to consider closing the planning area to new leasing in a "no leasing alternative." The non-inclusion of a full closure alternative fails to wholly address the reality of the current and future climate.</p> <p>[4] See Pitkin County "Climate Action Plan" webpage ("The Pitkin County Climate Action Plan focuses on County agencies and initiatives that can reduce emissions. This plan makes an important contribution to emissions reduction and shows the County's leadership. The plan was developed to serve as a guide for departments to drive robust and meaningful reductions."), available at https://climate.colorado.gov/pitkin-county-climate-actionplan#:~:text=The%20Pitkin%20County%20Climate%20Action,drive%20robust%20and%20meaningful%20reductions.</p> <p>[5] U.S. Dept. of Interior, Fact Sheet: President Biden to Take Action to Uphold Commitment to Restore Balance on Public Lands and Waters, Invest in Clean Energy Future (Jan. 27, 2021), available at https://www.doi.gov/pressreleases/fact-sheet-president-biden-take-action-uphold-commitment-restore-balance-public-lands#:~:text=Fossil%20fuel%20extraction%20on%20public,threatens%20cultural%20and%20sacred%20sites</p>
11	Pitkin County	314	<p>We recognize Alternative E has been chosen as the preferred alternative, but we also urge the BLM to consider developing another alternative which would mix-and-match components from Alternative E and F to fully close lands in the RMP to future oil and gas leasing in the Thompson Divide (TDACEC and adjacent land as in Alternative F) in addition to the removal from leasing of other lands in the Crystal and Roaring Fork River watersheds currently in Alternative E.</p>
11	Save West Mamm Creek Coalition	335	<p>Recommendations for management directions in the final plan: -- Expansion of the CRVFO RMP boundaries to be inclusive of all of Garfield County. It appears that portions of the County (i.e.: Southern Portion of 7S93W) are excluded, though they contain BLM lands and Fed Minerals at high risk of development. -- No-Leasing alternative: the only alternative not at odds with international climate commitments. Nothing in the IRA requires BLM to issue leases in any particular field office, and nothing prevents it, in this instance, from evaluating and indeed implementing a “no leasing” alternative. Such an alternative should be examined in every land management decision BLM makes, and this planning process is no exception. It is particularly appropriate in a part of the country already suffering disproportionate warming, Habitat fragmentation, Disease incidence and its associated impacts. Assuming the NO – Leasing Alternative: -- Mitigate existing oil and gas drilling by increasing public land protection through this planning process, including designating new Areas of Critical Environmental Concern. -- Protect community water sources in addition to eligible Wild & Scenic River segments from existing oil and gas development. -- Incorporate Closures, Plugging and Reclamation on Oil and gas lands where there is significant overlap with Disproportionately Impacted Communities (DICs) to align with state best practices and policies like the EnviroScreen tool and EJ Task Force Recommendations. -- Incorporate Closures, Plugging and Reclamation on all lands with wilderness characteristics and additionally tighten management to protect their wild character. Wilderness quality lands provide many values such as backcountry recreation opportunities, wildlife habitat and carbon storage that is prioritized over energy development.</p>
11	Wilderness Workshop	342	<p>Of the two new alternatives, BLM's analysis suggests that Alternative E does little to constrain drilling, resulting in just two fewer wells in the Colorado River Valley than the 2015 Plan that was challenged. To truly respond to the gravity of the climate crisis, the agency should consider a "no leasing" alternative.</p>
11	Roaring Fork Audubon and ColoradoWild	352	<p>However, because both Alternative E and F would result in new oil and gas leasing, we object to each of these alternatives. Further, both alternatives would thus contribute to further greenhouse gas emissions, ultimately exacerbating climate warming, increase landscape fragmentation and alteration thereby diminishing biodiversity, ultimately reducing ecosystem function, services and resilience to the impacts of climate warming. BLM must recognize the preponderance of climate science which supports that any additional future oil and gas development is incompatible with preventing further climate change and will diminish ecosystem health, services, and resilience. We urge the BLM to acknowledge the climate and ecosystem science that directs that a No-New-Leasing alternative should be analyzed and selected.</p>
11	Roaring Fork Audubon and ColoradoWild	352	<p>In keeping with our commitment to preserving and protecting the ecosystems upon which all life depends we support a No-New-Leasing alternative which would disallow any new fluid mineral leasing. By selecting a No New Leasing alternative, the BLM would effectively prevent the production of new greenhouse gas emissions thereby helping prevent further climate warming. A No-New-Leasing alternative would also prevent further wildlife habitat alteration, landscape fragmentation and diminishment of ecosystem process and resilience. A No-New-Leasing alternative is supported by climate and ecosystem science and aligns with both our international climate commitments and Colorado State law and policy. I. New Plans must be Consistent with Climate Change Science</p>
11	Ramirez, Jasmin	166	<p>we recommend the BLM consider a no leasing alternative, include appropriate setbacks and stipulations to better respond to and address EJ concerns and mitigate impacts faced by DICs, and strengthen air quality and climate change analysis to better understand and account for impacts to vulnerable communities in the decision area.</p>
11	Williams, Megan	224	<p>In the DSEIS BLM confirms that a no-leasing alternative is very similar to Alternative F but that "not having the ability to consider leasing parts of the remaining area would hinder orderly development." It's not clear what is meant by this statement and therefore whether it would be adequate justification for not considering a no leasing anywhere alternative. Also, BLM has nowhere acknowledged that considering a "no-leasing alternative" may be reasonable given the gravity of the climate crisis.</p>
11	Krische, Janet	369	<p>I support an alternative with No Oil and gas drilling on public lands for the following reasons: We need to be eliminating fossil fuel extractions not increasing it. Our planet - more correctly, the species that rely on a stable planet - cannot tolerate more fossil fuel use. The oil industry will continue to rake in their billions of dollars at the expense of us, our children and, if they survive, our grandchildren. Public lands are for our use, not for their profits. Populations continue to rise which makes public lands all the more precious to us.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
11	Davis, Dave	370	I support an alternative with No Oil and gas drilling on public lands for the following reasons: I believe we have over committed our forests for decades to oil and gas! We need to look to the future and stop using fossil fuels ASAP. Instead, we should protect our forest and public lands for recreation and environmental stewardship. As a resident of Western Colorado for 44 years and a Colorado native, I want you to protect the forest.
11	Walsh, Susan	372	I support an alternative with No Oil and gas drilling on public lands for the following reasons: Public lands should be for public uses not corporate lies. To address climate change, we need to stop using fossil fuels and banning drilling on public lands - 1st step.
11	Roaring Fork Audubon and ColoradoWild	352	BLM must align its planning efforts in the CRVFO and GJFO with the State of Colorado's policies, statutes, and regulations addressing fossil fuel extraction related issues including climate, pollution, and wildlife. Colorado's HB19-1261, Climate Action Plan to Reduce Pollution, mandates a goal of achieving climate neutrality by reducing overall greenhouse gas emissions by 26% below 2005 levels by 2025, 50% by 2030 and 90% by 2050. Those goals, enacted are in line with science-based recommendations to achieving climate neutrality. Alternatives E and F would undermine achieving climate neutrality and instead would fuel ongoing climate warming. Only a No New Leasing alternative will move Colorado toward achieving the legally mandated goals specified HB19-1261.
11	Williams, Megan	224	BLM estimates that Alternative F would be "very similar" to no leasing anywhere-or a "no-leasing alternative"-with 95 percent of the decision areas closed to future fluid mineral leasing. According to BLM, "much of the high-potential area currently has existing leases" which would not be affected by actions considered here.[15] Given that the number of wells foregone under Alternative F is essentially the same as under Alternatives B and C-especially in the CRVFO-a no-leasing alternative in the CRVFO would be the only meaningfully different development scenario and BLM should have considered this in the DSEIS. [15] BLM states in the DSEIS at I-I that, "[d]ecisions resulting from this supplemental EIS will not change existing rights or change existing fluid mineral leases."
11	Williams, Megan	224	BLM must consider a wider range of alternatives, including one that removes areas of high and very high mineral potential from future leasing and development, and must quantitatively evaluate and disclose the impacts of all alternatives
12	National Park Service National Trails Office	10	"Under Alternatives B and D, management of the Old Spanish National Historic Trail would continue as described under Alternative A. In addition, an NSO stipulation prohibiting surface occupancy and surface-disturbing activities within a 50-meter buffer around the Old Spanish National Historic Trail would be in place, providing more protection from surface-disturbing activities than under Alternative A." BLM Manual 6280 stipulates that the NHT management corridor must be based on field inventory in accordance with FLPMA. Subsequent volumes 1 and 2 of the BLM Manual 6280 provide implementation guidance. A 50-meter buffer is inadequate for NHT protection purposes, especially in the case that the congressional alignment has not been inventoried in order to locate trail-related resources and to define a proper corridor. The congressional alignment for the NHT is not to be interpreted at a scale finer than 1:100,000. In cases in which the land manager has inventoried the NHT according to BLM Manual 6280, the management corridor should be determined from inventory data.
12	National Park Service National Trails Office	10	"GJFO No special restrictions would be put in place for surface occupancy or fluid mineral leasing outside the Old Spanish National Historic Trail corridor (a 50-meter buffer from the trail centerline), which could result in impacts on visual resources or the trail's setting. A portion of the Old Spanish National Historic Trail would run along an area open to fluid mineral leasing. An NSO stipulation would apply to the trail." The co-administrators request that trail inventory, both following BLM Manual 6280 manual as well as Class III survey per NHPA, be conducted along the trail where it intersects planning and management areas opened to fluid mineral leasing prior to said leasing in order to ensure proper trail location as well as an appropriate management corridor and project buffer. Only with all trails resources identified can impacts resulting from fluid mineral leasing be properly analyzed and minimized or mitigated. Language stating this requirement in the SEIS is requested to ensure compliance with NTSA and NHPA at the project level.
12	National Park Service National Trails Office	10	"For all BLM undertakings that could impact national trails, the BLM complies with Section 106 of the NHPA prior to conducting the undertaking. Section 106 compliance typically includes inventory, evaluation, and consultation with the Colorado SHPO." Please note that impacts to the national historic trails should be evaluated primarily under the National Trails System Act of 1968, as resources comprising NHTs consist of more than historic properties pertaining to NHPA. For example, impacts to visual resources, setting, landscape, natural resources, and visitor experience are captured under NTSA evaluation. This legislation should be listed prior to NHPA.
13	Brower, Michele	174	I am also impacted directly by the oil and gas industry with oil and gas sites on 3 sides of my property. I know that the conditions I experience exactly mirror those inflicted by the oil and gas industry on our wild life habitat. My experience which to this point represents the impacts of ongoing maintenance only, includes oil and gas trucks of all sizes speeding up and down the steep roads day and night, making the roads unsafe for myself, livestock and wild life. I am looking at steep slopes permanently scarred by numerous pipelines and a landscape littered with oil and gas production sites.
14	Western Environmental Law Center et al.	304	Stakeholders also asked BLM to confirm its authority to deny unit proposals in the new plan, and to provide explicit guidance on unit size, unit suspensions, and lease extensions associated with unit management. Comments explained why clarification in each of these areas is necessary to ensure that the administration and management of oil and gas units furthers the public interest and the intent of the program.

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14	Western Environmental Law Center et al.	304	<p>Pursuant to FLPMA, the agency must "provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions... tak[ing] into account the long-term needs of future generations." [53] "[C]hanging needs and conditions" salient to "future generations" include those emerging from interwoven climate, ecological, and biodiversity crises and the implications of these crises to public lands. Those long-term needs must, in turn, be understood relative to the agency's ultimate imperative: to provide for the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment." [54] This imperative is also reflected in the "sustained yield" mandate which obliges BLM to take the long view and to satisfy the multiple use mandate "in perpetuity." Resource management planning is FLPMA's engine, providing BLM with its most important opportunity to reconcile tensions intrinsic to multiple use management, and serving a primary point of engagement for Tribal, state, and local governments, public lands stakeholders, and the public at large. BLM should therefore make it crystal clear that a lessee's surface use rights are subject to a the RMP's terms, including terms provided for by land use plans either revised or amended after a lease is issued. Because the term 'sustained yield' expressly incorporates principles of 'multiple use,' its reference to perpetually maintained 'output' accounts for impacts to both developable resources, such as timber for harvest, and environmental resources, such as watersheds and wildlife. Principles of sustained yield, like principles of multiple use, do not elevate certain uses over others, but rather, delegate discretion to the BLM to manage public lands in the best interests of the American people today, tomorrow and into the future." Solicitor's Opinion M-37039 at 8-9.</p> <p>[53] 43 U.S.C. § 1702(c).</p> <p>[54] 43 U.S.C. § 1701(a)(8). 55 43 U.S.C. § 1702(h) (emphasis added). "The term cautions against managing public lands for the short-term expediencies of the day, and, as the Supreme Court has explained, 'requires the BLM to control depleting uses over time, so as to ensure a high level of valuable uses in the future.' [citing Norton v. S. Utah Wilderness Alliance, 542 U.S</p>
14	Western Environmental Law Center et al.	304	<p>Scoping comments also highlighted examples of mismanagement of oil and gas units and the unitization process in the area, and urged that clear direction on unit management be included in the new plans. Comments describe how the unitization process has been misused by leaseholders to retain leases beyond their expiration dates without diligent development, and how BLM's management of units has facilitated speculation.[37]</p> <p>[37] WELC et al., Scoping Comments at 16</p>
14	Western Environmental Law Center et al.	304	<p>Comments asked that, in conjunction with this SEIS, BLM undertake a systematic review of all existing lease suspensions and reassess whether justifications for the suspensions still exist. To ensure more diligent, consistent, and transparent management of suspensions the new plans should include monitoring standards and requirements for suspensions.</p>
15	Amphibian Refuge	4	<p>Amphibian populations are declining worldwide, and amphibian populations are experiencing high extinction rates due to habitat loss, chytrid fungus, pollutants, pesticides, and climate change. Amphibians are the most threatened class of vertebrates and merit special attention in the Supplemental Environmental Impact Statement and Resource Management Plan. Provide a description of the amphibian existing environment and potential effects of the proposed action on amphibians. Consider classifying an amphibian, such as the northern leopard frog, as a BLM sensitive species.</p> <p>References: Catenazzi, A. 2015. State of the World's Amphibians. Annual Review of Environment and Resources, 40: 91-119. Collins, J.P., and M.L. Crump. 2009. Extinction in Our Times: Global Amphibian Decline. New York, NY: Oxford University Press. Kolbert, E. 2014. The Sixth Extinction, an Unnatural History. New York, NY: Bloomsbury. McCallum, M.L. 2007. Amphibian Decline or Extinction? Current Declines Dwarf Background Extinction Rate. Journal of Herpetology, Volume 41, Number 3, pp. 483-491.</p>
15	Western Environmental Law Center et al.	304	<p>BLM's analysis has not considered the most recent information related to other important wildlife habitat. For example, the discussion of lynx in the Draft SEIS, fails to cite or mention any recent information about the extent or condition of lynx habitat in the planning area. Similarly, there is no discussion of recent trends impacting Colorado River Cutthroat Trout, nor is there information regarding the golden eagle, canyon tree frog, northern leopard frog, midget faded rattlesnake, burrowing owl, or gray wolf... Without disclosure and consideration of this information, BLM cannot make an informed decision about areas that should be protected from new leasing.</p>
15	Roaring Fork Audubon and ColoradoWild	352	<p>In consideration of state and federal policies and law, BLM must take a hard look at impacts from proposed alternatives 'E' and 'F' to threatened and sensitive wildlife and plant species. Previous comments identified the need to update baseline data related to wildlife habitat, explicitly by assessing the extent and condition of habitat in the planning area. Additionally, there is information related to the sensitive Roundtail Chub and Colorado River cuthroat trout. BLM's analysis has not considered the most recent climate vulnerability information related to other important wildlife habitat. For example, the Draft SEIS fails to cite or mention new information about the extent or condition of Canada lynx habitat in the planning area or recent trends impacting Colorado River Cuthroat Trout, golden eagle, canyon tree frog, northern leopard frog, midget faded rattlesnake, burrowing owl, or gray wolf - all species that are listed or considered BLM-sensitive and that occur or will occur in the planning area - and all of which are vulnerable to the impacts of global warming and habitat alteration. However, BLM's wildlife and plant species' analysis are grossly incomplete and inadequate.</p>

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15	Roaring Fork Audubon and ColoradoWild	352	<p>The Colorado office of the Bureau of Land Management (BLM), which administers 8.4 million acres of Colorado's surface acres, and more than 29 million acres of sub-surface mineral estate has been charged with developing a climate adaptation strategy for BLM lands within the state to ensure the best possible adaptation strategies(CNHP 2015). A Climate Change Vulnerability Analysis was conducted for the BLM to evaluate the potential impact of future climate conditions on 36 key native animal species, 62 native plant species and 16 ecosystems on BLM-managed lands in Colorado (CNHP 2015). Climate change vulnerability assessments are not an end unto themselves, but rather are intended to help BLM managers identify areas where action may mitigate the effects of climate change, recognize potential novel conditions that may require additional analysis, and characterize uncertainties inherent in the process. Unfortunately, much of the advices from the Vulnerability Analysis have been disregarded. Ecosystems in BLM's project area are characterized by Pinyon-Juniper woodlands, which are highly vulnerable to climate warming, desert shrublands which are moderately vulnerable, sagebrush and oak and mixed-mountain shrublands both which have low vulnerability (CNHP 2015). Western riparian woodlands and shrublands occur throughout the project area and all have very high vulnerability to climate change (CNHP 2015). Colorado's western rivers are highly vulnerable to climate change (CNHP 2015). In Colorado, streams and rivers and their associated riparian habitat, provide greater than 80 percent of Colorado's native wildlife with essential resources during some period of their life cycle. Thus, the loss or degradation of riparian and stream habitat negatively impacts native biodiversity. BLM sensitive animal species in the project areas for which a Climate Change Vulnerability Assessment was conducted for the BLM and which were found to be vulnerable to climate warming include but are not limited to: Desert big horn (moderately vulnerable), Golden eagle (moderately vulnerable), Greater Sage-grouse (highly vulnerable), Burrowing owl (moderately vulnerable), Roundtail Chub (highly vulnerable), Colorado River cuthroat trout (extremely vulnerable), Canyon tree frog (moderately vulnerable), Northern Leopard frog (moderately vulnerable) and midget faded ratlesnake (highly vulnerable) (CNHP 2015). This extensive list of federally protected and BLM-sensitive native wildlife and plant species that occur in this planning area is extraordinary and indicates the extremely high and essential value of this landscape for native wildlife and plant species. This hotspot of native species diversity rarity is far too valuable to be lost to either the proximate or ultimate impacts of fossil fuel extraction.</p>
16	Western Energy Alliance	306	<p>Additionally, nowhere in the SEIS does BLM provide evidence that closing these huge areas to mineral development would actually result in the direct creation of additional recreational activities and visitor services. See Utah Shared Access Alliance, 463 F.3d at 1134 (For an agency decision to survive arbitrary and capricious review, the agency must have "articulated a rational connection between the facts found and the decision made."). No examples of additional recreation and visitor services were provided in the entire SEIS. BLM simply provides the two general and vague statements of alternative use as the basis for closing 1.56 million acres to mineral development in the planning area.</p>
16	Western Energy Alliance	306	<p>The Only Updated Alternative Resource Use Assessed by BLM Other Than Mineral Development in the SEIS was Recreation and Visitor Services</p> <p>In Section 3.6 (pages 3-92 to 3-97) of the SEIS, the only alternative resource use other than mineral development that BLM assessed was recreation and visitor services. In multiple locations within the SEIS, BLM makes the following two statements:</p> <p>"It is generally understood that closing areas to oil and gas leasing would benefit recreation and visitor services." SEIS at 3-93 to 3-94.</p> <p>"Quiet, dispersed recreational activities would not be impacted by potential oil and gas development." Id. at 3-95 to 3-96.</p> <p>However, BLM provides no evidence or examples as to why the alternative use of recreation and visitor services requires all no-known, low, and medium potential areas to be 100% closed to mineral development to be successful.</p>
16	Dehaan, Asa	343	<p>Recreation: The recreational areas within the Grand Hogback and Roaring Fork Valley are not just a means for outdoor activities but are crucial for local economic sustainability and the well-being of its residents. The protection of these areas from oil and gas development is essential to maintain their integrity and the quality of experience they provide.</p>
16	Holzmann, Vance	348	<p>Also tourism is a major part of the Colorado economy. Oil and gas is no longer a great option for income for Colorado. I enjoy mountain biking in the Roaring Fork Valley and also the Fruita area. I think that opening up more options for recreation will benefit Colorado Much more than leasing out land to oil and gas drilling. Recreational areas are going to become harder to develop if leasing to harmful well pads and drilling operations continues. Especially since the clean up after drilling and oil operations is difficult and costly to clean up. Oil and gas operations creates worse air quality which makes it difficult for me to want to partake in outdoor activities and also harms children's futures. There are more beneficial ways to use BLM land that could benefit the community. Well pads and oil operations prevent people from wanting to experience the outdoors. Tourism accounts for much more capital for Colorado than oil and gas industry. We should take a strong stance to increase recreational opportunities and tourism in the state rather than continue trying to make money via industries that the country is attempting to step away from.</p>
17	GMUG National Forest	86	<p>p. 3-70 (Section 3.5.7), Are there any new updates on the Little Book Cliffs herd numbers based on recently planned removals of horses?</p>

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18	Mesa County, Colorado	134	<p>The GJFO DSEIS/ RMPA's Preferred Alternative is inconsistent with Federal Land Policy and Management Act ("FLPMA") by failing to manage for multiple use. Under FLPMA, BLM is required to manage public lands under the principles of multiple use and sustained yield, to meet the needs of present and future generations. 43 U.S.C. § 1701(a)(7), (8) & (12); 43 U.S.C. § 1732(a) & (b); 43 C.F.R. § 1610.5-3. Further, FLPMA identifies mineral exploration and production as one of the "principle or major uses" of public lands. 43 U.S.C. § 1702(1). According to 43 U.S. Code § 1702- Definitions: The term "multiple use" means the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people ...vi</p> <p>The pursuit of one use does not need to exclude others; as such, it is entirely feasible to manage mineral extraction in a manner that accommodates a range of surface activities, including grazing and outdoor recreation. Despite statutory and regulatory direction under FLPMA, the BLM proposes unduly burdensome closures from future leasing for oil and gas development. FLPMA emphasizes the importance of public resources to America's domestic energy supply and contains an express declaration of Congressional policy that BLM manage public lands "in a manner which recognizes the Nation's need for domestic sources of minerals, [and other commodities] from the public lands." 43 U.S.C. § 1701(a)(12). These resources need to remain accessible.</p>
18	Office of Rep. Dan Newhouse	373	<p>There are already stringent standards and requirements in place for oil and gas producers that aim at reducing environmental and cultural impacts. This proposed ruling is yet another blatant overreach designed to dismantle the fossil fuel industry and force a green transition. At a time when energy prices are at record highs, it is crucial that your agency rescind this proposal. Your prompt attention to this matter is appreciated.</p>
18	Environmental Advocacy NGO Consortium	316	<p>BLM has a multiple use mandate and must manage its lands for a variety of uses, not primarily for oil and gas development. As emphasized in our scoping comments, FLPMA obligates BLM to abide by the principles of multiple use and sustained yield. The definition of multiple use [92] makes clear that BLM is obligated to manage our public lands for a number of resources other than oil and gas leasing, including recreation, watershed health, wildlife and fish, and natural scenic, scientific, and historical values.[93] BLM is directed to not always prioritize economic return.[94] In other words, simply because a particular resource exists does not mean that BLM should or must allow extraction of that resource. Outdoor recreation, fish and wildlife, and grazing are all "principal" uses of public lands and must receive the same consideration as energy development.[95] None of the overarching legal mandates under which BLM operates, be it multiple use or non-impairment, authorizes BLM to establish energy development as the dominant use of public lands. Thus, any action that attempts to enshrine energy development as the dominant use of public lands is invalid on its face and inconsistent with the foundational statutes that govern the management of public lands. BLM has authority to close areas to oil and gas leasing to prioritize other important resources and values. The U.S. Court of Appeals for the 10th Circuit has reiterated: "It is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses. Development is a possible use, which BLM must weigh against other possible uses including conservation to protect environmental values. . . ."[96] BLM recognizes that oil and gas leasing can be inconsistent with protecting other important resources and values. [97]</p> <p>[92] 43 U.S.C. § 1702(c). [93] Id. [94] Id. [95] 43 U.S.C. § 1702(l). [96] New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 710 (10th Cir. 2009). [97] See, e.g., DOI Report on the Federal Oil and Gas Leasing Program (Nov. 2021); Instruction Memorandum 2021-027.</p>
19	Western Energy Alliance	306	<p>Reflecting that access to helium resources that BLM admitted are critical to national security, areas with helium resources should be open to leasing.</p>
19	Associated Governments of Northwest Colorado	353	<p>Considering that we are already grappling with prolonged inflation, adding more financial stress on the American people is a worrisome prospect. Helium, despite being less known, plays a crucial role in various vital applications. The BLM has acknowledged its significance in activities such as diving, manufacturing, medical technology (e.g., magnetic resonance imaging equipment), gas leak detection in products, national defense (e.g., rocket engine testing and air-to-air missile guidance systems), scientific research, and even the cooling of nuclear reactors. This broad range of uses underscores its relevance to our nation's security. It's crucial to emphasize that helium is a finite resource, with substantial deposits found in only a handful of locations worldwide, and many of these sources are depleting rapidly. The presence of a substantial helium deposit within an area subject to production restrictions under this management plan raises valid concerns. Additionally, helium possesses substantial economic potential and could potentially serve as a vital resource in supporting communities grappling with impending economic challenges. Safeguarding our national security requires us to consider the strategic importance of resources like helium, oil, and gas and to ensure that we maintain access to them, especially in times of crisis or global instability.</p>
19	Mesa County, Colorado	134	<p>Closure of Areas with Viable Helium Resources As stated in the DEIS/ RMPA "Helium is a critical component in many fields, including, but not limited to (BLM 2022O... Manufacturing... Medical technology... Monitoring... National defense... Science and research... Cooling." v Restricting access to this valuable resource, particularly in a times of heightened demand and limited availability, is highly shortsighted. Mesa County requests that the BLM establish an exemption for helium recovery, irrespective of any assumptions about the Reasonably Foreseeable Development potential for the area. Roughly 175,900 of the 191,300 acres (99%) where helium is present are in low potential areas from the 2002 USGS Resource Assessment and would be closed in Alternative E if no changes are made.</p>

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20	National Association of Royalty Owners, Rocky Mountain Chapter	313	Additionally, the newly proposed Alternatives E and F would place restrictions on potential development of fee minerals adjacent to the up to 1,837,000 million acres of federal minerals that would be closed to future oil and gas leasing. As you know, a significant area within the RMP Planning Area Boundary consists of privately owned mineral rights. By closing adjacent federal minerals to future oil & gas development, this will effectively block private mineral rights adjacent to these areas from future development as well.
20	Mesa County	134	Although not explicitly outlined, it is imperative that the proposed closures in the DSEIS/RMPA do not hinder access to privately owned minerals beneath federal surface lands. Preventing access to these areas could be viewed as a potential infringement on property rights, resulting in a significant loss of the property's economic value or utility without just compensation for the owner. This situation might be interpreted as a "taking" of property rights. Therefore, it is essential for the BLM to meticulously assess the potential legal ramifications and constitutional implications of their land use decisions and to ensure that any proposed restrictions or closures are consistent with well-established legal principles, including the Takings Clause of the Fifth Amendment.
21	Associated Governments of Northwest Colorado	353	The AGNC membership holds deep concerns about the national security of the United States. In an era where we face various looming threats and potential global conflicts, and given our current historically low national reserves, it is vital that we maintain the option for domestic production of essential resources. In times of war or international crises, our reserves could become targets for attack, and unfriendly countries might impose hefty tariffs on critical resources like oil, making them unaffordable.
21	Office of Rep. Dan Newhouse	373	If this proposal were to be finalized, the United States would lose access to vital energy resources, many more than the 600 fewer wells projected to be lost by 2043. The consequences will be felt far beyond the state of Colorado, where residents will lose their livelihoods and see increased energy prices. This is an issue of national security because a decrease in domestic energy production will lead to an increased reliance on foreign nations, often those who are unstable and are adversarial to our domestic interests.
21	Western Energy Alliance	306	BLM should keep all 191,300 acres open to mineral development, even those in "low potential areas" to ensure continued access to a resource that even BLM admits "has important economic and national security interests." As the primary alternatives for helium resources are Qatar, Algeria, and Russia, U.S. security interests would be harmed by closing these areas to development.13 13 See USGS, Mineral Commodity Summaries-Helium (Jan. 2021) (showing United States import sources, in descending order, from Qatar, Algeria, Russia, among other countries). BLM has not adequately considered the adverse impact to the United States in doing so. BLM can use no surface occupancy and controlled surface use restrictions to ensure continued access, consistent with FLPMA's multiple-use mandate. 43 U.S.C. § 1732(a).
21	Associated Governments of Northwest Colorado	353	The proposed plan in the Draft Supplemental Environmental Impact Statement and Resource Management Plan Amendment (DSEIS/RMPA) for the Grand Junction Field Office (GJFO) goes against the core principles of the Federal Land Policy and Management Act (FLPMA). FLPMA mandates that the Bureau of Land Management (BLM) must manage public lands in a way that serves multiple purposes and ensures that both present and future generations' needs are met. Furthermore, FLPMA specifically recognizes that mineral exploration and production, such as oil and gas, are important uses of public lands. In simple terms, it means that these lands should be used in ways that benefit the American people today and in the future. FLPMA essentially says that we don't have to choose one use over others. For example, we can manage lands to extract minerals like oil and gas while also allowing activities like grazing and outdoor recreation. However, the current plan from the BLM restricts future oil and gas leasing too much, which doesn't align with FLPMA's goals. FLPMA emphasizes how crucial public resources, like minerals, are for our country's domestic energy supply. BLM should manage public lands in a way that ensures we have access to these resources to meet our national needs.

Concern ID	Organization/ Individual	Letter Number	Comment Text
21	Western States and Tribal Nations Natural Gas Initiative	210	<p>The last dimension involved is one of global energy security. Given the tremendous volatility in the world caused by the Russian/Ukraine war, the Israel/Hamas conflict and escalating tension with China over the status of Taiwan, increased need for U.S. LNG to support the energy security of our allies in Europe and Asia is paramount and cutting off one of the deepest and cleanest-production sources would be a self-inflicted wound. Alternatives E & F remove the potential for 599-779 wells, where production is among the cleanest in the country and world, because of Colorado and the United States' stringent environmental regulations. The April 2023 G7 Ministerial Meeting on Climate, Energy and Environment in Sapporo, Japan, produced tangible progress toward the future of natural gas as a clean energy source integral to the evolution of future energy systems such as hydrogen.</p> <p>The final communique articulating the use of low-methane intensity LNG exports to lower global emissions was one of the clearest declarations of qualified support for natural gas exports yet from the Biden Administration. final communique - https://www.meti.go.jp/information/g7hirosima/energy/pdf/G7MinistersCommunique2023.pdf</p> <p>As Assistant Energy Secretary for International Affairs Andrew Light told S&P Global at the meeting, the U.S. government sees a "phenomenal future for abated natural gas as a clean energy source in the world" by reducing methane intensity. "We do think that when things stabilize as Ukraine wins the war, then we will see an increased premium to be paid for the lowest-carbon and methane gas there is," he said. told S&P Global https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/041623-g7-interview-us-sees-need-for-new-gas-investments-in-light-of-russia-war-tight-market</p> <p>This outcome followed WSTN's work with the Japanese government, alongside that of our partners highlighted in our March 2023 Clean Energy Exports forum in Washington, D.C. In this venue, the Honorable Hirai Hirohide, Vice Minister of Japan's Ministry of Economy, Trade and Industry gave the keynote address in which he underscored Russian efforts to strengthen ties to the Global South. In his address, Vice Minister Hirohide stated "if the U.S. does not provide natural gas to developing nations, Russia will...."</p> <p>Developing countries are ratcheting up calls for more global natural gas production and imports to pare down emissions from coal and bring billions of people out of poverty and the Biden Administration should well heed Vice Minister Hirohide's words. Given the fears that LNG exports will drive domestic natural gas prices higher - which did not materialize in 2023 despite the U.S. exporting record amounts of LNG - also merit further study in this context. As we stated at the outset, natural gas production and its environmental, economic and energy security impacts must all be carefully weighed in this Supplemental EIS.</p>
22	Wilderness Workshop	108	<p>On a recent hike along the Ute Sweetwater trail, I was impressed with the beauty and wilderness of the area and hope that you will strongly consider making it "Lands with Wilderness Characteristics" in order to protect the wildlife and pristine nature of the wilderness.</p>
22	Wilderness Workshop	109	<p>I recently hiked with the wilderness workshop along the Ute Sweetwater trail. I would strongly recommend that the BLM lands around Sweetwater Lake and the Ute Sweetwater trail be designated as "lands with wilderness characteristics". This will help to protect the wildlife and keep this area pristine for hikers to appreciate.</p>
22	Wilderness Workshop	110	<p>I just had the pleasure of hiking to Hack Lake from the Sweetwater trail head. What a beautiful Area! I have hiked the Flat Tops Wilderness Area and the Hack Lake Area has all the same aesthetic attributes. The BLM should manage this area for wilderness and recreation</p>
22	Wilderness Workshop	115	<p>Toady we hike on the Ute Sweetwater trail and marveled at the peace, quiet, and fantastic views of Sweetwater Lake and Sweetwater Creek. I urge you to protect and preserve this lands with wilderness characteristics</p>
22	Wilderness Workshop	116	<p>We have hiked on the Ute Sweetwater Trail with wonderful solitude, and fantastic views of Sweetwater Lake and Sweetwater Creek. I ask you to protect this area, designate as lands with wilderness characteristics on resource management plan to preserve it for us and wildlife.</p>
22	Wilderness Workshop	119	<p>What a pleasure it is to be able to enjoy our beautiful public lands knowing that these wild places will be protected from development. Please consider protecting the land on Sweetwater-Ute trail by Sweetwater Lake.</p>
22	Wilderness Workshop	108	<p>On a recent hike along the Ute Sweetwater trail, I was impressed with the beauty and wilderness of the area and hope that you will strongly consider making it "Lands with Wilderness Characteristics" in order to protect the wildlife and pristine nature of the wilderness.</p>
23	Western Energy Alliance	306	<p>Appropriately tailored lease stipulations should be included, rather than a blanket closure to any leasing and development. Oil and natural gas can be developed in an environmentally friendly manner. We remind BLM that the requirements of the Energy Policy Act of 2005 as well as the Energy Policy Conservation Act Amendments of 2000 require federal land management agencies to use the least restrictive means necessary to protect other resource values.</p>
23	Western Energy Alliance	306	<p>Consistent with BLM's multiple-use mandate, BLM should not close off 1,566,300 acres of land to oil and natural gas leasing based on a faulty, outdated analysis of supposed "no-known, low, and medium potential lands." For those lands within the planning areas identified as potential areas for the alternative resource use of recreation and visitor services, BLM should assess how these lands can be protected using reasonable Special Recreation Management Areas, Extensive Recreation Management Areas, or State Wildlife Areas instead of a blanket restriction on mineral development.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
23	Western Energy Alliance	306	Establishing SRMAs, ERMAs, SWAs, and sensitive wildlife and stream areas is a less restrictive, better tailored, and reasonable approach to protecting areas of land for recreation and visitor services than a blanket closure to leasing of all no-known, low, and medium potential areas. A blanket closure on no-known, low, and medium potential areas-based on stale data-makes little sense and is not rational when BLM can take a more targeted approach, as it proposes for SRMA, ERMAs, and SWAs. Moreover, it is inconsistent with BLM's own Land Use Planning Handbook. The Land Use Planning Handbook provides that areas should only be closed to leasing when "other land or resource values cannot be adequately protected with even the most restrictive lease stipulations." BLM Handbook H-1601, App. C at 24 (emphasis added). Notably, BLM relied on this provision in its briefing before the court in Wilderness Workshop. A more tailored approach that does not allow fluid mineral leasing within SRMAs, ERMAs, and SWAs would also better fit with the Federal Land Policy and Management Act's (FLPMA) multiple-use mandate by allowing mineral development in more areas but still providing heightened protections in others.
23	Western Energy Alliance	306	Nowhere in the ruling does the court directly require that BLM must close off all no-known, low, and medium potential areas to mineral development in the planning area. Rather, the court simply held that BLM failed to assess an alternative with widespread closure to mineral leasing.
24	Western Energy Alliance	306	<p>Closing off areas currently deemed no-known, low, and medium potential is short-sighted and unnecessary. BLM should reject blanket closures of these areas. Rather, BLM could assign appropriately tailored lease stipulations in these areas to ensure protections for other resources should the areas become more productive in the future. BLM must assign any such stipulations in accordance with the Energy Policy Act of 2005 as well as the Energy Policy and Conservation Act Amendments of 2000, which require federal land management agencies to use the least restrictive means necessary to protect other resource values.[10]</p> <p>Indeed, Within the GJFO Alone, There are Hundreds of Existing Wells Within Areas BLM has Erroneously Classified as No-Known, Low, and Medium Potential Areas</p> <p>The Trades performed an analysis on all wells in producing, shut in, or temporarily abandoned status within the ECMC's database as of October 13, 2023. We analyzed wells that are either producing or capable of producing, per ECMC's definitions of shut-in and temporarily abandoned wells.[11]</p> <p>The analysis showed there are 366 wells in lands designated in the SEIS as no-known, low, and medium potential. These wells produced approximately 6,697,330 MCF of natural gas and 10,000 barrels of oil in just the past 12 months alone. Figure 7 shows the locations of these wells. (See PDF for Figure 7 - Existing Wells Capable of Producing Within No-Known, Low, and Medium Potential Areas in the GJFO)</p> <p>[10] See, e.g., 42 U.S.C. § 15922(b)(lease stipulations should only be as restrictive as necessary to protect the resource for which stipulations are applied); 42 U.S.C. § 6217(a) (directing the Secretary of Interior to consider leasing restrictions, among other potential restrictions to oil and gas resource development).</p> <p>[11] "Rules and Regulations (100 Series)," ECMC. April 30, 2022.</p>
25	Western Energy Alliance	306	Based on the below analysis and comments, the Trades ask that BLM not implement Alternative E but rather create and implement an Alternative G. Based on the updated geological assessment of the Piceance Basin, technological advancements, analysis of existing and producing wells in and adjacent to these areas, analysis of the Court's decision in Wilderness Workshop v. BLM, 342 F. Supp. 3d 1145 (D. Colo. 2018), and the importance of helium to national security, the Trades recommend that BLM adopt an Alternative G after performing thorough analysis, as required by the National Environmental Policy Act (NEPA) and the Federal Land Policy and Management Act (FLPMA)
26	Western Energy Alliance	306	Proper deference to Colorado Parks and Wildlife (CPW) and the Colorado Energy and Carbon Management Commission (ECMC) regarding protection of municipal watersheds and state parks. Colorado has some of the strictest regulations in the country. BLM does not need to duplicate in these exact areas. The BLM does not duplicate regulations but adheres to regulations put in place by entities like ECMC and CPW.
26	Roaring Fork Audubon and ColoradoWild	352	Further, BLM must align its planning efforts with Colorado's policies, statutes, and regulations including House Bill 21-1266 which addresses environmental justice, HB 21-1189 which regulates air toxics, and policies as specified by the Colorado Energy and Carbon Management Commission including wildlife protection and protection of high priority habitats (ECMC 2023).
27	Brower, Michele	174	I am concerned about the watershed area of West Mamm Creek. This is not an area designated on your maps, but in the crosshairs of Terra for 7 miles of pipeline and 70+ wells. I believe you have some authority in a section of this HPH, elk production area with at risk birds, plants and wild life. Again, this is a blatant disregard of the steep slopes, unstable soils and integrity of the HPH. My input is to stop additional oil and gas development in this area.
28	Environmental Advocacy NGO Consortium	316	We would propose to extend closure to oil and gas development in the following areas: All lands with wilderness characteristics that are not included within BLM's existing inventory (i.e., citizen submitted inventory); All Colorado Parks and Wildlife (CPW) high priority habitats, as well as important big game winter range and migration corridors identified by the State of Colorado. BLM must ensure consistency for these areas within the field office via the forthcoming CO Big Game RMP Amendment. Any areas identified as having renewable energy development potential from the forthcoming Solar Programmatic EIS
28	Western Environmental Law Center et al.	304	Scoping comments requested that BLM consider and should defer any allocation of lands as open to leasing in light of two recently announced proposals, one to complete a nationwide Gunnison Sage-Grouse Resource Management Plan Amendment, and the second to complete a statewide Resource Management Plan Amendment for big game corridors and habitat.224 BLM must take a hard look at impacts to wildlife species, and must take into account the new information to be analyzed in these planning efforts, at a minimum.

Concern ID	Organization/ Individual	Letter Number	Comment Text
28	Environmental Advocacy NGO Consortium	316	<p>Protecting critical wildlife habitat is increasingly important and supported by recent science that must be considered by BLM. For example, a recent Western Watersheds Project study concluded that: The combined residential and industrial development footprint in the Upper Colorado River Field Office is already quite heavy, with overwhelming majority of key seasonal habitats for both elk and mule deer already within the zone of disturbance for these animals. The likely outcome is that for both elk and deer, insufficient undisturbed habitat presently exists in the Upper Colorado River F.O. to maintain optimal survival and reproduction for these species.[60]</p> <p>[60] Molvar, E. and C. Bailey. 2023. Evaluating the cumulative effects of oil and gas development on elk and mule deer in the middle reaches of the Colorado River watershed near Silt, Colorado. Western Watersheds Project and Redstone GIS. 17 pp. Attached as Attachment I.</p> <p>The report assesses contemporary conditions in the planning area. Its findings clearly show the scarcity of key seasonal habitats and underscore the increasing need to protect such habitat. The report includes recommendations on how best to manage these sensitive habitats that include: mineral leasing closures, buffers, strong Condition of Approvals (COAs) applied to new development, and special designations with strong management guidelines. BLM should use this new information to support a decision protecting all Wildlife Emphasis Areas.</p>
28	Mesa County	134	<p>The BLM is currently working on serval plans with variability in definitions and key terms, areas and acres of closures, timing limitations, NSOs, Waivers, Exceptions, and Modifications ("WEMs"), and proposed ACEC's, etc. The inconsistency among plans creates confusion for land managers and those utilizing BLM lands for work and play. Mesa County firmly believe that the CRVFO and GJFO RMPA's need to only reference those plans that address individual resource values, rather than creating additional complexity and layers of management within these field office plans. Other BLM plans include:</p> <ul style="list-style-type: none">· Colorado Big Game Corridors Amendment· Greater Sage-grouse RMPA· Gunnison Sage-grouse RMPA· Western Solar RMP/ Programmatic EIS· Proposed Grazing Regulation Revision (43 CFR Part 4100, exclusive of Alaska) EIS (currently suspended) <p>Thus, the proposed Glade Park-Pinyon Mesa ACEC, would be better analyzed in the BLM's Gunnison Sage-Grouse RMP and the Big Game Important Habitat areas would be better analyzed in the BLM's big Game Corridors RMP. This would eliminate redundancies and the need for future plan updates if habitat management areas change.</p>
29	US Environmental Protection Agency Region 8	328	<p>Downstream GHG emissions are reasonably foreseeable and are indirect impacts of oil and gas leasing decisions on BLM-managed lands. The total federal fluid mineral leasing area to be made available by the selected Alternative will, therefore, impact the total potential GHG emissions associated with the decision, yet this distinction between Alternatives was not made clear in the Draft SEIS. The GHG analysis presented in Section 3.5.I does not distinguish GHG emissions between Project Alternatives and instead lumps them together using an aggregate data source representative of the low, mid, and high development scenarios. This point of comparison between Alternatives may be important to the Project decision because of the increasing level of public concern about GHG emissions and their contributions to global climate change. We therefore recommend clarifying the differences between Draft SEIS Alternatives GHG emissions and climate change impacts and quantifying them where possible.</p>
29	US Environmental Protection Agency Region 8	328	<p>Section 3.5.I includes a discussion on the Project climate change impacts relative to the impacts from the overall demand for oil and gas products but does not relate these trends to individual differences in potential impacts for the Alternatives. This approach removes climate change impacts as a differentiator between Alternatives in the upcoming decision-making process. We recommend that GHG emissions impacts be quantified for individual Alternatives and used to discuss and compare impacts between them in the Final SEIS. As previously outlined in our July 25, 2022, scoping comments, we recommend discussing each Alternative's potential GHG emissions in the context of state, national and international GHG emissions reduction goals, including the U.S. 2030 Paris GHG reduction target and 2050 net-zero pathway.[2] This discussion should address how reasonably foreseeable GHG emissions associated with the Alternatives are, or are not, consistent with these policies and goals, and offer ways to avoid or mitigate the increasing conflict over the RMP's lifetime between continued GHG emissions and GHG emission reduction goals.</p> <p>[2] https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/</p>
30	GMUG National Forest	86	<p>Tables 3.6.10 and 3.6.11, Please include enough of the assumptions related to wells forgone to support conclusions such as wells or development are largely predicted to occur on existing leases for Alternatives E & F with limited leasing occurring in other areas. This seems to be somewhat covered in cumulative effects but seems more like direct/indirect effects.</p>
31	Colorado Offroad Trail Defenders	17	<p>We particularly oppose the designation of a new WSA in alternative F, which is a blatant violation of the BLM's statutory authority. As the BLM acknowledged in both of the 2015 RMPs, the BLM's authority to designate new WSAs, including Sec. 202 WSAs, expired in 1993. The BLM admitted as much in a legal settlement in the early 2000s. Nothing has changed in the intervening years to give the BLM new authority to designate Sec. 202 WSAs, and doing so in this planning process is blatantly unlawful. We strongly oppose this action, and contend the BLM would only be inviting a legal challenge if it chose to unlawfully designate a new WSA in this process.</p>

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32	Western Environmental Law Center et al.	304	BLM's forthcoming Public Lands and Oil and Gas Rules also present BLM with timely opportunities to leverage a meaningful programmatic review in service of placing climate and conservation values on a truly "equal footing" with oil and gas by embracing the science to shape and inform action in the public interest. Because of these concurrent rulemaking processes, we urge BLM either to delay issuance of a final RMP pending issuance of those final rules or to condition any determination that lands in the planning area are "open" to new oil and gas leasing on the final issuance of these rules, and to acknowledge and explicitly provide for the exercise of BLM's inherent authority to restrict and condition lands determined to be open to leasing based on the content and provisions of either or both final rules.
32	Western Environmental Law Center et al.	304	We ask that BLM be cognizant, in this RMP revision and associated NEPA analysis, of contemporaneous rulemaking efforts, including not only the Draft Oil and Gas Rule, but also BLM's proposed Public Lands Rule, as well as its Waste Reduction Rule, and the Council on Environmental Quality's Phase II draft rules for NEPA implementation, and the Environmental Protection Agency (EPA's) methane reduction rule. All of these rulemakings affect BLM's administration of future leasing and development, and should therefore affect its planning within the RMP.
32	Environmental Advocacy NGO Consortium	316	Planning decisions should support proposed agency rulemaking efforts. BLM is engaged in several proposed rulemaking processes that should work as a package to support planning decisions within the Colorado River Valley and Grand Junction Field Offices. BLM's Proposed Conservation and Landscape Health Rule I 14, Proposed Rule on Fluid Mineral Leases and Leasing Process I 15, and Proposed Renewable Energy Rule I 16 all present a unique opportunity for the agency to ensure land use planning decisions ladder up to and support national policy goals. I 14 88 Fed. Reg. 19583 (Apr. 3, 2023). I 15 88 Fed. Reg. 47562 (July 24, 2023). I 16 88 Fed. Reg. 39726 (June 16, 2023). BLM must also consider the various planning efforts across the state and country that will have broader implications for the planning area, including the Western Solar Plan Programmatic EIS, the West-Wide Energy Corridor Review, and Colorado's Big Game Resource Management Plan Amendment and Sage Grouse Amendment. These rules and planning processes hold potential to serve as components of a comprehensive climate plan for public lands that guarantees we conserve lands for climate, ecological, and community resilience; meet emissions goals by phasing out drilling and responsibly increasing renewable energy, while supporting communities in making an economic transition; protect carbon sinks, especially old growth and mature forests; and center community and Native American Tribal input in public lands decision-making.
33	Western Environmental Law Center et al.	304	BLM must consistently apply CEQ Climate Guidance, adhere to Secretarial Order 3399, and be prepared to amend the RMPs to incorporate the new regulations once they are finalized. The agency references the 2016 guidance, and discusses the 2023 interim guidance in the context of social costs of emissions. BLM fails, however, to consistently apply the 2016 and 2023 guidance throughout its analysis, limiting its reference to the new guidance, in particular, to the context of the social cost of greenhouse gases, despite its own recognition that it must apply "all tools and resources available to [it] in assessing GHG emissions and climate change effects." The guidance- particularly the new guidance--should inform and direct BLM's entire analysis. BLM also fails to discuss Secretarial Order 3399, which requires that BLM's Supplemental NEPA processes for these RMPs be at least as stringent as the 1978 regulations. BLM must specify which NEPA regulations it uses in its analysis, at a minimum apply the NEPA Phase I regulations, and either apply the Phase II regulations or apply NEPA in a manner that is at least as stringent as the 1978 regulations. In sum, BLM must consistently apply the 2016 and 2023 guidance, and must be prepared to amend the RMPs to incorporate the new NEPA regulations once they are finalized.

Concern ID	Organization/ Individual	Letter Number	Comment Text
33	Western Environmental Law Center et al.	304	<p>BLM must ensure NEPA documentation addresses mitigation for climate impacts consistent with all relevant laws and policies, including BLM's current mitigation policy,[26] as well as the mitigation hierarchy identified in the proposed Public Lands Rule.[27] Both NEPA and FLPMA charge BLM with requiring mitigation of impacts caused by land use authorizations to public land resources, and over the past two decades, Interior and BLM have established robust mitigation policy and guidance, including approaches to mitigate the impacts of climate change.[28]</p> <p>[26] See BLM Instruction Memorandum 2021-046, Reinstating the Bureau of Land Management Manual Section (MS-1794) and Handbook (H-1794-1) on Mitigation (Sept. 22, 2021), available at https://www.blm.gov/policy/im-2021-046; BLM Mitigation Manual, MS-1794 (Sept. 22, 2021), available at https://www.blm.gov/sites/blm.gov/files/docs/2021-10/IM2021-046_att1_0.pdf; BLM Mitigation Handbook, H-1794-1 (Sept. 22, 2021), available at https://www.blm.gov/sites/blm.gov/files/docs/2021-10/IM2021-046_att2.pdf.</p> <p>[27] 88 Fed. Reg. 19,583 (April 3, 2023). See also Exhibit 15, WELC et al., Comments on Proposed Conservation and Landscape Health Rulemaking under the Federal Land Policy and Management Act of 1976 (July 5, 2023) at 12-15.</p> <p>[28] See, e.g., Secretarial Order No. 3226, Amendment No. 1, "Climate Change and the Department of Interior," (Jan. 16, 2009)("In addition to finding ways to prevent greenhouse gas emissions, the United States has recognized the need to focus on mitigation and adaptation activities"(replaced by Secretarial Order No. 3289 (Sept. 14, 2009), available at https://www.blm.gov/sites/blm.gov/files/uploads/IM2012-104_att4.pdf; Secretarial Order No. 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources," (Sept. 14, 2009), available at https://d9-wret.s3.us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/SecOrder3289.pdf; Departmental Manual 523 DM 1, "Climate Change Policy" (Dec. 20, 2012)(established Interior's policy to "[p]romote landscape-scale, ecosystem-based management approaches to enhance the resilience and sustainability of linked human and natural systems" and "[a]dvance approaches to managing linked human and natural systems that help mitigate the impacts of climate change"), available at https://www.doi.gov/sites/doi.gov/files/elips/documents/523-dm-1.pdf; Secretarial Order No. 3330, "Improving Mitigation Policies and Practices of the Department of Interior (Oct. 31, 2013)("land and resource managers across the Nation are recognizing the dramatic effects that climate change is having on our Nation's water, land, plant, animal, and cultural resources, as well as tribal lands and resources. In light of these effects, the Department must change the way it manages the resources for which it is the steward"), available at https://www.doi.gov/sites/doi.gov/files/migrated/news/upload/Secretarial-Order-Mitigation.pdf; Departmental Manual 600 DM 6, "Implementing Mitigation at the Landscape-scale" (Oct 23, 2015)(stating the policy of Interior to "effectively avoid, minimize, and compensate for impacts to Department-managed resources and their values, services, and functions; . . . improve the resilience of our Nation's resources in the face of climate change; encourage strategic conservation investments in lands and other resources; increase compensatory mitigation effectiveness, durability, transparency, and consistency; and better utilize mitigation measures to help achieve Departmental goals."), available at https://www.doi.gov/sites/doi.gov/files/elips/documents/600-dm-6.pdf.</p>
33	Western Environmental Law Center et al.	304	<p>BLM should analyze reasonable alternatives that would mitigate both direct and indirect GHG emissions impacts and the cumulative effects of climate change, and address the quality of mitigation measures as well as ensure they are additional, verifiable, durable, enforceable, and will be implemented.</p>
33	Western Environmental Law Center et al.	304	<p>Comments highlighted specific stipulations absent from existing plans that may be necessary to adequately protect important resources. For example, current plans do not include stipulations requiring methane capture or other mitigation of GHG emissions that may be necessary and appropriate to reduce climate impacts.[42] The existing plans do not include stipulations requiring specified casing and cementing depths for new drilling to ensure protection of groundwater resources.[43] Comments also presented science supporting setback stipulations to protect human health that are not included in existing plans.[44] Stakeholders urged BLM to consider incorporating specific new stipulations into the new plan. However, the agency refused to do so in the Draft SEIS.</p> <p>[42] See WELC et al., Scoping Comments at 22, 58, 62-64, 114.</p> <p>[43] See WELC et al., Scoping Comments at 61-62.</p> <p>[44] See WELC et al., Scoping Comments at 87-88.</p>
34	Western Environmental Law Center et al.	304	<p>the agency failed to use baseline information to design a meaningfully in the challenged RMPs.[100] The way that BLM presents the new Alternatives E and F in the DSEIS is misleading. BLM describes the two new alternatives primarily in terms of area, or acres, closed to future fluid mineral leasing-e.g., see Tables 2.3-1 and 2.3-2 and Table 2.6-1 in the DSEIS. Assessing the relative magnitude of area (acreage) amongst alternatives gives the misleading impression that the new Alternatives (E and F) are significantly more restrictive than the previous alternatives assessed in the FEIS (Alternatives A, B, C, and D). However, the amount of future fluid mineral leasing available under these new alternatives is not significantly different than the previous alternatives since the areas that remain open to future leasing are the areas where there is high potential for development. This is particularly true in the CRVFO where the number of wells foregone over 20 years is virtually the same under Alternative E as it is under Alternatives B and C-i.e., BLM projects 58 wells foregone under Alternative E, compared to 56 wells foregone, each, under Alternatives B and C. Put another way, over the course of 20 years, only two fewer wells would be developed under Alternative E than under Alternatives B or C.[101]</p> <p>[100] See id., at 1, 9-11, Exhibit 22.</p> <p>[101] See id., at 9, Exhibit 22.</p>

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34	Roaring Fork Audubon and ColoradoWild	352	BLM's consideration of Alternatives E and F in their Draft Environmental Impact Statement represents an important step in the right direction. However, the effects of these alternatives on air quality, climate, wildlife and water are not substantially different from the alternatives BLM previously considered. This is particularly true in the CRVFO where the number of wells foregone over 20 years is virtually the same under Alternative E as it is under Alternatives B and C-i.e., BLM projects 58 wells foregone under Alternative E, compared to 56 wells foregone, each, under Alternatives B and C. Put another way, over the course of 20 years, only two fewer wells would be developed under Alternative E than under Alternatives B or C. As indicated by BLM's own analysis, both alternative E and F will result in habitat alteration, air and water pollution and landscape fragmentation (Draft SEIS). Each of these factors will individually and cumulatively contribute different alternative than those considered to the loss of biodiversity, diminished ecosystem processes and function and reduced resilience to environmental perturbations (Sodhi and Ehrlich 2022). There is increasing evidence that degradation and destruction of ecosystems by humans increases the vulnerability of people (IPCC 2022). Unsustainable land-use and land cover change, unsustainable use of natural resources, deforestation, loss of biodiversity, pollution, and their interactions, adversely affect the capacities of ecosystems, societies, communities and individuals to adapt to climate change (IPCC 2022). Loss of ecosystems and their services has cascading and long-term impacts on people globally (IPCC 2022). Globally, and even within protected areas, unsustainable use of natural resources, habitat fragmentation, and ecosystem damage by pollutants increase ecosystem vulnerability to climate change (high confidence) (IPCC 2022).
34	Williams, Megan	224	Assessing the relative magnitude of area (acreage) amongst alternatives gives the misleading impression that the new Alternatives (E and F) are significantly more restrictive than the previous alternatives assessed in the FEIS (Alternatives A, B, C, and D). However, the amount of future fluid mineral leasing available under these new alternatives is not significantly different than the previous alternatives since the areas that remain open to future leasing are the areas where there is high potential for development. This is particularly true in the CRVFO where the number of wells foregone over 20 years is virtually the same under Alternative E as it is under Alternatives B and C-i.e., BLM projects 58 wells foregone under Alternative E, compared to 56 wells foregone, each, under Alternatives B and C. Put another way, over the course of 20 years, only two fewer wells would be developed under Alternative E than under Alternatives B or C.
35	Western Environmental Law Center et al.	304	BLM makes no effort to discuss or identify useable groundwater in the planning area, and protecting that valuable resource is not discussed. The Draft SEIS largely summarizes the groundwater analysis used in the 2015 RMPs, and it is unclear if the agency even considered new information or the valuable scientific information provided during the scoping period.
35	Schenk, Sherry	365	In this time of regional drought, it is imperative that you do whatever can be done to protect both the water quality and quantity of the water found in streams and rivers in these areas.
36	Western Environmental Law Center et al.	304	Stakeholders also urged BLM to clearly and unequivocally articulate the agency's duty to protect resources in the planning area, and its authority to impose stipulations and COAs to ensure protection of those resources when faced with discretionary decisions. BLM's authority is not, as some sections of the existing RMPs suggest, limited to imposing 60-day timing limitations and 200-meter buffers on proposed development projects. Rather, BLM's authority starts with the ability to deny the proposal, period, and extends to as many days, meters, or miles as are necessary to protect other resources based on best available information and science. ⁴⁶ 46 See e.g., Getty Oil Co. v. Clark, 614 F. Supp. 904, 915-16 (D. Wyo. 1985) (BLM can condition lease suspension on reserving the right to deny all drilling); SUWA, 127 IBLA 331, 355-56 (1993). Note: With respect to some resources, BLM properly recognizes its authority deny proposals on existing leases. For example, in the Visual Resources section BLM says: "The BLM may: (1) attach additional mitigation through stipulations, COAs, or special design requirements to bring the proposal into compliance; (2) work with the proponent to modify the proposal or relocate it; or (3) deny the proposal." CRV FEIS at 3-120. Such authority applies to all resources and BLM should explicitly say that in this SEIS.
36	Western Environmental Law Center et al.	304	Scoping comments provided examples of important values in the planning area that are not protected by existing leases, including clean air, public water sources, and areas of ecological importance. When this is the case, BLM must commit to consistently ensuring that the protective measures of the RMP's new stipulations are applied to all development proposals that could adversely impact important resources. Instead, though, the Draft SEIS suggests that BLM has no intention of ensuring leases are protected with updated stipulations.

Concern ID	Organization/ Individual	Letter Number	Comment Text
37	US Environmental Protection Agency Region 8	328	<p>Table 2.5-1 of the Draft SETS details the BLM's rationale for not including resource concerns identified during Project scoping in an Alternative. According to Table 2.5-1 BLM excluded wetlands, riparian areas, streams, stream crossings, and meadows within the federal leasing area from detailed consideration because these features are difficult to map and would need to be grounded by field surveys before they could be used to establish leasing exclusion areas. While we understand this point of view for some finer features, there are many well established scientific wetland mapping tools that could be used to establish areas of leasing exclusion to best protect valuable wetland resources at the RMP phase rather than relying solely on environmental analyses at the leasing phase which, according to our experience, usually also do not include site-specific analyses of impacts to water resources. These mapping tools include the: - National Hydrography Dataset[3] a simple database of the water drainage network of the United States containing features such as rivers, streams, canals, lakes, ponds, coastline, dams, and stream gages maintained by the United States Geological Survey; - Colorado Wetland Inventory [4]- a detailed geospatial inventory of the wetland resources across Colorado maintained by the Colorado Natural Heritage Program; - National Wetlands Inventory[5]- a geospatial representation of and database on the status, extent, characteristics and functions of wetlands, riparian, and deepwater habitats maintained by the United States Fish and Wildlife Service.</p> <p>[3] https://www.usgs.gov/national-hydrography/national-hydrography-dataset [4] https://cnhp.colostate.edu/cwic/wetlandtypes/fen-mapping/ [5] https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper</p> <p>While these tools operate at different resolutions there are general wetland-forming features such as lakes and streams that could be easily cross-referenced and developed into leasing exclusion zones without requiring field work. Some may be captured by other no surface occupancy guidelines established by BLM but commitments to protect wetland resources at the RMP level for persistent features like these would ensure protections for wetlands.</p>
38	Dehaan, Asa	343	<p>Water: The purity of our waterways is not just a measure of ecological health but a lifeline for our communities, agriculture, and local wildlife. Any threat to this resource is too great a risk. Alternative F's protection for community water sources and eligible Wild and Scenic River segments is pivotal and should be non-negotiable.</p>
38	Western Environmental Law Center et al.	304	<p>Scoping comments urged BLM to consider alternatives that would protect usable groundwater.[114] We appreciate that some alternatives offer greater protections to groundwater, though BLM does not offer an alternative specifically focusing on groundwater protections.[115] BLM must consider alternatives that would protect usable groundwater in the Final SEIS.</p> <p>[114] See WELC et al., Scoping Comments at 61-62. [115] See Draft SEIS at 3-31 through 3-35.</p>
39	Environmental Advocacy NGO Consortium	316	<p>The SEIS presents contradictory information about how the Gunnison Sage-grouse will be treated under the alternatives. The SEIS states that "For all alternatives under the Proposed RMP/Final EIS, occupied habitat (35,400 acres) and critical habitat (112,500 acres) for the Gunnison Sage-grouse would be closed to fluid minerals." [43] However, Table 2.3-2 shows that Alternatives A and D do not do this, Alternative B closes Gunnison Sage-grouse critical habitat to fluid mineral leasing, and that Alternatives C, E, and F close occupied Gunnison Sage-grouse habitat to fluid mineral leasing.[44] Additionally, Table 2.5-1 shows that BLM considered but rejected an alternative to close critical or occupied Gunnison Sage-grouse habitat to fluid mineral leasing. Yet Alternatives B, E and F appear to do that (based on provided GIS data). BLM should clarify the GuSG habitats (critical, occupied, and unoccupied) that are closed in each alternative.</p> <p>[43] Draft SEIS at 3-63. [44] Id. at 2-13.</p>
40	Colorado Wildlife Federation, Inc.	274	<p>CWF supports the provision in Alternative F, as well as in preferred Alternative E, to close to fluid mineral leasing in Gunnison sage-grouse occupied habitat of the satellite Pinon Mesa population, partially in GJFO. (We are unclear as to critical habitat.) But we urge that no surface occupancy be imposed within a 4-mile buffer of lek site. Although ECMC Rule 1202 (c) (1) D. requires no surface occupancy within 1.0 mile of a Gunnison sage-grouse lek site, this buffer is inadequate. We await BLM's analysis in the release of its Gunnison sage-grouse Resource Management Plan Amendment and discussion in that document of best available science. CWF also supports the closures to oil and gas leasing in Greater sage-grouse habitat provided by both Alternatives E and F. ECMC Rule 1202(d)(5) provides that a CPW-approved Wildlife Mitigation Plan is required in Greater sage-grouse priority habitat management areas for Oil and Gas Development Plans that "cause the density of Oil and Gas locations to exceed 1 square mile." Rule 1202 (c) 1.C. requires no surface occupancy within 1.0 miles of a Greater sage-grouse lek site. As stated above, this buffer is inadequate. (See Manier, D.J., et.al., Conservation buffer distance estimates for Greater Sage-Grouse - A Review: U.S. Geological Survey Open-File report (2014) and a four-mile buffer around all leks should be closed to oil and gas to prevent disturbance to birds in the lekking and brood-rearing seasons. We look forward to the Greater sage-grouse Resource Management Plan Amendment.</p>

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40	Environmental Advocacy NGO Consortium	316	<p>The SEIS should include a 4-mile lek buffer for oil and gas activities. Best available science argues for a 4-mile lek buffer for oil and gas activities. Further the buffers should be around all leks, not just active ones, given the precarious nature of the satellite population within the planning area. There is a chance that inactive and historic leks, given aggressive conservation measures, might be utilized and thus should not be sacrificed.</p> <p>Manier, D.J., Bowen, Z.H., Brooks, M.L., Casazza, M.L., Coates, P.S., Deibert, P.A., Hanser, S.E., and Johnson, D.H., 2014, Conservation buffer distance estimates for Greater Sage-Grouse-A review: U.S. Geological Survey Open-File Report 2014-1239, 14 p., http://dx.doi.org/10.3133/ofr20141239.</p> <p>While this study was conducted for Greater sage-grouse, absent Gunnison sage-grouse specific investigations, BLM should regard this study as the best available science for both species. This is reasonable as the birds are closely related and share similar biology. The 2015 GJFO RMP Alternative B closes to fluid mineral leasing GuSG occupied habitat within one mile of an active lek (SSS-SGR-AU-03). It appears that Alternative E and F do not provide lek buffers and the SEIS does not analyze the effects of the lek buffer management prescriptions under the various alternatives. The SEIS states in Table 2.5-I that closing 4-mile lek buffers to fluid mineral leasing was considered but rejected for analysis. The rationale for rejecting the alternative is that BLM is currently amending RMPs as part of a GuSG rangewide conservation strategy and programmatic environmental impact statement. There is no basis to not close to leasing this crucial habitat for GuSG in this planning effort. And, in fact, doing so would comport with BLM's approach to addressing the simultaneous planning processes as articulated in Section 2.2.2 which explains that if the RMPAs are finalized before this plan, the RMPA closures will remain in effect, and if this plan is finalized before the RMPAs are finalized the RMPAs may result in an amendment to this plan.</p>
40	Environmental Advocacy NGO Consortium	316	<p>The SEIS should protect a one-mile buffer around Gunnison Sage-grouse critical and suitable habitat. BLM should close public lands to fluid mineral leasing that are located within one mile of any type of GuSG habitat (whether it be on public or private land) to assure that activities (e.g., power lines) located proximal to habitat do not degrade habitat or impact birds. Research on Greater Sage-grouse suggests that birds may avoid otherwise suitable winter habitat within 1.9 km (1.2 miles) of infrastructure.[50] Dzialak et al. (2011) found that annual survival of Greater Sage-grouse chicks reared near gas field infrastructure was lower than those reared away from infrastructure.[51] This research supports the idea that a buffer is needed to protect seasonal habitats from development, including winter and brood rearing habitat.</p> <p>[50] Jennifer Carpenter, Cameron Aldridge, and Mark S. Boyce "Sage-Grouse Habitat Selection During Winter in Alberta," Journal of Wildlife Management 74(8), 1806-1814, (1 November 2010). https://doi.org/10.2193/2009-368.</p> <p>[51] Dzialak, M. R., C. V. Olson, S. M. Harju, S. L. Webb, J. P. Mudd, J. B. Winstead, and L. D. Hayden-Wing. 2011. Identifying and prioritizing greater sage-grouse nesting and brood-rearing habitat for conservation in human modified landscapes. PLoS ONE 6:e26273.</p>
40	Environmental Advocacy NGO Consortium	316	<p>Historically, Gunnison Sage-grouse (GuSG) inhabited southwestern Colorado, northwestern New Mexico, northeastern Arizona, and southeastern Utah. Today, it occupies less than ten percent of its historic range (virtually all in Colorado) with a total estimated population of about 4,300 birds in eight discontinuous populations. A primary reason for the species' decline is habitat loss and degradation, which has led to small and disconnected populations.</p>
40	Environmental Advocacy NGO Consortium	316	<p>The SEIS should ensure adequate protection of the Gunnison Sage Grouse. Both the Greater Sage-grouse and the Gunnison Sage-grouse (threatened) have habitat within the planning area.³⁴ Both species are trending to extinction. The Gunnison sage-grouse has less than 4,400 birds left on this planet.³⁵ It is imperative that BLM establish RMP prescriptions that address threats and promote recovery. In the context of this SEIS, this can be achieved by closing grouse habitat to oil and gas leasing and development and designating habitat as ACECs. ³⁴ Attachment H to these comments demonstrates the critical, potential, and occupied Gunnison sage-grouse habitat in the area. ³⁵ Based on Colorado Parks and Wildlife High Male Counts, 2022 and the algorithm for crosswalking high male counts to total population used in the US Fish and Wildlife Service's final Gunnison sage-grouse recovery plan (2020).</p>
40	Environmental Advocacy NGO Consortium	316	<p>BLM should analyze the impacts of not closing lek buffers in Alternatives E and F to fluid mineral leasing on GuSG habitat quality and populations.</p>

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40	Environmental Advocacy NGO Consortium	316	<p>We support the closures to oil and gas leasing in Greater Sage-grouse habitat provided by both Alternatives E and F (F is slightly more protective). However, like the situation with the Gunnison sage-grouse, a four-mile buffer around all leks should be closed to oil and gas to prevent disturbance to birds in the lekking and brood-rearing seasons. Manier et al. (2014) conducted a literature search and concluded that impacts from energy operations and infrastructure are likely to occur within a 3-5 mile zone.[55] They also found that high well densities closer to leks resulted in decreased grouse populations and specifically where "greater than eight active wells occurred within 5 km (3.1 mi) of leks, or when more than 200 active wells occurred within 18 km (11 mi) of leks" led to decreasing population trends.</p> <p>The buffers should be around all leks, not just active ones, given the precarious nature of the satellite population within the planning area. There is a chance that inactive and historic leks, given aggressive conservation measures, might be utilized and thus should not be sacrificed. The 2015 GJFO RMP Alternative B closes to fluid mineral leasing Greater Sage-grouse occupied habitat within one mile of an active lek (SSS-SGR-AU-03). It appears that Alternative E and F do not provide lek buffers and the SEIS does not analyze the effects of the lek buffer management prescriptions under the various alternatives. The SEIS states in Table 2.5-1 that closing 4-mile lek buffers to fluid mineral leasing was considered but rejected for analysis. The rationale for rejecting the alternative is that BLM is currently amending RMPs as part of a Greater Sage-grouse rangewide conservation strategy and programmatic environmental impact statement. There is no basis to not close to leasing this crucial habitat for Greater sage-grouse in this planning effort. And, in fact, doing so would comport with BLM's approach to addressing the simultaneous planning processes as articulated in Section 2.2.2 which explains that if the RMPAs are finalized before this plan, the RMPA closures will remain in effect, and if this plan is finalized before the RMPAs are finalized the RMPAs may result in an amendment to this plan. BLM should analyze the impacts of not closing lek buffers in Alternatives E and F to fluid mineral leasing on Greater Sage-grouse habitat quality and populations.</p> <p>[55] Manier et al. 2014, supra.</p>
40	Environmental Advocacy NGO Consortium	316	<p>BLM should analyze the impacts of not closing lek buffers to fluid mineral leasing on Greater Sage-grouse habitat quality and populations. The Greater Sage-grouse has experienced an 80% rangewide decline since 1965 and a nearly 40% decline since 2002.[53] It is estimated that 78% of leks have a greater than 50% chance of extirpation in about 56 years from now if current conditions persist.[54] It is imperative that BLM establish RMP prescriptions that address threats and promote recovery. In the context of this SEIS, this can be achieved by closing grouse habitat to oil and gas leasing and development and designating habitat as ACECs.</p> <p>[53] Coates, P.S., Prochazka, B.G., O'Donnell, M.S., Aldridge, C.L., Edmunds, D.R., Monroe, A.P., Ricca, M.A., Wann, G.T., Hanser, S.E., Wiechman, L.A., and Chenaille, M.P., 2021, Range-wide greater sage-grouse hierarchical monitoring framework-Implications for defining population boundaries, trend estimation, and a targeted annual warning system: U.S. Geological Survey Open-File Report 2020-1154, 243 p., https://doi.org/10.3133/ofr20201154.</p> <p>[54] Id.</p>
40	Environmental Advocacy NGO Consortium	316	<p>The SEIS should close all Gunnison Sage-grouse habitat to leasing and development. Given the precipitous long-term decline of the GuSG satellite population within the planning area, the final RMPs should close all GuSG critical habitat and other suitable habitat (occupied and unoccupied) to fluid mineral leasing and geophysical exploration, as proposed in Alternatives E and F. In addition, BLM should designate all critical and suitable habitat in the planning area as an ACEC. This comports with the best available science that preventing any additional disturbances and recovering habitat integrity within the satellite populations is vital for preventing extinction and promoting recovery. ACEC nominations to this effect were submitted to BLM in the scoping comment period for the GuSG RMP Amendments (RMPA). Attachment H is a map showing critical, occupied and unoccupied habitat. Note that important GuSG habitat exists outside of critical habitat and thus the RMP should address the impacts of oil and gas leasing and other related issues on all habitats. Note that critical habitat does not encompass all the suitable habitat within the planning area. See USFWS Species Status Assessment, especially population trend predictions under various development and climate scenarios. See letter submitted on August 22, 2022 by Center for Biological Diversity et al in response to the Notice of Intent to Amend Multiple Resource Management Plans Regarding Gunnison Sage-Grouse (<i>Centrocercus minimus</i>) Conservation and Prepare an Associated Environmental Impact Statement, Colorado and Utah.</p>

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41	Environmental Advocacy NGO Consortium	316	<p>South Shale Ridge represents another example of an area with wilderness quality deserving of protection and existing oil and gas leases that may never be developed. Leases in the area were issued for ten-year terms in November of 2005, approximately 18 years ago. In 2007, a federal judge found that BLM's decision to issue the leases violated NEPA and the Endangered Species Act (ESA) and ordered that BLM shall take no further action with regard to the leases "until and unless they have fully complied with the ESA and NEPA." [25] Thereafter, BLM suspended the leases and the agency has done nothing to resolve legal deficiencies identified by the court. Leaseholders have not actively encouraged BLM to resolve legal deficiencies, nor have they filed any plans to develop the leases. The lease suspensions lapsed long ago, and these leases should properly be canceled or allowed to expire. Instead, the 2015 GJ RMP declined to manage the area to protect wilderness character because it "fall[s] within the portion of the Grand Junction Field Office with known potential for natural gas development, and [is] largely leased for oil and gas development..." [26] BLM should not make the same mistake again, choosing to prioritize oil and gas over other important values like wilderness character. Instead, the SEIS should protect South Shale Ridge's wilderness characteristics. Additionally, BLM should better manage existing leases to protect wilderness characteristics. BLM has the authority to impose conditions of approval whenever faced with new discretionary decisions on existing leases. Courts have upheld BLM's authority to condition discretionary decisions to protect the environment, including conditioning the approval of suspension and unitization requests. [27] Reasonable conditions may include the right to deny all drilling or to restrict surface use if necessary to protect other values and to achieve BLM's other management priorities and statutory obligations. [28] BLM should consider conditions of approval to protect wilderness characteristics and other important values in the SEIS, and apply those conditions to existing leases in all inventoried LWC areas.</p> <p>[25] Wilderness Soc'y v. Wisely, 524 F. Supp. 2d 1285, 1313 (D. Colo. 2007).</p> <p>[26] Grand Junction Field Office, Approved Resource Management Plan, App. F - Wilderness Characteristics Inventory (Aug. 2015), at F-6. Available at https://eplanning.blm.gov/public_projects/lup/55944/67731/73690/Appendix_F_Wilderness_Characteristics_Inventory_ARMP.pdf (last accessed 10/30/23).</p> <p>[27] See Getty Oil Co. v. Clark, 614 F. Supp. 904, 915-16 (D. Wyo. 1985); SUWA, 127 IBLA 331, 355- 56 (1993).</p> <p>[28] Id.</p>
42	Environmental Advocacy NGO Consortium	316	<p>Suitable habitat for listed and sensitive species listed under the Endangered Species Act are on an extinction trajectory and every effort needs to be made to protect their habitat, ensure viability, and promote recovery. There is no room for error. Thus, the final decision must disallow oil and gas leasing (at a minimum no surface occupancy) within occupied habitat and suitable habitat [56] for listed species or on lands that affect occupied or suitable habitat or populations. Similarly, sensitive species, some of which are also on an extinction trajectory, should enjoy similar protections and stewardship.</p> <p>[56] As noted above, suitable habitat and critical habitat do not necessarily coincide. It is difficult to tell from the SEIS (and underlying RMPs) if Alternative F achieves this objective. BLM needs to make sure that the analysis discloses how the suitable and occupied habitat for listed species and sensitive species will fare under each alternative. BLM should be maintaining an up-to-date inventory of occupied and suitable habitat for special status species (prioritizing listed ones).</p>
43	Mesa County	134	<p>Mesa County has long been an opponent of duplicative management layers that hinder development, create confusion among lessees and public lands users, and can take years to finalize amendments in multiple land management plans. The GJFO DSEIS/ RMPA identifies both inclusion in the National Wild and Scenic River System ("NWSRS") and an ACEC for the lower portion of the Dolores River. Mesa County would like clarification on whether the two management designations would create competing control issues. Does one designation offer protections the other does not?</p>
44	Mesa County	134	<p>Lastly, for stream sections identified as eligible after a water appropriation assessment and remaining open for leasing, it is vital to clarify that an NWSRS designation should not be used to amend or restrict legally established lease rights by imposing new lease conditions.</p>
44	Mesa County	134	<p>Historically, Mesa County has expressed concerns about adding areas to the National Wild and Scenic Rivers System ("NWSRS") because, similar to Wilderness Study Areas, these newly designated management areas often remain in an indefinite state of limbo without final Congressional action. Determining eligibility for a stream segment obligates it to be managed to preserve its Outstandingly Remarkable Value ("ORV"), as identified for that segment. These designations should not create unnecessary regulatory burdens or de facto restrictions on use by Mesa County citizens or adjacent property owners. Supporting materials do not show that the BLM has assessed the availability of unappropriated water in the proposed stream segments. Many ORVs depend on the continued presence of free-flowing water in these streams. An evaluation of available water and existing water appropriations should be conducted for all segments before making final eligibility determinations. Any ORV that relies on water availability should only be considered valid if the in-stream flows, after deducting appropriations, are sufficient to support the preservation of that ORV indefinitely. Mesa County does not support the acquisition of water rights through exactions, including claims of beneficial use by a federal agency. Furthermore, inclusion in the NWSRS should not diminish existing water rights or impede access to construct, maintain, or replace important water infrastructure.</p>

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45	Western Environmental Law Center et al.	304	BLM should analyze in detail an RMP alternative that is meaningfully different with regard to air quality and climate impacts. Such an alternative would, for example, remove areas of high and very high mineral potential from leasing, as discussed above, as well as a range of climate and air quality specific stipulations, COAs, and mitigation measures that are applied to future development in order to ensure an actual reduction in future emissions that will, in turn, result in real reductions in associated air quality and climate impacts when compared to Alternatives A through D.[113] Such an alternative should also require that any new leases include stipulations reserving to BLM the right to limit or deny future drilling and production where appropriate to advance climate and air quality goals. A climate and air quality alternative could also address existing leases by requiring phased development of such leases. BLM may require phased development under: (a) its authority under the terms of all standard oil and gas leases to limit rates of production and development; and (b) its authority to suspend operations and production on leases. Limits on production rates and suspensions can be used separately or in combination, depending on the circumstances of a given lease or project, to ensure that production from existing leases meets climate and air quality goals. [113] Id. at 10.
45	Western Environmental Law Center et al.	304	BLM should consider an alternative that preserves a likely chance of avoiding 1.5 degrees Celsius warming and mitigates the local warming which has already exceeded that,[111] and a no-leasing alternative must therefore be considered to evaluate the planning areas foreseeable emissions against this backdrop. [111] See WELC et al., Comments on Supplemental EA (DOI-BLM-CO-G020-2023-0003-EA) and Underlying Revised Preliminary EA (DOI-BLM-CO-N040-2017-0050-EA): North Fork Mancos Master Development Plan. (June 16, 2023), pp. 20-26 (discussion of local warming and regional impacts of climate change), Exhibit 23.
45	Lish, Christopher	171	I strongly urge you to analyze, choose, and implement an alternative for the supplemental environmental impact statement for the Colorado River Valley and Grand Junction resource management plans that ends new oil and gas leasing and phases out production by 2030, preferably sooner. Climate science states that to avoid the harms of warming the climate beyond 1.5 degrees Celsius, the United States and other developed nations must end oil and gas development by 2030. Because these plans will guide oil and gas on public lands for at least a decade, they must do that now. The oil and gas industry has long plundered western Colorado's public lands, which has come at a terrible cost for the land, water, and air on which living creatures rely on. Wildlife habitat has been fragmented by a sprawling network of roads, land has been scraped bare for well pads, air pollution has worsened, and drought has stressed precious water resources. To safeguard these life-giving resources and protect imperiled species—including Colorado pikeminnows, razorback suckers, and Colorado hookless cacti—the BLM must adopt a resource management plan that aligns with the best available climate science.
45	Williams, Megan	224	It's also important that BLM re-visit its mitigation measures in order to keep pace with rapidly moving targets established by the State of Colorado. BLM discusses Colorado's GHG Pollution Reduction Roadmap in the DSEIS and even acknowledges that significant decreases in oil and gas emissions are not likely to occur until additional legislation, regulation, and policy are put into place.[44] However, BLM has the ability, in its actions in the SEIS, to align future emissions in the planning areas with the state's efforts to achieve the science-based climate targets of reducing GHG emissions 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels.[45] And in anticipation of Colorado's pending update to its GHG Pollution Reduction Roadmap ("Roadmap 2.0")-and with it, a new set of Near Term Actions-BLM should commit to updating mitigations measures to align with these new efforts in the near term. At the very least, BLM should consider an alternative doing so in a NEPA process to assess the comparative benefit such actions may provide in the climate context. Counter to what BLM has concluded in the DSEIS, it must consider additional mitigation measures to avoid, reduce, and minimize GHG emissions and climate impacts from fluid mineral leasing and development. [44] BLM DSEIS at 3-20 [45] Colorado Energy Office GHG Pollution Reduction Roadmap https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap-20
45	Williams, Megan	224	BLM should more broadly incorporate measures to align with overarching commitments to meet U.S. and Colorado climate targets. A key finding in Colorado's GHG Pollution Reduction Roadmap is that achieving the State's 2030 goal of reducing GHG emissions 50% from 2005 levels will rely on "deep reductions in methane pollution from the oil and gas industry, which makes up the largest source of non-combustion emissions in the state." BLM must include mitigations measures in the FSEIS that reflect this need. In fact, BLM's own 2021 Annual GHG Report acknowledges that, for the oil and gas sector to reduce emissions enough for the state to meet its targets, the industry must achieve a 33% reduction in methane emissions by 2025 and more than 50% reduction in emissions by 2030, and the industry operators must be required to eliminate routine flaring, minimize emissions, and track preproduction and production emissions. These are additional critical elements that must be translated into enforceable measures in the FSEIS/ROD that apply to any future oil and gas leasing operations in the planning areas.

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45	Environmental Advocacy NGO Consortium	316	<p>C. BLM must include additional information to ensure the SEIS covers a reasonable range of alternatives. As emphasized in our scoping comments, NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions.[100] This evaluation extends to considering more environmentally protective alternatives and mitigation measures.[101] For the SEIS, the consideration of more environmentally protective alternatives is consistent with the requirement of FLPMA to "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." [102]</p> <p>The current SEIS is a step in the right direction with additional alternatives reducing the acreage available of oil and gas in the region. However, the new alternatives keep hundreds of thousands of acres open to new leasing in the most prospective areas and may result in impacts to air quality and climate that are comparable to the 2015 plans that were previously challenged in court. For example, BLM estimates that Alternative E would only reduce the number of wells drilled in the Colorado River Valley Field Office over the next 20 years by two wells compared to the plan adopted by BLM in 2014. In other words, the number of wells foregone over 20 years is virtually the same under Alternative E as it is under Alternatives B and C. [103]</p> <p>This lack of differentiation indicates that the range of alternatives remains insufficient when it comes to new development and BLM's tendency to only consider alternatives that tilt heavily towards resource extraction. BLM has failed to satisfy its goal of evaluating a wider range of alternatives. "BLM [should] put forth an Alternative that removes areas of high and very high mineral potential from leasing and development in order to ensure an actual reduction in future emissions that will, in turn, result in real reductions in associated air quality and climate impacts when compared to Alternatives A through D." [104]</p> <p>In other words, BLM should consider a no leasing alternative as part of its analysis. BLM asserts that Alternative F would be "very similar" to a no leasing alternative. However, given that the number of wells foregone under Alternative F is essentially the same as under Alternatives B, C, and E, a no leasing alternative is necessary to adequately consider the full range of various development scenarios.</p> <p>[98] SEIS pp 2-3 - 2-4; see also Table 2.3-1, Table 2.3-2, Figure 2.6-2.</p> <p>[99] Definitions of NatureServe Conservation Status Ranks, available online at: https://help.natureserve.org/biotics/content/record_management/Element_Files/Element_Tracking/ETRACK_Definitions_of_Heritage_Conservation_Status_Ranks.htm</p> <p>[100] 40 C.F.R. §§ 1502.14(a), 1508.25(c).</p> <p>[101] See, e.g., Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094, 1122-1123 (9th Cir. 2002) (and cases cited therein).</p> <p>[102] 43 U.S.C. §1732(d)(2)(a).</p> <p>[103] Megan Williams, "Review of Air Resources and Climate Impacts in BLM's August 2023 Draft Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office." October 18, 2023, p. 9-10. (Attachment K).</p> <p>[104] Id., p. 10.</p>
46	US Environmental Protection Agency Region 8	328	<p>The direct and indirect impact analysis on page 3-7 of the Draft SEIS references analyses from the 2014 and 2015 RMPs that are approximately ten years old and does not directly examine the current proposed Alternatives E and F. The Draft SEIS also states that BLM Colorado (and other Rocky Mountain region states) are currently completing a regional air quality modeling study for the Western U.S., evaluating potential impacts due to federal oil, gas, and coal emissions sources for years 2028 and 2032, and that these results will supplement the BLM CARMMS (BLM 2017) modeling study used for oil and gas leasing and project-level assessments under the plans. (Draft SEIS, page 3-7). However, the Draft SEIS does not provide details to demonstrate that the trends and trajectories for air quality concentrations and AQRVs around the region will continue to follow recent trends. It also does not detail whether conditions will improve in the foreseeable future with the implementation of Alternatives E or F. In addition, this regional modeling study for the Western U.S. does not provide field office source apportioned impacts, but rather reports air quality impacts for Western Colorado as a whole. As a result, it is unclear whether these air quality studies adequately disclose the air quality impacts that could be expected under the Project Alternatives.</p>
46	US Environmental Protection Agency Region 8	328	<p>The Draft SEIS references air quality analyses used for the 2014 CRVFO and 2015 GJFO RMPs as well as other sources of information without explaining the relevance of these other air quality analyses to the current Alternatives proposed in the Draft SEIS. In addition, the Draft SEIS does not include information necessary for the reader to understand existing air quality or the local and regional air quality impacts or benefits that would result from the proposed Alternatives, including with respect to the National Ambient Air Quality Standards (NAAQS) and Air Quality Related Values (AQRVs). The intent of NEPA is to provide a detailed assessment that discloses the potential impacts to air quality and aids in making decisions about the proposed actions</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
46	Williams, Megan	224	In the DSEIS, BLM also references the ongoing BLM Western US Photochemical Air Quality Modeling for 2032 (Regional Modeling Study) and indicates it will be used for future oil and gas project-level assessments and "to describe potential air quality impacts for new proposed oil and gas projects' environmental assessments conducted under the life of the plans." ²³ The BLM released what appears to be a portion of this Regional Modeling Study, in a July 2023 report. ²⁴ This report is based on a modeling platform developed by EPA in support of the Good Neighbor Plan and is supplemented with additional oil and gas and coal mining data from BLM and presents modeling results for Colorado (only). The analysis includes source apportionment groups that do not directly align with BLM's planning areas, as they do in CARMMS, but instead cover the Western and Eastern (Royal Gorge) portions of Colorado, looking at impacts attributable to new and existing oil and gas development on federal / non-federal / tribal lands in these areas. Of note, the modeling analysis predicts cumulative impacts in the planning areas that include exceedances of the PM _{2.5} and PM ₁₀ NAAQS. ²⁵ A model performance evaluation is needed in order to better understand and contextualize the impacts reported. But source apportionment groups and impacts would need to be understood and made available at the planning area-level in order to be able to use the analysis in any future planning area decisions and/or for project-level decisions in the CRVFO and GJFO.
47	Not Disclosed	120	Climate change and the loss of biodiversity are two huge, overlapping, and increasingly serious problems. I strongly urge BLM to make helping to solve these problems a top priority of this RMP revision. BLM has a timely opportunity with this RMP revision to provide positive leadership. The attached IPPC report describes why BLM should immediately stop approving any further fossil fuel leasing or other development. The attached scientific study describes how livestock grazing on public lands contributes to climate change along with the degradation of habitats for biodiversity. I hope that BLM will use this important information to make the best decisions for the future management of these valuable BLM lands and resources
48	Western Environmental Law Center et al.	304	Another way BLM might evaluate and implement such alternatives would be to include in its analysis an alternative or portion of an alternative that requires any future leasing under the RMPs to include stipulations that mandate the use of best available methane reduction technologies to parcels. Reduction of methane from oil and gas operations is a critical piece of addressing the worst short-term impacts of climate change. Recent research has demonstrated that the use of technically proven and commercially available methane emissions reduction technologies can together capture more than 80 percent of the methane currently going to waste in the oil and gas sector's operations.[129] BLM must be proactive about ensuring that it is implementing best available methane control technologies in a manner that will render it compliant with EPA's upcoming § 111 rules. [129] Exhibit 27, Leaking Profits, The U.S. Oil and Gas Industry Can Reduce Pollution, Conserve Resources, and Make Money by Preventing Methane Waste, Harvey, et al. (2012) (hereinafter "Harvey Report"), available at https://www.nrdc.org/sites/default/files/Leaking-Profits-Report.pdf .
48	Western Environmental Law Center et al.	304	BLM must take a hard look at the direct, indirect, and cumulative methane emissions that will result from development under these RMPs in accordance with NEPA. This includes Interior's duty to quantify methane emissions and, on that basis, to assess impacts and a range of reasonable alternatives and mitigation measures to cut those emissions. BLM must also consider the other environmental impacts of this wasted resource, including the public health and welfare impacts of flaring.[210] [210] EDF, Flaring Aerial Survey Results (2021), available at https://www.permianmap.org/flaring-emissions/ ; see also Exhibit 58, Gvakharia et al., Methane, Black Carbon, and Ethane Emissions from Natural Gas Flares in the Bakken Shale, North Dakota, Environmental Science & Technology 5317, 5317 (2017); Cushing et al., Up in Smoke: Characterizing the Population Exposed to Flaring From Unconventional Oil and Gas Development in the Contiguous U.S., 16 Environmental Research Letters 1, 1 (2021), Exhibit 53.
48	Matranga, Joan	122	I worked with Randy Udall in the early 2000s. I tried to attach "Methane Madness", a 4 page piece he wrote then. You should search it in the internet and see what you think. I also think the NRDC report is very informative.
49	US Environmental Protection Agency Region 8	328	The discussion of the Volatile Organic Compounds (VOCs), Hazardous Air Pollutants (HAPs), and methane emissions trends from the Garfield County monitoring study as well as the study conducted by Ramboll on page 3-6 of the Draft SEIS is helpful in understanding the existing conditions for the area. For the Final SEIS, we recommend including additional details of the studies referenced to help the reader understand the past and existing monitored values and trends. This will avoid differing interpretations of the data by readers and the decision maker.
49	US Environmental Protection Agency Region 8	328	The Draft SEIS only incorporates by reference existing conditions from the 2014 and 2015 CRVFO/GJFO RMPs and other references to illustrate the existing conditions beyond the 2012 timeframe that was used in these documents. However, the Draft SEIS does not summarize the actual existing conditions from these references. We recommend adding a map of the monitoring sites that are relevant to the field offices, a table of background air pollutant concentrations using the most recent data, and a trends analysis to the Final SEIS.

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50	Ramirez, Jasmin	166	Recently, the undersigned flew over the CRVFO decision area, this flyover included a specific flight path over an EJ community of concern census tract identified by the BLM in the SEIS (08045952002). On this flight we witnessed the proximity and density of current and legacy (O&G) operations and infrastructure near our communities from New Castle to Parachute. To see O&G development so close to our neighborhoods, open-spaces, waterways, places of work, and schools is deeply concerning and illustrates significant current environmental justice issues faced by our communities locally and across the state. Statewide, the presence of oil and gas wells is more densely packed in high Latino counties. Even though counties with high concentrations of Latinos account for 33% of all counties in Colorado, 58% of all oil and gas wells are located in these same communities1. Around 30.5% of Garfield County identifies as Hispanic or Latino and many reside in the most impacted region of the decision area. We saw flaring, standing water on well sites, waste water reservoirs in close proximity to waterways and agricultural lands, and more pads than we ever expected to see near our homes. This aerial perspective illuminated the potential for adverse environmental and public health impacts our community has been disproportionately impacted by for decades. The Colorado EnviroScreen tool indicates Garfield County residents are disproportionately burdened by environmental effects of O&G and are exposed to higher rates of pollution than residents of most Colorado communities. Many research studies find that living near oil and gas activity may be tied to asthma, birthing complications, and other health impacts2. Furthermore, localized impacts of climate change on already vulnerable communities creates an incredible burden that threatens our homes, our livelihoods, and our future .The impacts to our communities from oil and gas production have led to numerous environmental injustices and we believe the BLM's preferred alternative (Alternative E) must do better to address those injustices. Our communities are located on and surrounded by lands the BLM identifies as high potential for O&G production. Keeping 93% of these lands open to development will perpetuate environmental injustices and harm BIPOC communities because of their direct proximity to where we live, work, and play. Alternative F is far better as only 16% of high potential lands would remain open for development, but given most high potential lands have active leases that won't be considered for closure during this process, the reality is Alternative F would only provide marginal relief to our community.
50	Protegete Piceance	165	In addition to incorporating the standards and guidelines referenced above we encourage the BLM to expand its consideration of screening tools, standards, and data sources to include those at the state level. In many instances state standards and resources can compliment and improve the BLMs understanding of impacts faced by DICs beyond what is currently captured in the SEIS. The state's EnviroScreen tool for instance provides greater granularity than EPA's EJScreen tool. While the BLM is working to codify EJ standards and guidelines more broadly the state can provide valuable insights to support more adequate addressment of impacts faced by DICs from oil and gas development through the state's Environmental Justice Action Task Force Recommendations.
50	Arauza, Hanna	360	Reference - CDPHE Colorado EnviroScreen Environmental Justice Mapping Tool https://cdphe.colorado.gov/enviroscreen Reference: United State Census Bureau, Census Bureau Releases Estimates of Undercount and Overcount in the 2020 Census, May 10, 2022 https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html Reference: US News & World Report - High Schools in Garfield School District No. Re-2 https://www.usnews.com/education/best-high-schools/colorado/districts/garfield-school-district-no-re-2-109902 Reference: Garfield County Economic Update, First Quarter 2023, Colorado Mesa University https://www.coloradomesa.edu/business/documents/garfield-county-economic-newsletter-q1-2023.pdf Reference: Human health risk assessment of air emissions from development of unconventional natural gas resources, McKenzie et al, 2012
50	Western Environmental Law Center et al.	304	Scoping comments raised the necessity that BLM take a hard look at the inexorable relationship between health and environmental justice.[192] The SEIS fails to adequately link health and environmental justice to BLM's decision-making, including analysis of and choices among alternatives, despite the clear mandate of EO 12898, and, even more recently, EO 14008. BLM's own September 2022 Instruction Memorandum 2022-059, "Environmental Justice Implementation,"[193] mandates environmental justice analyses in BLM's NEPA reviews. [192] WELC et al., Scoping Comments at 91-92. [193] U.S. Bureau of Land Management, IM 2022-059, "Environmental Justice Implementation" (September 20, 2022, Available at https://www.blm.gov/policy/im2022-059 ; See also Bureau of Land Management, 2022. Addressing Environmental Justice in NEPA Documents: Frequently Asked Questions. U.S. Department of the Interior, Bureau of Land Management, Socioeconomics Program, Washington, D.C.
50	Western Environmental Law Center et al.	304	impacts from oil and gas development have a differential, adverse impact on low-income populations, including communities of color, within the planning area. These disproportionate impacts create environmental justice concerns that must be addressed throughout the land use planning process and in any subsequent approved activities.[25] [25] WELC et al., Scoping Comments at 7-8.

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50	Colorado Department of Natural Resources	305	<p>We also appreciate BLM referencing its Environmental Justice Implementation Instruction Memorandum, which will apply to future implementation-level decisions in the CRVFO and GFO areas.[2] As recommended in the attachment to the Memorandum, we support the inclusion of a list of Environmental Justice considerations that should be conducted for individual projects implemented under the plan in the Supplemental EIS.[3] We also strongly encourage BLM to conduct early meaningful engagement before it is too late to avoid impacts or incorporate public input in the decision making process. When addressing environmental justice concerns, we encourage BLM to consider Colorado's definition of disproportionately impacted communities, as provided in HB23-1233.[4] The Colorado EnviroScreen tool can be used to identify census block groups that meet Colorado's definition of a disproportionately impacted community within the planning and decision area. The Colorado EnviroScreen tool, guides, and data, including GIS shapefiles, are available at https://cdphe.colorado.gov/enviroscreen. Colorado agencies are also available to consult on environmental justice as it pertains to any future implementation-level decisions.</p> <p>[2] BLM, IM2022-059, September 20, 2022, https://www.blm.gov/policy/im2022-059</p> <p>[3] BLM, Addressing Environmental Justice in NEPA Documents, page 5 and Section 16, https://www.blm.gov/sites/default/files/docs/2022-09/IM2022-059_att1.pdf</p> <p>[4] Colorado Legislature, H.B. 1233, 2023 Regular Session, https://leg.colorado.gov/sites/default/files/2023a_1233_signed.pdf</p>
50	Environmental Advocacy NGO Consortium	316	<p>BLM must conduct a more comprehensive analysis of environmental justice (EJ) impacts and consider an alternative that accounts for the disproportionate burdens facing environmental justice communities in the planning area. As outlined in Megan Williams' recent report, both National and State policy direction should influence BLM's decisionmaking and environmental justice impact analysis. As it stands, the SEIS fails to take a comprehensive look at "potential impacts to environmental justice communities, including adverse health impacts and climate-change related effects from continued resource development under BLM's preferred Alternative (E)."[83]</p> <p>[83] Megan Williams, "Review of Air Resources and Climate Impacts in BLM's August 2023 Draft Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office." October 18, 2023, p. 20.</p>
50	Environmental Advocacy NGO Consortium	316	<p>BLM must expand its consideration of screening tools, standards, and data sources to include those at the state level. In numerous instances state standards and resources can inform the BLM's current understanding of impacts faced by disproportionately impacted communities beyond what is currently captured in the SEIS. For example, the state's EnviroScreen tool provides greater granularity than EPA's EJScreen tool at census block and tract levels that can better inform current analysis and decision making. While the BLM works to codify EJ standards and guidelines at the national level the BLM must develop specific EJ standards and guidelines in the SEIS to address potential oil and gas related public health, environmental pollution, and climate change impacts to disproportionately impacted communities across the decision area. A deferred project by project level approach towards mitigating impacts to these communities is more likely to lead to inconsistent results that fail to adequately protect communities.</p>
50	Ramirez, Jasmin	166	<p>Expand the existing analysis of environmental justice impacts to ensure consistency with state best practices and policies. We urge the BLM to consider the state of Colorado's EJ Task Force Recommendations and to consider the state's EnviroScreen tool.</p>
50	Ramirez, Jasmin	166	<p>We are concerned the BLM may not be adequately consulting and/or weighting state priorities, data, resources, and recommended standards as they relate to DICs and EJ concerns. The state of Colorado has developed a robust set of resources including CDPHE's Environmental Justice Task Force Recommendations and CDPHE's EnviroScreen. The EnviroScreen offers greater resolution and insight than the EPA's EJScreen tool at census block and tract levels that have the potential to provide greater insights. While the EPA's EJScreen is a helpful tool, there are many well documented deficiencies and weaknesses that limit its effectiveness and buy-in specifically with DIC communities. We recommend the BLM consider these resources as this process moves forward and consult with the state's EJ Taskforce and program to better understand state EJ concerns and priorities</p>
50	Ramirez, Jasmin	166	<p>We encourage the BLM to acknowledge the historic environmental injustices our communities have faced as they relate to health and environmental impacts of O&G production and to take meaningful steps to avoid and mitigate these impacts moving forward.</p>
50	Williams, Megan	224	<p>BLM fails to take a deeper look at a more comprehensive set of potential impacts to EJ communities, including adverse health impacts and climate-change related effects from continued resource development under BLM's preferred Alternative (E). BLM should use the recent federal and state guidance, laws, and tools to conduct a more comprehensive analysis of EJ impacts.</p> <p>BLM DSEIS at 2-18: EPA's Environmental Justice screening and mapping tool (EJScreen) provides environmental and socioeconomic indicators that can be used to identify areas with populations that are disproportionately impacted by environmental quality issues. EPA indexes 13 EJ indicators that combine environmental and socioeconomic data. The 13 indicators are: (1) PM2.5; (2) ozone; (3) diesel particulate matter; (4) air toxics cancer risk; (5) air toxics respiratory hazard index; (6) toxic releases to air; (7) traffic proximity; (8) lead paint; (9) Risk Management Plan facility proximity; (10) hazardous waste proximity; (11) superfund proximity; (12) underground storage tanks; and (10) wastewater discharge. EPA EJ indexes (and supplemental EJ indexes) combine demographic factors such as low-income, people of color, unemployment, limited English speaking, less than high school education, and low life expectancy with each environmental indicator to highlight areas with vulnerabilities.</p>

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50	Arauzo, Hanna	360	Additionally, relying solely on 2020 census data as reported results in an undercounted Hispanic population. The Hispanic population reported in the 2020 census had a statistically significant undercount rate of 4.99%. If this undercount rate is applied to Garfield County, the actual Hispanic demographic, and therefore the entire minority population, comes very close to exceeding the “meaningfully greater” environmental justice threshold for minority criteria, in contrast to what the SEIS currently reports. Furthermore, data from local public school enrollment suggests that the actual non-white Hispanic population in western Garfield County is much higher than what was reported in the census. Enrollment data in Garfield Re-2 (New Castle, Silt, and Rifle) indicates the student population is 53% Latino and 29% of students are learning English. Rifle High School students are 61% Latino. Coal Ridge High School students (in Silt) are 50% Latino. The Garfield County towns that are located within the high production potential areas do exceed the “meaningfully greater” environmental justice minority criteria.
50	Arauzo, Hanna	360	It’s common knowledge that low-income communities and people of color, both disproportionately impacted (DI) communities, are more likely to suffer negative health and environmental impacts from oil and gas development. This is one of the reasons environmental analysis is conducted. However, the environmental justice analysis presented in the August 2023 CRV RMP SEIS is inadequate. Using only county-level data, when census block level data is available, skews the interpretation and underestimates the minority population in the western end of the I-70 corridor in Garfield County, where the majority of oil and gas development occurs. The BLM should review state resources, which offer greater detail than federal resources, identifying DI communities when considering the impacts of future leasing in western Garfield County. Screening tools are readily available through the Colorado Department of Public Health and Environment.
51	GMUG National Forest	86	p. 3-20 (?) Under Direct & Indirect Impacts related to GHG emissions, please clarify if there is a quantifiable difference between all alternatives including (Alternatives E &F) based upon # of wells in RFD or estimated production.
52	GMUG National Forest	86	p. 3-15, 3rd Paragraph under Social Cost of GHGs, Update guidance with January 2023 Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (https://www.govinfo.gov/content/pkg/FR-2023-01-09/pdf/2023-00158.pdf)
53	GMUG National Forest	86	p. 3-99 (Section 3.6.2), Cumulative Impacts notes that coal effects were covered in 2014 and 2015 Proposed RMPs/Final EISs. Is there anything regarding coal that needs to be updated regarding GHG emissions or to be compliance with new guidance?
54	US Environmental Protection Agency Region 8	328	We further recommend characterizing the specific types and magnitudes of potential impacts to the resources in the areas of environmental concern addressed in Alternative F. While the Draft SEIS acknowledges in several impact analysis sections that overall environmental effects would be lessened by limiting fluid mineral leasing further under Alternative F, it does not characterize the nature of the resource impacts that would occur under Alternative E vs Alternative F in detail. The specifics of these differences are instead relegated to environmental analyses that would occur at the leasing stage. We encourage the exploration of these impacts to the extent possible in the Final SEIS because the RMP stage of analysis provides the clearest opportunity to examine impacts at a broad scale, which is particularly important for connected resources, and provide the most certain level of protection. This broad scale may be more likely to be overlooked, or associated impacts minimized, at the project level. Tn addition, many environmental analyses at the federal leasing stage are deferred until the application for permit to drill (APD) stage, which is typically not subject to public review, thus limiting public and agency involvement in addressing the concerns currently documented by this SETS' scoping process.

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55	Environmental Advocacy NGO Consortium	317	<p>Attached are exhibits from technical comments submitted by Colorado Wildlands Project, The Wilderness Society, Wilderness Workshop, Rocky Mountain Wild, National Parks Conservation Association, Defenders of Wildlife, Conservation Colorado, Sheep Mountain Alliance, Western Colorado Alliance, Earthjustice, Conservation Lands Foundation, Great Old Broads for Wilderness – Grand Junction Broadband, and Audubon Rockies for the Supplemental Environmental Impact Statement for the Colorado River Valley and Grand Junction Field Offices. All attachments are available online at: https://drive.google.com/drive/folders/IzofQHEm3yHDbzkG8RLiO7K_i7LmnpTTf?usp=drive_link Attachments include: Attachment A1 - The Wilderness Society et al. Protest of the Grand Junction Proposed RMP, May 11, 2015. Attachment A2 - The Wilderness Society et al. Protest of the Colorado River Valley Proposed RMP, May 5, 2014.</p> <ul style="list-style-type: none"> Attachment B - Wilderness Workshop et al scoping comments on the Colorado River Valley and Grand Junction Supplemental EIS, July 25, 2022 Attachment C - Previously submitted LWC inventory information for CRVFO a. Blowout Hill b. Bull Gulch c. Castle Peak d. King Mountain e. Lucky Gulch Attachment D - Previously submitted LWC inventory information for GJFO a. Bangs Canyon b. Bangs West c. Cone Mountain Canyons d. Cow Ridge e. Granite Creek f. Horse Mountain g. Munger Creek h. Spink Canyon i. Spring Canyon Attachment E - 2022 LWC inventories a. GJFO: Cone Mountain Canyons b. CRVFO: Hogback East c. CRVFO: Red Hill Attachment F - Colorado River Valley field office LWC communications a. Jan. 28, 2014 letter to CRVFO Field Manager Steve Bennett from TWS and WW b. Mar. 25, 2014 letter to CRVFO Field Manager Steve Bennett from TWS and WW c. Aug. 15, 2014 letter to TWS and WW from CRVFO Field Manager Steve Bennett d. Apr. 1, 2015 letter to CRVFO Acting Field Manager Karl Mendonca from TWS and WW e. Feb. 6, 2017 letter to CRVFO Acting Field Manager Shonna Dooman from TWS and WW f. Mar. 23, 2017 letter to TWS and WW from CRVFO Acting Field Manager Shonna Dooman Attachment G - Chart of ACECs within the Draft Colorado River Valley / Grand Junction SEIS Attachment H - Gunnison Sage-Grouse Habitat Map, created by Defenders of Wildlife using U.S. Fish and Wildlife Service and Colorado Parks and Wildlife spatial data. Attachment I - Molvar, E. and C. Bailey. 2023. Evaluating the cumulative effects of oil and gas development on elk and mule deer in the middle reaches of the Colorado River watershed near Silt, Colorado. Western Watersheds Project and Redstone GIS. 17 pp. Attachment J - Hjerpe, E. and Aldrich, G. Economic Transition Away from Federal Oil and GAs in Western Colorado: A Conservation Economics Institute Brief (#14). 2023. Attachment K - Megan Williams, "Review of Air Resources and Climate Impacts in BLM's August 2023 Draft Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office." October 18, 2023. Attachment L - Colorado Parks and Wildlife's Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado, February 12, 2021. Attachment M - PSE Healthy Energy, Examination of Potential Groundwater Contamination Pathways from Oil and Gas Activities in Colorado. July 15, 2022. Attachment N - Notice of Intent To Prepare a Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office Resource Management Plans. June 23, 2022.
56	GMUG National Forest	86	p. 3-171, In Alternative F should this be multiple 1.3 instead of 0.3 (i.e., 30% greater values forgone than under Alternative E)?
57	Environmental Advocacy NGO Consortium	316	<p>Planning decisions should support America the Beautiful and 30x30 On January 27, 2021, President Biden signed Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, which laid out a policy goal of protecting at least 30% of our nation's lands and waters by 2030. [90] This goal is what scientists have determined we need to combat the biodiversity and climate crises and sustain the human population worldwide. The success of this 30x30 initiative will hinge on the nation's largest land manager, the BLM. BLM should use this planning process as an opportunity to uphold the principles of 30x30 by establishing protections throughout GJFO and CRVFO, including designating WSAs and ACECs.</p> <p>[90] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/</p>
57	Environmental Advocacy NGO Consortium	316	<p>In addition to committing to the 30x30 goal in Executive Order 14008, President Biden strengthened his administration's dedication to meaningful conservation through the recommendations set forth in the 2021 America the Beautiful report.⁹¹ This report provides guidance and principles for pursuing locally led efforts to conserve and restore "America the Beautiful." The eight principles are: ⁹¹ https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf</p> <p>Principle 1: Pursue a Collaborative and Inclusive Approach to Conservation Principle 2: Conserve America's Lands and Waters for the Benefit of All People Principle 3: Support Locally Led and Locally Designed Conservation Efforts Principle 4: Honor Tribal Sovereignty and Support the Priorities of Tribal Nations Principle 5: Pursue Conservation and Restoration Approaches that Create Jobs and Support Healthy Communities Principle 6: Honor Private Property Rights and Support the Voluntary Stewardship Efforts of Private Landowners and Fishers Principle 7: Use Science as a Guide Principle 8: Build on Existing Tools and Strategies with an Emphasis on Flexibility and Adaptive Approaches</p>

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57	The Mountain Pact	332	While the BLM completes a more thorough analysis of the impacts of federal oil and gas development on our climate and communities, we urge you to consider that fossil fuel extraction on public lands generates nearly 25 percent of the United States' climate change causing emissions. Increasing conservation on our public lands is a critical tool for climate mitigation and adaptation for our region. Protected public lands provide essential core habitat and migration corridors that enable wildlife species and entire ecosystems to survive and thrive. The Biden-Harris administration has established an ambitious goal to conserve 30% of our nation's lands and waters by 2030 in order to safeguard biodiversity against the threat of climate change, and this planning process can be a key piece for Colorado.
57	Environmental Advocacy NGO Consortium	316	FLPMA is sufficiently flexible that the agency has broad discretion to provide durable administrative protections through resource management planning processes with sufficient policy guidance. In the spirit of 30x30 and America the Beautiful, the SEIS should ensure that more acres will be managed to maintain a primarily natural state, providing connectivity corridors and habitat for wildlife and ensuring clean water and air for local communities. We encourage the agency to use existing tools and authorities to advance 30x30 goals and provide protective and durable protections for the unique resources and landscapes within GJFO and CRVFO.
58	Western Environmental Law Center et al.	304	Scoping comments urged BLM to align its planning efforts in the CRVFO and GJFO with the State of Colorado's policies, statutes, and regulations addressing climate and related issues. Regarding climate policy, we appreciate BLM's discussion of Colorado's oil and gas regulations in the Draft SEIS. BLM does not, however, discuss Colorado's policies regarding a just transition for the coal industry and related data and information requirements. Nor does BLM discuss Colorado's public health or environmental justice statutes and policies, such as 2021 House Bill 21-1266 (requiring a 60% reduction in greenhouse gas emissions from the oil and gas sector) or House Bill 21-1189 (requiring the monitoring of toxic air pollutants), or its wildlife policies. Although BLM did analyze effects on recreation, there is not analysis of the RMP's compatibility with Colorado's policies regarding recreation. In addition, the Colorado Energy and Carbon Management Commission ("ECMC") is required by SB19-181 to conduct a rulemaking to evaluate and address cumulative impacts. HB23-1294 also requires the ECMC to define cumulative impacts-including impacts to climate-by April 24, 2024. We again request that BLM align its planning efforts with Colorado's policies, statutes, and regulations.
59	Mesa County	134	Lastly, to ensure that the BLM can base its decisions on the most up-to-date and robust scientific information, it is our recommendation that the BLM consider reevaluating the assessment of Reasonably Foreseeable Development for the region. This recommendation is prompted by the information provided in the 2016 United States Geological Survey ("USGS") report titled "Assessment of Continuous (Unconventional) Oil and Gas Resources in the Late Cretaceous Mancos Shale of the Piceance Basin, Uinta-Piceance Province, Colorado and Utah." The USGS report states, "the USGS Energy Resources Program drilled a research core in the southern Piceance Basin that provided significant new geologic and geochemical data that were used to refine the 2003 assessment of undiscovered, technically recoverable oil and gas in the Mancos Shale." in This discovery lends to the possibility that there is more resource potential than previously known. It is important to ensure that upon reevaluations, areas of low potential are reclassified should they be found to contain previously undiscovered resources.
59	The Daily Sentinel Grand Junction, Colorado	245	We can appreciate the agency's attempt to shift to a more balanced approach in managing public lands - one in which conservation gets equal consideration as oil and gas leasing - and still question whether the BLM's preferred management alternatives for the field offices in Grand Junction and Silt make sense. In our view, they don't - for the simple reason that there's nothing clear about how the BLM determined what lands have high or low oil and gas potential. The BLM's proposal to limit future leasing to areas identified as having high oil and gas development potential makes sense. The problem is that BLM relied heavily on 2002 U.S. Geological Survey data instead of a recent 2016 survey that more accurately reflects resource potential based on technological advancements in the industry. Industry officials told the Sentinel's editorial board modern drilling techniques can access lands once considered "low potential" in a way that minimizes surfaces disturbances. In their view, there's no reason to lock away so much acreage in the two field offices when gas can be drilled with such a small impact on the land. And they pushed back on the notion that development is incompatible with other uses, such as recreation, hunting or preserving wildlife habitat, noting that leased acreage is not off-limits for any other use.
59	Office of Rep. Dan Newhouse	373	The supplemental EIS is necessary to comply with judicial rulings on air quality and greenhouse gas (GHG) analysis. BLM is correct to update its GHG analysis, but has gone far beyond the rulings by proposing to close 73% of high potential oil and natural gas areas to leasing. Further, BLM is proposing to close all areas with "no-known, low, and moderate oil and gas development potential." BLM is basing its analysis of the oil and gas potential on out-of-date information that does not take into consideration modern technology or a full assessment of the Mancos shale. Shales once considered low potential are now quite productive in other areas such as the Bakken in North Dakota and the Permian Basin of New Mexico and Texas. What was once medium- or low-potential in these and other areas can turn out to be high potential. By reducing access to the promising Mancos shale, this administration hopes to ensure that it is not likewise explored and its true potential revealed. It is a political play meant to further restrict access to the oil and natural gas development that could reinvigorate the economy of the West Slope of Colorado and help ensure energy security for all Americans.

Concern ID	Organization/ Individual	Letter Number	Comment Text
59	Mesa County	134	Inclusivity and Timeliness of Reasonably Foreseeable Development Scenario for Oil and Gas. The BLM's decision to close areas with no, low, or medium potential to future leasing lies largely in the findings of the 2012 report entitled Reasonably Foreseeable Development ("RFD") Scenario for Oil and Gas, developed for the Grand Junction Field Office and the 2008 report Reasonable Foreseeable Development: Oil and Gas in the Glenwood Springs Field Office (GSFO) Administrative Boundary Area. These RFD reports, while based on geological considerations, underscore the speculative nature of predicting future development possibilities. While some areas in western Colorado may have previously been deemed uneconomical for development due to resource depths, difficult terrain, and infrastructure constraints, it's crucial to acknowledge the rapid advancements in technology and innovations that have occurred, even in the years since the RFD's completion. Recent and future breakthroughs may render previously "inaccessible" resources both cost-effective and more environmentally friendly. By prematurely restricting access to these lands, we risk limiting our capacity to tap into these resources. Therefore, closures of specific areas should undergo a more nuanced and site-specific review rather than being subjected to the broad-brush closures currently proposed in the Preferred Alternative. Mesa County supports an Alternative which would maintain access to BLM lands for future leasing, contingent upon a comprehensive, site-specific National Environmental Policy Act ("NEPA") analysis. The adopted plan should strike a balance between conservation and responsible resource development, both of which are crucial for sustaining our community's economic well-being and environmental stewardship.
59	Western States and Tribal Nations Natural Gas Initiative	210	It is WSTN's assertion that the geological assessment that is the basis for BLM's Reasonable Foreseeable Development (RFD) analysis is based on outdated information and must be updated. In a 2016 analysis, the U.S. Geological Survey (USGS) conducted its second largest assessment of potential shale & tight gas resources to that date. USGS determined the Mancos Shale in the Piceance Basin of Colorado contains an estimated mean of 66 trillion cubic feet of shale natural gas, 74 million barrels of shale oil and 45 million barrels of natural gas liquids. This estimate is for undiscovered, technically recoverable resources. The previous USGS assessment of the Mancos Shale in the Piceance Basin was completed in 2002 as part of a comprehensive assessment of the greater Uinta-Piceance Province, and estimated 1.6 trillion cubic feet of shale natural gas. Included in the 2015 CRVFO RMP/Final EIS documents is BLM's Appendix S Reasonable Development Scenarios: Oil and Gas in the Glenwood Springs Field Office Administrative Boundary, which on page 3 states, "This GSFO RFD geologic discussion is based heavily on the 2002 USGS Resource Assessment." On pages 31 to 33, it references the same 2002 USGS Resource Assessment as the basis for estimating undiscovered recoverable oil and natural gas resources and classifies areas within the Piceance Basin by potential. In its 2016 assessment, USGS understood that technological advancements have increased the ability of operators to recover oil and natural gas resources and updated their resource assessment of the Piceance Basin in 2016. BLM must now update the RFD for the planning area and reclassify what is no-known, low, medium, and high potential for the planning area based on the best, most current 2016 assessment, not the outdated 2002 assessment. A reassessment using best available information is required under NEPA, especially since BLM has decided to propose that all areas deemed no-known, low, or medium potential would be completely off limits to fluid mineral development. We request that BLM update its RFD Analysis to reclassify areas by potential using the 2016 USGS Resource Assessment and not the outdated 2002 USGS Resource Assessment. These corrections/advancements are relevant to the context of Alternatives E & F, which were precipitated by a BLM legal settlement with a private plaintiff opposed to oil and gas production. As such, there appears to be a somewhat arbitrary assessment of which lands are to be stricken from potential future production because they have "no known, low, and medium oil and gas development potential." That determination is better made by economic actors whose interest is in economically recovering the assets, and whose technical expertise is best-suited for making those decisions. Removing the bulk of available leasing land forecloses the possibility of additional technological innovations making these areas and their potential reserves economically recoverable, which in turn will chill investment and the accompanying employment and rural economic contributions that come from private investment.
59	The Daily Sentinel Grand Junction, Colorado	245	The BLM took a harder look and put forth a preferred alternative. But the BLM could preserve the status quo, which seems the wiser course of action given the confusion it created by not relying on the best available data to identify resource potential. These field offices have done a good job balancing reasonable energy development with reasonable access to public lands. Until the BLM provides better data, we see no compelling reason for it to shift away from that balance.
59	Western Environmental Law Center et al.	304	Scoping comments made clear that BLM's analysis must start with an accurate and updated baseline.[71] Indeed, "NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action." Or. Nat. Desert Ass'n v. BLM, 625 F.3d 1092, 1109 (9th Cir. 2010) (quoting Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 553 (1978)). NEPA also imposes a continuing duty to consider new information and changed circumstances. 40 C.F.R. § 1502.9(c). However, as discussed below, BLM's Draft SEIS has done an inconsistent and inadequate job disclosing and considering baseline conditions relevant to its analysis and decision. Comments specifically pointed to the need for updated Reasonable Foreseeable Development Scenarios (RFDs).[72] RFDs form the basis for much of BLM's analysis. Existing RFDs are based on information that is now decades old. Comments highlighted important new information and changed circumstances that were not considered in existing RFDs, and described how predictions in the existing RFDs have not borne out. An independent RFD prepared by a professional geo-scientist was submitted for the record. Nonetheless, BLM refused to update existing RFDs.[73] This failure undermines much of BLM's analysis. [71] See WELC et al., Scoping Comments at 40-55. [72] See WELC et al., Scoping Comments at 40-44. [73] See Draft SETS at 1-2 ("The BLM determined the two RFDs remain valid.").
59	Western Energy Alliance	306	The Trades suggest as a first step for BLM to meet with oil and natural gas operators and scope out what data sources are needed other than the 2016 USGS Resource Assessment to create these updated RFDs. The Trades are willing to meet at BLM's earliest convenience.

Concern ID	Organization/ Individual	Letter Number	Comment Text
59	Western Energy Alliance	306	BLM Should Automatically Update Any RFD Analysis if USGS Conducts an Updated Resource Assessment and Reclassify the Planning Area's Potential Based on it Should BLM persist with closing off any areas within the planning area classified as no-known, low, or medium potential, BLM should update the RFD analysis first based on the 2016 Resource Assessment and subsequently whenever USGS finalizes an updated resource assessment that covers the planning area. With such future updates, any lands within the planning area closed to mineral development because of designation in a certain potential category should then be reclassified and reopened to leasing and development accordingly. This approach will ensure that BLM continues using up-to-date data rather than the stale data used in the SEIS.
59	Western Energy Alliance	306	This updated USGS Resource Assessment was not available to the BLM during the 2014 CRVFO RMP/Final EIS and 2015 GJFO RMP/Final EIS, but the assessment is readily available to BLM now for this SEIS.
59	Western Energy Alliance	306	An updated Reasonable Foreseeable Development (RFD) analysis using the 2016 Resource Assessment from the U.S. Geological Survey (USGS) and a reclassification of the oil and natural gas potential on all lands in the planning areas based on that analysis using that best available and most recent analysis, not the outdated 2002 USGS assessment.
59	Western Energy Alliance	306	BLM must also update its analysis to account for advancements in drilling and completion technologies that have reduced impacts on the land and other natural resource values while increasing recovery of mineral resources.
59	Western Energy Alliance	306	BLM must review producing wells within or adjacent to lands characterized as no-known, low, and medium potential and review how gas processing capacity (not necessarily available resources) sometimes plays a role in low production in the areas. BLM should desist from a blanket closure of all no-known, low, and medium potential lands.
59	Western Energy Alliance	306	BLM's assumption that the two RFDs remain valid because geology remains constant is flawed. While it is true that the underlying geology of mineral resources remains constant, how oil and natural gas operators are able to reach those mineral resources has changed dramatically since 2002. These dramatic changes have made new resources available throughout the planning area and across the United States more broadly. The 2016 USGS resource assessment is just one illustration of the point. According to the U.S. Energy Information Administration (EIA), the drilled footage per well in the United States increased from roughly 6,000 feet in the early 2000s to roughly 15,000 feet in 2019, demonstrating the technological developments in the industry. This is a 2.5-fold increase, as shown in Figure 3.5 5 U.S. EIA, U.S. crude oil and natural gas production in 2019 hit records with fewer rigs and wells (June 25, 2020) (See PDF for Figure 3 - Drilled Footage Per Well in the United States 1975 to 2019)
59	Western Energy Alliance	306	BLM does mention the updated 2016 USGS Resource Assessment a single time (page 3-100) in the SEIS, but it was not used for classifying potential. BLM provides no rationale for its failure to update the RFD. This makes BLM's approach arbitrary and capricious. See Center for Biological Diversity v. U.S. Dep't of Interior, 72 F.4th 1166, 1177 (10th Cir. 2023) (agency must examine the relevant data and articulate a rational connection between the facts found and the choice made). If BLM decides to close all no-known, low, and medium potential areas, this must be done using the best available information, which obviously includes the 2016 USGS Resource Assessment. BLM must work with USGS, oil and natural gas operators, and other technical experts to gather required supplemental information to the 2016 USGS Resource Assessment including technological advancements, surveys, new discoveries, drilling and completion statistics and plans, oil and gas production by formation, well production characteristics, oil and natural gas pipelines, and facilities and then reclassify the planning areas based on this information. The Trades are willing to assist BLM in any way needed to make this happen. BLM did work with oil and natural gas operators in 2008 and 2012 while not recommending a complete closure of all no-known, low, and medium potential areas. If BLM was able to work with oil and natural gas operators and other technical experts back then, BLM should be able to do that now, especially when the stakes are much higher.
59	Western Energy Alliance	306	BLM has an obligation under NEPA and the Administrative Procedure Act (APA) to use the best available information and not to ignore such an obvious piece of relevant information. See Lands Council v. Powell, 395 F.3d 1019, 1031 (9th Cir. 2005) (agency should use "up-to-date" data and not use "stale" data); N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1086-87 (9th Cir. 2011) (agency acted arbitrarily and capriciously by using "stale" data and therefore failed to take the required "hard look" under NEPA). The RFD must be redone based on the 2016 Resource Assessment and the areas erroneously characterized as no-known, low, and medium potential must be reclassified USGS understood that technological advancements have increased the ability of operators to recover oil and natural gas resources and updated their resource assessment of the Piceance Basin in 2016. BLM must now update the RFD for the planning area and reclassify what is no-known, low, medium, and high potential for the planning area based on the best, most current 2016 assessment, not the outdated 2002 assessment. A reassessment using best available information is required under NEPA, especially since BLM has decided to propose that all areas deemed no-known, low, or medium potential would be completely off limits to fluid mineral development.
59	Western Energy Alliance	306	While BLM did this additional RFD analysis described above in 2008 and 2012, this analysis still relied heavily on the outdated 2002 USGS assessment. Importantly, USGS performed an updated resource assessment in 2016.[4] USGS noted right on the very first page that it had updated the 2002 assessment based on what has been learned from 2,000 wells drilled within the Mancos Shale of the Piceance to significantly refine the assessment of undiscovered, technically recoverable reserves and found: - 66.3 Tcf of natural gas. - 74 million barrels of oil. - 45 million barrels of natural gas liquids [4] Assessment of Continuous (Unconventional) Oil and Gas Resources in the Late Cretaceous Mancos Shale of the Piceance Basin, Uinta-Piceance Province, Colorado and Utah, USGS, 2016.

Concern ID	Organization/ Individual	Letter Number	Comment Text
59	Western Energy Alliance	306	BLM must commit to updating the RFD analysis in the event USGS conducts an updated resource assessment and reclassify the planning area's potential based upon it
59	Western Energy Alliance	306	BLM must update its formal RFD analysis using the 2016 Resource Assessment from the USGS and reclassify all lands in the planning areas as no-known, low, medium, and high potential based on this 2016 Resource Assessment. This is especially important if BLM decides to close any supposed no-known, low, or medium potential areas. The Trades suggest as a first step for BLM to meet with oil and natural gas operators and scope out what data sources are needed other than the 2016 USGS Resource Assessment to create these updated RFDs. The Trades are willing to meet at BLM's earliest convenience.
59	Williams, Megan	224	BLM should reconcile Reasonably Foreseeable Development scenarios from 2014 and 2015 in the DSEIS with current and future oil and gas development in the planning areas and should develop and present air pollutant emission inventories and estimated impacts for the proposed actions in Alternatives E and F.
59	Williams, Megan	224	BLM did not update the reasonably foreseeable development (RFD) scenarios for the DSEIS, instead relying on the RFDs undertaken in 2008 and 2012 for the CRVFO and GJFO respectively. BLM based the RFD projections on "unconstrained development" but fails to address how the many factors it highlights, that influence development, may have changed in the past 10-15 years since the RFD projections were made, e.g., commodities prices, technological challenges, costs, and geopolitical influences. In fact, BLM's most recent Colorado Annual Air Resources Report (2020 Report Year) states that, "...data trends show how RFD documents, that are developed for various analysis applications, are not entirely representative of the realities of a free energy market, and how market circumstances (or changes) drive development for what is essentially a global commodity." BLM should update its RFD projections for these two planning areas in order to better understand and evaluate the level of development proposed under all of the Alternatives BLM is considering. BLM should also describe how development in the planning areas compares to the RFD projections since the time they were made in 2008 and 2012-i.e., BLM should show how actual development in these areas since the RFDs were undertaken compares to the projections made in the RFD scenarios.
59	Associated Governments of Northwest Colorado	353	The BLM primarily used data from a 2002 U.S. Geological Survey, overlooking a more recent and technologically advanced 2016 survey that provides a more precise assessment of resource potential. The reliance on outdated data has raised concerns about the accuracy of the maps and information presented, particularly when compared to the more recent 2016 data. It is of utmost importance that we base our critical decisions on the most up-to-date and accurate information available. These decisions have far-reaching consequences, affecting entire communities, the State of Colorado, and valuable American assets, especially in a period of uncertainty. To ensure sound and informed choices, we must prioritize the use of current and reliable data sources.
59	Williams, Megan	224	The only way for BLM and the public to accurately understand and evaluate the air quality impacts from Alternatives E and F would be for BLM to model the emissions from these newly considered alternative development scenarios and clearly present the results alongside the estimated impacts from Alternatives A through D.
60	Mesa County	134	Inadequate Analysis and Acknowledgement of State Regulations. The purpose of the DSEIS is to enhance the air quality analysis for the various fluid mineral management options considered in the 2014 CRVFO Final EIS and the 2015 GJFO Final EIS, as well as in this DSEIS. In order to gain a comprehensive understanding of the cumulative impacts, it is essential to conduct a thorough assessment of the potential effects of oil and gas leasing on air quality. This evaluation should encompass all possible scenarios, rather than focusing solely on adverse outcomes. It is crucial for the BLM to accurately represent the projections outlined in Colorado's Greenhouse Gas (GHG) Pollution Reduction Roadmap ("Roadmap"), which anticipates emissions reductions of approximately 16 percent by 2025 and 25 percent by 2030 without extreme interventions as identified in the DSEIS.'y Projections should also be reevaluated for Alternatives A through D to ensure the BLM has presented the most accurate, timely information available. The previously completed analysis didn't account for the significant changes to oil and gas technology, monitoring, and regulatory compliance that has been required since the passage of Senate Bill 19-181.
61	Protegete Piceance	165	Within the current range of alternatives we believe Alternative F provides the strongest benefits to DICs and communities and we encourage the BLM to adopt and strengthen alternative F as the preferred alternative based on our recommendations. Our concerns still hold that Alternative F would leave DICs exposed and we believe the 16% of lands kept open to leasing should be viewed as a baseline and that more restrictions and closures would be necessary to adequately protect communities from the adverse impacts of oil and gas development. We believe the BLM should include stronger guidance and develop standards with specific stipulations aimed at protecting DICs from oil and gas production, including but not limited to minimum 1 mile setback requirements from communities.
61	Ramirez, Jasmin	166	We believe the BLM should incorporate stronger guidance, direction, and stipulations in the proposed alternative specifically aimed at avoiding, minimizing, and mitigating impacts to DICs. The BLM has done this in other states, creating mile setbacks from schools in New Mexico as an example. By taking these and other steps recommended in this comment we believe the BLM can more We do not believe that the BLM is setting itself up for success or adequately supporting DICs by deferring this work to project level decision making that would occur on a case by case basis and in the current absence of guidance or direction in the SEIS. We are concerned that deferring this action would result in an inconsistent piecemeal approach that would lead to support gaps for DICs and inconsistent guidance to address negative O&G impacts on local communities.
61	Ramirez, Jasmin	166	Incorporate guidance, direction, and stipulations in the proposed alternative specifically aimed at avoiding, minimizing, and mitigating impacts to DICs.
61	Williams, Megan	224	In addition, BLM should develop mitigation measures designed to protect disproportionately impacted communities. These measures should require identification of impacted communities, using EPA and Colorado screening tools, to identify potential areas of concern and also requiring further review that considers other relevant factors and other sources of information, e.g., EPA suggests other: health-based information, local knowledge, susceptible populations, unique exposure pathways, and other federal, state, and local data. The mitigation measures should then require that operators avoid any significant impacts to these EJ communities.

Concern ID	Organization/ Individual	Letter Number	Comment Text
61	Protegete Piceance	165	We are concerned that BLM has not provided an accurate cumulative and equity impact analysis of potential air quality and climate change impacts associated with oil and gas production on vulnerable DICs in the decision area. We recommend the BLM update their analysis to better assess specific air quality and climate related impacts on DICs for each alternative (A through F). This is necessary to better understand potential impacts to vulnerable populations associated with each alternative. While the BLM asserts that air quality trends show an overall improvement, various air quality monitoring sites and EPA findings do not support this. While we recognize the challenge of accurately assessing how the SEIS will impact climate change at a national or global scale we do believe it is important for the BLM to recognize that incremental changes at field office levels are necessary to meet national and global objectives.
61	Western Environmental Law Center et al.	304	<p>Stakeholders also raised the dangers of ozone, a criteria pollutant of particular concern in the region, as well as particulate matter-including PM10 and PM2.5.[198] BLM cannot rely solely on attainment of standards like the NAAQS, or on other indicators such as the Air Quality Index ("AQI") or National Air Toxics Assessment ("NATA"), most of which are at the county level or other areas of analysis that are not sufficiently localized, and assume that attainment of these standards alone would satisfy its hard look NEPA obligations with respect to the impacts of its decisions on air quality and human health. BLM must analyze impacts in the context of poor baseline air quality conditions due to historical and ongoing oil and gas development in the planning area, and the cumulative risks and impacts related to air quality, including the potential for social and structural factors to exacerbate those risks and impacts and raise environmental justice concerns, as discussed throughout these comments.</p> <p>[198] WELC et al., Scoping Comments at 97-99. Despite these known risks and impacts, BLM fails to adequately analyze the health risks and impacts of air pollution from fracking, on specific populations in the planning area, or from reasonably foreseeable oil and gas leasing and development overall. BLM's discussion of air quality impacts--with respect to health or otherwise--in the Draft SEIS falls short of NEPA's requisite hard look. BLM does not even list quantities of projected air pollutant emissions, let alone take a hard look at their cumulative and long-term effects, nor does it provide any metric by which BLM or the public can put these emissions in context, understand their significance, and evaluate alternatives or identify mitigation measures.</p>
61	Western Environmental Law Center et al.	304	<p>An expert report was provided that reviewed BLM's Colorado Air Resource Management Modeling Study (CARMMS). The expert identified existing air quality issues within the planning area and highlighted predicted exceedances under BLM's CARMMS model, including exceedances of the NAAQS for ozone and PM10, and visibility impairment at Colorado National Monument. BLM did undertake more analysis of air quality for the Draft SEIS. However, as discussed in Megan Williams' review of the analysis, BLM failed to consider important baseline information and the agency's characterization of baseline conditions conflicts with recent data that BLM failed to consider. Williams notes that BLM's Draft SETS "failed to update historical air pollution trends" and the agency inaccurately claims that air quality in the planning area is improving.[96] She presents EPA data showing HAPs, PM2.5, and ozone levels on the rise, contemporary exceedances of the ozone standard at local monitors, worsening visibility trends, and increasing nitrogen deposition trends in Garfield County.[97] Williams contrasts the Draft SETS's depiction of air quality in the planning area as "continuing to improve"</p> <p>[96] See Exhibit 22, Megan Williams, "Review of Air Resources and Climate Impacts in BLM's August 2023 Draft Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office." October 18, 2023, at 1-7 ("BLM has failed to identify and disclose changes to the baseline resource conditions that have occurred in the 10 years since the analysis BLM conducted for the Proposed RMPs/Final EISs for the CRVFO and GJFO planning areas (which BLM states were up to year approximately 2012).").</p> <p>[97] See id. at 2-7, Exhibit 22.</p>
61	Save West Mamm Creek Coalition	335	Attached and hereby incorporated by reference is a recent analysis by Erik Molvar and Connor Bailey analyzing the impacts of oil and gas development on the areas under consideration (1) and a Link to Human health risk assessment of air emissions from development of unconventional natural gas resources, McKenzie et al, 2012 (2) the Study area being West Garfield County, making it very relevant.
61	Ramirez, Jasmin	166	<p>We are also concerned with the BLM's analysis of air quality impact trends and climate change. While the BLM asserts that air quality trends show an overall improvement, various air quality monitoring sites and EPA findings do not support this.[3] While we recognize the challenge of accurately assessing how the SEIS will impact climate change at a national or global scale we do believe it is important for the BLM to recognize that incremental changes at field office levels are necessary to meet national and global objectives. While climate change is a global issue the impacts are often felt locally and most severely by DICs. Understanding and addressing the social and economic impacts of climate change on DICs at the field office level is critical to meeting national environmental justice objectives set forth in the White House Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All, issued April 2023.</p> <p>[3] Review of Air Resources and Climate Impacts in BLM's August 2023 Draft Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office, Prepared by Megan Williams October 18, 2023</p>
61	Williams, Megan	224	BLM does not present a meaningfully different alternative from the ones originally considered. BLM also does not sufficiently assess air quality and climate impacts from the two new alternatives in the DSEIS and therefore fails to provide adequate information for the public to be able to understand-and for the Agency to be able to properly evaluate- the differences in potential impacts between all alternatives (A through F). BLM failed to model the air quality impacts from Alternatives E and F and has not conducted a comprehensive analysis of potential climate impacts-one that considers local vulnerabilities and aligns with state and national goals. BLM has also failed to consider an alternative that accounts for the disproportionate burdens facing environmental justice communities in the planning areas. And BLM has not included adequate enforceable mitigation measures that will ensure that no significant air quality and climate impacts will occur.

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61	Williams, Megan	224	EPA AirData (excluding exceptional events) show monitored exceedances of the ozone standard in recent years at several monitors in the planning areas, as shown below. The Rangely Golf Course monitor in Rio Blanco County recorded five exceedance of the ozone standard in 2023, one in 2021 and two in 2020. The 4th maximum 8-hour average concentrations in those years were 71 parts per billion (ppb) (above the ozone standard), 69 ppb, and 65 ppb, respectively. The Piceance Basin Mobile monitor, also in Rio Blanco County, recorded one exceedance of the ozone standard in 2022 and two in 2021, with 4th maximum 8-hour average values in those years of 65 ppb and 70 ppb, respectively. And the Palisade monitor in Mesa County recorded three exceedances of the ozone standard in 2020, with the 4th maximum 8-hour average value of 65 ppb that year.
61	Williams, Megan	224	BLM has failed to update historical air pollution trends data in the DSEIS, instead referencing resources where one can go to look up data and trends that have occurred since 2012 (which is the approximate baseline period that is incorporated by reference into the DSEIS). BLM concludes, without presenting any data from these referenced sources, that "[i]n general, air quality (including that associated with hazardous air pollutants [HAPs]) and related values (visibility, etc.) continue to improve around the region."
61	Williams, Megan	224	These trends in increasing air pollution and degradation of air quality related values in the CRVFO and GJFO are concerning, and BLM must consider that background air resource conditions in these planning areas cannot support increases in oil and gas development that will exacerbate the worsening trends in the region. Also, in its scoping comments on the DSEIS, EPA recommended that BLM "update information about the existing environment for all resources in the identified planning area in order to provide an accurate baseline for considering proposed BLM actions and related potential impacts to the human and natural environment." BLM has failed to identify and disclose changes to the baseline resource conditions that have occurred in the 10 years since the analysis BLM conducted for the Proposed RMPs/Final EISs
61	Williams, Megan	224	BLM's Colorado Annual Air Resources Report (2020 Report Year) states-for the GJFO-that, "[a]lmost all of the pollutants are now exceeding the levels analyzed by the low CARMMS scenario." Relative report year emissions (i.e., 2020 emissions) shown in the report indicate that this is the case for VOC, NOx, CO, SO2, methane, and HAP.12 BLM must reconcile these inconsistencies in the DSEIS. BLM describes, in the DSEIS, how it "relies on its online emissions inventory tool and up-to-date air quality data, trends, and modeling studies to estimate impacts for new proposed actions..." yet it fails to present relevant baseline air quality data / trends for the planning areas (as discussed in the previous section) and fails to present emission inventories or analyses of air quality impacts from the proposed actions under the new Alternatives E and F in the DSEIS.
61	Williams, Megan	224	BLM's Colorado Annual Air Resources Report (2020 Report Year) summarizes more recent baseline conditions in the planning areas and highlights concerns in the CRVFO with deposition impacts, measured in comparison to a Deposition Analysis Threshold (DAT)-a threshold below which deposition impacts are considered insignificant. BLM concludes that, "the report year data shows that current scaled source apportioned values for nitrogen deposition are exceeding the project level DAT at the Eagles Nest Wilderness, and also at the Flat Tops Wilderness Area (0.008 kg/ha-yr)."[7] BLM then states that, "[b]ased on the [Colorado Air Resource Management Modeling Study] CARMMS mitigation analysis and the current pace of development it is unlikely that the mitigation rates evaluated in CARMMS would be enough to offset the excess impacts of the report year impacts." More mitigation will be needed to reduce nitrogen deposition impacts in the CRVFO [7] BLM, Colorado Annual Air Resources Report (2020 Report Year)
61	Williams, Megan	224	Visibility monitoring and trends from Interagency Monitoring of Protected Visual Environments (IMPROVE) data show worsening visibility trends in many of the impacted protected areas in the planning areas.
61	Not Disclosed	242	I urge the BLM to align its oil and gas decision-making with the latest climate science. The best available climate science suggests that the current plans for oil and gas development in Colorado will exacerbate the climate crisis. The SEIS must be rigorous in evaluating these impacts and determining ways to mitigate them. I believe the BLM can and should take meaningful steps to improve its current climate analysis by using more current data sources than were analyzed in the draft and by considering local climate impacts. The western slope of Colorado is warming disproportionately faster and is widely considered a “climate hotspot.”
62	Mesa County	134	The DSEIS also fails to account for cumulative effects if production in western Colorado is moved to another producing state with less stringent regulatory requirements, includes overestimates due to inclusion of the non-energy related uses, and is unable to make assumptions for changes to future technologies, regulations, policies, and consumer behavior. If unable to make accurate predications with certainty, it is imprudent to choose the most restrictive path forward. The Memorandum of Understanding between the BLM and the State of Colorado's Energy and Carbon Management Commission ("ECMC") ensures that all oil and gas leases in the state must adhere to all rules and regulations, fostering a more stringent and consistent regulatory environment for operators, regardless of ownership.

Concern ID	Organization/ Individual	Letter Number	Comment Text
62	Western States and Tribal Nations Natural Gas Initiative	210	A 2021 study commissioned by WSTN found that the export of Rockies-sourced liquefied natural gas from the North American West Coast to China, India, Japan, South Korea, and Taiwan would reduce net life cycle emissions by 42%-55% if used to replace coal-fired energy generation in those countries. As you consider alternatives that balance all uses of federal land in the decision area, WSTN encourages consideration of additional research showing that responsible, well-regulated natural gas production and exports can actually reduce global emissions, as evidenced by the study's findings, available here. Crucially, the report accounts for the life cycle greenhouse gas emissions impact of Rockies-sourced gas by assessing every point of the entire LNG supply chain, starting with production at the well head and ending with the emissions from electricity transmission and distribution in the destination nations. This report has its roots in earlier studies including a 2016 Department of Energy National Energy Technology Laboratory lifecycle analysis (updated in 2019 and available here) and a 2015 paper by the University of Calgary that explored how the destination of LNG affected its climate impact. One of the University of Calgary authors led the WSTN study, working with peers from the University of Utah to complete it. WSTN is in the process of updating and expanding its own study, in light of the tectonic shift in the global LNG trade caused by the Russian invasion of Ukraine as well as advancements in methane reduction being made by Colorado's natural gas producers, as well as the other states and tribal nations that form WSTN's membership.
62	Western States and Tribal Nations Natural Gas Initiative	210	As you are aware, global demand for clean energy supplies is soaring, led by economic growth and fuel switching in China, Japan, South Korea, Taiwan and India and Europe's push to diversify from embargoed Russian natural gas. Natural gas from western basins in the U.S. can play a key role in meeting those energy needs by providing reliable, cleaner baseload power to displace higher carbon fuels and foster renewable energy deployment by balancing intermittency issues and supporting related supply chains. While WSTN shares the mission of reducing global greenhouse gas (GHG) emissions, our original vision is predicated on the fact that GHG emissions know no national or regional boundaries. When that reality is factored into GHG analyses, it is clear that not all emissions are additive to the global tally - some are reductive. Colorado's in particular would be reductive if exported to Asian markets to displace coal-fired generation. Colorado led the nation with the first oil and gas methane regulations established in 2014. More recently, the Colorado Air Quality Control Commission adopted a new rule requiring direct measurement of methane emissions and demonstrating with real-world data that oil and gas operators are meeting emission reduction standard.
63	Western Environmental Law Center et al.	304	Such a programmatic review could then be tiered to field-office level or planning area scales-such as for the CRV/GJ RMP-to drive planning, and subsequent leasing and development, that actually comports with scientific climate thresholds. Our hope is that such an analysis would lead BLM to develop an agency-wide carbon budget, which could be downscaled to the RMP- or field office-level, and which would provide BLM with flexibility in terms of both allocation of new leasing/development and mitigation of proposed activities. This approach would have an additional benefit of allowing BLM to determine a significance threshold for individual lease sales and permitting decisions, something the agency has yet to accomplish. Therefore, we encourage BLM-even in the absence of a programmatic review- to, at a minimum, develop a budget for the Colorado River Valley and Grand Junction field offices, or ideally for the proposed RMP.
63	Dehaan, Asa	343	Climate: As someone who has witnessed the local effects of climate change, I urge the BLM to adopt measures that will curtail climate pollution from public lands. While I believe a “no leasing alternative” would have been ideal, Alternative F is a robust step towards a significant reduction in emissions and an acknowledgment of the gravity of our current climate crisis.
63	Williams, Robert	357	Federal lands open to oil and gas development must be limited and reduced. Greenhouse gases are continuing to increase at an alarming rate and contributing to more perilous fire conditions, sea level rise, etc. The worsening conditions are so troubling to climate scientists recently got together to plead for actions to reduce greenhouse gases (Ripple et al., 2020). An excerpt from their paper: “Scientists have a moral obligation to clearly warn humanity of any catastrophic threat and to “tell it like it is.” On the basis of this obligation and the graphical indicators presented below, we declare, with more than 11,000 scientist signatories from around the world, clearly and unequivocally that planet Earth is facing a climate emergency.”
64	Western Energy Alliance	306	In sum, the BLM performed analysis required to address the court's conclusion related to climate change deficiencies. Although BLM followed the court order, BLM may also want to make the section on GHGs even more robust by providing further details that are mentioned in the Council on Environmental Quality (CEQ) guidance on evaluating GHGs issued in early 2023.[17] In particular, BLM could further contextualize the GHG emissions with additional comparisons to other GHG emissions sources. The Trades acknowledge that BLM provided comparison tables with national and global emissions levels, but the CEQ also suggests comparisons with more familiar metrics, like annual average emissions from a certain number of cars on the road. Id. at 1203. [17] See National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196 (January 9, 2023). The Trades note that the CEQ guidance does not carry the force of law, however, and BLM is not required to follow it. Id. at 1197 n.4 ("This guidance is not a rule or regulation, and the recommendations it contains may not apply to a particular situation based upon the individual facts and circumstances. This guidance does not change or substitute for any law, regulation, or other legally binding requirement, and is not legally enforceable.")

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65	Colorado Department of Natural Resources	305	<p>Air quality and climate are components of air resources which may be affected by BLM applications, activities, and resource management. Therefore, the BLM must consider and analyze the potential effects of BLM and BLM-authorized activities on air resources as part of the planning and decision making process. In particular, the activities surrounding oil and gas development are likely to have impacts related to air resources. The Supplemental EIS references the recently completed regional air quality modeling study to evaluate potential impacts due to federal oil, gas, and coal emissions sources for years 2028 and 2032.[1] We note that the study does not provide data or analysis specific to the CRVFO or GJFO. Neither the modeling study nor the Supplemental EIS provide an analysis or discussion of the differences in potential air quality impacts between the alternatives, and the Supplemental EIS does not include estimated well counts for the alternatives. The Supplemental EIS references sections 4.2.1 and 4.2.2 of the CRVFO Proposed RMP/Final EIS and Section 4.3.1 of the GJFO Proposed RMP/Final EIS as describing the potential impacts on air quality and related values that could be associated with Alternatives E and F. However, the scenarios included in the referenced RMPs/Final EISs are different from the new alternatives, and the Supplemental EIS does not describe why or how they are comparable. Therefore it is not possible to evaluate the potential air quality or climate change impacts associated with the alternatives or to assess whether or not additional lease stipulations or mitigations are warranted. We welcome the opportunity to consult with the BLM on the incorporation of such measures in the Final SEIS and future decision making.</p> <p>[1] BLM Western US Photochemical Air Quality Modeling for 2032. July 2023. Prepared by Ramboll Environmental, https://www.blm.gov/sites/default/files/docs/2023-08/BLM_Regional_2032_Air_Quality_Modeling_Study_Report-Colorado.pdf</p>
66	Mesa County	134	<p>Proposed Plan Amendment's Failure to Fully Consider Economic Impacts Oil and gas exploration and production play a crucial role in sustaining the well-being of countless individuals, local enterprises, and communities, extending beyond the boundaries of Mesa County to encompass the state of Colorado and the United States as a whole. In recent years, western Colorado has experienced a reduction in oil and gas industry workforce numbers, largely attributable to increasingly stringent state and federal regulations and support for renewable energy sources. Considering the significant changes in our economy over the past decade, the BLM should undertake a comprehensive economic analysis for each alternative, taking into account the current economic conditions. While the extractive industry regularly sees ebbs and flows as prices and demand changes, we acknowledge the pivotal role the oil and gas industry has had on our economy. This industry not only creates high-paying job opportunities, but also contributes significantly to the financial well-being of both counties and the state through taxes generated by business operations and industry and family spending in our communities. These tax contributions, directed through programs like the Federal Mineral Lease Program, State Severance payments, and Energy/Mineral Impact Assistance Fund grants, are crucial for the allocation of essential, critical services and projects, including rural fire protection district equipment, road and bridge infrastructure, rural broadband, the establishment of the new Early Childhood Education Center, improvements to sewer and water system facilities, and various other initiatives that our communities rely on. Examples of the important funding that has been distributed in Mesa County through the Federal Mineral Lease Program (2018-2022) include: · Mesa County Public Library District \$386,184 · Colorado Mesa University/ Mesa County Valley School District \$88,400 · Town of Collbran \$300,000 · City of Fruita \$100,000 · City of Grand Junction \$150,000 · Clifton Sanitation \$75,000 · East Orchard Mesa Fire Protection District \$153,595 · Lands End Fire Protection District \$19,348 · Lower Valley Fire Protection District \$50,000 · Plateau Valley Fire Protection District \$63,816 Without the tax revenue from oil and gas companies, many of these programs and projects would be financially unviable. While we understand the need to diversify inputs in the energy grid, Mesa County has extreme concerns regarding the draft SEIS and the potential for even deeper economic ramifications if the suggested closures are formalized in a Record of Decision.</p>
66	Western States and Tribal Nations Natural Gas Initiative	210	<p>The BLM is right to note on page 2-17 that there will be significant economic impacts from Alternatives E & F, in particular the latter, which removes 95% of available land from future leasing opportunities. This, BLM acknowledges, would have employment impacts and potentially impact environmental justice communities. As advocates for rural economic development and tribal self-determination, WSTN questions whether any Alternatives, such as E & F, which countenance over \$2 billion a year in production losses (Figure E-1, pg. E-3) and over \$3.2 billion in lost employment/economic impact (Figure E-2, pg. E-4), should be considered at all without a more rigorous economic assessments and modeling.</p>
66	Western Energy Alliance	306	<p>Colorado Mesa University's Davis School of Business (Colorado Mesa) releases periodic economic updates for Mesa County and Garfield County showing key socio-economic statistics, changes, and trends in these counties. Colorado Mesa last released a Garfield County economic update for the first quarter 2023 [19] and a Mesa County economic update for the third quarter 2023 (20). These reports have interesting economic information regarding oil and natural gas jobs and trends that BLM must consider prior to finalizing this SEIS.</p> <p>[19] Colorado Mesa University, Davis School of Business, Garfield County Economic Update (Q1 2023) ("Garfield County Economic Report"), available at https://www.coloradomesa.edu/business/documents/garfield-county-economic-newsletter-q1-2023.pdf (20) Colorado Mesa University, Davis School of Business, Mesa County Economic Update (Q1 2023) ("Mesa County Economic Report"), available at https://www.coloradomesa.edu/business/documents/mesa-county-economic-newsletter-q3-2023.pdf.</p>
66	Western Energy Alliance	306	<p>If BLM decides to close all no-known, low, and medium potential areas to oil and natural gas development as Alternative E proposes, BLM must perform a proper and detailed socio-economic assessment to show the potential impacts to the local economy, including jobs. NEPA regulations require an EIS assess direct and indirect effects of an agency's proposed action on a number of different resource categories, including economic and social effects. See 40 C.F.R. §§ 1508.7, 1508.8. The Trades provide the following information to inform such an analysis, and as always, would be willing to work with BLM to fully accomplish this important assessment.</p>

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66	Western Energy Alliance	306	<p>Mesa County economic report states "The biggest job gains compared to one year ago were in accommodation and food services (607), retail trade (322), and mining, oil and gas (230) (emphasis added)." Mesa County Report, at 10. The report provides additional job and employment information by sector in the county. This includes Table 3 of the report that shows average employment, average weekly wage, and total wage change by sector and Figure 16 that shows total wage changes from 2022 to 2023. It is important to note three key facts from this data in Mesa County: - Oil and natural gas jobs were the third largest in growth during this time. Id. at 10, Table 3. Oil and natural gas jobs accounted for 230 of the 1,673 (14%) total employment change in the county. - Oil and natural gas average weekly wages rank FIRST in the entire county with an average wage of \$1,987. Id. at Table 3. The next closest sector is Finance and Insurance with a \$1,671 weekly wage. - Oil and natural gas total wage changes from 2022 to 2023 ranked second in the county. Id. at 11, Figure 16. Figure 23 (copied immediately below) in the third quarter 2023 Mesa County economic report shows the total oil and natural gas jobs and wages in Garfield County and Mesa County.[21] This shows the significant wages earned by oil and natural gas workers in the region and how restricting drilling on over 1,000,000 acres of land in the area could have a negative impact on these wages and families that are supported by these jobs (See PDF for Figure 23: Mesa and Garfield Oil and Gas Jobs/Wages)</p> <p>[21] Colorado Mesa University, Davis School of Business, Mesa County Economic Update (Q3 2023) at 15 ("Mesa County Economic Report"), available at mesa-county-economic-newsletter-q3-2023.pdf (coloradomesa.edu).</p>
66	Western Energy Alliance	306	<p>The Garfield County Economic Report states "The biggest job gains were in construction (267), oil and gas (137), and educational services (130) (emphasis added)." Garfield County Economic Report, 6. The report provides additional job and employment information by sector in the county. This includes a table that shows average employment, average weekly wage. Id. at 6, Table 6. It also reports total wage change by sector, summarizing total wage changes from 2021 to 2022. Id. at 7. It is important to note three key facts from this data in Garfield County: - Oil and natural gas jobs were the second largest in growth during this time. Id. at 6, Table 2. Oil and natural gas jobs accounted for 137 of the 612 (22%) total employment change in the county. - Oil and natural gas average weekly wages rank second (behind only real estate and rental and leasing) in the entire county. Id. at Table 2. - Oil and natural gas total wage changes from 2021 to 2022 ranked seventh in the county. Id. at 7, Figure 10.</p>
66	Western Energy Alliance	306	<p>federal mineral lease distributions are significant to the local communities in these areas and these distributions are directly tied to federal mineral development. If federal mineral development is restricted or reduced through regulatory actions, these distributions will decrease, and potentially by significant amounts.</p>
66	Associated Governments of Northwest Colorado	353	<p>Every one of these counties operates its distinct Federal Mineral Lease District. Since its establishment in 2011, the Board of Directors for the Garfield County Federal Mineral Lease District has distributed 302 grants, cumulatively amounting to \$32,608,772.83. The Mesa County Federal Mineral Lease District has reinvested over \$8 million into its localities since its inception in the same year. More than \$11.5 million has been reinvested by the Rio Blanco Federal Mineral Lease District into its community. Similarly, Montrose County's Federal Mineral Lease District has allocated \$550,000 to a community within its jurisdiction. These funds from the Federal Mineral Lease Districts are designated to bolster public health, safety, and welfare across these regions. Investments have been channeled into educational institutions, libraries, economic development initiatives, water treatment facilities, fire service areas, and numerous other critical services. These are projects that might struggle to materialize without this financial support. Many of these initiatives are also designed to reduce greenhouse gas emissions and improve the quality of life in these areas.</p>
66	Associated Governments of Northwest Colorado	353	<p>Many of the communities facing the potential reduction in fossil fuel production are also categorized as Coal Communities, either having already experienced hardships due to coal facility closures or anticipating such closures within the next seven years. In Rio Blanco County, the combined contributions of coal, oil, and gas production account for approximately 71% of the county's GDP. As the urgency of addressing climate change has escalated, Rio Blanco has already witnessed a significant decline in its oil and gas production. The closure of coal facilities alone will result in a known 26% loss of GDP in Rio Blanco County. Any additional economic setbacks in this county, which is home to roughly 6,600 people, will only exacerbate the challenges faced by its residents. It's important to note that these industries typically offer higher-paying jobs with valuable benefits. Communities like Rio Blanco County have experienced cycles of economic booms and busts due to their reliance on oil and gas production. Additionally, it's crucial to recognize that the workforce in these industries will follow job opportunities wherever they are available. The West End of Montrose County has already grappled with the closure of mines and power plants, which had a devastating impact on the local communities. Unfortunately, there has been limited assistance offered to help these communities recover from the losses imposed by regulations and legislation that led to coal closures in Colorado. While Mesa and Garfield counties may not experience such severe losses, there will inevitably be a ripple effect, with larger counties also feeling the economic repercussions of these closures.</p>
66	Associated Governments of Northwest Colorado	353	<p>The Colorado Department of Local Affairs (DOLA) is a state agency tasked with assisting local governments through grant funding and technical assistance. About 60% of DOLA's annual budget is made up of Severance Tax and Federal Mineral Lease dollars. Over the last 5 years, Garfield, Mesa, Montrose, and Rio Blanco County's share of the two income streams was about \$115,000,000, making up more than 30% of the total DOLA budget over the same years. The funding and assistance DOLA provides is statewide. DOLA awards grants to local governments and organizations for various purposes, such as housing, infrastructure, planning, and energy. These grants include various programs, such as the Energy and Mineral Impact Assistance Fund (EIAF), the Community Development Block Grant (CDBG), the Colorado Main Street Program, and the Affordable Housing Support Fund. DOLA has awarded more than \$302,000,000 to community initiatives in the last 5 years. While many of the recipients do not have energy activity that funds these grants, the entire State of Colorado will be impacted by the loss of these funds.</p>

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67	Mesa County	134	Missing Piece of Economic Analysis - Mesa County is currently a cooperating agency for multiple federal planning processes. There is no indication in this DSEIS/ RMPA that the BLM has evaluated the cumulative effects of all pending BLM plans and how the various closures, timing limitations, and other restrictions proposed will impact the economic and socioeconomic viability of Mesa County. When combined, nearly every part of the 73% of Mesa County managed by federal land managers faces some form of restriction. While this may not be the intention, the comprehensive impacts of these restrictions on Mesa County need careful consideration by decision-makers. According to an August 8, 2023 press release by the Grand Junction Economic Partnership, Mesa County is still heavily reliant on jobs in the mining, quarrying, and oil and gas extraction industry." Given the potential for compounded impacts on the economies of Mesa County and other western slope counties and the families and individuals that rely on the well-paying jobs from the extractive industry, Mesa County supports a more reasonable alternative that fosters a diversified economy, allows Mesa County to better weather external shocks, encourages entrepreneurship and innovation, and can reduce income inequality through job creation.
68	Western Energy Alliance	306	A proper socio-economic assessment regarding the true impact of Alternative E on decreased production; lost jobs; less federal, state, and local tax revenue; and indirect economic effects.
69	Western Energy Alliance	306	The SEIS closes mineral leasing in the Jerry Creek, Mesa/Powderhorn source water protection area and the Collbran source water protection area municipal watersheds within the GJFO planning area (page 2-14). Colorado's ECMC manages oil and natural gas operations near public water systems under ECMC Rule 411. This is a very detailed, technical rule that requires consultation with the administrators of the water system. It is inappropriate for BLM to manage municipal watersheds and should instead defer to the state and local agencies that regulate watersheds through these permit-specific requirements. Therefore, BLM should remove these from areas closed to leasing.
69	Western Energy Alliance	306	The SEIS would close the Highline and Vega state parks within the GJFO planning area to oil and natural gas leasing (p. 2-13). Colorado's ECMC, in consultation with CPW, manages oil and natural gas operations in all state parks under ECMC Rule 1202.c.(1)T. It is inappropriate for BLM to determine management of these state parks and should instead defer to these state agencies.
70	Western Energy Alliance	306	Nowhere does BLM consider the land use impacts of wind and solar. As intermittent, low-density sources of energy, the land requirements are huge. A Princeton University study estimates that net-zero scenarios, low to high, for wind and solar energy would result in land impacts between 62 million and 247 million acres.[16] Those are equivalent to the surface of Illinois and Indiana combined on the low side and Arkansas, Iowa, Kansas, Missouri, Nebraska, and Oklahoma on the high side. [16] Net Zero Impact: Potential Pathways, Infrastructure, and Impacts, Final Report Summary, Princeton University, October 29, 2021, p. 55.
71	Bruell, Debbie	167	Oil and gas development has already negatively impacted our environment. Garfield County is currently in the 85th percentile nationally for the amount of toxic water discharged into our environment. We have 12,000 active oil and gas wells releasing toxins into our air. More spills occur each month; 15 spills were reported last August. Given that the state does not even have the capacity to monitor all the oil and gas production and storage sites here on the Western Slope, there are many more leaks and spills that are not documented. The Colorado Fiscal Institute estimates that pollution emitted by oil and gas operations in Colorado will cause over \$13 billion of damages between 2020 and 2030. We'll all bear the brunt of those costs. Oil and gas production has also negatively impacted the health of those of us who live near those production sites. Over 8,000 people in Garfield County, including over 2,000 children, are estimated to live or attend school within a half mile of oil and gas operations, exposed to dangerously elevated levels of toxic pollution. (See oilandgasthreatmap.com)
71	Environmental Advocacy NGO Consortium	316	In general, we agree with the SEIS's assertion that for both the CRVFO and the GJFO, Alternative F would result in positive cumulative impacts on public health and safety.[62] The economy of Western Colorado is changing and the economic importance of oil and gas in the region is declining, both in jobs and demand.[63] BLM should incorporate additional context and supporting analysis to inform impacts to public wellbeing, including further comparison across alternatives to inform its nonmarket values and economic analysis. [62] Id. at 3-149. [63] Hjerpe, E. and Aldrich, G. Economic Transition Away from Federal Oil and GAs in Western Colorado: A Conservation Economics Institute Brief (#14). 2023. Attachment J to these comments.

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71	Environmental Advocacy NGO Consortium	316	<p>Protective land designations and the recreation opportunities provided by wilderness-quality lands yield direct economic benefits to local communities. Communities near protected public lands reap measurable benefits in terms of employment and personal income.[67] A report by the Sonoran Institute found that protected lands have the greatest influence on economic growth in rural isolated counties that lack easy access to larger markets.[68] From 1970 to 2000, real per capita income in isolated rural counties with protected land grew more than 60 percent faster than isolated counties without any protected lands. This report also found that rural western counties with a higher dependence on extractive industries showed lower income and employment growth.[69] How important is wilderness? Results from a United States survey. Environmental Management, Vol. (15):2, pp 227-233; Johnson, J. and R. Rasker. 1993. The role of amenities in business attraction and retention. Montana Policy Review, Vol. 3, No. 2; Johnson, J.; Rasker, R. 1995. The role of economic and quality of life variables in rural business location. Journal of Rural Studies, 11(4), 405-416; Lorah, P. 2001. Population growth, economic security and cultural change in wilderness counties. In: Cole, David N.; McCool, Stephen F. 2000. Proceedings: Wilderness Science in a Time of Change. Proc. RMRS-P-000. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. This research shows and the SEIS acknowledges that wilderness, open space, and abundant recreation opportunities are beneficial for local economies.[70] Residents of counties with wilderness cite wilderness as an important reason why they moved to the county, and long-term residents cite it as a reason they stay.[71] Survey results also indicate that many firms decide to locate or stay in the West because of scenic amenities and wildlife-based recreation, both of which are strongly supported by wilderness areas.[72] 70 SEIS 3-162, stating that in 2017, the economic contributions of outdoor recreation from counties in this region of Colorado resulted in 133,658 jobs and nearly \$5.1 billion in salaries and wages. Additional nonmarket economic values arise from the ability of wildlands to contribute to recreation and recreation-related jobs, scientific research, scenic viewsheds, biodiversity conservation, and watershed protection. [73] The SEIS states that employment in the travel- and tourism-related sectors in the planning area comprised 21.4 percent of total employment in the study area, which was 8.0 percentage points higher than that of the state overall.[74] All of these economic benefits are dependent upon adequate protection of the wilderness characteristics of regional public lands, and should be accounted for throughout BLM's analysis.</p> <p>[67] Attachment J, p. 7.</p> <p>[68] Rasker, R., Alexander, B., van den Noort, J., Carter, R. 2004. Public Lands Conservation and Economic Well-Being. The Sonoran Institute, Tucson, AZ.</p> <p>[69] Whitelaw, E., et al. 2003. A letter from economists to President Bush and the governors of eleven western states regarding the economic importance of the west's natural environment. (100 total authors) http://www.econw.com/pdf/120303letter.pdf.; citing, Rudzitis, G.; Johansen, H. E. 1989. Amenities, Migration, and Nonmetropolitan Regional Development. Report to Nat. Science Foundation, Dept. of Geography, Univ. of Idaho; Whitelaw and Niemi (1989); Rudzitis, G.; Johansen, H. E. 1991.</p> <p>[70] SEIS 3-162, stating that in 2017, the economic contributions of outdoor recreation from counties in this region of Colorado resulted in 133,658 jobs and nearly \$5.1 billion in salaries and wages.</p> <p>[71] Morton, P. 2000. Wilderness, the silent engine of the west's economy. The Wilderness Society: Washington, DC.</p> <p>[72] Id.</p> <p>[73] Morton, P. 1999. The economic benefits of wilderness: theory and practice. University of Denver Law Review. Volume 76, No. 2 pp. 465-518. 74 SEIS 3-162.</p> <p>[74] SEIS 3-162</p>
71	Environmental Advocacy NGO Consortium	316	<p>A recent report by the Conservation Economics Institute found that oil and gas and mining only accounted for 2% of jobs in Mesa and Garfield Counties in 2020.[75] The SEIS points out that from 2010 to 2020, the three industry sectors with the highest percentage growth in the study area were 1) educational services (53.2 percent growth), 2) health care and social assistance (37.2 percent growth), and 3) management of companies and enterprises (23.3 percent growth). In terms of net jobs lost or gained over the period, the biggest net job gains were in health care and social assistance, and the biggest net job losses were in mining. [76]</p> <p>[75] Hjerpe, E. and Aldrich, G. Economic Transition Away from Federal Oil and GAs in Western Colorado: A Conservation Economics Institute Brief (#14). 2023. Attachment J to these comments.</p> <p>[76] SEIS 3-152 Over the past several months, Western Colorado Alliance hosted a series of community interviews in Garfield and Mesa counties regarding local economic drivers and public lands. The data and additional analysis will be submitted as supplemental information to these comments. General themes from these interviews highlight that residents take advantage of public land access for recreation and mental health benefits. Regardless of socio-economic status, political identity, and other demographic information, residents appreciate the beauty and abundance of undeveloped public lands. In an area with many economic stressors and many low-income residents, access to public lands remains one of the few ways people can recreate for free. This first-hand, localized subset of information should be considered throughout the BLM's analysis in relation to the amount of public land that is protected or left available for development.</p>

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71	Environmental Advocacy NGO Consortium	316	<p>As emphasized in a recent news article written by two local business owners, over 80% of Mesa County residents identify outdoor recreation as the most or one of the most important factors in their choice to live in the area.[89] "A 2022 Colorado Mesa University report found that tourism, outdoor recreation, and related industries accounted for 11% of jobs in our county and a total economic impact of almost a quarter of a billion dollars." These facts, in addition to social and community benefits of public spaces, emphasize the importance of maintaining BLM land for recreational purposes.</p> <p>[89] "For a thriving future, prioritize outdoor recreation as an economic engine." Sarah Shrader and Cole Hanson. Grand Junction Sentinel. October 11, 2023. Available online at: https://www.gjsentinel.com/opinion/columns/for-a-thriving-future-prioritize-outdoor-recreation-as-an-economic-engine/article_46f1b78e-6888-11ee-b47c-eb69d4c9e7f5.html.</p>
71	Environmental Advocacy NGO Consortium	316	<p>BLM is directed to estimate nonmarket environmental values throughout land use planning to support management decisions.[64] As emphasized in our previous scoping comments, agency guidance encourages quantitative analysis of nonmarket values when "the alternatives to be considered present a strong contrast between extractive and nonextractive uses of land and resources.</p> <p>[64] IM 2013-131, available at: http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2013/IM_2013-131_Ch1.print.html; SEIS at 3-165. 65 Attachment B, p. 17. 66 IM 2013-131.</p>
71	Environmental Advocacy NGO Consortium	316	<p>BLM's social and economic condition analysis is focused on how management actions would affect fluid mineral development and production. The agency must also consider how management actions would affect the value of wildlands and open space within the planning area. For example, while closures of areas with oil and gas development potential could result in changes to employment and income, as well as housing, infrastructure, and government services, additional protection for wild spaces may counteract these impacts, resulting in an overarching net benefit to the area's social and economic condition. This is the type of analysis the agency is directed to consider throughout land management decisions.</p>
71	Environmental Advocacy NGO Consortium	316	<p>Protective land designations and the recreation opportunities provided by wilderness-quality lands yield direct economic benefits to local communities. Communities near protected public lands reap measurable benefits in terms of employment and personal income.[67] A report by the Sonoran Institute found that protected lands have the greatest influence on economic growth in rural isolated counties that lack easy access to larger markets.[68] From 1970 to 2000, real per capita income in isolated rural counties with protected land grew more than 60 percent faster than isolated counties without any protected lands. This report also found that rural western counties with a higher dependence on extractive industries showed lower income and employment growth.[69]</p> <p>This research shows and the SEIS acknowledges that wilderness, open space, and abundant recreation opportunities are beneficial for local economies.[70] Residents of counties with wilderness cite wilderness as an important reason why they moved to the county, and long-term residents cite it as a reason they stay.[71] Survey results also indicate that many firms decide to locate or stay in the West because of scenic amenities and wildlife-based recreation, both of which are strongly supported by wilderness areas.[72]</p> <p>[67] Attachment J, p. 7.</p> <p>[68] Rasker, R., Alexander, B., van den Noort, J., Carter, R. 2004. Public Lands Conservation and Economic Well-Being. The Sonoran Institute, Tucson, AZ.</p> <p>[69] Whitelaw, E., et al. 2003. A letter from economists to President Bush and the governors of eleven western states regarding the economic importance of the west's natural environment. (100 total authors) http://www.econw.com/pdf/120303letter.pdf; citing, Rudzitis, G.; Johansen, H. E. 1989. Amenities, Migration, and Nonmetropolitan Regional Development. Report to Nat. Science Foundation, Dept. of Geography, Univ. of Idaho; Whitelaw and Niemi (1989); Rudzitis, G.; Johansen, H. E. 1991. How important is wilderness? Results from a United States survey. Environmental Management, Vol. (15):2, pp 227-233; Johnson, J. and R. Rasker. 1993. The role of amenities in business attraction and retention. Montana Policy Review, Vol. 3, No. 2; Johnson, J.; Rasker, R. 1995. The role of economic and quality of life variables in rural business location. Journal of Rural Studies, 11(4), 405-416; Lorah, P. 2001. Population growth, economic security and cultural change in wilderness counties. In: Cole, David N.; McCool, Stephen F. 2000. Proceedings: Wilderness Science in a Time of Change. Proc. RMRS-P-000. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.</p> <p>[70] SEIS 3-162, stating that in 2017, the economic contributions of outdoor recreation from counties in this region of Colorado resulted in 133,658 jobs and nearly \$5.1 billion in salaries and wages.</p> <p>[71] Morton, P. 2000. Wilderness, the silent engine of the west's economy. The Wilderness Society: Washington, DC.</p> <p>[72] Id. Additional nonmarket economic values arise from the ability of wildlands to contribute to recreation and recreation-related jobs, scientific research, scenic viewsheds, biodiversity conservation, and watershed protection.</p>

Concern ID	Organization/ Individual	Letter Number	Comment Text
71	Honu Studio	339	We own and operate businesses at the heart of recreation and tourism based economies across the Western Slope. People come here for the skiing, biking, hiking, camping, fishing, hunting, boating, off-roading, and opportunities to seek solitude on the lands surrounding us. These same people are sustaining our businesses and bringing much needed resources we would not see if these lands were locked-up by energy companies. While our own financial statements can attest to the importance of public land access and recreation, a 2022 Colorado Mesa University study detailed how tourism and outdoor recreation added \$322 million in gross domestic revenue for Mesa County alone. When including supply chains and other spending, the figure rises to \$484 million-over 7% of our local economy. Outdoor recreation accounted for 8.4% of direct jobs in the county and another 2.6% of indirect jobs. These jobs are critical for families who call the Western Slope home. These figures are not unique to Mesa County. Every community in the planning area is positively impacted by outdoor recreation and it will continue to be a driving factor for how our businesses invest and grow in the future. We firmly believe that conservation of our public lands plays a crucial role in this. It is important that the BLM prioritize our region's economic reality when making management decisions.
71	Environmental Advocacy NGO Consortium	316	Residents take advantage of public land access for recreation and for mental health benefits. Regardless of socio-economic status, political ideology, etc., residents appreciate the beauty and abundance of undeveloped public lands. Every interviewee described recreational activities they enjoyed. Many noted the importance of spending time with family on public lands. Others expressed the importance of being able to clear their heads by spending time alone on public lands. In an area with many economic stressors and many low-income residents, access to public lands remains one of the few ways people can recreate for free. One interviewee even said the access to nature is the primary reason they don't leave the area,
71	Grand Valley Outdoor Recreation Coalition	355	The outdoor recreation sector is an economic powerhouse that has helped drive the rapid diversification of our regional economy. Yes, visitors come to go mountain biking, rock climbing, skiing, or fishing; and these visitors bring their wallets, injecting vital funds into our local businesses. But it goes much further: outdoor recreation fuels manufacturing and other ancillary industries to the Western Slope. The outdoor recreation amenities that attract visitors also attract new businesses, young families, and a diverse workforce who want a great place to live, work, and play. In a recent survey of Mesa County residents, over 80% said that outdoor recreation is the most or one of the most important factor(s) in their choice to live here. A 2022 Colorado Mesa University report found that tourism, outdoor recreation and related industries accounted for 11% of jobs in our county and a total economic impact of almost a quarter of a billion dollars. By fostering and preserving our natural assets, we ensure that this economic engine not only survives but thrives. This means more jobs, more opportunities for growth, and more revenue for our communities.
71	Steele, Eden	161	Protecting these lands will not have a detrimental effect on our economy and over time will likely benefit the economy. According to a recent study (attached), oil and gas on federal lands provides jobs to only 1% of our population. Although these jobs pay more, they carry much higher risks of injury and even death. Oil and gas brings in tax revenues, but this means of income is subject to a boom and bust cycle and has been on the decline since 2012. Moreover, there are steep costs associated with cleaning up after these operations and responding to spills and air quality issues. As our nation transitions to more efficient and climate-friendly sources of energy, oil and gas is likely to continue to be on the decline. Protecting our lands now puts us in the best position to continue a transition away from oil and gas and toward a more tourism-based, climate-friendly economy.
71	Bruell, Debbie	167	Revenue from oil and gas development in our county has been declining and is expected to continue declining. The number of active oil and gas drilling rigs decreased by 91% statewide from 2008 to 2020 and by 86% in Garfield County around that same time. In 2019 Haliburton permanently laid off 178 workers in their Grand Junction office, preparing for the decreasing demand for Piceance Basin oil and gas. Jobs in the oil and gas sector have also diminished to a mere 3% of all employment in our county — with many positions held by people from out of state, not locals. We need to be preparing for the declining revenue from oil and gas and investing in a diversified economy – one that is not subject to the boom/bust cycle of the fossil fuel industry. Developing our outdoor recreation economy could be a crucial aspect of that diversification. Mesa County is a great example of the economic potential for outdoor rec in our region. Outdoor rec now accounts for 11% of their county's workforce and over \$480 million of economic activity each year. The City of Rifle also has made great progress establishing itself as a popular destination for mountain bikers, trail-runners and climbers. The outdoor recreation industry is a revenue source that can continue for generations. In contrast, fossil fuels are a finite resource. Once we gain the revenue from that extraction, that resource is depleted – and in the process of depleting that resource, we degrade our environment. We need to protect our environment if we want to have the option of developing a robust outdoor rec economy for Garfield County.
71	Not Disclosed	242	Taxpayers are already overburdened with the financial cost of oil and gas cleanup. The Colorado Fiscal Institute reports that the state of Colorado will pay \$13 million in oil and gas damages between 2020 and 2030. This amount is 1.5 times more than what Colorado receives from oil and gas taxes, making the industry a net loss to the public, even before accounting for the damage to the environment and climate.
71	Holzmann, Vance	348	Also tourism is a major part of the Colorado economy. Oil and gas is no longer a great option for income for Colorado. I enjoy mountain biking in the Roaring Fork Valley and also the Fruita area. I think that opening up more options for recreation will benefit Colorado Much more than leasing out land to oil and gas drilling. Recreational areas are going to become harder to develop if leasing to harmful well pads and drilling operations continues. Especially since the clean up after drilling and oil operations is difficult and costly to clean up. Oil and gas operations creates worse air quality which makes it difficult for me to want to partake in outdoor activities and also harms children's futures. There are more beneficial ways to use BLM land that could benefit the community. Well pads and oil operations prevent people from wanting to experience the outdoors. Tourism accounts for much more capital for Colorado than oil and gas industry. We should take a strong stance to increase recreational opportunities and tourism in the state rather than continue trying to make money via industries that the country is attempting to step away from.

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71	Brower, Michele	174	I consider the Western Slope of Colorado be a uniquely beautiful landscape with a rich variety of plants and wildlife. To me this should be recognized a the value of the area and should not be sacrificed to the oil and gas industry.
72	Ramirez, Jasmin	166	Finally, we appreciate the BLM's efforts to strengthen engagement with our communities. Translating resources and providing translation services at public meetings is vital and important. We encourage the BLM to continue to build on these efforts and consider additional ways to support the engagement of our communities to ensure the BLM is able to collect more meaningful feedback and to strengthen trust. Again, we would like to recommend the CDPHE EJ Task Force Recommendations as an excellent guide to strengthen community engagement.
73	Moyer, Larry	172	The Draft Resource Management Plan document needs correcting in that it is not possible to reasonably follow and understand the reasons for the differences between Figure 1.8-3. Oil and Gas Development Potential in the Decision Area and Figure 2.6-1 Alternative E, Open and Closed to Fluid Mineral Leasing for areas open to leasing. Where are the maps? Text in tables is inadequate to fully understand things.
74	Environmental Advocacy NGO Consortium	316	For context, Garfield County is starkly divided between the east and west ends of the populated portion of the county in quantifiable ways. In the west, people are lower income, have lower education levels, are more inclined to be politically conservative, and are younger. Most oil and gas production also takes place in the west. Meanwhile, the east end of the county is more expensive, and residents have higher income levels, higher levels of education, are more liberal, and the population is older. Much of the population in the west commutes to the east, and usually further south toward Aspen, as service workers and blue-collar-workers. There is a sense of injustice within residents in the western end of Garfield County. This county relies on tax revenue from oil and gas production in the west, and the taxes benefit the entire county.
74	Environmental Advocacy NGO Consortium	316	The community interviews provide an unbiased glimpse into the perspectives of diverse residents of Garfield and Mesa counties. In an area where cultural and political differences abound and communities have sometimes become polarized, through this interview process one point of consensus was abundantly clear. Residents of Garfield and Mesa County value living near public lands and want public lands to be protected. Residents want to increase access to public lands and want to see improved management and maintenance of public lands.
74	Arauza, Hanna	360	Residents in this area are struggling with a high cost of living, low paying jobs, long commutes, and lack of affordable childcare. Contrary to the oil and gas industry narrative, tey are not providing an abundance of high-paying jobs locally. Most people out here work in construction, healthcare, retail, and education. The number of jobs in the oil and gas industry pales in comparison to these other vital industries. The last thing we need is more health problems and greater environmental harm resulting from more oil and gas development.
75	Environmental Advocacy NGO Consortium	316	At a minimum, Special Recreation Management Areas (SRMAs) and Extensive Recreation Management Areas (ERMAs) should be closed to oil and gas leasing where they overlap with important wilderness or wildlife designations, including BLM-identified LWCs, ACECs, and WEAs. Closing SRMAs and ERMAs within the planning area to oil and gas leasing would provide further protections to help support and sustain the principal recreational activities and the associated qualities and conditions of these important areas.[88] [88] SEIS p. 3-96.
75	Jarboe, JoLynn	252	The BLM should not allow oil & gas leasing with any proximity to neighborhoods, schools, critical habitat, wilderness characteristics, and water sources.
75	McGregor, Andrew	289	Close areas to leasing with high natural resource, watershed, and wildlife values such as Thompson Creek and Deep Creek. Expand the Castle peak WSA.
75	McGregor, Andrew	289	Close all areas to leasing with existing and potential outdoor recreation uses. These range from Red Hill in Carbondale, the Hogback area of New Castle and Rifle, the Crown near Carbondale, to the N. Fruita Desert. Also, areas along the Colorado River corridor from Dotsero northward to Gore canyon.
75	McGregor, Andrew	289	Close all no known, low, and medium potential lands to new oil and gas leasing. For instance, lands of medium potential abut residential neighborhoods in Glenwood Springs, including my own residence. Restrict future leasing/drilling to areas of high potential where impacts on existing and future residential and commercial land uses nearby are unlikely.
76	McGregor, Andrew	289	In those areas of high potential for drilling, require sufficient setbacks from live water bodies and riparian areas. Eliminate the potential for industrial discharges into any waterbody.
77	Arauza, Steven	359	I am writing to urge you to accept Alternative F because the BLM's preferred alternative (Alternative E) is NOT protective of Disproportionately Impacted Communities identified by the State of Colorado using best practices consistent with the definition of Disproportionately Impacted Communities outlined in Colorado's House Bill 23-1233 (attached).
77	Arauza, Steven	359	I have attached maps using the Colorado Energy and Carbon Management Commission GIS Map of Disproportionately Impacted Community Data showing the extents of mapped DI Communities that meet State Criteria for Low-Income and People of Color Populations as well as Linguistically Isolated Populations along the I-70 corridor between De Beque and Rifle. These communities are located in the heart of areas left open to fluid mineral leasing in Alternative E, meaning that Alternative E is not protective of Disproportionately Impacted Communities or "Environmental Justice Populations."

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78	Environmental Advocacy NGO Consortium	316	Many of the proposed and currently designated ACECs also contain sensitive areas for cultural and Native American resources, scenic values, geological resources, and paleontological resources that must be prioritized for protection throughout this planning process. As outlined in Attachment G, each of these areas contain relevant and important values, as well as the need for special management. The Wilderness Society submitted supplemental comments during this planning process to demonstrate how BLM can and should use national datasets to consider ACEC designation during the land use planning process.
78	Rechel, Eric	364	It is critical that we have habitat for T&E species. I encourage the BLM to designate as many acres as possible as ACECs. These areas are rich in diverse number of species. To maintain viable ecosystems we need to protect habitat. We need as much wilderness as you can squeeze out of the land.
78	Schenk, Sherry	365	I would ask that you increase public lands protection by using ACEC designation on all lands that meet the required qualifications. ACEC protection would decrease impacts on rare and endangered plants, palaeontologic resources, cultural lands and wildlife species that need larger areas to forage.
79	Environmental Advocacy NGO Consortium	316	BLM should consider an alternative that proactively considers environmental justice impacts, and include mitigation measures to future protect disproportionately impacted communities. This includes considering an alternative that closes areas that are in, or have the potential to impact, areas of potential environmental justice concern. Potential mitigation measures include identifying impacted communities and requiring further review that considers other relevant factors and sources of information, including health-based information. Additional measures could include buffers from communities similar to what states like New Mexico have done.
79	Williams, Megan	224	BLM should take a multi-layered approach to minimize impacts to EJ communities by putting forth an alternative that considers EJ impacts in the first place and by including mitigation measures to further protect disproportionately impacted communities. BLM should consider an alternative that closes areas to leasing that are in-or have the potential to impact-areas of potential EJ concern. According to EPA, for purposes of NEPA review, a project is considered in an area of potential EJ concern when the area shows one or more EJ Indexes at or above the 80th percentile in the nation and/or state.
79	Not Disclosed	242	It is an injustice that oil and gas permitting continues and is most highly concentrated in disproportionately impacted communities (DICs). Frontline communities, often Indigenous or communities of color, bear the brunt of the negative health impacts. Children born near fracking sites experience higher rates of childhood cancers and lower birth rates. Fracking is unsafe for everyone, and further burdens DICs and Indigenous communities by threatening their cultural resources and ways of life. The BLM should not allow oil & gas leasing with any proximity to neighborhoods, schools, critical habitat, wilderness characteristics, and water sources.
80	US Environmental Protection Agency Region 8	328	Disclose the Reasonably Foreseeable Development (RFD) for oil and gas for each field office under each Alternative.
80	US Environmental Protection Agency Region 8	328	Present an emissions inventory for each Alternative's RFD.
81	US Environmental Protection Agency Region 8	328	Evaluate how the alternatives relate to the results from the modeling studies to present reasonable estimates of impacts to future air quality under each Alternative.
81	US Environmental Protection Agency Region 8	328	Compare emissions from each Alternative to emissions included in the BLM's CARMMS and Western U.S. regional modeling studies to facilitate an understanding of how the impacts under the Alternatives may compare to the impacts predicted through these modeling studies.
81	US Environmental Protection Agency Region 8	328	Summarize the model performance and impacts from the CARMMS and BLM's Western U.S. regional modeling studies and include the most recent citations and websites to the final reports. We would also like to note that we did not become aware of the finalization of BLM's recent regional modeling efforts until reviewing this Draft SEIS and request a meeting with the collaborating agencies to learn more about the new modeling efforts and results.
82	US Environmental Protection Agency Region 8	328	Present an analysis of reasonable near-field air quality impacts that may result from development and production of wells estimated under each Alternative and outline the activities that may approach or exceed the NAAQS. Based on these results, it may be appropriate to apply additional mitigation, such as Tier 4 nonroad engines during drilling and completion (hydraulic fracturing), to protect populated areas or other potential sensitive receptors that are close to the areas open for leasing. Near-field modeling for other RMPs has identified the potential for exceedances during drilling and completion, and for which mitigation was found to be warranted.
83	US Environmental Protection Agency Region 8	328	In addition, we recommend summarizing air quality and AQRVs at Class T areas near the field offices, which include Flat Tops, Maroon Bells-Snowmass, West Elk, and Black Canyon of the Gunnison Wilderness areas.
84	US Environmental Protection Agency Region 8	328	Identify the population centers and other sensitive receptors located close to the areas open to leasing for each Alternative, particularly for Alternative E because it includes leasing areas adjacent to residential development along the I-70 corridor. Also, identify the air quality impacts that will be avoided under each Alternative, especially since Alternative F proposes to close areas that are open to leasing under Alternative E.

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85	US Environmental Protection Agency Region 8	328	Regarding climate change impacts associated with Project GHG emissions, Section 3.5.I separates BLM authority from emission-producing combustion activities that may occur after parcel development. While BLM may have limited control over products produced and distributed by fluid mineral leasing, the RMP is unique in that it can establish requirements for producers to meet in order to access those resources based upon management priorities. With consideration of the ongoing and worsening climate crisis, and the inevitable contribution to climate change emissions that would occur with BLM-authorized oil and gas leasing and development, we recommend that the Final SEIS identify lease stipulations to mitigate the climate-related impacts of oil and gas development and combustion. These stipulations could include requirements for GHG emissions offsets (including offsets of downstream emissions from combustion) or climate change impacts fees. Such requirements would be consistent with BLM's mandates to manage land for sustained yield, prevent unnecessary and undue degradation, and safeguard the public welfare.
86	Not Disclosed	242	Oil and gas extraction on public lands also exacerbates the emergency water shortage in the Colorado Basin region. Each oil and gas fracking well can use as much as 16 million gallons of water, and most of that water is rendered unusable for other purposes due to contamination with toxics from fracking. BLM must also consider that wastewater storage emits large quantities of greenhouse gasses.
86	Sullivan, Lynne	253	This will enable the BLM to modernize its oil and gas decision-making based on the warming of the climate and related documented ecologically devastating results, the link supported by the latest climate science. This science suggests that the current plans for oil and gas development in Colorado will only make the climate crisis worse. The western slope of Colorado is warming faster than other regions, considered a "climate hotspot." BLM must account for the extensive greenhouse gas emissions from wastewater storage. Storage containers vent methane, benzene, and other volatile compounds into the atmosphere without any regulations on emission limits for these sites. The SEIS must be rigorous in evaluating these impacts and determining ways to mitigate them. The BLM should take real steps to improve its current climate analysis by using more current data sources than were analyzed in the draft and by considering local climate impacts.
87	US Environmental Protection Agency Region 8	328	Based on our review of the Project Alternatives, Alternative F appears to be the most environmentally protective due to the areas of environmental concern that were raised during the public scoping process and used to limit the total leasable area, yet Alternative E is designated as the Preferred Alternative for the Final SEIS. These areas of environmental concern include designations such as wild and scenic river segments, critical habitat for threatened and endangered species, areas of tribal significance, native trout crucial habitat, and lands with wilderness characteristics. While we acknowledge that BLM may still develop a final Alternative that combines components from any of the Draft SEIS Alternatives, EPA supports efforts to identify and select an Alternative that avoids, minimizes, or otherwise mitigates environmental impacts. We therefore recommend either the selection of Alternative F or the development of a new Alternative that evaluates these environmental considerations individually and weighs their potential benefits with their impacts (e.g., economic, recreational, etc.) in order to support removing or replacing the unique components of Alternative F
88	US Environmental Protection Agency Region 8	328	We also recommend expanding on the rationale for designating the Preferred Alternative in the Final SEIS. This discussion should answer how individual potential impacts in different resource areas (e.g., natural, economic, cultural, etc.) were weighed against one another
89	US Environmental Protection Agency Region 8	328	We also recommend present[ing] any mitigation measures that may be necessary in order to balance impacts across resource areas.
89	Environmental Advocacy NGO Consortium	316	BLM should incorporate compensatory mitigation into the SEIS to offset existing and future oil and gas development. The Notice of Intent for the SEIS stated: The BLM will identify, analyze, and consider mitigation to address the reasonably foreseeable impacts to resources from all reasonable alternatives and, in accordance with 40 CFR 1502.14(f), include appropriate mitigation measures not already included in the alternatives. Mitigation may include avoidance, minimization, rectification, reduction, or elimination over time, and compensation; and may be considered at multiple scales, including the landscape scale.
89	Brower, Michele	174	The scientific research on the impacts of the industry on the quality of the air we breathe and the integrity of our watersheds is inadequate to nonexistent.
89	Williams, Megan	224	In the DSEIS, BLM relies on the Colorado Air Resource Management Modeling Study (CARMMS) to describe the cumulative air quality and ecosystem impacts that could occur. Specifically, the DSEIS states that, "the BLM CARMMS high, medium, and low modeling scenarios are used for describing the maximum and minimum potential field office and cumulative-level air quality and related values impacts that could occur across all Proposed RMPs/Final EISs and supplemental EIS alternatives." [18] BLM should clarify in the DSEIS how its RFD estimates in the planning areas compare to the RFD scenarios used in CARMMS. BLM states that, for CARMMS 2.0, it projected "year 2025 regional air quality using a year 2011 modeling platform with updated information such as new oil and gas reasonably foreseeable development estimates (RFD) for year 2025."19 BLM must show how the RFD scenarios it is using in the DSEIS compare to its "new" RFD estimates in CARMMS. And in relying on CARMMS, BLM must also disclose and address the modeled impacts associated with oil and gas development in the CRVFO and GJFO. [18] BLM DSEIS at 3-19
90	Environmental Advocacy NGO Consortium	316	BLM should not grant exceptions to fluid mineral leasing prescriptions for geothermal in identified lands with wilderness characteristics units BLM should take a nuanced approach to issuing exceptions to geothermal leasing in the planning area. Areas that are important due to their significant wilderness character, wildlife, cultural, and other resource values are not appropriate for geothermal production, just as they are not appropriate for oil and gas leasing or development.

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91	Environmental Advocacy NGO Consortium	316	We are glad to hear that BLM has prioritized Tribal consultation and building relationships with Tribal nations since the 2015 Proposed RMPs/Final EISs. As mentioned in the Draft SEIS, both in person and written communication is critical to ensuring adequate consultation and incorporating Tribal input and priorities into federal decisionmaking.[77] [77] SEIS p. 3-74. Within the CRV Field Office, the majority of the high and medium gas potential areas occur within high prehistoric zones, which would result in a greater probability of direct and indirect impacts on cultural resources.78 Additionally, under BLM's preferred alternative, 1,923 acres of areas significant to Tribes would remain open to leasing.
92	Color Environmental Advocacy NGO Consortium	316	BLM should include language to manage WSAs for protection if released by Congress from consideration for wilderness designation. Land use planning is the best opportunity for BLM to make additional, layered designations that would take effect if WSAs within the planning area are released from further consideration. As such, BLM should ensure all WSAs within the planning area [23] are adequately managed for protection regardless of future potential congressional release. Given the wilderness characteristics present in these areas, the SEIS should include language requiring the areas to be managed as LWCs, as under Alternative C from the 2014/2015 RMPs, if released by Congress from consideration for wilderness designation. The inclusion of this language in the SEIS would ensure durable management as well as consistency for land managers and limited agency resources. [23] Including Bull Gulch, Castle Peak (with addition), Eagle Mountain, Hack Lake in the Colorado River Valley Field Office, and Demaree Canyon, Little Book Cliffs, The Palisade, and Sewemup Mesa in the Grand Junction Field Office
93	Environmental Advocacy NGO Consortium	316	BLM must clarify that all ACECs designated in the 2015 RMPs for CRV and GJ will remain designated and closed to mineral leasing in the agency's final SEIS. Within the CRV Field Office this includes: Grand Hogback, Glenwood Springs Debris Flow Hazard Zones, Hardscrabble-East Eagle, Lyons Gulch, McCoy Fan Delta, Mount Logan Foothills, and Sheep Creek Uplands.[31] The current Draft SEIS does not make clear that these ACECs are designated under Alternative E, only Alternative F. Additionally, the Draft SEIS does not clarify that Abrams Creek, Colorado River Seeps, Dotsero Crater, Greater Sage-grouse Habitat, and the Crown Ridge ACECs were analyzed as being closed to leasing under Alternative C in the 2015 RMP.[32] These ACECs should all be included as designated and closed to future energy development in the Final SEIS. [31] Colorado River Valley Field Office Approved Resource Management Plan pp. 115-130. Available online at: https://eplanning.blm.gov/public_projects/lup/68506/90704/109012/01_CRVFO_ROD_ARMP_FINAL_6-12-15.pdf . [32] Colorado River Valley Field Office Proposed Resource Management Plan p. 2-11. Available online at: https://eplanning.blm.gov/public_projects/lup/68506/110860/135737/06_Chapter_2_508.pdf .
93	The Pew Charitable Trusts	331	In addition to designating ACECs, BLM must also include management guidelines that will protect the values for which the ACEC is designated. We recognize that BLM has proposed to close ACECs to oil and gas leasing in several alternatives and we recommend that these management prescriptions are carried forward into the final plan and record of decision. BLM should further ensure that surface-disturbing activities are prevented in ACECs. In doing so, BLM will minimize negative impacts to ACECs.
94	BlueRibbon Coalition	358	The BLM is required to show a broad range of alternatives when undertaking a NEPA process. In order to adequately comply with NEPA the BLM must have alternatives that explore a range of alternatives. In the case of the Pinnacles Dispersed Recreation Management project, we hope BLM will consider the feedback of BRC and our members to come up with a range of management alternatives to meet the purpose and need of the proposed reservation system since the original proposal suffers from several deficiencies. BLM often creates a "conservation" alternative, then it is typical to present several other alternatives that include varying levels of closures and restrictions from the baseline. There should be an alternative that protects dispersed camping and analyzes increasing those opportunities. That BLM has conditioned itself to believe that it must never expand or enhance recreation access through the planning processes is an inherent and fundamental flaw of this process and a violation of NEPA. This inequitable privilege of one stakeholder's interest over the interests of other stakeholders taints the integrity of the NEPA process. BLM should form a range of alternatives where each of the alternatives accomplishes the goal of the project. The purpose and need of this plan is to create better management strategies, not to simply close and restrict use. Closure is not management. These areas provide a purpose and need for outdoor access that improves physical and mental health for public land users.
95	McGregor, Andrew	289	Include potential Wild and Scenic River status for the Crystal River Deep Creek and the Dolores River. These intact landscapes and watersheds warrant significant protection.
96	Western Environmental Law Center et al.	304	BLM's analysis has not considered the most recent information (in the Draft SEIS). Nor is there consideration of new information related to listed and sensitive plant communities, including physaria congesta, camissonia eastwoodiae, gilia stenothyrsa, mentzeiia rhizomata or thalictrum heliophilum. Although BLM briefly discusses the Colorado hookless cactus - sclerocactus glaucus and sclerocactus dawsonii - its analysis is inadequate, as it relies heavily on flawed information from United States Fish and Wildlife Service. Without disclosure and consideration of this information, BLM cannot make an informed decision about areas that should be protected from new leasing.
96	Roaring Fork Audubon and ColoradoWild	352	BLM does appear to have considered new information related to listed and sensitive plant communities, including Phacelia submutica, Penstemon debilis, Spiranthes diluvialis, Astragalus debequaeus, and Astragalus naturitensis. This new information is critical to informing BLM's supplemental analysis and supporting a new decision. However, BLM's wildlife and plant species' analysis are grossly incomplete and inadequate.

Concern ID	Organization/ Individual	Letter Number	Comment Text
96	Roaring Fork Audubon and ColoradoWild	352	Nor is there consideration of new information related to listed and BLM-sensitive plant species in the planning area including <i>Physaria congesta</i> , <i>Camissonia eastwoodiae</i> , <i>Gilia stenothyrsa</i> , <i>Mentzelia rhizomata</i> or <i>Thalictrum heliophilum</i> . Although BLM briefly discusses Colorado hookless cactus - <i>Sclerocactus glaucus</i> and <i>Sclerocactus dawsonii</i> - its analysis is inadequate, as it relies heavily on flawed information from United States Fish and Wildlife Service. Without disclosure and consideration of this information, BLM cannot make an informed decision about areas that should be protected from new leasing.
96	Roaring Fork Audubon and ColoradoWild	352	The Colorado office of the Bureau of Land Management (BLM), which administers 8.4 million acres of Colorado's surface acres, and more than 29 million acres of sub-surface mineral estate has been charged with developing a climate adaptation strategy for BLM lands within the state to ensure the best possible adaptation strategies(CNHP 2015). A Climate Change Vulnerability Analysis was conducted for the BLM to evaluate the potential impact of future climate conditions on 36 key native animal species, 62 native plant species and 16 ecosystems on BLM-managed lands in Colorado (CNHP 2015). Climate change vulnerability assessments are not an end unto themselves, but rather are intended to help BLM managers identify areas where action may mitigate the effects of climate change, recognize potential novel conditions that may require additional analysis, and characterize uncertainties inherent in the process. Unfortunately, much of the advices from the Vulnerability Analysis have been disregarded. Ecosystems in BLM's project area are characterized by Pinyon-Juniper woodlands, which are highly vulnerable to climate warming, desert shrublands which are moderately vulnerable, sagebrush and oak and mixed-mountain shrublands both which have low vulnerability (CNHP 2015). Western riparian woodlands and shrublands occur throughout the project area and all have very high vulnerability to climate change (CNHP 2015). Federally listed plant species in the project areas for which a Climate Change Vulnerability Analysis was conducted for the BLM and which found to be extremely vulnerable to warming include <i>Phacelia submutica</i> , <i>Penstemon debilis</i> , <i>Physaria congesta</i> , <i>Spiranthes diluvialis</i> and <i>Sclerocactus glaucus</i> . BLM-sensitive plant species in the project areas for which the Climate Change Vulnerability Assessment for the BLM was conducted and which were found to be extremely vulnerable to climate warming include include: <i>Astragalus debequaeus</i> , <i>Astragalus naturitensis</i> , <i>Gilia stenothyrsa</i> , <i>Mentzeia rhizomata</i> and <i>Thalictrum heliophilum</i> . This extensive list of federally protected and BLM-sensitive native wildlife and plant species that occur in this planning area is extraordinary and indicates the extremely high and essential value of this landscape for native wildlife and plant species. This hotspot of native species diversity rarity is far too valuable to be lost to either the proximate or ultimate impacts of fossil fuel extraction.
97	Protegete Piceance	165	While climate change is a global issue the impacts are often felt locally and most severely by DICs. Understanding and addressing the social and economic impacts of climate change on DICs at the field office level is critical to meeting national environmental justice objectives set forth in the White House Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All, issued April 2023. BLM should establish clear and enforceable mitigation measures tied to DICs and should periodically review and update measures to align with evolving national and state commitments to address air quality and climate impacts based on an updated analysis.
97	Colorado Department of Natural Resources	305	Lastly, we recognize and support BLM's decision to keep geothermal resources open to leasing. Colorado's Energy and Carbon Management Commission is in the process of developing a protective regulatory framework to govern deep geothermal activities in the state and we are working diligently to enable the responsible development of geothermal resources to contribute to the State's efforts to increase renewable energy development and reduce greenhouse gas emissions. Similarly, we recognize that BLM is developing an updated plan to guide responsible solar energy development on public lands through an updated Solar Programmatic Environmental Impact Statement which will help accelerate and continue momentum for the clean energy economy. We are hopeful that this process will enable additional solar development on public lands in Colorado in the future.
98	The Daily Sentinel Grand Junction, Colorado	245	I'm trying to make sense of what seems like a discrepancy in the EIS. On page 3-160 it says: "The CRVFO contains approximately 2,300 producing federal oil and gas wells and it processes the most applications for permit to drill in Colorado. The vast majority of oil and gas development within the CRVFO boundaries (about 80 percent) is on private land and minerals where the BLM has no jurisdiction. Of the 773,000 acres of federal minerals within the CRVFO, roughly 200,000 acres are leased for oil and gas. ... Within the GJFO, approximately 513,913 acres are leased for oil and gas." On page 3-101, the chart shows 85,700 acres leased in the CRVFO decision area, and about 350,000 acres leased in the GJFO decision area. I'm trying to understand why the leased-acre amounts differ in these two references.
99	Mesa County	134	Moreover, oil and gas companies, typically situated in the remote comers of the county, frequently take on the responsibility of road maintenance, gravel placement, and dust suppression. These contributions serve a dual purpose: they offer valuable assistance to local governments grappling with limited resources, and significantly improve the travel experience for backcountry recreationists. These well-maintained roads also provide safer access for emergency personnel responding to medical emergencies. If these funds become unavailable, Mesa County will face challenging choices regarding resource allocation, potentially prioritizing areas near population centers and diminishing access to public lands.
100	Pitkin County	314	[1] In our review of the GIS shapefiles for Alternative F within Pitkin County, there are tiny areas which appear as leasable between Thompson Creek Road and South Thompson Creek Road as shown in blue on Ex. A. These areas are not visible on the static pdf maps for Alternative F. We believe these are remnants of polygons from a larger GIS geoprocessing operation and not leasable areas under Alternative F. If this understanding is incorrect, let us know as it will materially change our position.
N/A	BlueRibbon Coalition	358	BRC would like to be considered an interested public for this project. Information can be sent to the following address and email address: Ben Burr BlueRibbon Coalition P.O. Box 5449 Pocatello, ID 83202 brmedia@sharetrails.org

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Appendix G

Review of CRVFO and GJFO RFD Scenarios

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Appendix G. Review of CRVFO and GJFO RFD Scenarios

G.1 BACKGROUND

During public review of the 2023 Draft Resource Management Plan (RMP) and Supplemental Environmental Impact Statement (SEIS), the Bureau of Land Management (BLM) received comments from industry and local governments questioning the validity of BLM's Reasonably Foreseeable Development (RFD) scenarios for the Colorado River Valley and Grand Junction Field Offices that were completed prior to the 2016 and 2018 United States Geological Survey (USGS) petroleum assessments. After reviewing the USGS assessments as well as recent development trends, the BLM has determined that the RFDs remain valid and appropriate to inform land management decisions⁵.

Though the USGS assessments show increased estimates of fluid mineral reserves in the Mancos/Mowry and Mesaverde TPSs (total petroleum system) in the Piceance Basin, the published RFDs are still valid because the deeper Mancos and Niobrara formations have not been targeted for drilling in the decision area since 2016. Market conditions and state regulations appear to have affected fluid mineral development more than geology and estimated reserves. Approximately 85 percent of the Piceance Basin fluid mineral reserves would be captured within the High Potential and Medium Potential adjacent to High potential, and not closed under other planning efforts, that would still be open to new leasing under Alternative G of the SEIS.

G.2 PREVIOUS ASSESSMENT METHODS

G.2.1 BLM's Reasonably Foreseeable Development Scenarios

2008 Colorado River Valley Field Office RFD

The RFD scenario for the Glenwood Springs Field Office (GSFO), which would become the Colorado River Valley Field Office (CRVFO), was published on June 27th, 2008. It concluded that the assessment published by the USGS/EPCA in 2003 was “considerably low” in its estimations of recoverable fluid minerals. The GSFO RFD considered the USGS assessment, interviews with local operators, past and present activity, local analysis performed by field office staff, and market projections to reach its conclusions. The GSFO RFD projected that most drilling and completion would target the Mesaverde TPS.

2012 Grand Junction Field Office RFD

The Grand Junction Field Office (GJFO) RFD was published on June 18th 2012. The GJFO considered the same 2002 USGS assessment, past and present activity within the field office boundaries, market projections, physical limitations on access (area topography, land owners), and infrastructure and transportation (pipelines, gas plants) to draw conclusions. The GJFO RFD projected up to 2002 horizontal wells (GJFO RFD Table 2, p. 47) would be drilled and completed into the Mancos Shale play, and in the area designated as very high, high, and moderate potential east of Highway 139.

2022 BLM Evaluation of Previous RFDs

An important component of RFDs is the mapping of differing levels of oil and gas development potential across a planning area. This mapping assists planners in understanding where, and at what magnitude, oil and gas activities and associated impacts on other resources and uses could be anticipated, including the

amount of surface disturbance from well pads, access roads, and pipelines. An initial task in the SEIS, which could result in new decisions for the two Field Offices, was to compare the respective RFDs and evaluate their current utility for the SEIS. In examining oil and gas development potentials in the two RFDs, two differences are apparent – categories of oil and gas potentials and boundaries between potentials.

Maps of oil and gas potential in the CRVFO RFD show four categories—High, Medium, Low, and No Known Potential. Maps in the GJFO RFD show six categories—the four CRVFO categories plus Very High and Very Low). The GJFO RFD also uses the terms “Moderate” instead of “Medium” and “None” instead of “No Known.” The boundaries between potential layers are also different between the two field offices. The CRVFO uses geologic mapping to identify areas of potential while GJFO uses geological information as well as Township and Range to delineate areas of potential.

Combining the two RFDs for use in the SEIS is complicated due to the different approaches used in the two Field Offices for defining development potential, as described above. BLM’s SEIS team concluded that mapping of potentials categories for the two combined Field Offices would be an important tool for analysis and public presentation. Because GJFO’s six categories represent a finer differentiation than CRVFO’s four categories, the combined High/Very High and Low/Very Low categories in GJFO are comparable to the High and Low categories in CRVO. For consistency across field offices, the SEIS combines High and Very High under the term “High”, in addition to Low and Very Low under the term “Low”. The terms “Medium” and “No Known” are used instead of Moderate and None throughout the SEIS.

The previously published RFDs still remain valid due to the weight placed on the geology of the area. Areas where geology was not conducive to fluid mineral recovery, i.e., geologic strata that are not known to contain oil and gas deposits, still apply. Industry also uses geology as a factor in determining where to drill as well. The project team considered whether the CRVFO RFD, prepared in 2008, and the GJFO RFD, prepared using data from the same period but published in 2012, were valid for use in the SEIS. The team also considered whether the disparity in mapping of potentials in the two RFDs affected their utility for analysis of a combined planning area. The purpose of an RFD is to assess a reasonable and foreseeable future scale and distribution of oil and gas leasing, exploration, and development within a planning area and planning timeframe. Mapping of development potential in an RFD does not incorporate restrictions such as “Closed to Leasing” land use allocations, “No Surface Occupancy” (NSO) oil and gas lease stipulations, and “Exclusion Areas” for rights-of-way (ROWs). Such restrictions result from land use planning decisions considered during the planning process. Thus, the scale of the relatively “unconstrained” potential development described in an RFD is almost certain to be assumed to be greater, and often much greater, than the scale of development that may occur during the life of the plan. Defining and mapping categories of oil and gas potentials serves two purposes:

- It provides planners with information needed to develop a reasonable range of alternatives and associated management actions tailored to the locations and levels of assumed future oil and gas activities, and an analysis of foreseeable impacts associated with those assumed activities.
- It provides resource specialists with information needed to assess the location, type, and intensity of potential direct, indirect, and cumulative impacts on resources and resource uses and to identify appropriate mitigation measures.

For the reasons described above, the SEIS project team has concluded that both RFDs are appropriate for describing oil and gas resource distribution and potential future drilling rates in the SEIS. Although the scale of potential future development described in the RFDs is much greater than the amount of development to date, the distribution of oil and gas activities and associated facilities is similar to the distribution predicted based on the RFDs. In addition, the lower-than-assumed development rate can be explained by a combination of factors that may or may not continue to apply during the remainder of the 20-year analysis period.

G.2.2 USGS Petroleum Assessments

2002 Assessment of Undiscovered Oil and Gas Resources of the Uinta-Piceance Province of Colorado and Utah

The Uinta-Piceance Province was assessed using the TPS and is geology based (type of reservoir rock, petrophysical properties, hydrocarbon generation and maturation, etc.). The USGS identified 5 TPSs containing 20 AUs. An estimated 21 trillion cubic feet of gas (TCFG), 60 million barrels of oil, and 43 million barrels of natural gas liquids are estimated to be a part of this TPS (undiscovered resources). The majority (approximately 62%, 13 TCFG) of the gas resource is estimated to occur in the Mesaverde TPS. Approximately 7 TCFG (32%) of gas occurs in the Mancos/Mowry TPS, with the remaining in the Phosphoria and Green River TPSs. The Ferron/Wasatch Plateau and Mesaverde TPSs also contain approximately 2.3 TCFG of coal-bed gas.

2016 Late Cretaceous Mancos Shale Assessment—Assessment of Continuous (Unconventional) Oil and Gas Resources in the Late Cretaceous Mancos Shale of the Piceance Basin, Uinta-Piceance Province, Colorado and Utah

A geology-based assessment following up from the 2002 assessment was completed by the USGS in 2016. Between 2003 and 2016, over 2,000 wells were drilled/completed in the Mancos Shale, which is the primary hydrocarbon resource for the Mancos/Mowry TPS. Some hydrocarbons migrated into conventional reservoirs along the Douglas Creek Arch and others were generated and retained in the Niobrara Member of the Mancos Shale. These systems are mainly in tight shales that require hydraulic fracturing during completions for fluid mineral extraction. The 2016 assessment divides the Mancos strata into 5 AUs. The USGS estimated mean volumes of 66 TCFG, 74 million barrels of oil, and 45 million barrels of natural gas liquids, with the majority occurring in the Upper Mancos Tight Gas AU and Upper Niobrara Shale Oil AU.

Since the 2002 assessment, more than 2,000 wells were drilled and completed in one or more intervals within the Mancos Shale of the Piceance Basin (IHS Energy Group, 2015). In addition, the USGS Energy Resources Program drilled a research core in the southern Piceance Basin that provided significant new geologic and geochemical data used to refine the 2002 assessment of undiscovered, technically recoverable oil and gas in the Mancos Shale. The Late Cretaceous Mancos Shale was assessed previously as a single interval. The assessment combined all the continuous accumulation resources within the Mancos and Mowry Shales into one set of three AUs that addressed the hydrocarbon resources in the entirety of the Uinta-Piceance Province (Kirschbaum, 2003). The 2016 assessment of the Mancos Shale differs from the 2002 assessment in two ways: (1) it only assesses the Mancos Shale within the Piceance Basin and (2) the Mancos Shale strata are subdivided vertically into separate AUs. Each AU differs in geological characteristics that control hydrocarbon accumulation type and extent, the type of drilling and completion techniques applied, and the distribution of estimated ultimate recovery volumes of producing wells. These key factors influenced the input data used to assess the technically recoverable

hydrocarbons in the Mancos Shale. Production estimates for the Mancos/Mowry system increased, but the location of the formation boundaries did not change from the 2002 assessment to the 2016 assessment.

2018 Assessment of Undiscovered Continuous Tight-Gas Resources in the Mesaverde Group and Wasatch Formation, Uinta-Piceance Province, Utah and Colorado

Using a geology-based assessment methodology, the USGS estimated undiscovered, technically recoverable mean resources of 24 TCFG in the Mesaverde Group and Wasatch Formation of the Uinta-Piceance Province in northeast Utah and northwest Colorado. Primary source rocks in the Piceance Basin come from the Williams Fork of the Mesaverde Group and overlying Wasatch Formation (Johnson and Roberts, 2003). Gas produced from the west side of the field is primarily intraformational coal gas while the east side of the field is predominantly from marine shales of the Mancos Formation (Lillis et al 2008).

GIS, supplemental data table, and references for focus areas of potential domestic resources of 13 critical minerals in the United States and Puerto Rico—antimony, barite, beryllium, chromium, fluor spar, hafnium, helium, magnesium, manganese, potash, uranium, vanadium, and zirconium (2021 USGS)

In response to Executive Order 13817 of December 20, 2017, the USGS coordinated with the BLM to identify 35 nonfuel minerals or mineral materials considered critical to the economic and national security of the United States (U.S.) (Fortier et al., 2018). Acquiring information on possible domestic sources of these critical minerals is the rationale for the USGS Earth Mapping Resources Initiative (Earth MRI). The program, which partners the USGS with State Geological Surveys, Federal agencies, and the private sector, aims to collect new geological, geophysical, and topographic (lidar) data in key areas of the U.S. to stimulate mineral exploration and production of critical minerals. The USGS has identified broad areas within the U.S. to target acquisition of geologic mapping, geophysical data, and (or) detailed topographic information to aid research, mineral exploration, and evaluation of mineral potential in these areas. Focus areas were defined using existing geologic data including data on known deposits in the U.S. The focus areas are provided as geospatial data supported by tables that summarize what is known about the mineral potential and brief descriptions of data gaps that could be addressed by the Earth MRI program.

G.3 COMPARISON OF BLM'S RFDs TO USGS ASSESSMENTS

2008 CRVFO RFD

The 2008 CRVFO RFD estimated 55 trillion cubic feet of recoverable gas as high potential (20% of the area) but this number includes private minerals. Within the CRVFO 12% is designated as medium potential, 46% as low potential, and 22% no known potential.

The Piceance Basin encompasses approximately 20% of CRVFO, primarily in the western half of the field office. The 2002 USGS assessment considers the Uinta-Piceance basin as a single unit, but only the Piceance Basin portion is located within the CRVFO and GJFO boundaries. The USGS identified five TPSs, four of which are within the Piceance Basin portion. These TPSs include nine AUs. The Mesaverde and Mancos/Mowry TPSs contain nearly all gas resources, with approximately 1% in the Ferron/Wasatch and Phosphoria and Green River TPSs.

At the time of the RFD release, most production stemmed from Mesaverde and Wasatch TPSs, with no Niobrara or Mancos/Mowry production within the CRVFO. This remains the case, as most wells drilled in the CRVFO are targeting the Mesaverde, while most Mancos/Mowry wells are within the GJFO.

2012 GJFO RFD

As in the CRVFO RFD from 2008, the majority of lands in the GJFO fall within the Piceance Basin. Central and western GJFO are located on the western limb of the Piceance Basin, which becomes gradually shallower and thinner as it stretches westward along the Grand Valley and Book Cliffs to GJFO's western edge. Within the Piceance Basin, the USGS 2002 assessment recognized five TPSs—the Green River, Mesaverde, Ferron/Wasatch, Manco/Mowry, and Phosphoria systems.

Highest production (up to 2008) came from the Mancos/Mowry and Phosphoria TPSs, specifically from the Dakota Sandstone in both systems (BLM 2012). The Mesaverde TPS is the next largest producer, and added with the Mancos/Mowry system, accounting for over half of production in the GJFO area.

USGS Assessments

Geographic extent is not defined in the 2002 USGS assessment. Production volumes were estimated to be 20.93 million barrels of oil, 213 billion cubic feet of gas, and 4.93 million barrels of natural gas liquids in the Phosphoria, Ferron/Wasatch, Mesaverde, and Green River TPSs (conventional). Estimated volumes for the Mancos/Mowry TPS averaged 3,719 billion cubic feet of gas and 10 million barrels of natural gas liquids.

The 2016 USGS assessment focuses on the Mancos Shale. Shale gas migrated primarily along the Douglas Creek Arch. Of the five AUs identified (Lower Mancos Tight Gas, Lower Niobrara Tight Gas, Upper Niobrara Shale Gas, Upper Niobrara Shale Oil, and Upper Mancos Tight Gas), two (Lower Mancos and Lower Niobrara Tight Gas AUs) extend to the Mancos Shale outcrop to the north, east, and south, and along the Douglas Creek Arch to the west. The Upper Mancos Tight Gas AU boundary runs along the outcrop of the Iles Formation in the Piceance Basin. Potential mean production of these AUs totals over 2 million acres. Production volumes for all five TPS AUs were estimated to average 74 million barrels of oil, 111,669 billion cubic feet of gas and 45 million barrels of natural gas liquids.

The 2018 USGS assessment only discussed the Mesaverde Group and Wasatch Formation. The Mesaverde TPS geographically extends from west of Glenwood Springs to the Utah border, north to Meeker, and south to the Uncompahgre Plateau. The potential mean production area for the Piceance Mesaverde AU is 1,056,767 acres. Production volumes for the Mesaverde TPS were estimated to be 24 billion cubic feet of gas and 19 million barrels of natural gas liquids.

Geologic conditions put forth in the USGS assessments and BLM RFDs remain the same but advances in technology make it possible to reach farther and produce from zones previously thought unfeasible. Primary targets for the GJFO are in the Mancos/Mowry TPS while the primary source for the CRVFO is the Mesaverde TPS. Most leases for both TPSs are located within Very High/High potential areas, while some are in Medium/Moderate potential areas.

G.4 COMPARISON OF BLM'S RFDs TO RECENT DEVELOPMENT TRENDS

Table G-1 presents comparisons of the two RFDs with current information on oil and gas development following completion of the two RFDs. As shown, both RFDs assumed that considerably more wells

would be drilled during the 20-year planning period than possible to attain based on the number drilled to date. For both Field Offices, the discrepancies between estimated and actual development reflect assumptions of relatively stable or increasing commodity prices in relation to development and operational costs and continuing advances in technological tools to access, extract, and produce the commodity. Federal oil and gas well counts were compiled from the Oracle Analytics Server (OAS) internal reporting system.

Table G-2
Comparison of RFD Assumptions with Current Conditions (through 2022)

RFD Criterion	RFD Assumed Drilling 2009-2028 (20 years)	Actual Drilling 2009-2022 (14 years) / Extrapolated to 2028 (20 years)		Current Active Wells Regardless of Drill Date
	Federal	Federal / Extrapolated	Actual Number Extrapolated as Percent of RFD	Federal
Colorado River Valley Field Office ¹				
Conventional + Unconventional / Mancos Wells	5,312	1,631 / 2,330 ²	43.9% ³	3,023 ⁴
Percent in High Potential	99%	100%		100%
Grand Junction Field Office ⁵				
Conventional + Unconventional / Mancos Wells	3,676	94 / 134 ²	3.6% ³	436 ⁴
Percent in High / Very High Potential	85%	70%		79%

¹ Numbers include the White River National Forest and the lower Roan Plateau Planning Area, although these are not part of the decision area for the SEIS.

² Number drilled 2009 through 2022, extrapolated to 20 years (period assumed in the RFDs)

³ Number drilled 2009 through 2022, extrapolated to 20 years, then divided by 20-year total assumed in the RFDs.

⁴ Active well counts are intended to represent wells that are currently operating or could easily be returned to production. Wells not considered active were not included in these totals.

⁵ Although the GJFO RFD is dated 2012, the assumptions of future well development were for 2009 through 2028.

Table G-2 summarizes data pulled from the AFMSS2 database from 2016 to 2023 and includes well identification data (well name, API number), spud date, and field office, along with the main target formation and well class (vertical, directional, horizontal). Data pulled includes Federal wells and wells that have a Federal nexus (split estate, FEE/FEE/FED) as part of an agreement or unit. It also includes wells drilled in White River National Forest and the Roan Planning area, although these are not part of the decision area for the SEIS. Wells drilled and completed into private, or state mineral holdings (FEE/FEE) were not included in the data pull because they would not be subject to BLM planning efforts. No horizontal wells have been drilled in the decision area of the SEIS since 2016. The wells have exclusively been drilled as directional. All wells reported were drilled into the Mesaverde TPS. The deeper Mancos formations have not been the target for drilling in this area like they have in other parts of the country, including the nearby Denver-Julesburg Basin in the northern part of the Denver Metro area. All data used to generate **Table G-2** is placed in the administrative record of the SEIS online for review.

Table G-3
Wells Drilled in CRVFO and GJFO 2016 to 2023.

Field Office	Wells Spud ¹	Well Class	Formations
CRVFO	529	Directional	61 Mesaverde, 1 Wasatch/Iles, 467 Williams Fork
GJFO	189	Directional, Single Multi Lateral ²	8 Mesaverde, 181 Williams Fork

¹Well totals include wells in the Roan Plateau Planning Area, which is outside of the decision area.

²In the single multi-lateral well, the drill string got stuck in the wellbore and had to be abandoned. A new bore was drilled at a kick off point above the lost drill string, creating a second (multi) lateral.

Protracted periods of low commodity prices over the past several years have had a major impact on drilling. This is reflected by the dramatic decrease in drilling rigs, from a high of 14 in CRVFO in 2007 to only one in 2021, 2022, and 2023 and none in GJFO in 2020, 2021, 2023. GJFO had one rig in 2022. The number of Federal wells drilled per year also declined, from a high of 125 in CRVFO in 2017 to 13 in 2023. In GJFO, the number of Federal wells drilled per year dropped from a high of 74 in 2017 to 0 in 2020, 2021, and 2023. The COVID-19 pandemic probably contributed to the low number of wells drilled in 2021. Development activity increased in 2022, with 45 Federal wells drilled in CRVFO and three drilled in GJFO. Factors that may influence actual rates of development but are not reflected in the RFDs' assumed drilling rates include:

- Unforeseen increases or decreases in commodity prices due to economic or geopolitical factors.
- Amount of undeveloped resource in existing or potential new oil and gas leases.
- High elevation and rugged or unstable terrain in some areas, with high construction and operation costs in relation to the value of the commodity.
- Remote locations with poor access from existing or planned road and natural gas pipeline infrastructure.
- Availability and delivery costs of water to be used in drilling and completions, and in disposing of produced water.
- Extent of sensitive resources and conflicting land uses that would reduce or preclude oil and gas leasing and development due to BLM management decisions and policies, and applicable State, County, and local laws, regulations, or ordinances.

Differences in **Table G-1** between assumed and actual drilling to date for both Field Offices also reflect the higher cost of unconventional and, especially, horizontal drilling than the conventional drilling that dominated historical development. As a result, higher costs and lower prices may have affected the rate of development in GJFO, which placed a much greater emphasis on future Mancos wells. The rate of horizontal drilling of the Mancos has also been affected by technological challenges associated with its depth, low permeability, long horizontal reaches, and associated greater temperatures, pressures, and friction encountered. Existing infrastructure, including roads and pipelines, is better developed and more concentrated in areas of high-potential geologic conditions in CRVFO than in GJFO, where the existing infrastructure is generally sparser and largely concentrated in areas geologically incapable of supporting unconventional/Mancos development. One operator has indicated the purchase of and plans to upgrade an existing gas plant in the northwestern part of the GJFO to handle low BTU/ High inert concentration gas. This plant is being upgraded to process helium out of the gas stream for more economical recovery. A bonus to this will be the increase in economic recovery of hydrocarbons in the nearby low potential

field. This field will be preserved as open to leasing in Alt G for the purposes of helium recovery. The SEIS interdisciplinary team was tasked with reviewing, analyzing, and suggesting the best area to keep open for helium recovery. The team used previous mapping completed for the SEIS, new GIS data provided by local operators that have wells in the area capable of producing economic concentrations of helium, and the USGS focus area from 2021. Since more than simply geology played a part in the decision of the helium area, a part of the USGS focus area was left out of the low potential area that will remain open in Alternative G.

G.5 BLM'S LAND USE PLANNING PROCESS TO ADDRESS CHANGES IN CIRCUMSTANCE

The BLM typically assumes a 20-year timeframe when analyzing RMPs. However, the BLM has the ability to change management decisions, through an RMP amendment, if warranted due to the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances, or a proposed action that may result in the change in the scope of resource uses (43 CFR 1610.5-5).

Appendix J provides the BLM's monitoring plan for the RMPs. Field Managers are responsible for monitoring and evaluating the RMPs at the intervals established in the monitoring plan (43 CFR 1610.4-9). Typically, the BLM strives to evaluate RMPs at 5-year intervals. In the future, if technology or market conditions were to change to the degree that the BLM's RFDs were no longer valid, the BLM could consider amending the RMPs to address these changes in circumstances.

While all implementation decisions (e.g., issuing an oil and gas lease or approving a well location) must be in conformance with the existing RMP, the BLM does have the ability to consider amending the RMP in response to a specific proposal (43 CFR 1610.5-5).

G.6 REFERENCES

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Kirschbaum, Mark A. 2003. Assessment of Undiscovered Oil and Gas Resources of the Uinta-Piceance Province of Colorado and Utah, 2002. [Reston, Va.]: U.S. Dept. of the Interior, U.S. Geological Survey.

Figure G-I. Formation Groups in Relation to Potential

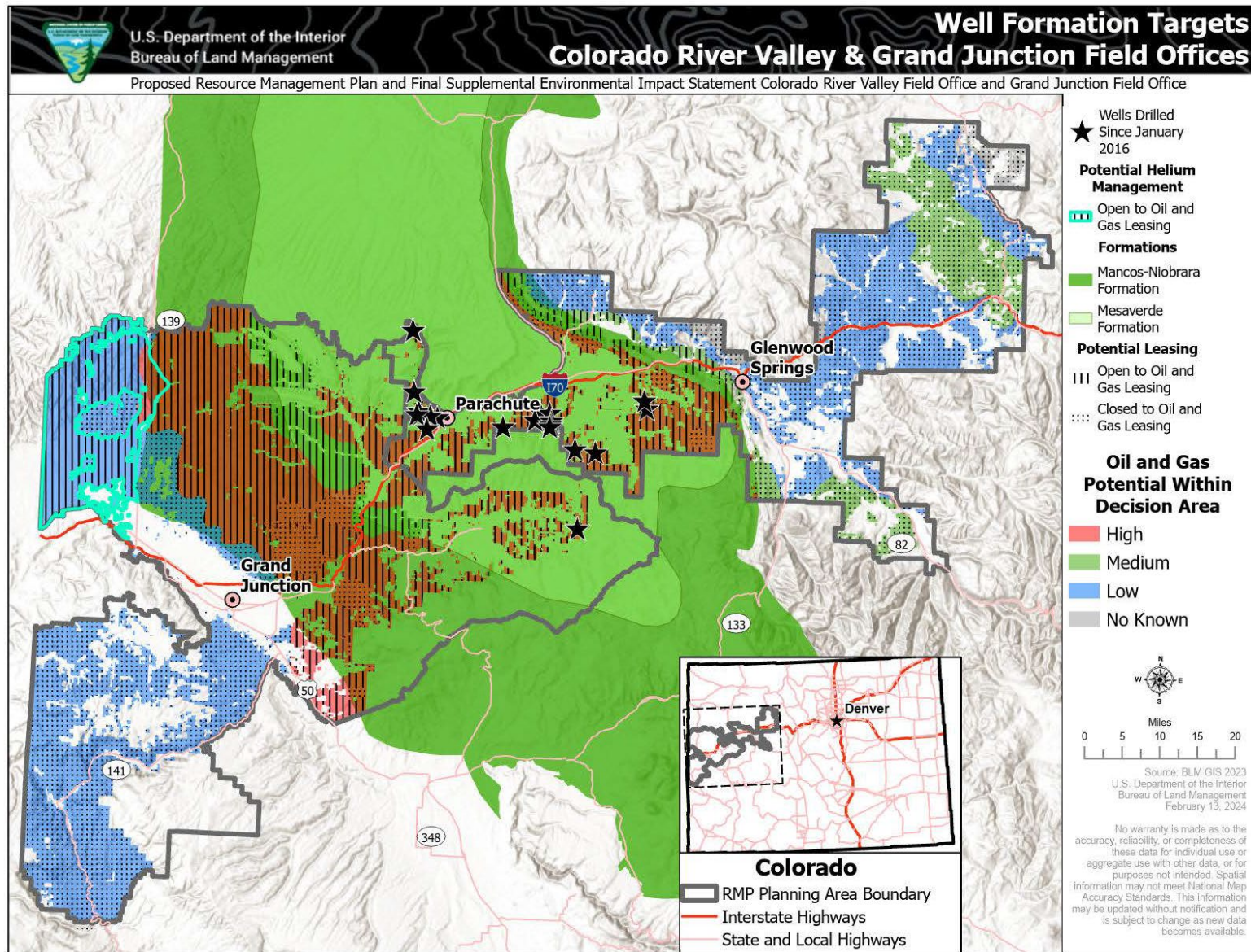
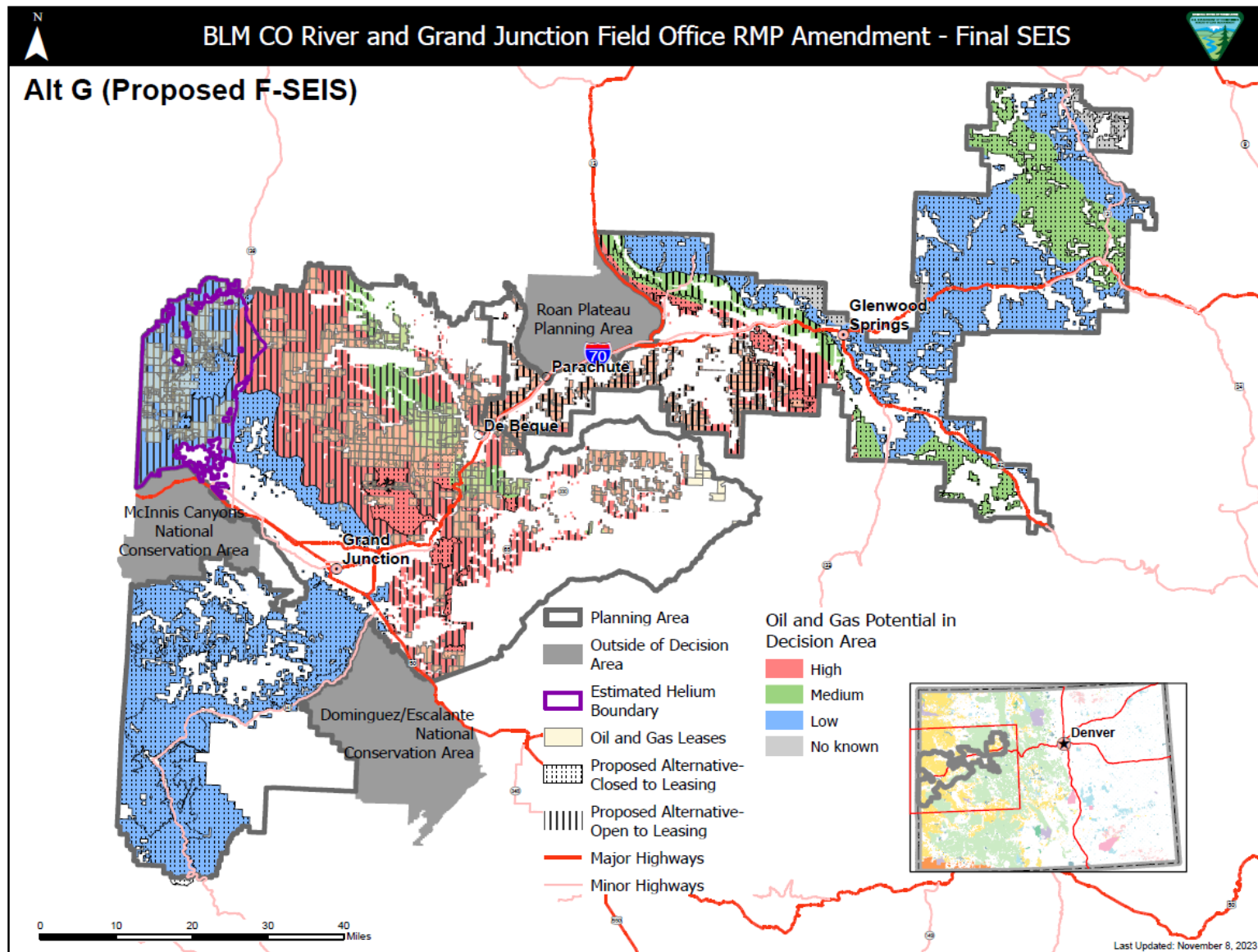


Figure G-2. Map of areas open and closed to future leasing under Alternative G.



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Appendix H

Lease Stipulations

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Appendix H. Lease Stipulations

H.1 BACKGROUND

Existing lease stipulations remain in effect and can be found in Appendix B of the 2015 Grand Junction Field Office Approved RMP and ROD and in Appendix B of the 2015 Colorado River Valley Field Office Approved RMP and ROD. Please note that stipulations such as NSO and CSU apply to all uses in the GJFO and CRVFO, not only to oil and gas leasing.

The following are existing lease stipulations found within the range of alternatives of the previous final EISs which have been applied to different resource areas in Alternative G.

H.2 ROAN AND CARR CREEKS ACEC IN GJFO

The Roan and Carr Creeks ACEC is currently managed with GJFO-CSU-39 (Alternative B). Alternative G would replace the CSU and instead manage the area with GJFO-NSO-12.

Stipulation Name: GJFO-NSO-12 ACECs

Stipulation: Prohibit surface occupancy and use and surface-disturbing activities in the following ACECs to protect threatened, proposed, candidate, and sensitive species and habitat:

- Atwell Gulch (2,900 acres);
- Badger Wash (2,200 acres);
- Dolores River Riparian (7,400 acres)
- Indian Creek (2,300 acres);
- Juanita Arch (1,600 acres);
- Mt. Garfield (2,400 acres);
- Palisade (32,200 acres);
- Pyramid Rock (15,350 acres);
- Roan and Carr Creeks ACEC (33,600 acres);
- Rough Canyon (2,800 acres);
- Sinbad Valley (6,400 acres); and
- South Shale Ridge (27,800 acres)
- Unawee Seep (85 acres).

Purpose¹: To protect and prevent irreparable damage to resources described in the relevance and importance criteria for which the ACEC was established.

- Atwell Gulch: To protect rare plants, cultural resources, scenic values, and wildlife habitat.
- Badger Wash: To protect rare plants and hydrologic study area.
- Dolores River Riparian: To protect riparian, hydrology, scenic, paleontological resources, and rare plants.

¹ Only those ACECs listed under “Stipulation” are subject to the NSO.

- Indian Creek: To protect cultural, research, and wildlife values.
- Juanita Arch: To protect rare plants and geologic values.
- Mt. Garfield: To protect scenic values.
- The Palisade: To protect rare plants and special status wildlife.
- Pyramid Rock: To protect rare plants, paleontological, and cultural resources.
- Roan and Carr Creeks: To protect core conservation populations of cutthroat trout, unique riparian habitat, greater sage-grouse habitat, and cultural resources.
- Rough Canyon: To protect geologic, cultural resources, rare plants, and wildlife habitat.
- Sinbad Valley: To protect geologic and scenic values, cultural resources, rare plants, wildlife resources.
- South Shale Ridge: To protect rare plants, wildlife habitat, and scenic values
- Unaweeep Seep: To protect special status wildlife, rare plants, riparian habitat, and hydrologic values.

Exception: Standard exceptions apply (Section B.2).

Modification: This stipulation may be modified to include species listed as threatened, endangered, proposed, candidate, or sensitive in the future. This stipulation may also be modified to account for the change in status of species protected in this stipulation. Also see section B.2.

Waiver: This stipulation may be waived or reduced in scope if circumstances change, or if the lease can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified. If this stipulation is waived or reduced in scope, any of the other attached stipulations (if any) may impact operations on this lease. Also see standard waivers apply (Section B.2).

Citation: 2015 Grand Junction RMP, Appendix B, page B-34

H.3 MUNICIPAL WATERSHEDS IN GJFO

Alternative G would close the Grand Junction and Palisade municipal watersheds. Alternative G would also apply GJFO-NSO-6 from Alternative C of the 2015 FEIS to the Grand Junction, Palisade, Jerry Creek, Mesa/Powderhorn, and Collbran areas. Alternative G would retain GJFO-CSU-4 for the Jerry Creek, Mesa/Powderhorn and Collbran areas.

Stipulation Name: GJFO-NSO-6 (Palisade and Grand Junction Municipal Watersheds, Collbran and Mesa/Powderhorn Source Water Protection Areas, and Jerry Creek Watershed).

Stipulation: Prohibit surface occupancy and use and other activities in the Palisade and Grand Junction municipal watersheds, Collbran and Mesa/Powderhorn source water protection areas, and Jerry Creek watershed.

Purpose: To protect municipal watersheds providing drinking water to local communities.

Exception: Standard exceptions apply (Section B.2). In addition, exceptions would require professionally engineered design and construction for a 100-year flood event along strait and stable stream reaches.

Modification: Standard modifications apply (Section B.2).

Waiver: Standard waivers apply (Section B.2).

Justification: This stipulation is necessary to reduce potential for groundwater contamination and/or dewatering of domestic and municipal sources.

Citation: March 2015 Grand Junction Field Office Proposed RMP and Final EIS, Appendix B, page B-24

H.4 CASTLE PEAK ADDITION WSA IN CRVFO

Alternative G would designate the Castle Peak Addition as a section 202 WSA and apply the same management to this area as other WSAs, including application of CRVFO-NSO-29.

Stipulation Name: CRVFO-NSO-29 (Wilderness Study Areas)

Stipulation: Prohibit surface occupancy and surface-disturbing activities in WSAs.

Purpose: To preserve wilderness in accordance with non-impairment standards as defined by BLM Manual 6330 – Management of BLM Wilderness Study Areas.

Exception: Standard exceptions apply (Section B.3). In addition, the authorized officer may grant an exception if an environmental analysis of a proposed action reveals that wilderness values would not be impacted, or that impacts could be adequately mitigated (see BLM Manual 6330 – Management of BLM Wilderness Study Areas).

Modification: Standard modifications apply (Section B.3). In addition, the Stipulation may be modified if the WSA boundary is modified by Congress.

Waiver: Standard waivers apply (Section B.3). In addition, the stipulation may be waived if the WSA is released by Congress for multiple uses.

Citation: 2015 CRVFO RMP, Appendix B, page 24

H.5 LANDS WITH WILDERNESS CHARACTERISTICS IN GJFO

Alternative G would manage additional lands with wilderness characteristics units within the Grand Junction Field office to protect their wilderness characteristics and apply “Lands with Wilderness Characteristics NSO CO”.

Stipulation Name: Lands with Wilderness Characteristics NSO CO

Stipulation: No surface occupancy or use is allowed on identified lands being managed to protect inventoried wilderness characteristics, in accordance with the Resource Management Plan:

- Bangs Canyon (13,900 acres);
- Maverick (25,600 acres);
- Unaweep Canyon (7,500 acres);
- Cone Mountain (18,000 acres);

- Granite Creek (14,400 acres);
- Kings Canyon (9,100 acres);
- Lumsden Canyon (10,900 acres);
- West Creek (100 acres).

Purpose: To protect inventoried wilderness characteristics and their locally, regionally, or nationally significant recreational, social, economic, and environmental values.

Exception: Standard exceptions apply (Section B.2).

Modification: Standard modifications apply (Section B.2).

Waiver: Standard waivers apply (Section B.2).

Justification: This stipulation is necessary to ensure lands with identified wilderness characteristics remain in their current undeveloped state.

Citation: 2015 GJFO RMP, Appendix B, page B-31

Appendix I

Alternative G Management Maps

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Appendix I. Alternative G Management Maps

Figure I-1. Alternative G – Areas Open and Closed to Fluid Mineral Leasing

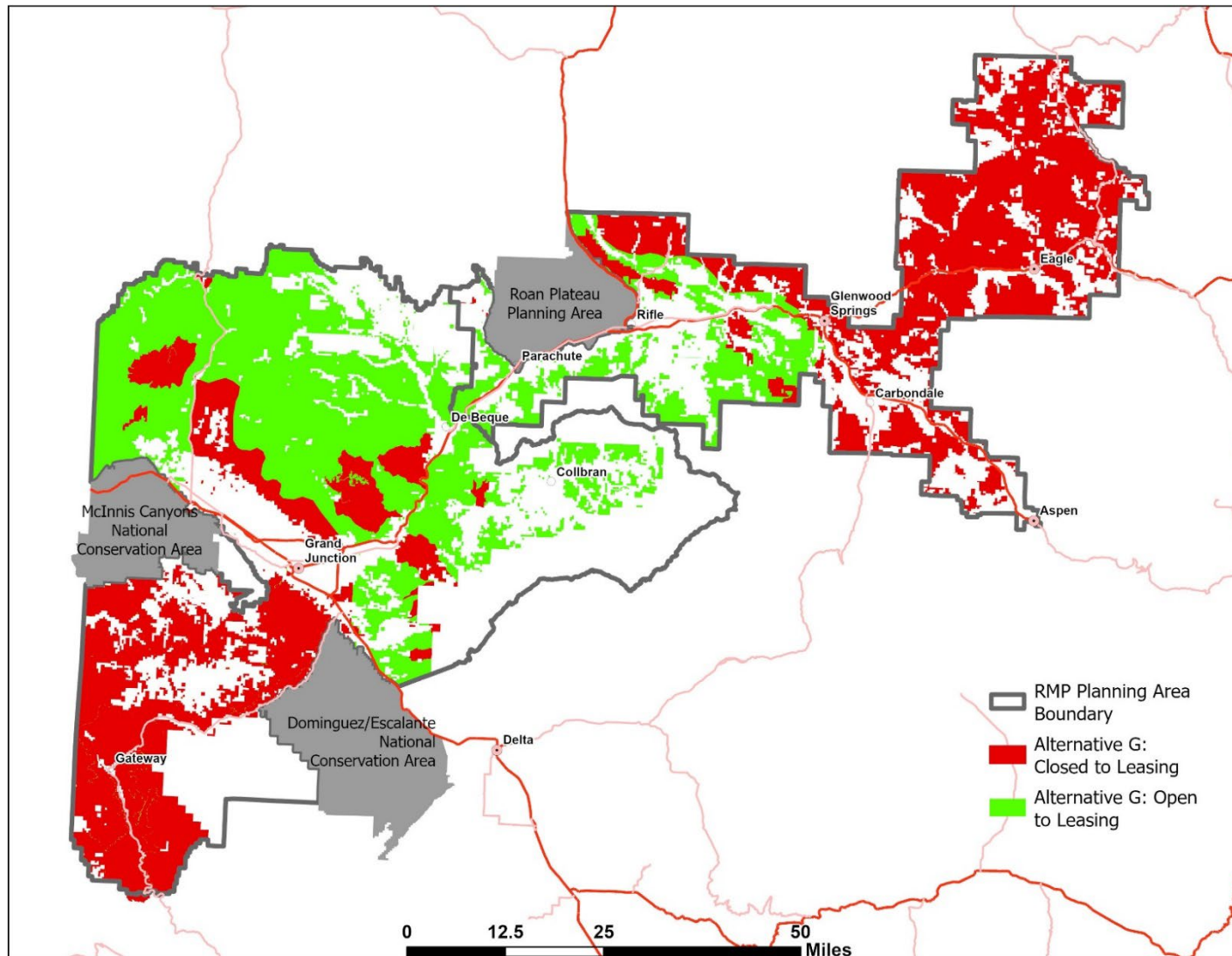


Figure I-2. Alternative G: Existing Leases and Areas Open and Closed to Leasing in GJFO and CRVFO

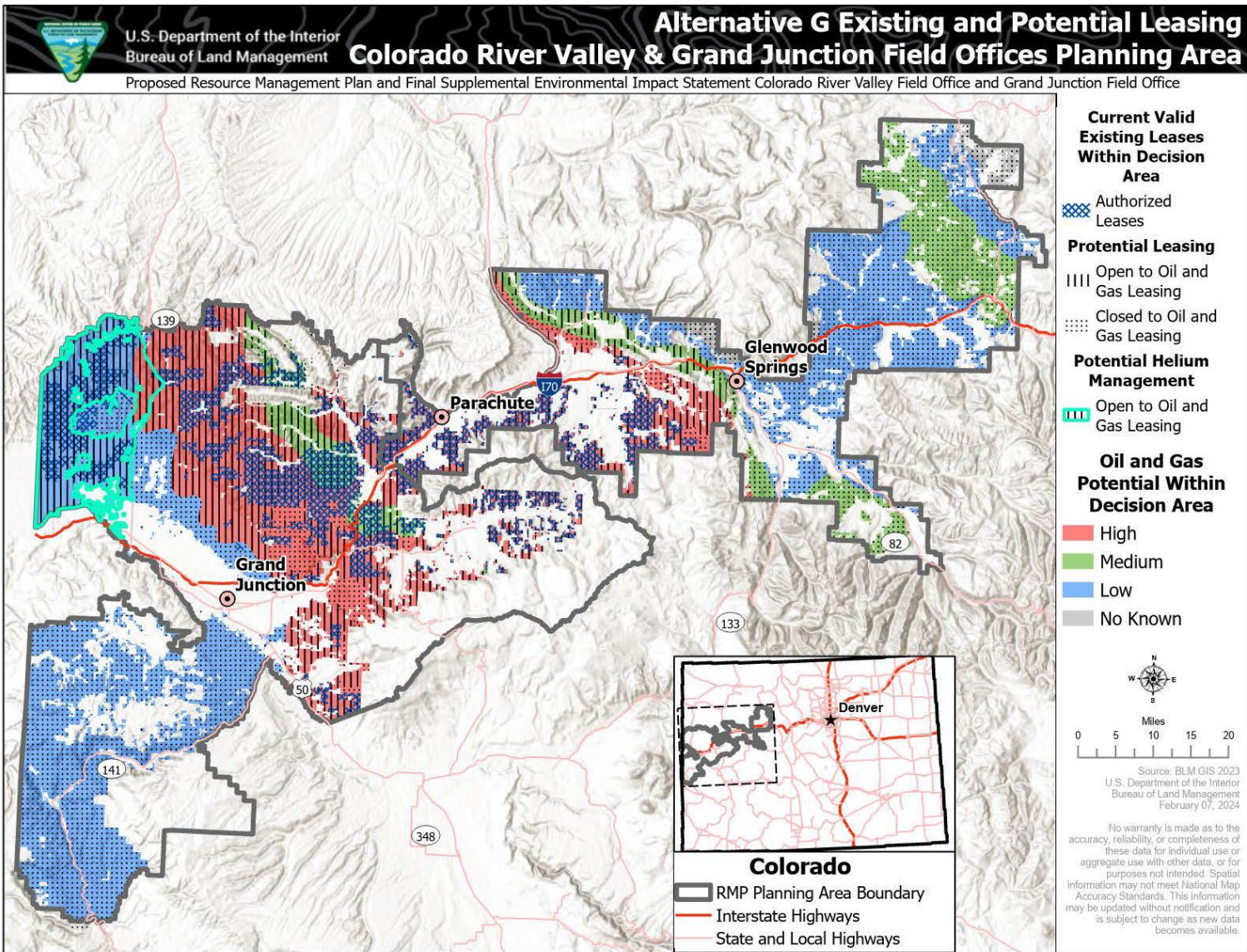


Figure I-3. Alternative G: Existing Leases and Areas Open and Closed to Leasing in CRVFO

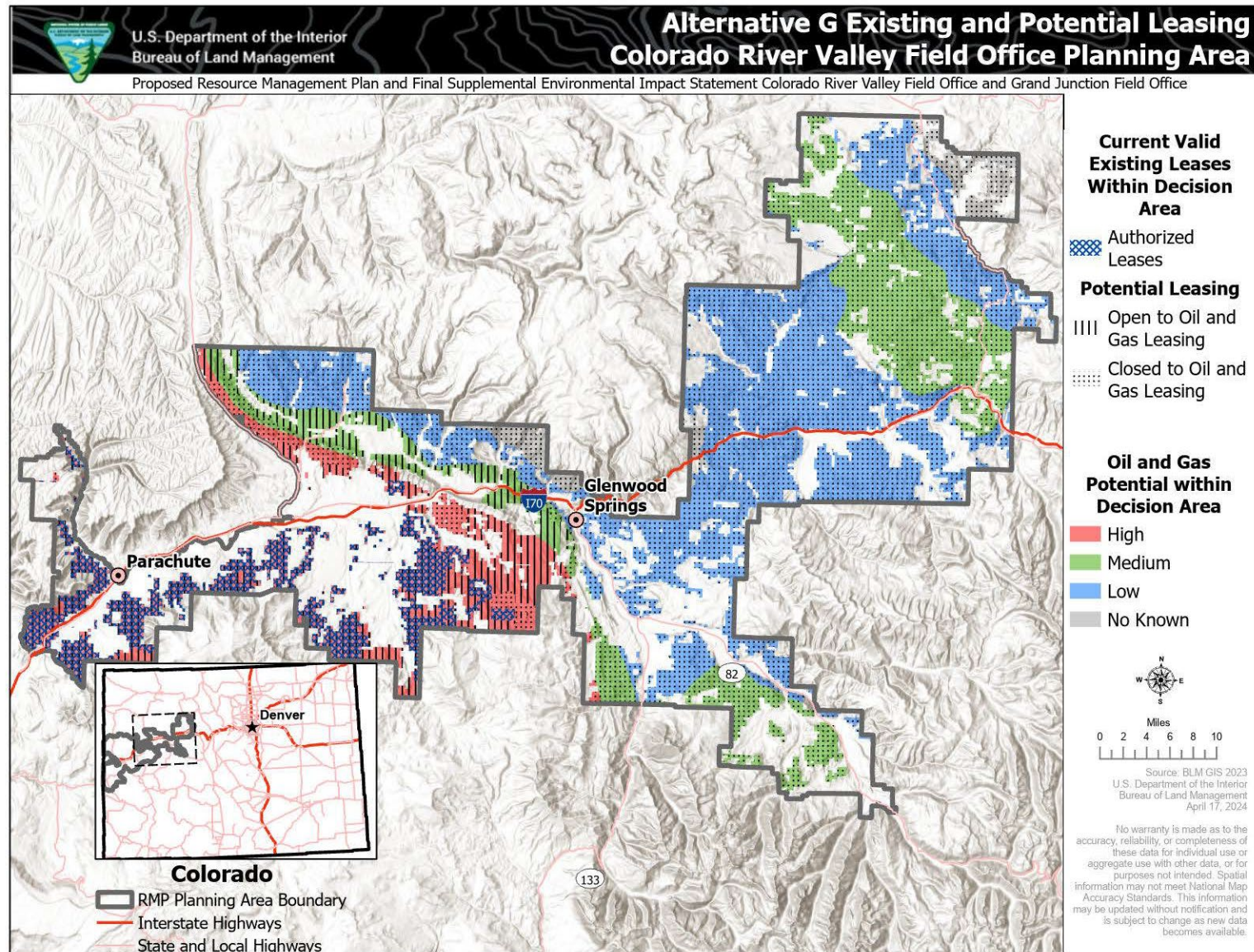


Figure I-4. Alternative G: Existing Leases and Areas Open and Closed to Leasing in GJFO

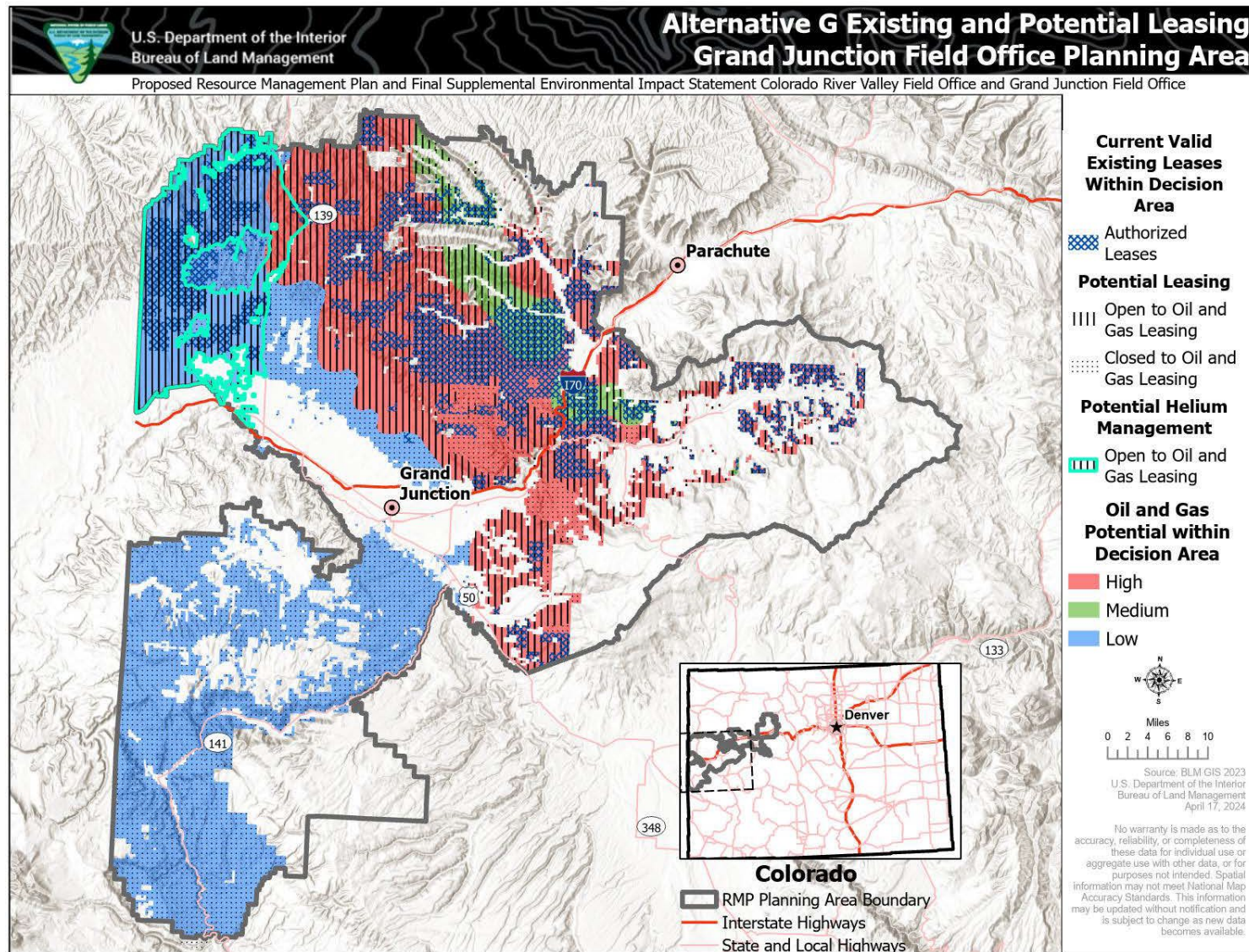


Figure I-5. Alternative G: Areas Open for Leasing – Helium Potential Area in GJFO

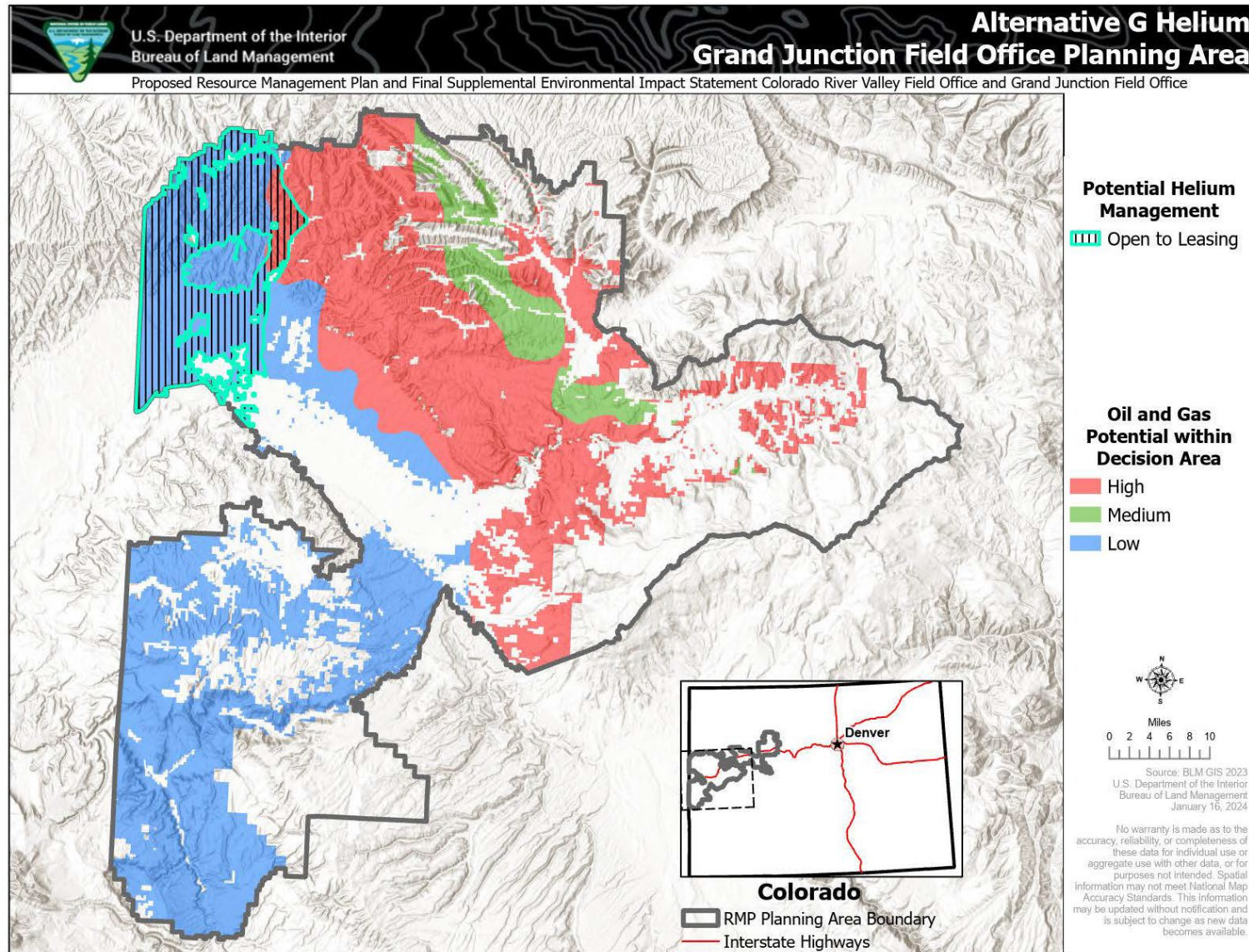


Figure I-6. Alternative G: Areas Open and Closed for Geothermal Leasing in CRVFO

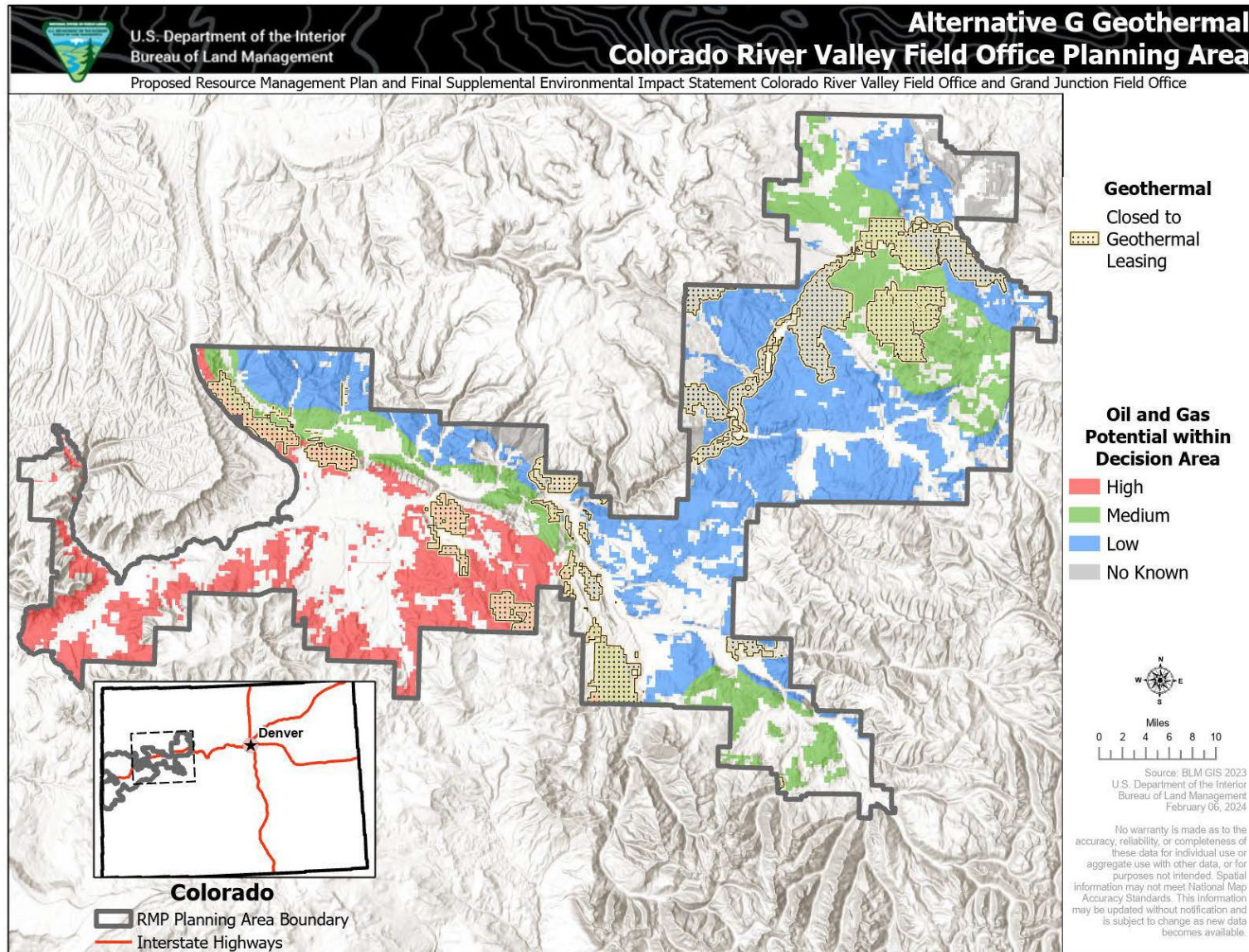


Figure I-7 Alternative G: Areas Open and Closed to Geothermal Leasing in GFJO

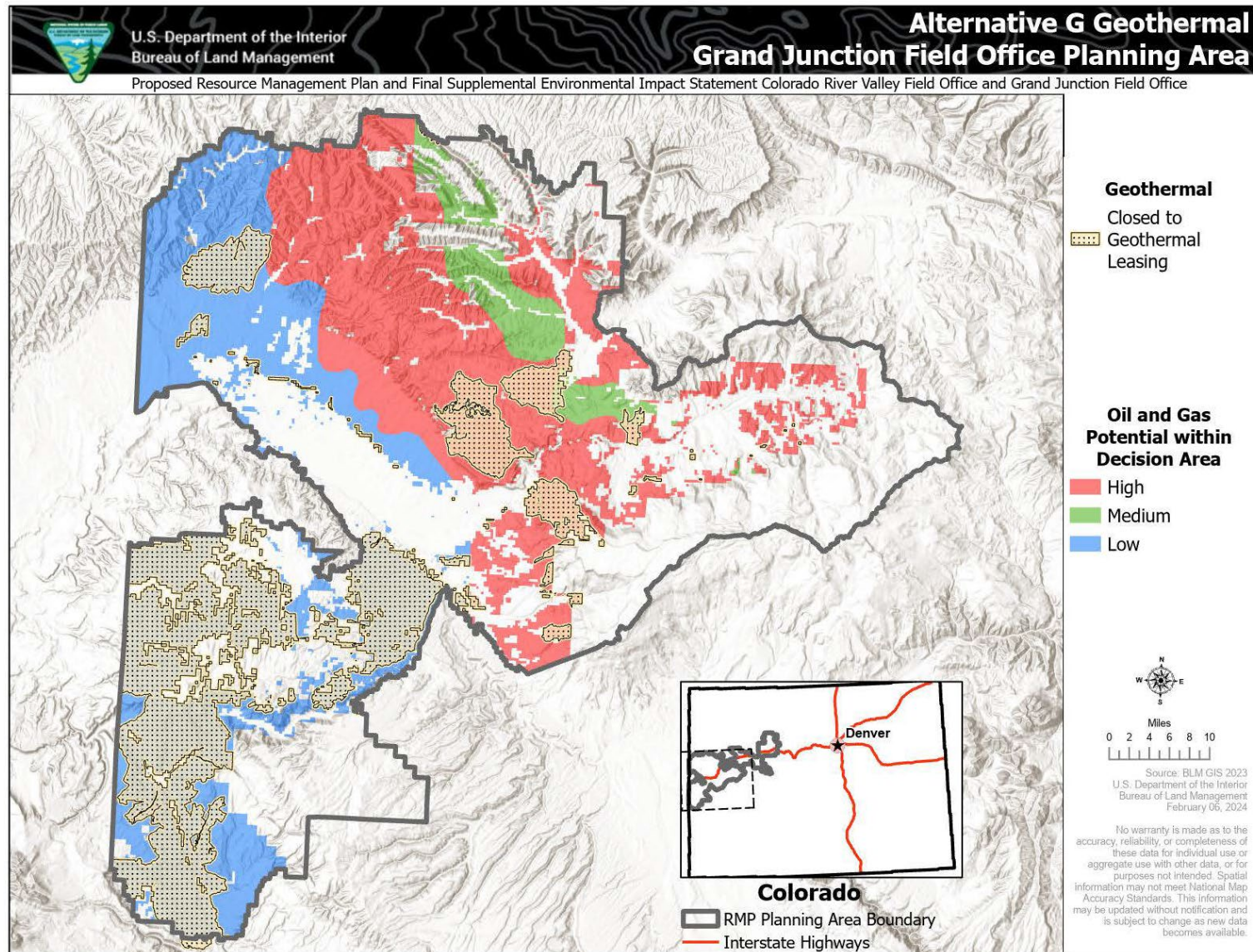


Figure I-8. Alternative G: Areas Closed to Leasing – WSAs and Lands with Wilderness Characteristics in CRFVO

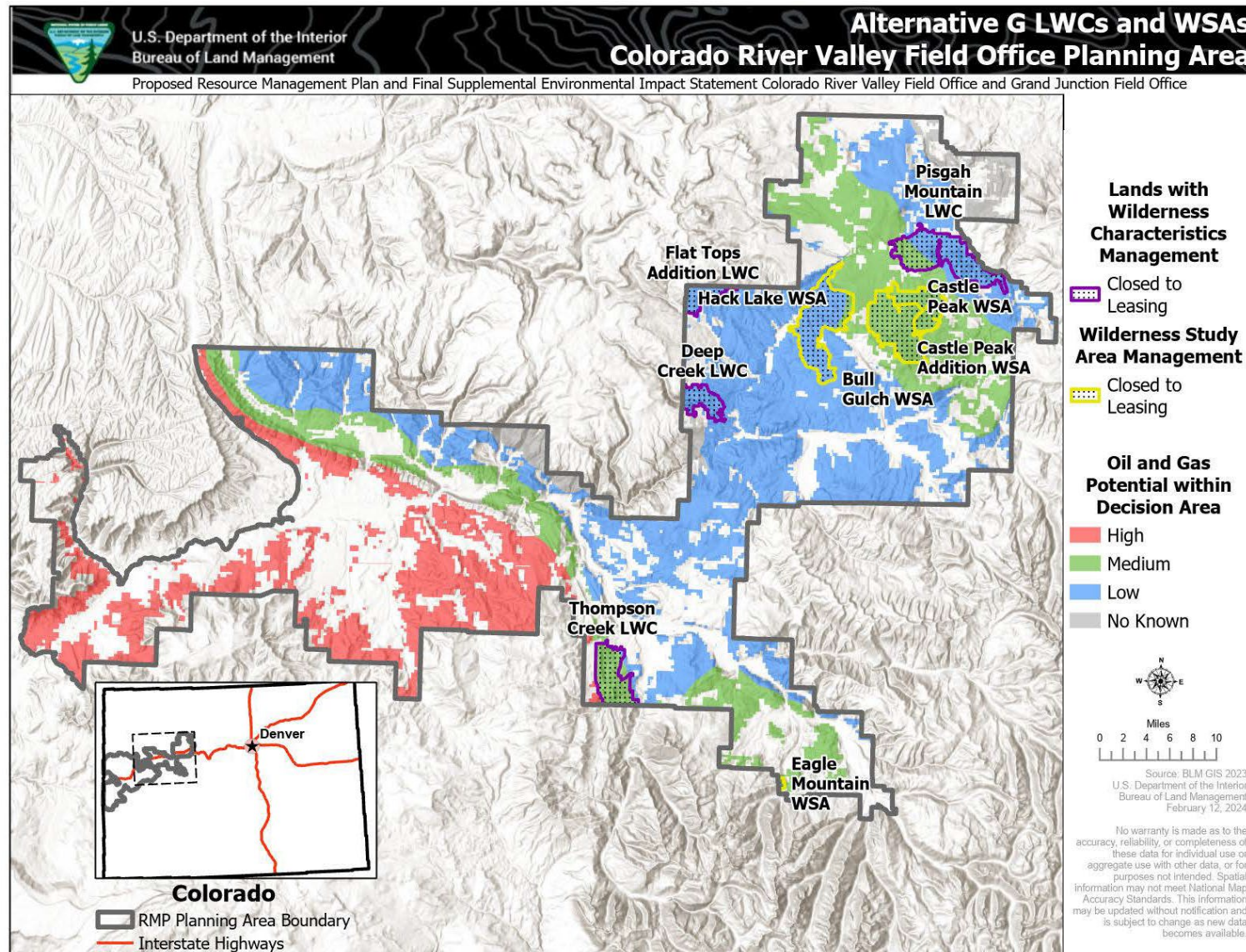


Figure I-9. Alternative G: Areas Closed to Leasing – WSAs and Lands with Wilderness Characteristics in GJFO

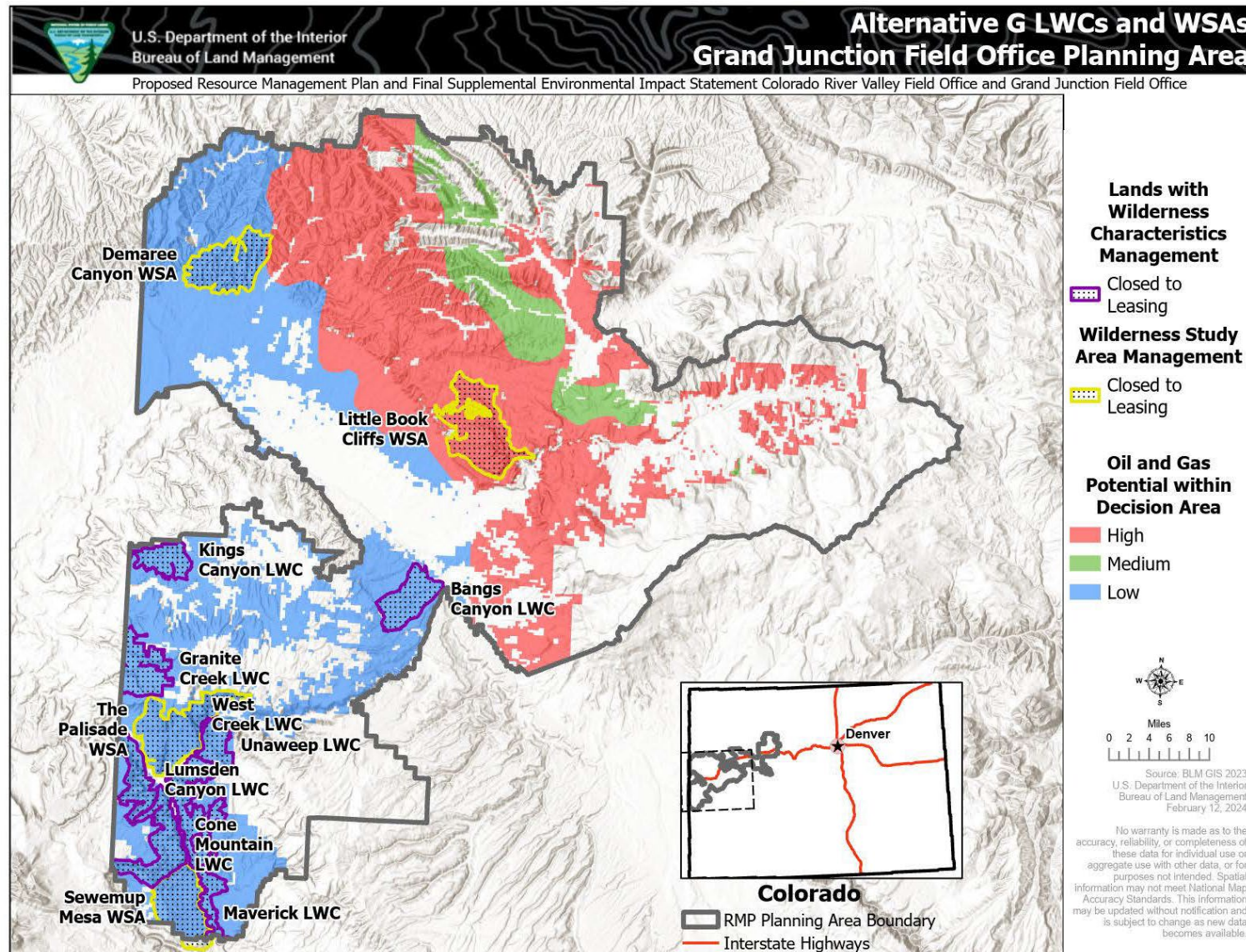


Figure I-10. Alternative G: Areas Closed to Leasing – Special Recreation Management Areas in CRVFO

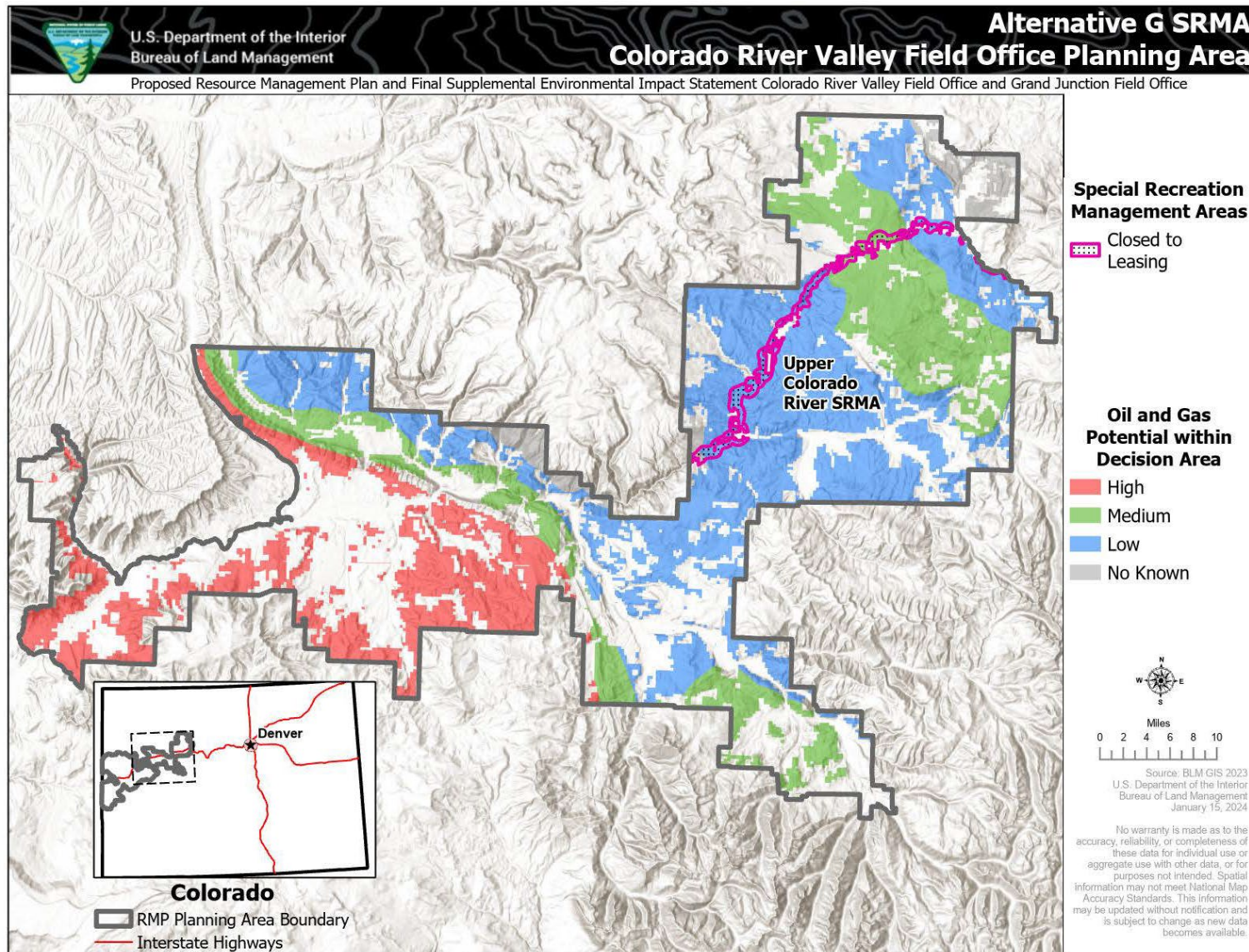


Figure I-11. Alternative G: Areas Closed to Leasing – Recreation Management Areas in GJFO

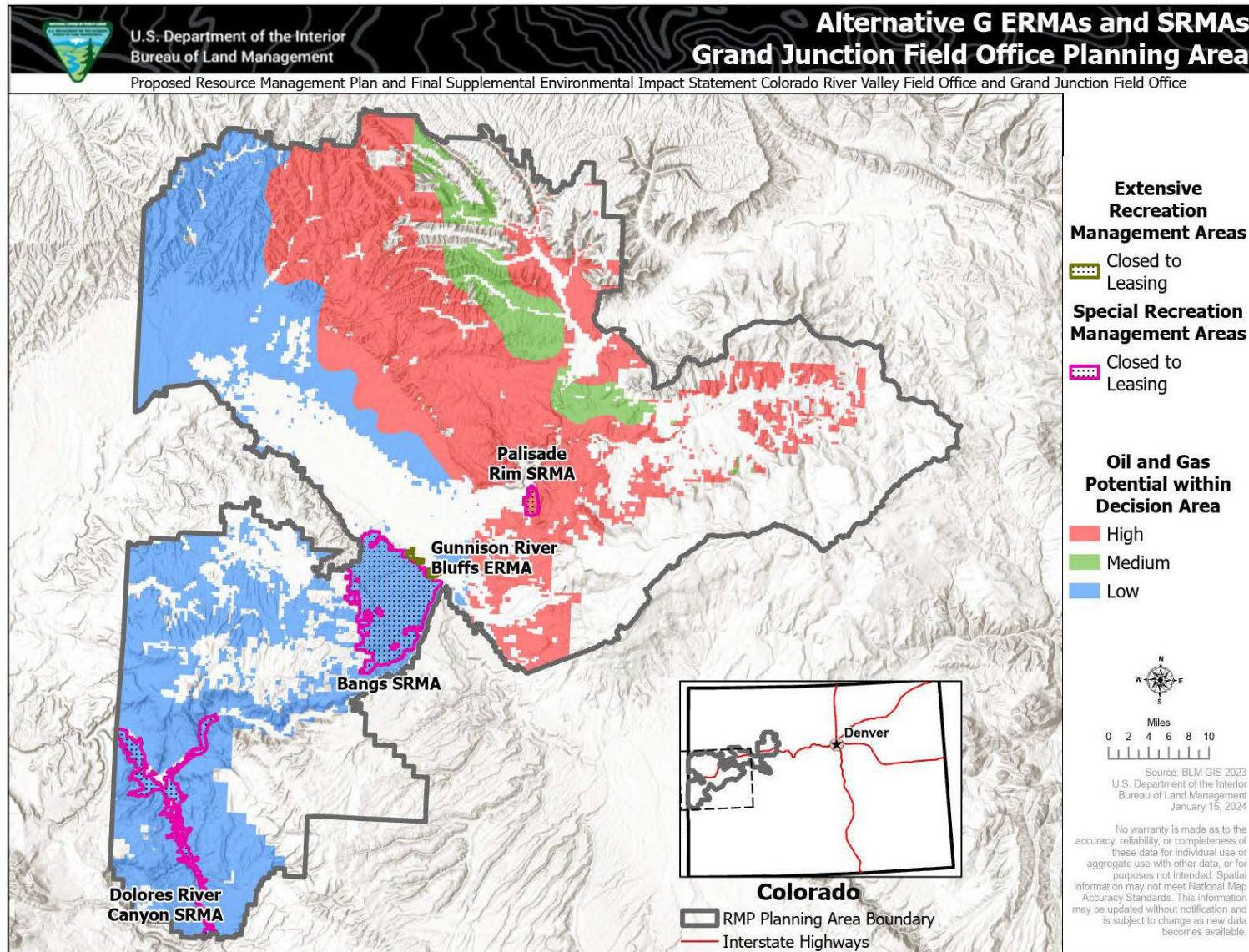


Figure I-12. Alternative G: Areas Closed to Leasing – Areas of Critical Environmental Concern in CRVFO

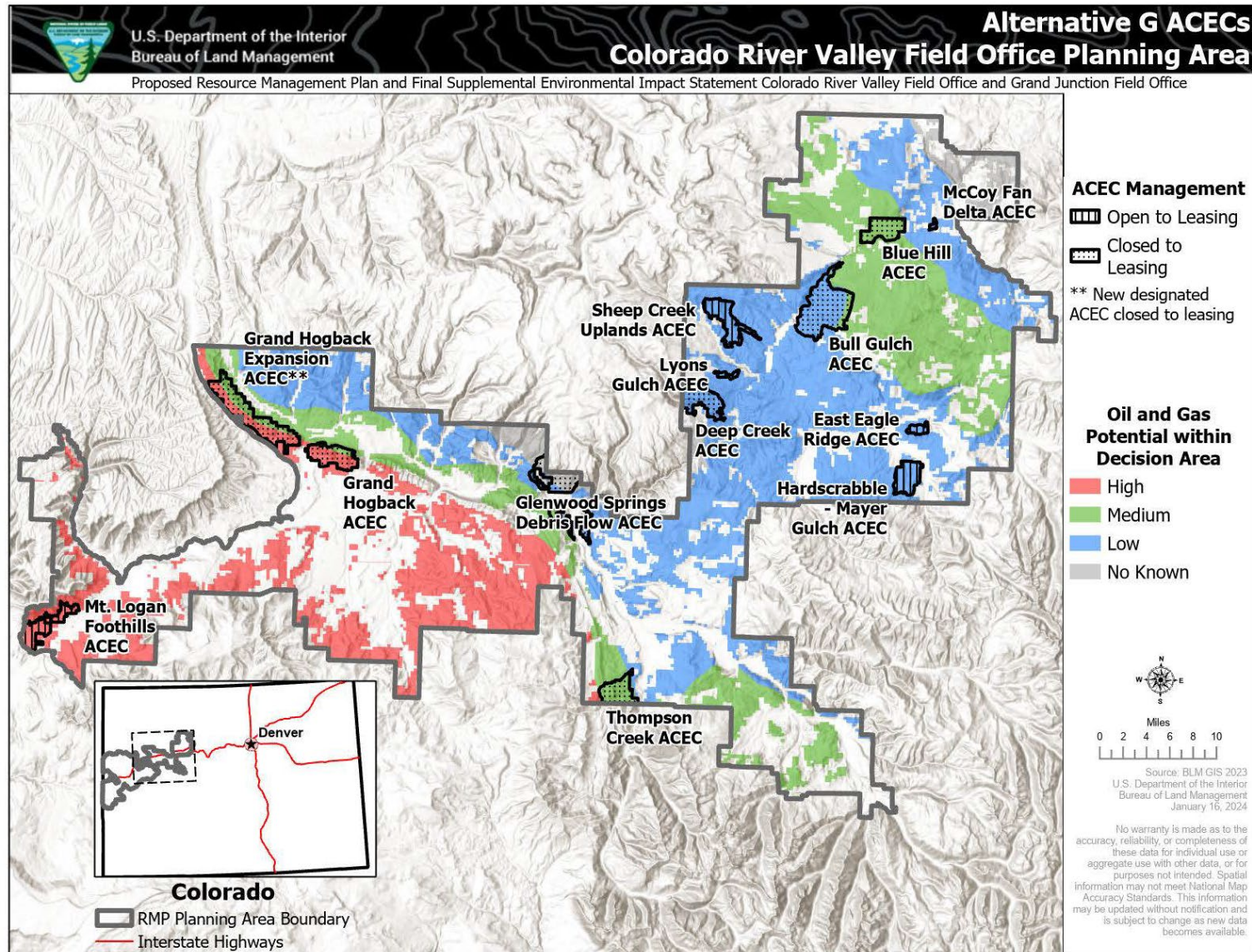


Figure I-13. Alternative G: Areas Closed to Leasing – Areas of Critical Environmental Concern in GJFO

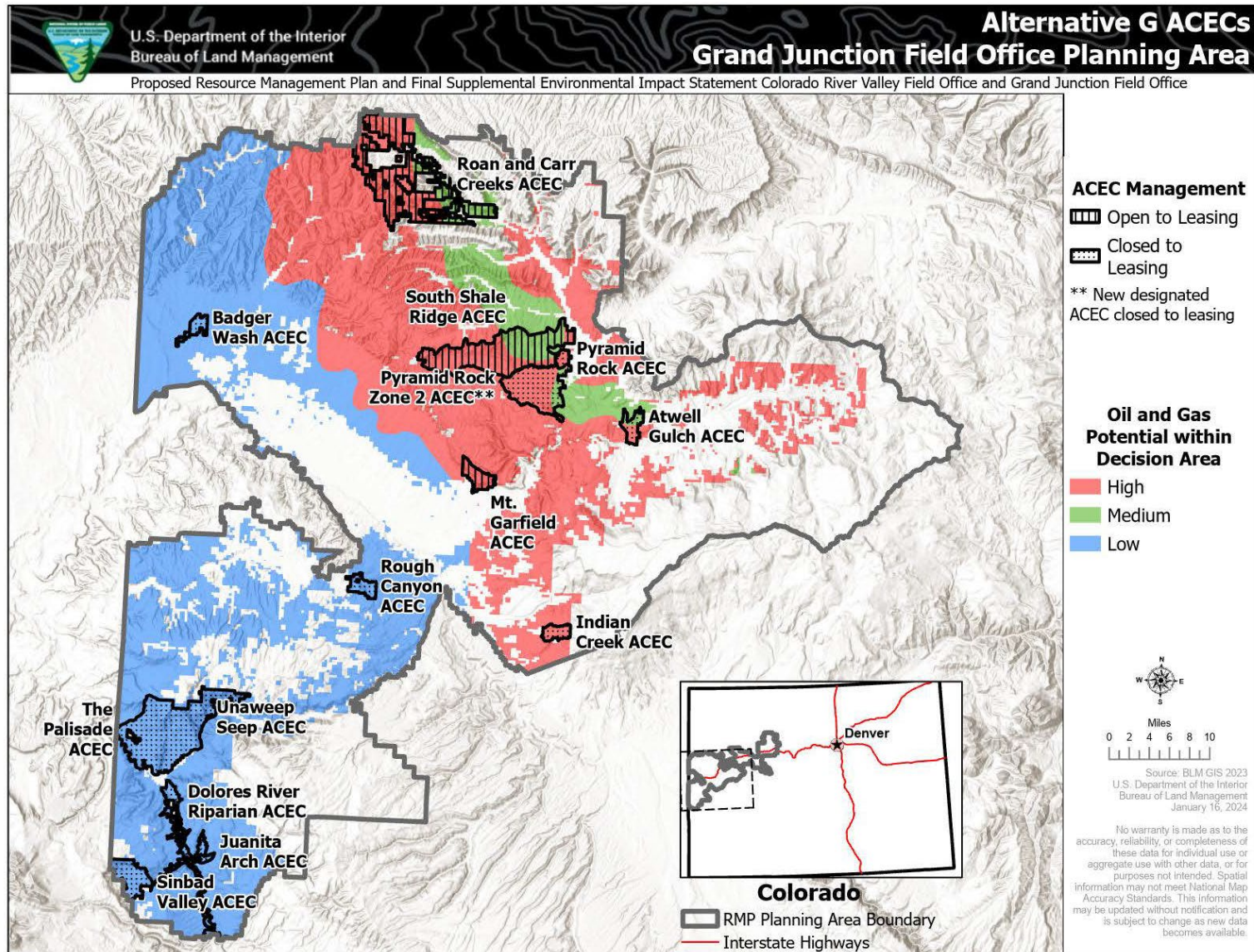


Figure I-14. Alternative G: Areas Closed to Leasing – Wild & Scenic Rivers in CRVFO

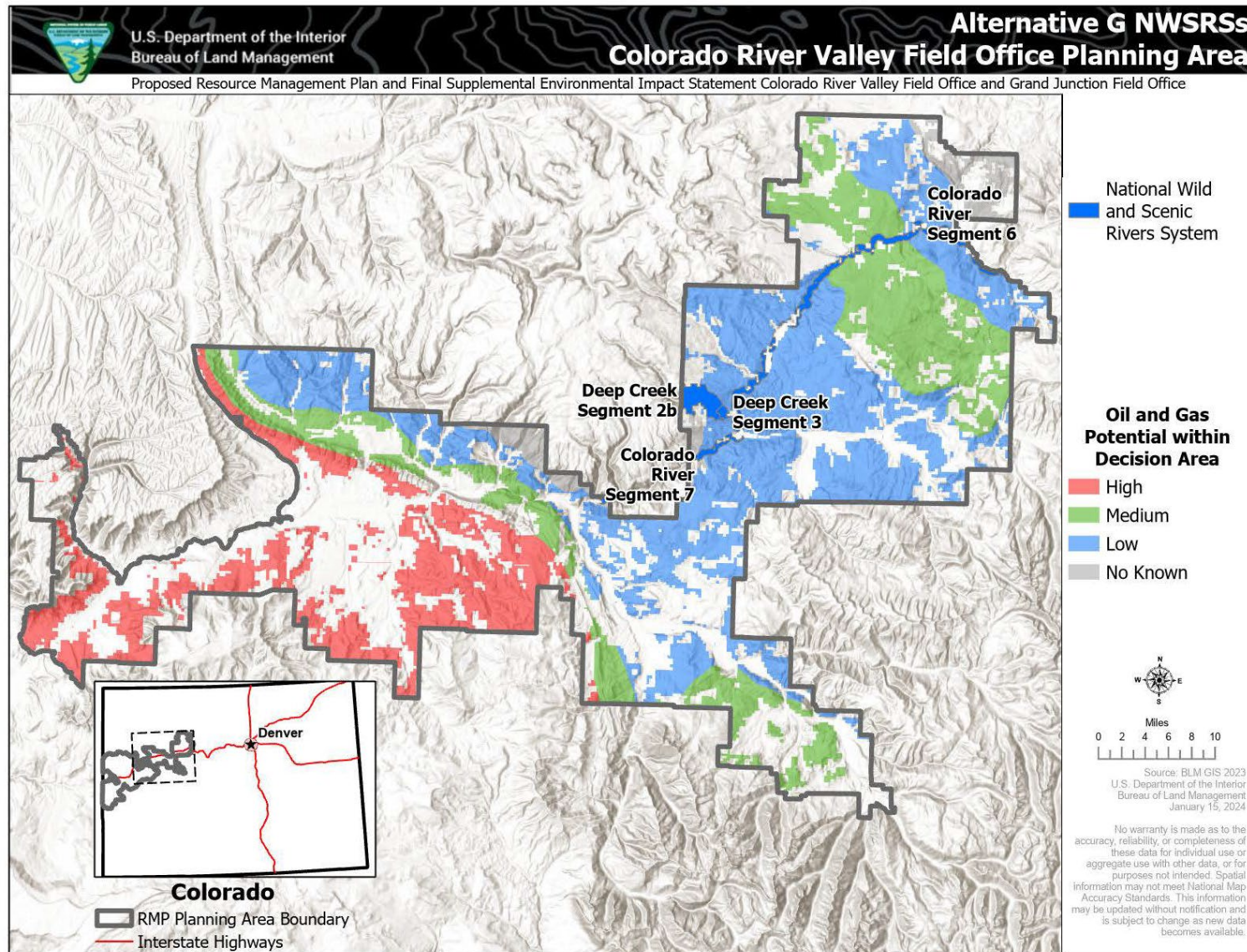


Figure I-15. Alternative G: Areas Closed to Leasing – Thompson Divide Withdrawal Area in CRVFO

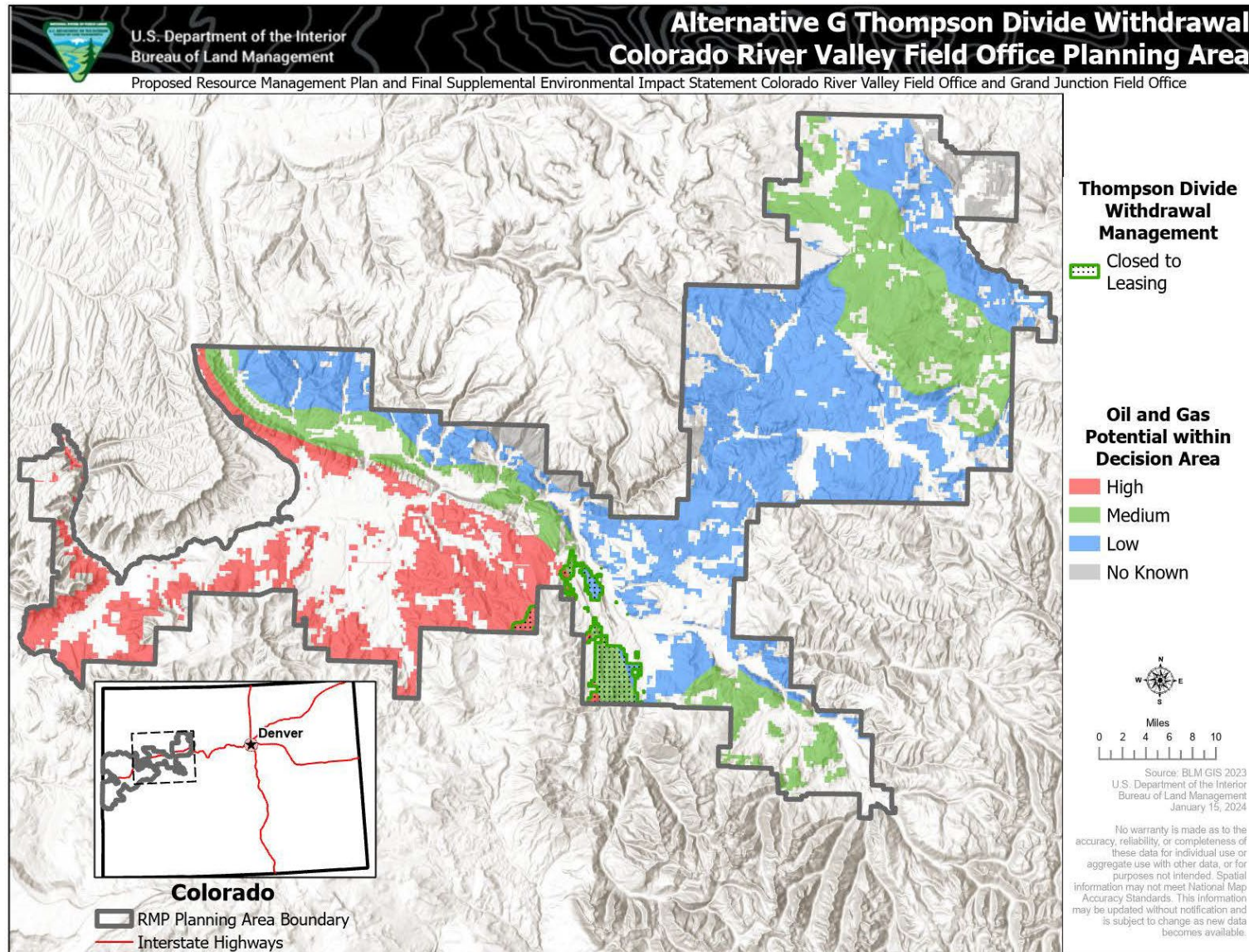


Figure I-16. Alternative G: Areas Closed to Leasing – State Wildlife Areas in CRVFO

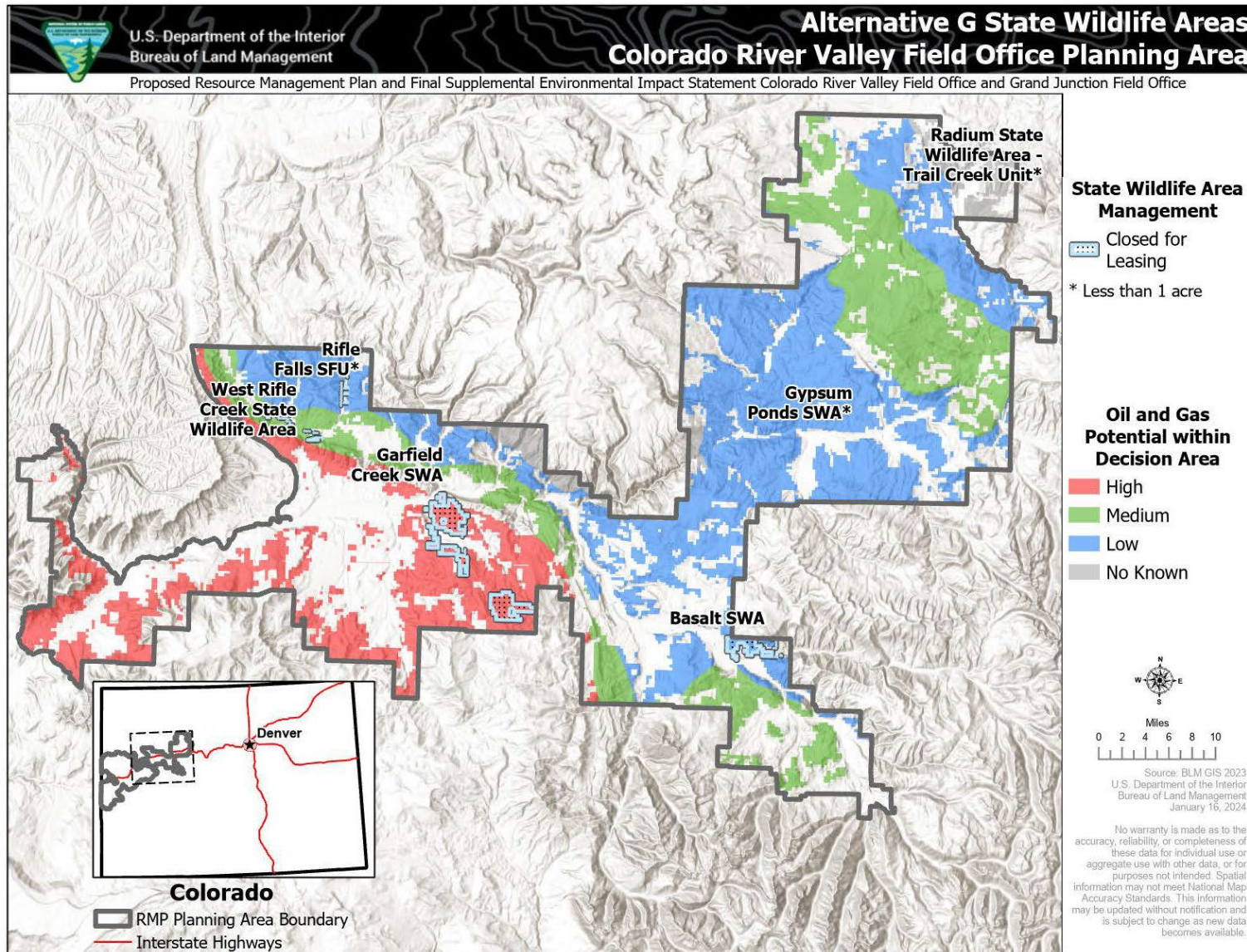


Figure I-17. Alternative G: Municipal Watersheds in GJFO

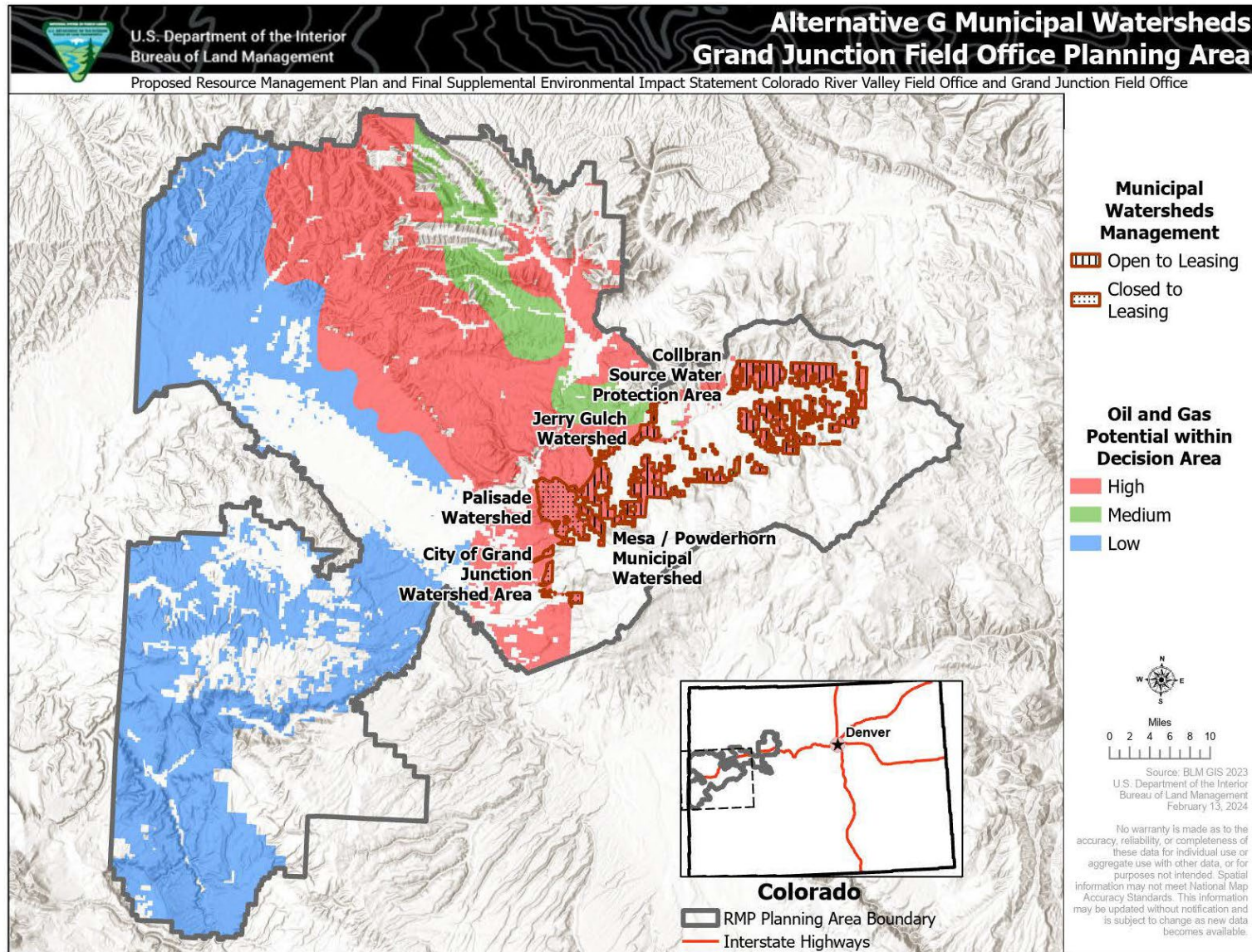


Figure I-18. Alternative G: Areas Closed to Leasing – Bureau of Reclamation Withdrawals in GJFO

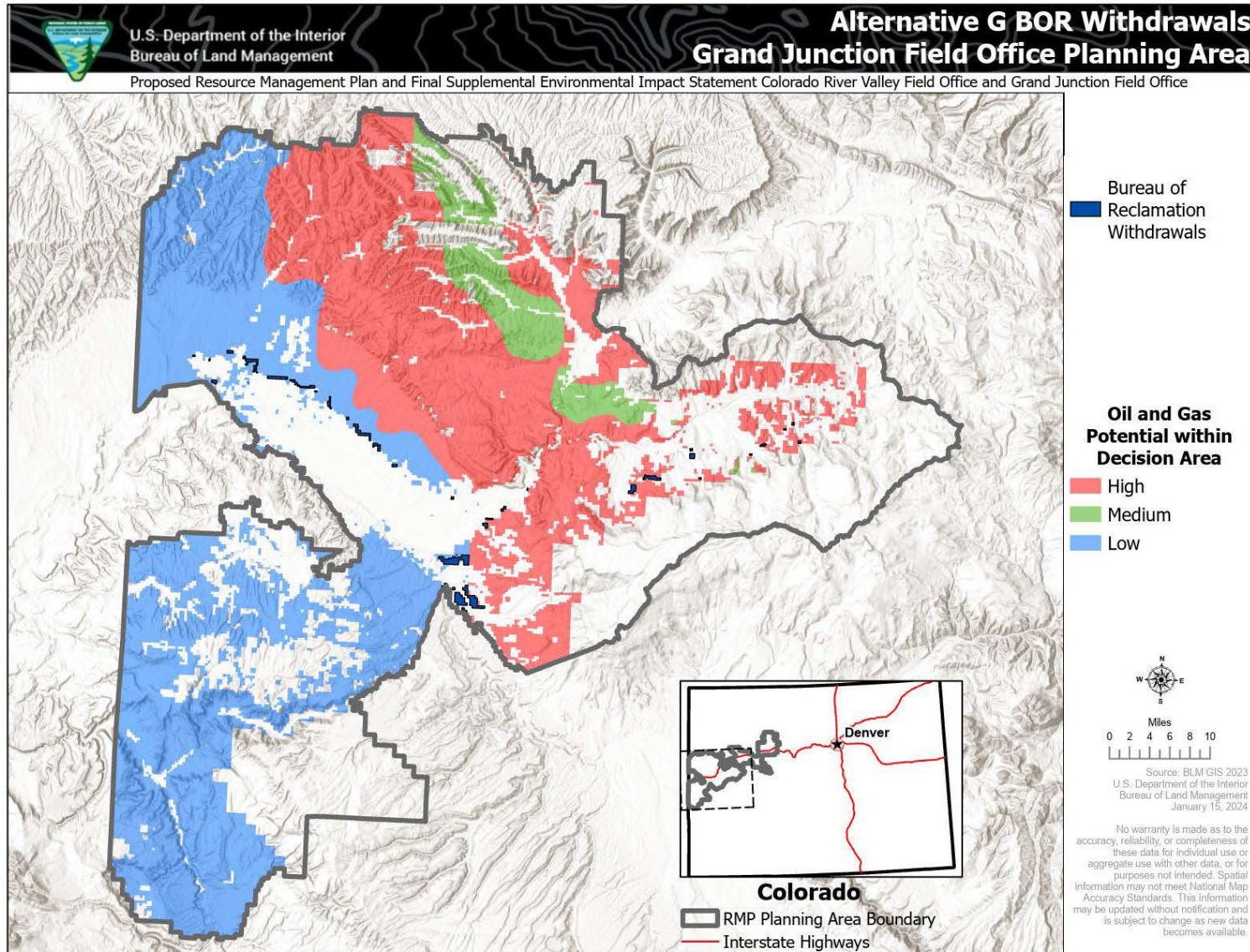
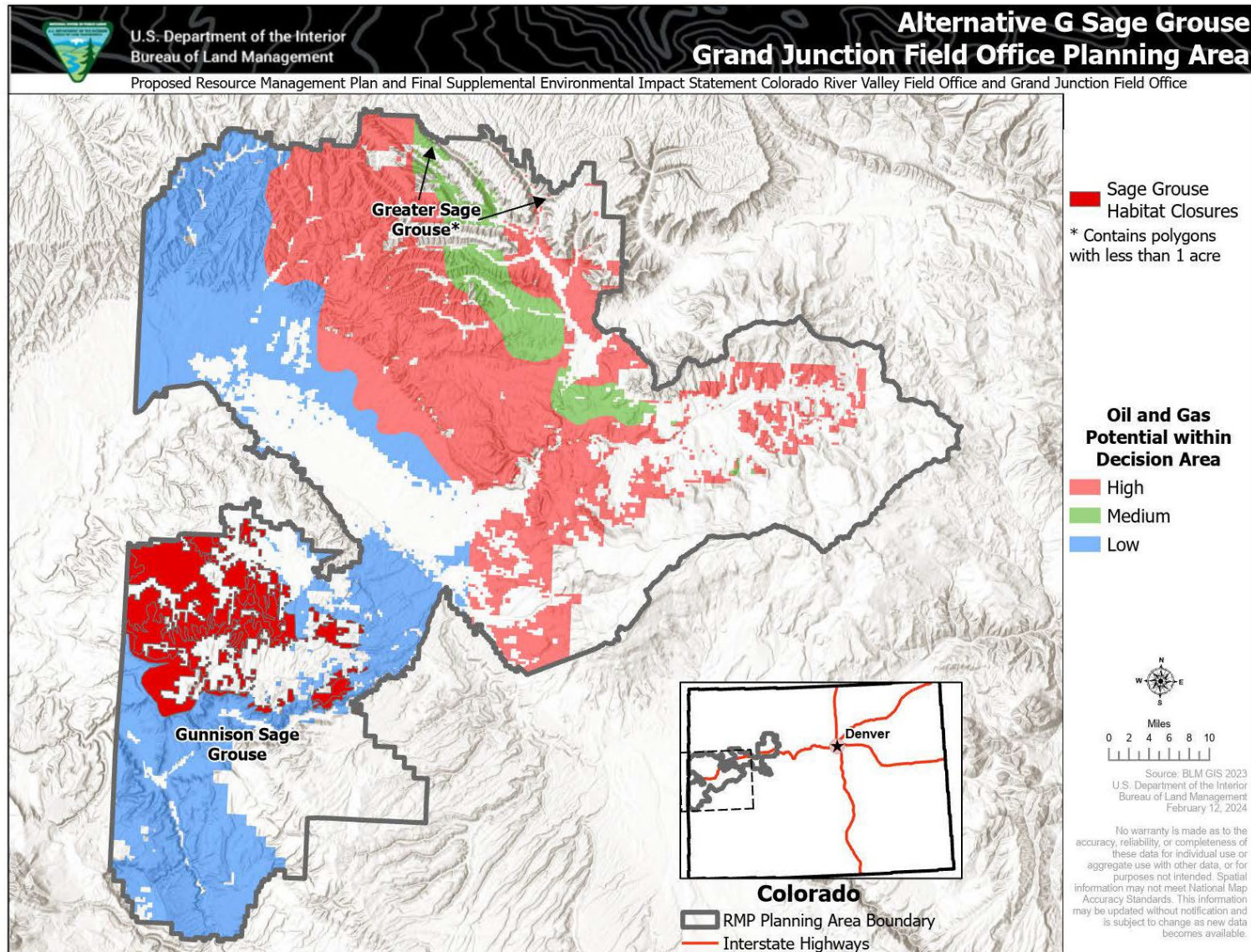


Figure I-19. Alternative G: Areas Closed to Leasing – Sage-grouse Habitat in GJFO



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