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November 1, 2023

Submitted via eplanning.blm.gov

Attn: Stacey Colon
Attn: Bruce Krickbaum
Attn: Supplemental EIS
BLM Upper Colorado River District Office
2815 H Rd.
Grand Junction, CO 81506

Attn: Director Doug Vilsack
BLM Colorado State Director
Denver Federal Center, Building 40
Lakewood, Colorado 80225

Subject: BLM_CO_FRN_MO4500171447 – Comments on the Draft Resource Management Plan and Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office Resource Management Plans, Colorado

Dear Director Vilsack:

Western Energy Alliance, the West Slope Colorado Oil and Gas Association, and the Colorado Oil and Gas Association (the Trades) timely submit the following comments on the U.S. Bureau of Land Management's (BLM) Draft Resource Management Plan (RMP) and Supplemental Environmental Impact Statement (SEIS) for the Colorado River Valley Field Office (CRVFO) and Grand Junction Field Office (GJFO), as noticed for availability in the Federal Register on August 4, 2023. 88 Fed. Reg. 51,855 (Aug. 4, 2023).

Western Energy Alliance (the Alliance) is the leader and champion for independent oil and natural gas companies in the West. Working with a vibrant membership base for nearly 50 years, the Alliance stands as a credible leader, advocate, and champion of industry. Our expert staff, active committees, and committed board members form a collaborative and welcoming community of professionals dedicated to abundant, affordable energy and a high quality of life for all. The majority of independent producers are small businesses, with an average of fourteen employees.

West Slope Colorado Oil & Gas Association (WSCOGA) is a member-based organization focused on promoting the development of natural gas and oil resources in Northwest Colorado. WSCOGA

provides a unified political and regulatory voice for the oil and natural gas industry in the Piceance Basin and Western Colorado. WSCOGA represents over 90 member companies and its mission is to promote the development of Western Colorado natural gas and petroleum products for the benefit of society. WSCOGA is an affiliated chapter of the Colorado Oil & Gas Association – a nationally recognized trade association that promotes the expansion of Rocky Mountain natural gas markets, supply, and transportation infrastructure through its growing and diverse membership.

The Colorado Oil & Gas Association (COGA) is a non-profit trade organization that represents over 200 companies throughout the state of Colorado. For Nearly 40 years, COGA has sought to create a thriving, innovative and respected oil and natural gas industry in Colorado that embodies the values of our communities, prioritizes the protection of our environment, and provides the natural resources that advance our society. COGA provides a positive, unified, and proactive voice for the oil and natural gas industry in Colorado.

Executive Summary of the Trades’ Recommendations

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), with the following features:

- 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.
- 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.

- Reflecting that access to helium resources that BLM admitted are critical to national security, areas with helium resources should be open to leasing.
- 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.
- 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.
- 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.
- 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.

Without the thorough analysis the Trades recommend, BLM will not have satisfied the hard-look requirements of NEPA. The Trades do note, however, that BLM has accomplished the analysis of GHGs required by the court.

I. The Geological Assessment that is the Basis for BLM’s Reasonable Foreseeable Development (RFD) Analysis Must be Updated

The Trades’ Recommendations in this Section

- 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.

- 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.

Overview of the Issue

The SEIS states on page 1-2 that it has evaluated the RFD scenarios from the 2014 and 2015 Proposed RMPs/Final EIS and determined that the two RFDs remain valid and that geology remains constant. However, what does not remain constant is technology to access that geology. Despite huge advances in technology that enable recovery of more resources than were possible in 2002 and an updated USGS assessment, BLM assumes old technology and persists with outdated information.

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,¹ 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.

According to the 2002 USGS assessment, total undiscovered resources in both the Uinta Basin in Utah and the Piceance Basin in Colorado from Glenwood Springs to the Colorado/Utah border are:²

- 21 trillion cubic feet (Tcf) of natural gas.³
- 60 million barrels of oil.
- 43 million barrels of natural gas liquids.

The Trades acknowledge that BLM did develop supplemental RFD documents for the Glenwood Springs Field Office (now called CRVFO) in 2008 and the GJFO in 2012. While these documents relied heavily on the 2002 USGS assessment, the RFDs also included information regarding

¹ BLM, Appendix S – Reasonable Development Scenario: Oil and Gas in the Glenwood Springs Field Office, https://eplanning.blm.gov/public_projects/lup/68506/110860/135765/34_Appendix_R_RFDS_Oil_and_Gas.pdf.

² [Assessment of Undiscovered Oil and Gas Resources of the Uinta-Piceance Province of Colorado and Utah](#), USGS, 2002.

³ All estimates in this bullet point list are the mean.

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.

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.

The 2016 USGS Resource Assessment was based on the Piceance alone and does not include the entire Uinta Basin in Utah. (See Figures 1 and 2 for area comparisons).

Even by excluding the entire Uinta Basin, the 2016 USGS Resource Assessment found significantly greater potential oil and natural gas resources than the 2002 USGS Resource Assessment, as shown in Table 1. Since the Uinta Basin was excluded, the increase in potential resources in the Piceance are even greater than the percentage increase shown in the last column.

Table 1 – Comparison of the USGS 2002 and 2016 Resource Assessments

Resource	2002 USGS Assessment	2016 USGS Assessment	% Increase
Natural Gas	21 trillion cubic feet	66.3 trillion cubic feet	318% increase
Oil	60 million barrels	74 million barrels	23% increase
Natural Gas Liquids	43 million barrels	45 million barrels	5% increase

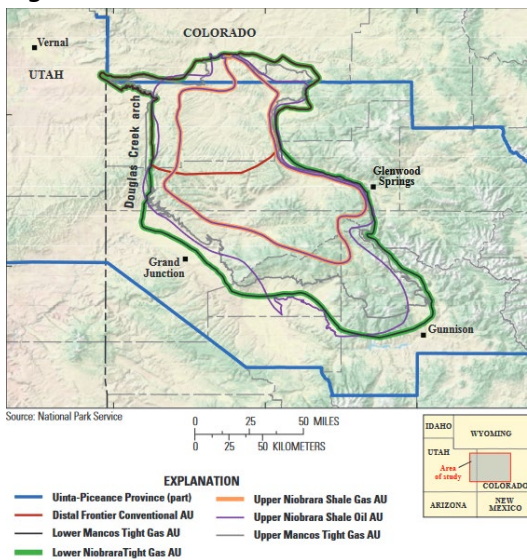
This updated USGS Resource Assessment was not available to the BLM during the 2014 CRVFO RMP/Final EIS and 2015 GJFO RMP/Final EIS, but the assessment is readily available to BLM now for this SEIS.

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.

Figure 1 – 2002 USGS Resource Assessment Area



Figure 2 – 2016 USGS Resource Assessment Area



BLM Must Update its RFD Analysis to Reclassify Areas by Potential Using the 2016 USGS Resource Assessment as the Base and *Not* the Outdated 2002 USGS Resource Assessment

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.

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.

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.

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.

II. Technological Innovation in the Oil and Natural Gas Industry Continuously Expands Technically Recoverable Reserves

The Trades' Recommendations in this Section

- 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.
- 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.
- Rather than simply closing lands to oil and natural gas leasing, BLM has the ability to assign stipulations to areas to ensure appropriate levels of protection for other natural resources such as wildlife, air, and water resources.

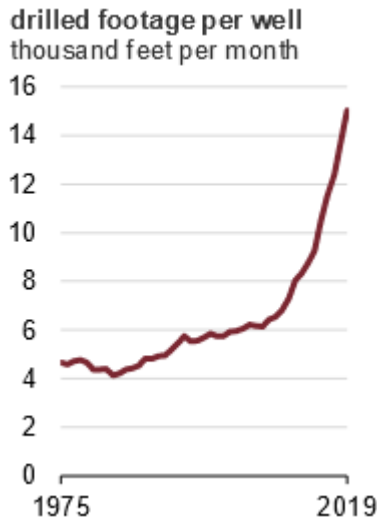
Technological Advancements in Drilling Operations

As discussed above, 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),

Figure 3 – Drilled Footage Per Well in the United States 1975 to 2019



In the Denver-Julesburg (DJ) Basin of Colorado, horizontal well development started in 2010. Prior to 2010, operators drilled what were known as “S Shaped” directional wells that had a lateral reach of roughly 1,000 feet away from the wellhead. These “S Shaped” directional wells have largely been superseded in the DJ Basin by horizontal wells, which are well-suited to the DJ Basin’s geology.

According to World Oil, initial lateral lengths for horizontal wells in the DJ in 2010 to 2011 were 4,000 to 5,000 feet. Lateral lengths have since increased to over 9,000 feet and occasionally even up to three miles.⁶

This data is confirmed by the Information Handling Services (IHS) database, which is sourced from state regulatory data. The data shown in Figure 4 was accessed from the IHS database on October 3, 2023. In Colorado, the average total depth of wells drilled increased from 11,766 feet in 2010 to 18,381 feet in 2023. The data show lateral lengths increased from 4,566 feet in 2010 to 11,181 feet in 2023, about a 2.5-fold increase, and allowing more resources to be accessed.

⁶ [“EOR/IOR technology: Advanced shale oil EOR methods for the DJ basin,” World Oil, May 2023.](#)

Figure 4 – Average Lateral Length in the DJ Basin 2010 to 2023

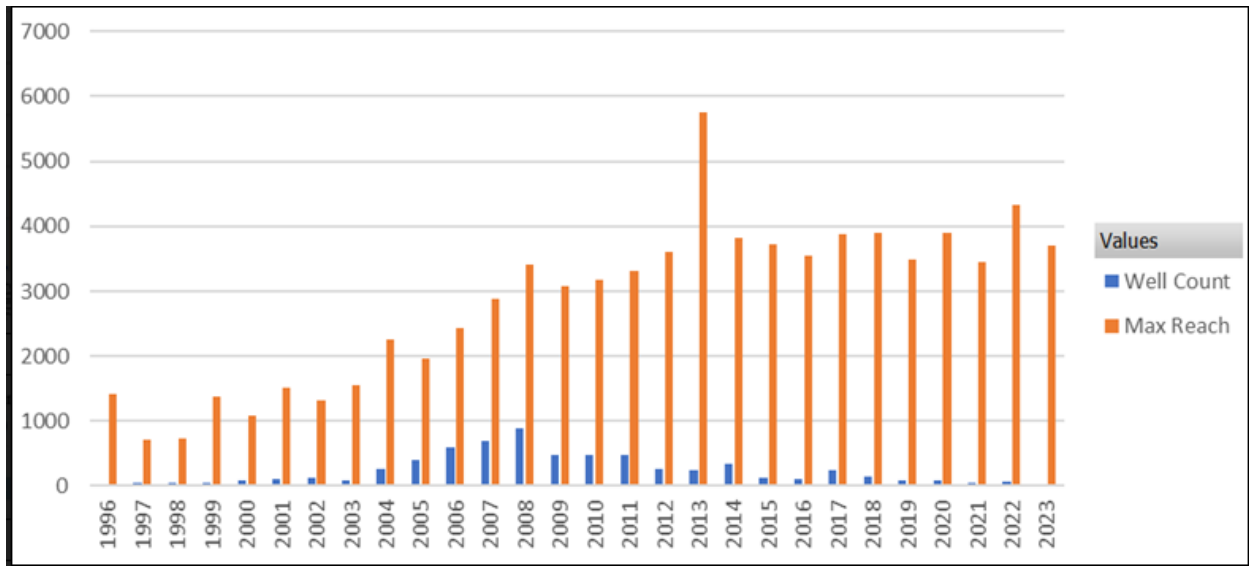
Year	Horizontal Well Count	Average of Total Depth	Average Lateral Length	Miles
2010	25	11,766	4,566	0.86
2011	238	11,307	4,107	0.78
2012	592	11,562	4,362	0.83
2013	1071	11,950	4,750	0.90
2014	1477	12,903	5,703	1.08
2015	1115	13,195	5,995	1.14
2016	680	14,643	7,443	1.41
2017	1318	15,125	7,925	1.50
2018	1277	15,906	8,706	1.65
2019	1137	16,502	9,302	1.76
2020	509	16,795	9,595	1.82
2021	536	17,480	10,280	1.95
2022	491	17,203	10,003	1.89
2023	18	18,381	11,181	2.12

Turning to the Piceance Basin, there are two technological success stories about increased access to mineral resources with less surface disturbance. The first is that oil and natural gas operators have increased the number of wells drilled from a single pad from, on average, 2.5 in 2002 to 9.1 in 2016.⁷ This was accomplished by oil and natural gas operators moving from vertical wells to directional wells.

The second success story is that oil and natural gas operators were able to increase the lateral reach of these directional wells. Figure 5 shows the maximum lateral reach for a large Piceance Basin operator for wells drilled between 1996 and 2023. As Figure 5 shows, the maximum reach in the early 2000s was well under 2,000 feet, but that number doubled by the 2020s. By increasing lateral reach, more resources can be produced from a single well pad.

⁷ [“Oil and gas development footprint in the Piceance Basin, western Colorado,”](#) Cericio Martinez and Todd M. Preston, *Science Direct*, March 2018.

Figure 5 – Maximum Well Reach for a Piceance Basin Operator 1996 to 2023



Technological Advancements in Completions Operations

As with advancements in drilling discussed above, advancements in completions and hydraulic fracturing technologies have enabled development of previously unrecoverable resources. Hydraulic fracturing first started in 1947 and has grown exponentially over the past few decades unleashing tight shale basins across the country. Below are some examples of hydraulic fracturing improvements:⁸

- Stage count⁹ and intensity of hydraulic fracturing has increased. The average stage count has risen to 40 stages/well, with average stage spacing dropping from 350 ft/stage in 2010 to 200 ft/stage in 2017.
- Proppant and fluid volumes grow to new heights. From 2010 to 2017, average proppant mass spiked to 1,600 lbs/ft from 500 lbs/ft and fluid volumes increased to 33 bbl/ft from 13 bbl/ft.

⁸ [“Exploring the Innovative Evolution of Hydraulic Fracturing,”](#) Matt Zborowski, *Journal of Petroleum Technology*, June 2, 2019.

⁹ Hydraulic fracturing is done in a series of “stages” starting at the toe of the well. The length of stages can vary by area, by formation and by operator. Stages are necessary because it takes a tremendous amount of pumping horsepower to create fractures. Thus, it is only practical to perform in limited increments. Also, fracture patterns are easier to control in small stages and can be implemented more uniformly. The number of stages will depend on the length of the lateral and the length of the stages. A 10,000-foot lateral with 250’ stage length would have about 40 stages.

- Pump rate take off. The rate per lateral foot increased to 0.42 bpm/ft in 2017 from 0.16 bpm/ft in 2010 in an effort to improve diversion, accompanied by a rapid increase in frac fleet horsepower.

All three of these technological advancements have worked together to get more oil and natural gas out of a single well. Stage count increases allow for more “side streets” (fractures of the rock) to be built that have access to the main highway (the well bore). The proppant and pump rate advancements allow for the fractures to go out further away from the well bore and be wider (like adding a lane to Interstate 70 will allow for more throughput), therefore allowing more oil and natural gas to travel from these side roads to the wellbore.

Figure 6 below shows at least some of the enhancements of completions operations from 2012 to 2017.

Figure 6 – Technological Advancements in Hydraulic Fracturing in the U.S 2012 to 2017

Parameter	Unit	2012 Average*	2017 Average*	Change
Lateral Length	ft	5580	7625	37%
Stage Count		19.3	38.6	100%
Stage Intensity	ft/stage	296	208	-30%
Proppant Mass	lbs	3,506,284	11,891,000	239%
Proppant Mass per Lateral Foot	lbs/ft	677	1,632	141%
Fluid Volume	bbl	74,411	243,983	228%
Fluid Volume per Lateral Foot	bbl/ft	14.4	33.2	131%
Average Proppant Concentration	PPG	1.17	1.21	3%
Max Rate	bpm	57.6	81.7	42%
Max Rate per Lateral Foot	bpm/ft/stage	0.20	0.42	105%
365-Day Cumulative Oil	BO	61,044	108,209	77%
365-Day Cumulative Oil per Lateral Foot	BO/ft	12.2	17.7	46%
365-Day Cumulative Oil Equivalent	BOE	91,465	159,942	75%
365-Day Cumulative Oil Equivalent per Lateral Foot	BOE/ft	18.2	25.7	41%
Well Cost	Million \$	\$7.2	\$5.1	-29%
Cost per Barrel Oil Equivalent	\$/1-Year BOE	\$86	\$32	-63%
Cost per Barrel Oil	\$/1-Year BO	\$128	\$46	-64%

*Averaged over 10 basin / formations: Williston Middle Bakken and Three Forks, PRB Niobrara and Frontier/Turner, DJ Codell and Niobrara, Delaware Basin Wolfcamp and Bone Spring, Midland Basin Wolfcamp and Eagle Ford; Production metrics from 2016 wells.

BLM Should Recognize that Technological Advancements are Likely to Increase the Resource Potential in the Planning Areas in the Near- and Long-Term

The three-fold increase of natural gas resources between the 2002 and 2016 USGS resource assessments clearly demonstrates how technically recoverable resources grow as technology advances and knowledge of geologic information expands.

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

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

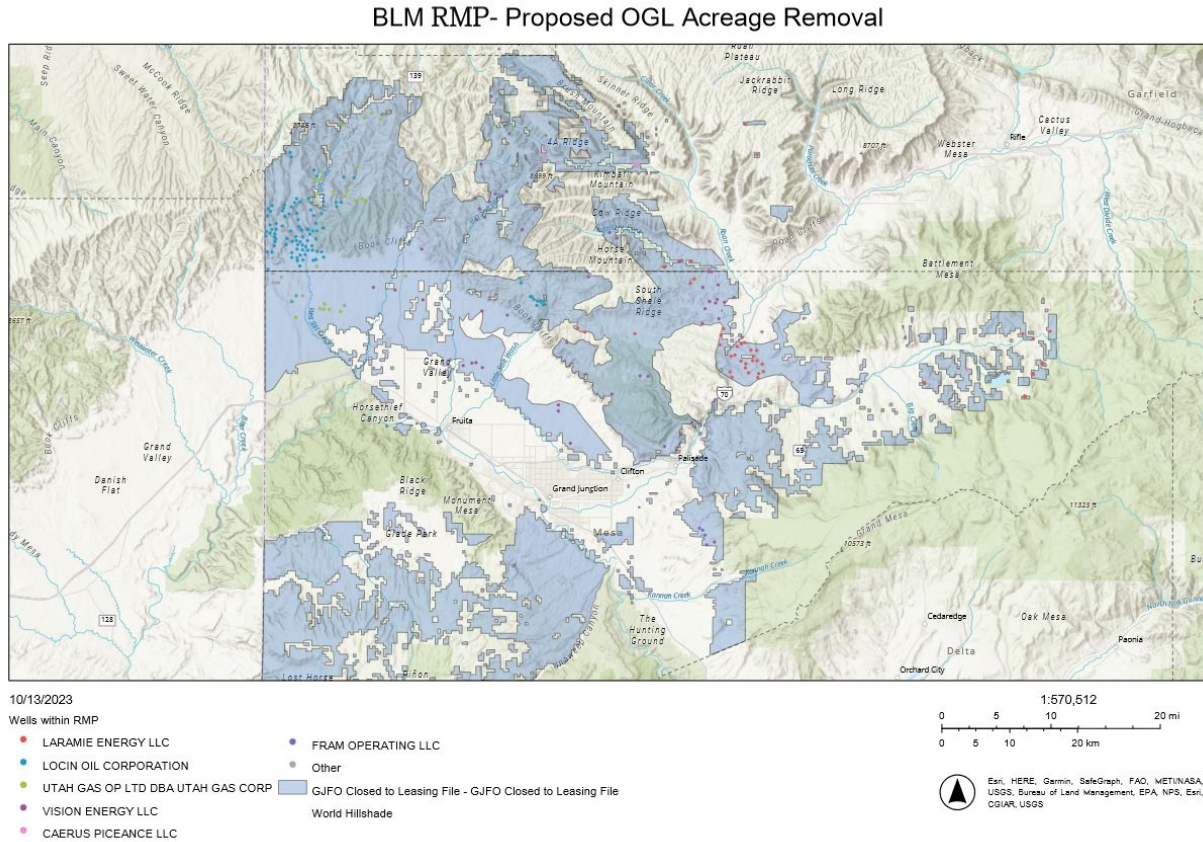
The Trades performed an analysis on all wells in producing, shut in, or temporarily abandoned status within the ECMC's database as of October 13, 2023. We analyzed wells that are either producing or capable of producing, per ECMC's definitions of shut-in and temporarily abandoned wells.¹¹

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.

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).

¹¹ "[Rules and Regulations \(100 Series\)](#)," ECMC. April 30, 2022.

Figure 7 – Existing Wells Capable of Producing Within No-Known, Low, and Medium Potential Areas in the GJFO



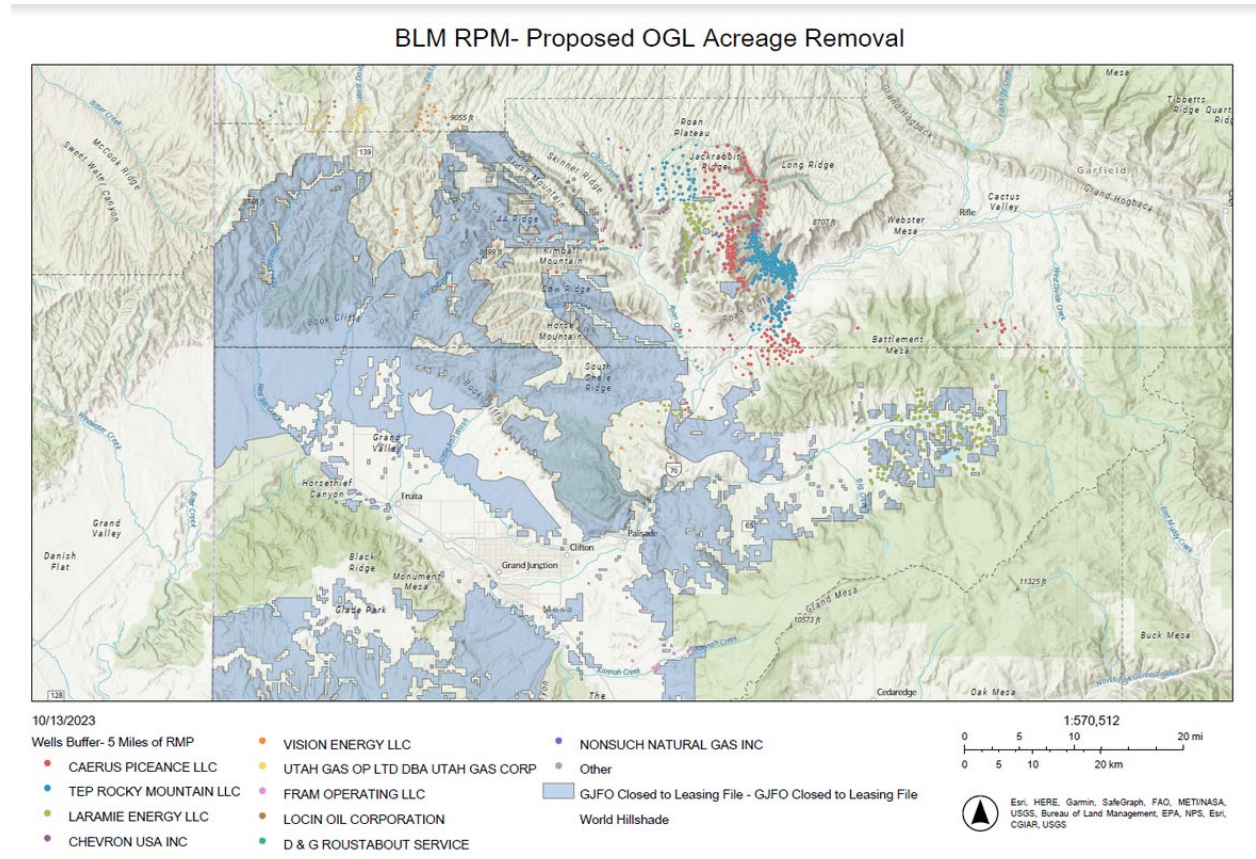
Within the GJFO Alone, There are Thousands of Wells Capable of Producing Adjacent to The No-Known, Low, and Medium Potential Areas

In addition to the 366 existing wells within these no-known, low, and medium potential areas in the GJFO alone, there are 5,172 existing wells within five miles of any land classified as no-known, low, or medium potential by the 2002 USGS Resource Assessment. These 5,172 existing wells produced approximately 126,385,336 MCF of natural gas and 232,264 barrels of oil in just the past 12 months alone. Of these 5,172 wells, 1,311 are within one mile of no-known, low, or medium potential areas and 2,107 are within two miles, as shown in Figure 8.

Given the technological advancements discussed above where operators have continued to increase lateral distance, it is likely that lands in, and minerals under, no-known, low, and medium potential areas could be developed from these existing well locations just outside of these areas that would then be closed off.

Therefore, production from existing wells within and adjacent to no-known, low, and medium potential areas demonstrates that blanket restriction on these areas is not a reasonable or factually supported method of regulating oil and gas development. *See Utah Shared Access Alliance v. Carpenter*, 463 F.3d 1125, 1134 (10th Cir. 2006) (For an agency decision to survive arbitrary-and-capricious review, the agency must have “examined the relevant data and articulated a rational connection between the facts found and the decision made,” and “there must be a reasoned basis for the agency’s action.”).

Figure 8 – Existing Wells Capable of Producing within Five Miles of No-Known, Low, and Medium Potential Areas in the GJFO



Some Areas Classified as No-Known, Low, and Medium Potential do not Reflect Lack of Resources but Rather Lack of Processing Availability

Some of the areas considered no-known, low, or medium potential in the SEIS are not due to a lack of resources but a lack of infrastructure to move the product to gas processing. Much of the area in the no-known, low, or medium potential range is known to contain high inert gas (>3%), which exceeds the standard pipeline limit. The high inert gas is not unusable but rather requires additional processing to remove the inert gases such as nitrogen. For example, the Badger Wash

gas processing plant is currently shuttered, and wells in the surrounding area are shut in because of the lack of pipeline infrastructure. This issue is further exacerbated by the challenging topography in Western Colorado, with tumultuous terrain and extreme weather conditions. The resource is available and can easily be developed. Once the processing capacity and technology is enhanced, as has occurred in other basins throughout the United States and continues to occur in the Piceance Basin, these resources are likely to be developed. BLM should classify areas by resource potential, not by the existence or absence of processing technology.

III. BLM Went Beyond the Court’s Ruling and Settlement Orders

The Trades’ Recommendations in this Section

- Consistent with BLM’s multiple-use mandate, for those lands within the planning area identified as potential areas for 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 closure to oil and natural gas leasing in all so-called no-known, low, and medium potential areas.

Overview of the Court Order Related to Consideration of Alternatives

On October 17, 2018, the federal district court of Colorado issued a ruling in *Wilderness Workshop v. BLM*, 342 F. Supp. 3d 1145 (D. Colo. 2018), finding that BLM failed to consider reasonable alternatives in violation of NEPA when “BLM did not closely study an alternative that closes low and medium potential lands when it admits there is an exceedingly small chance of them being leased.” *Id.* at 1167.

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. Below are statements taken directly from the ruling. BLM erroneously interprets the court’s discussion as determinative of an outcome, rather than obligation for a clear and transparent process. Indeed, NEPA itself does not require any substantive outcomes, just a consideration of alternatives to allow for informed decision-making. *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978) (“NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.”).

- “‘Since a parcel of land cannot both be preserved in its natural character and mined’ 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.” *Wilderness Workshop*, 342 F. Supp. 3d at 1166–67.

- “But if those areas were open for leasing, even if there is a minimal chance for development, it would detract from BLM designating that land for other uses.” *Id.* at 1166.
- “BLM points to its field guidance, which reads that it should ‘close lands to mineral development only when other land or resource values cannot be adequately protected with even the most restrictive lease stipulations.’ However, this does not excuse the fact that BLM did not closely study an alternative that closes low and medium potential lands when it admits there is an exceedingly small chance of them being leased. This alternative would be ‘significantly distinguishable’ because it would allow BLM to **consider** other uses for that land.” *Id.* at 1167 (emphasis added).

Overview of the Settlement Agreement

On September 16, 2019, BLM entered into a settlement agreement with the petitioners in *Wilderness Workshop*.¹² As part of the settlement agreement, BLM stipulated in item #2 that “During remand, Respondents agree to prepare a Supplemental EIS, which will address the deficiencies identified by the Court.” Settlement Agreement, at 2.

Nowhere in the settlement agreement does it require BLM to close the no-known, low, and medium potential areas to mineral development. The agreement merely required BLM to create a SEIS that *assessed* closing low and medium potential areas *as an alternative* and to consider other uses of such lands. This is in part because NEPA directs that federal agencies follow the requisite procedure in considering the environmental impacts of their actions and in weighing alternatives. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350–51 (1989) (discussing NEPA’s requirements and stating, “Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed—rather than unwise—agency action” (footnote omitted)). Because NEPA does not compel any substantive outcomes, *id.*, the court would not have authority to direct any particular outcome.

¹² Settlement Agreement, Case No. 16-cv-01822 (Sept. 16, 2019), <https://westernlaw.org/wp-content/uploads/2019/09/2016.09.16-CRV-RMP-Settlement.pdf>.

The Only Updated Alternative Resource Use Assessed by BLM Other Than Mineral Development in the SEIS was Recreation and Visitor Services

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:

“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.

“Quiet, dispersed recreational activities would not be impacted by potential oil and gas development.” *Id.* at 3-95 to 3-96.

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.

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.

BLM Can Protect Lands for Recreation and Visitor Services Using Other Tools Instead of a Blanket Restriction on all Oil and Natural Gas Leasing

Additionally, BLM added Special Recreation Management Areas (SRMA), Extensive Recreation Management Areas (ERMA), and State Wildlife Areas (SWA) that would all be completely off limits to fluid mineral leasing in the planning area.

In the CRVFO, under Alternative E, the Upper Colorado River SRMA would be closed to all oil and natural gas leasing to protect recreation and visitor services. SEIS at 3-95. In the GJFO, the Bangs and the North Fruita Desert Recreation Management Zone 1 SRMAs would be closed to all leasing to protect recreation and visitor services. *Id.* The SEIS’s Alternative E also closes off additional areas within lands managed for wilderness characteristics, wildlife emphasis areas, and stream segments found suitable for inclusion in the National Wild and Scenic Rivers System (NWSRS). *Id.* at 3-135 to 3-136.

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. *See Biodiversity Conservation All. V. BLM*, 2010 WL 3209444 at *13 (D. Wyo. 2010) (noting BLM’s balance of considering cultural resources, among others, “while still enabling recovery of . . . much needed oil and gas resources” under the FLPMA multiple-use mandate).

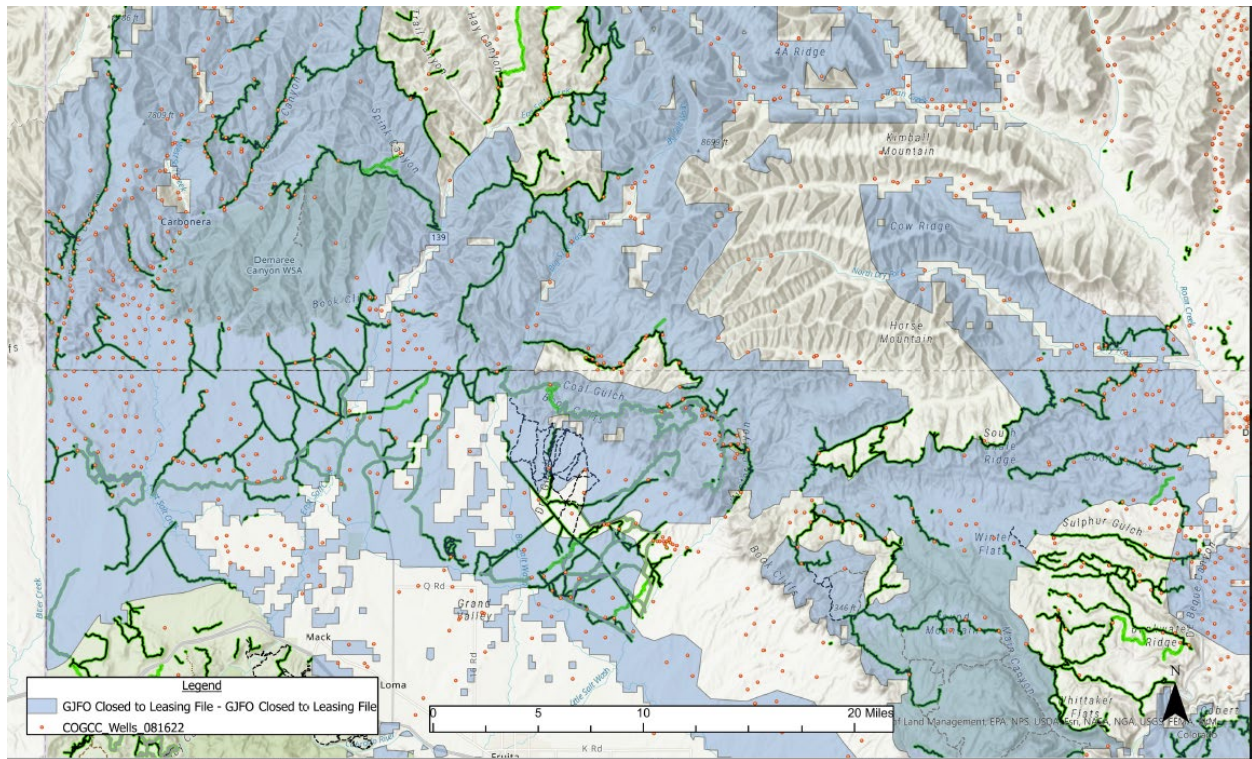
Oil and Natural Gas Development and Recreation Have a Long History of Successful Coexistence

The SEIS assumes a zero-sum game, that any area of land developed for oil and natural gas automatically and necessarily disqualifies it for outdoor recreation and visitor services. This ignores the long history of the region. Many outdoor recreation areas are only accessible *because* of lease roads ending with an oil and natural gas well. Thus, such roads actually foster recreation and visitor services.

In fact, when oil and natural gas operators reclaim well locations, counties often take over the roads instead of having the operator reclaim them to ensure continued access for recreational activities. There are several examples of off-highway vehicle trails, bike trails and other activities on current or former lease roads and accessible only by the same.

Figure 9 shows the western Garfield County and northwest Mesa County area trail map with active wells in the area, which demonstrates how lease roads are also used as recreational trails. Trails are shown in green, and the trails ending in a well (i.e., a red dot) were very likely developed for access to mineral resources.

Figure 9 – BLM Trails and Wells in Western Garfield and Northwestern Mesa Counties



IV. BLM Should Not Close Off Helium Resources Within the GJFO

The Trades' Recommendation in this Section

- BLM must not close off helium resources that are critical to national security.

BLM mentions a helium resource on the western part of the GJFO area (west of Highway 139 and north of I-70) that is 191,300 acres. BLM lists seven critical uses of helium and states the following on page 3-104:

*For many of the applications shown above, there is no substitute for helium. Helium is a nonrenewable resource found in recoverable quantities in only a few locations around the world; many of these are being depleted. Accordingly, the US has **important economic and national security interests** in ensuring a reliable supply of helium (emphasis added).*

Uses of helium include diving, manufacturing, medical technology (such as MRI machines), monitoring, national defense, science and research, and cooling. Helium is of critical importance for MRIs to cool the magnets in order to prevent harm to patients, treatment for respiratory

ailments like asthma and emphysema, chip manufacturing, fiber optics, leak detection for pipelines or ships, and rocket fuel systems to purge tanks and ensure all fuel is combusted to prevent explosion. These and many other industrial applications have no alternative.

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. 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

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).

V. BLM Should Not Seek to Advantage Solar and Wind Energy Development by Disadvantaging Oil and Natural Gas

Overview of the Issue

BLM is working on a Renewable Energy Rule to “promote the development of solar and wind energy on public lands. The proposed Renewable Energy Rule would reduce fees nationwide and **facilitate** development in priority areas consistent with the Biden-Harris administration’s efforts to permit 25 gigawatts of clean energy on public lands by 2025.”¹⁴

Yet the SEIS did not analyze renewable development as an alternative use for these no-known, low, and medium potential areas. If BLM is working to facilitate development of renewables as an alternative resource use, that use should have been analyzed per the Court order. *See Wilderness Workshop*, 342 F. Supp. 3d at 1167 (noting BLM could consider other uses for land if such lands are closed to mineral leasing). And in addition to the court order, NEPA itself requires consideration of the environmental impact of renewables development. *See Backcountry Against Dumps v. Jewell*, 674 Fed. App’x 657, 662 (9th Cir. 2017) (BLM must take a “hard look” at environmental impacts of renewable energy development). Given the lands required for wind and solar development, BLM needs to take the requisite “hard look” of such impacts if it intends

¹³ See USGS, [Mineral Commodity Summaries—Helium](#) (Jan. 2021) (showing United States import sources, in descending order, from Qatar, Algeria, Russia, among other countries).

¹⁴ See BLM, [Renewable Energy Rule](#) (last visited Oct. 26, 2023).

to expand the currently contemplated development levels in the planning areas. And that analysis should consider the impact on fluid mineral uses and availability.

At the same time BLM is working to restrict oil and natural gas leasing from all no-known, low, and medium potential areas in the planning area based solely on the alternative use of recreation and visitor services alternative, BLM is concurrently working to reduce requirements for wind and solar energy. Yet wind and solar energy typically require much more surface to develop the same amount of energy as oil and natural gas, as shown below in Figure 10.¹⁵ 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.

Figure 10 – Land Use by Electricity Source in Acres/MW Produced

Electricity Source	Acres per Megawatt Produced
Coal	12.21
Natural Gas	12.41
Nuclear	12.71
Solar	43.50
Wind	70.64
Hydro	315.22

Furthermore, in multiple places of the SEIS, BLM states:

“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.

“Quiet, dispersed recreational activities would not be impacted by potential oil and gas development.” *Id.* at 3-95 to 3-96.

The Trades question how allowing renewables—with their attendant land-use and visibility impacts—enhances recreation and visitor services.

¹⁵ [The Footprint of Energy: Use of U.S. Electricity Production](#), Strata, June 2017.

¹⁶ [Net Zero Impact: Potential Pathways, Infrastructure, and Impacts](#), Final Report Summary, Princeton University, October 29, 2021, p. 55.

VI. BLM Addressed the Climate Change Deficiency Related to GHG Emissions Identified by the Court

Overview of the Issue

In *Wilderness Workshop*, the court required BLM to take a “[h]ard look at the direct, indirect, and cumulative impacts to people and environment -- GHG pollution and climate change,” and found that “BLM acted in an arbitrary and capricious manner and violated NEPA by not taking a hard look at the indirect effects resulting from the combustion of oil and gas on the planning area under the RMP. BLM must quantify and reanalyze the indirect effects that emissions resulting from combustion of oil and gas in the plan area may have on GHG emissions.” *Wilderness Workshop*, 342 F. Supp. 3d, at 1156.

The court concluded that “BLM failed, in part, to take a hard look at the severity and impacts of GHG pollution. Namely, it failed to take a hard look at the reasonably foreseeable indirect impacts of oil and gas.” *Id.* at 1167.

BLM’s Updated Air Quality, Greenhouse Gases, and Climate Change Analysis

In the SEIS, BLM has updated the air quality, greenhouse gas, and climate change analysis in section 3.5.1 on pages 3-5 to 3-21 and quantified GHG emissions and indirect impacts from oil and natural gas operations. Specifically, BLM responded to the court order by discussing the reasonably foreseeable indirect impacts of oil and gas production, which as relevant here, include GHG emissions.

BLM’s analysis included significant information from Garfield County’s 2020 Air Quality Monitoring Report, the BLM’s GHG report of 2022, Colorado’s GHG Pollution Reduction Roadmap, and the strong state of Colorado regulations on GHG emissions. SEIS at 3-8 to 3-21. BLM’s analysis shows an estimated reduction in GHG emissions, “[b]ased on all the information presented in this air quality, GHG, and potential climate change impacts section, no additional emissions mitigation beyond that required by state and federal regulations is warranted.” *Id.* at 3-21. BLM also noted that hypothetically, it is reasonable to argue that overall global GHG emissions “would be lower by allowing the oil and gas development and production to occur in states and countries with additional regulations, such as Colorado[.]” *Id.* at 3-20.

BLM evaluated GHG emissions from oil and gas well development and production operations, midstream, and end-use combustion. *Id.* at 3-8 to 3-9. BLM then used data from the Energy Information Administration (EIA) to project future oil and gas development in the region. This EIA data has “low,” “reference,” and “high” production scenarios, and BLM reasonably stated that

the range of production accounted for in those scenarios reflects the production differences spanned by Alternatives A through F. *Id.* at 3-9. BLM used these amounts to assess and compare total emissions levels from 2022 to 2050 for the Mesa and Garfield County. *Id.* at 3-12 to 3-13. BLM therefore considered the GHG emissions from the entire range of alternatives.

Next, BLM explained that it assumed that all oil and gas produced is combusted in downstream use, but BLM acknowledged that approximately seven percent of these fuels would be used for a non-combustion use. *Id.* at 3-14. BLM's estimates of GHG emissions are therefore conservative, as BLM noted: "[I]t is reasonable to conclude that the projected 2022 to 2050 federal emissions levels shown in the tables above are overestimates for the GHG emissions levels that will occur over the next 30 years." *Id.*

After setting the parameters and assumptions for BLM's estimate of emissions levels, BLM then used the social cost of GHGs to compare the implied costs of the GHG emissions. *Id.* at 3-15 to 3-18. Finally, BLM assessed the emissions levels from the planning area in comparison with total global emissions to draw an inference of impacts on climate change from the planning area's emissions. BLM notes that the planning area's emissions would constitute 0.06 percent of the global 2022 to 2050 emissions. *Id.* at 3-18. And setting this value in context with all federal oil and gas GHG emissions, BLM determined "that all projected US federal oil- and gas-related emissions through year 2050 . . . would constitute approximately 1 percent of the lower carbon budget temperature target of 1.5-degree Celsius change." *Id.*

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.")

VII. BLM Should Not Expand the ACECs Closed to Mineral Leasing

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 Area of Critical Environmental Concern (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 SEIS.

BLM has failed to provide any compelling reasons as to why, after such a short period of time, it has included these ACECs in the Preferred Alternative. *See FCC v. Fox Television Stations*, 556 U.S. 502, 515 (2009) (agency must offer a reasoned explanation for disregarding facts and circumstances that underlay agency’s prior policy). Further, BLM is preparing this supplemental EIS for purposes of complying with a judicial ruling involving GHG emissions and lack of alternatives related to oil and natural gas resource potential. None of these ACECs has anything to do with either of the two items the court found lacking in BLM’s previous analysis.

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.

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 a 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.

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.

VIII. BLM Should Defer to Colorado State and Local Decisionmakers

This country's federalist system recognizes that local problems are often best addressed through local solutions. In that vein, the Trades recommend that BLM defer to state and local rules and permitting regimes in deciding whether mineral resources in state parks and municipal watersheds should be open to leasing. Colorado's state and local decisionmakers are perfectly competent to decide whether mineral development is appropriate in these areas, and if so, under what conditions. This is already borne out by the existing Colorado regulations addressing both topics.

CPW and ECMC Manage State Parks, Not BLM

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.

Municipal Watershed Areas Should not be Closed to Mineral Leasing

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.

IX. BLM Should Conduct a Proper Socio-economic Assessment Regarding the True Impacts of Alternative E

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.

Mesa County and Garfield County Economic Reports

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 2023¹⁹ 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.

Garfield County Economic Report

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.

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>.

Mesa County Economic Report

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. *Id.* at 10–11.

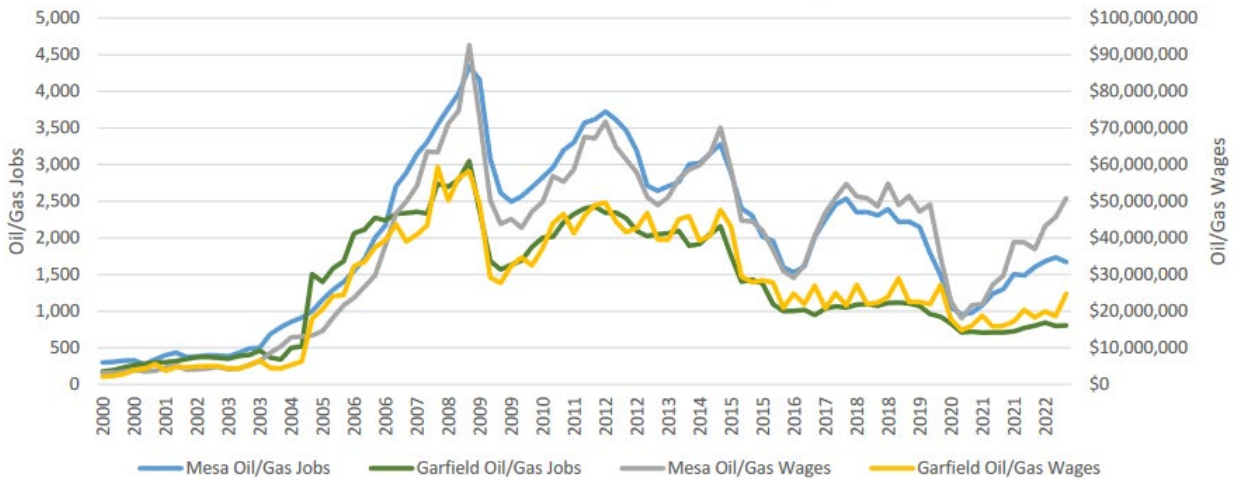
It is important to note three key facts from this data in Mesa County:

- 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.

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 \(coloradomesa.edu\)](https://coloradomesa.edu/mesa-county-economic-newsletter-q3-2023.pdf).

Figure 23:
Mesa and Garfield Oil and Gas Jobs/Wages



2022 Federal Mineral Lease Distributions

Under the Federal Mineral Leasing Act (FMLA), approximately 49% of the rentals and royalties from mineral production on federal lands are returned to the state of origin for planning, construction, and maintenance of public facilities in areas socially and economically impacted by the mineral leasing development that occurs on federal lands. The State of Colorado has determined that these federal mineral lease distributions should go to these counties, municipalities, and school districts and has created an allocation method to do this each year.

In 2022, the Colorado Department of Local Affairs (DOLA) distributed \$47,092,189 statewide in accordance with the FMLA, with all these dollars going to counties, municipalities, and local school districts.

The Trades performed analysis of these 2022 distributions²² which were broken out by discretionary grant awards, direct distributions to local governments, and direct distributions to local school districts. This analysis showed that of the \$47,092,189 distributed statewide, \$10,856,987 (23%) went directly to communities in Garfield and Mesa Counties. The Trades have summarized this detailed analysis in Figure 11 (below).

²² Colorado Department of Local Affairs, Direct Distribution – Severance Tax & Federal Mineral Lease, last visited November 1, 2023, available at <https://dlg.colorado.gov/direct-distribution-severance-tax-federal-mineral-lease>.

Cumulative Federal Mineral Lease Distributions

Additionally, both Mesa County and Garfield County tracks cumulative federal mineral lease distributions in their communities.^{23,24} Garfield County reports over \$32 million of distributions to their communities and Mesa County reports over \$11 million to their communities.

As this information shows, these 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.

(Figure 11 is on the following page)

²³ Garfield County Federal Mineral Lease District, Past Grant Recipients, last visited November 1, 2023, *available at* <https://gcfmld.colorado.gov/grant-information/past-grant-recipients>.

²⁴ Mesa County Federal Mineral Lease District, Past Grant Cycles, last visited November 1, 2023, *available at* <https://mesafml.org/past-grant-cycles/>.

Figure 11 – Federal Mineral Lease 2022 Distributions to Garfield and Mesa Counties

Federal Mineral Lease 2022 Distributions to Garfield and Mesa Counties Local Communities				
Type	County	Grant Recipient	Project	Amount
Discretionary Grant Awards	Garfield	Parachute	Parachute Diamond Loop Reconstruction	\$ 300,000
Discretionary Grant Awards	Mesa	Collbran	Collbran WWTP Design and Engineering	\$ 23,000
Discretionary Grant Awards	Mesa	Collbran	Collbran Auditorium Renovation Design & Engineering	\$ 25,000
Discretionary Grant Awards	Mesa	Grand Junction	Grand Junction Dos Rios Park Development	\$ 400,000
Discretionary Grant Awards	Mesa	De Beque	De Beque Sewer Line Extension	\$ 400,000
Discretionary Grant Awards	Mesa	Fruita	Fruita Hydrogen Sulfide Mitigation System	\$ 600,000
Discretionary Grant Awards	Mesa	Fruita	Fruita WW Reclamation Facility Aeration System	\$ 650,000
Discretionary Grant Awards	Mesa	Palisade	Palisade Troyer Lift System Rehabilitation Phase 3	\$ 173,322
Formulaic Direct Distribution to Local Governments	Garfield	Carbondale	N/A	\$ 266,877
Formulaic Direct Distribution to Local Governments	Garfield	Garfield County	N/A	\$ 4,192,073
Formulaic Direct Distribution to Local Governments	Garfield	Glenwood Springs	N/A	\$ 441,849
Formulaic Direct Distribution to Local Governments	Garfield	New Castle	N/A	\$ 252,193
Formulaic Direct Distribution to Local Governments	Garfield	Parachute/Battlement Mesa	N/A	\$ 184,990
Formulaic Direct Distribution to Local Governments	Garfield	Rifle	N/A	\$ 936,438
Formulaic Direct Distribution to Local Governments	Garfield	Silt	N/A	\$ 188,637
Formulaic Direct Distribution to Local Governments	Mesa	Collbran	N/A	\$ 4,121

Figure 11 (continued) – Federal Mineral Lease 2022 Distributions to Garfield and Mesa Counties

Formulaic Direct Distribution to Local Governments	Mesa	De Beque	N/A	\$ 6,929
Formulaic Direct Distribution to Local Governments	Mesa	Fruita	N/A	\$ 83,146
Formulaic Direct Distribution to Local Governments	Mesa	Grand Junction	N/A	\$ 339,238
Formulaic Direct Distribution to Local Governments	Mesa	Mesa County	N/A	\$ 725,629
Formulaic Direct Distribution to Local Governments	Mesa	Palisade	N/A	\$ 14,440
Formulaic Direct Distribution to Local School Districts	Garfield	DeBeque 49JT	N/A	\$ 2,021
Formulaic Direct Distribution to Local School Districts	Mesa	DeBeque 49JT	N/A	\$ 584
Formulaic Direct Distribution to Local School Districts	Mesa	Delta County 50J	N/A	\$ 23
Formulaic Direct Distribution to Local School Districts	Garfield	Garfield 16	N/A	\$ 66,789
Formulaic Direct Distribution to Local School Districts	Garfield	Garfield RE-2	N/A	\$ 258,172
Formulaic Direct Distribution to Local School Districts	Mesa	Mesa County Valley 51	N/A	\$ 97,747
Formulaic Direct Distribution to Local School Districts	Mesa	Plateau Vally 50	N/A	\$ 1,393
Formulaic Direct Distribution to Local School Districts	Garfield	Roaring Fork RE-1	N/A	\$ 222,377
TOTAL TO GARFIELD AND MESA LOCAL COMMUNITIES				\$ 10,856,987

X. Conclusion

The Trades appreciate the opportunity to provide comment on the Draft Resource Management Plan and Supplemental Environmental Impact Statement for the Colorado River Valley Field Office and Grand Junction Field Office Resource Management Plans, and we look forward to continuing to cooperatively engage on the recommendations provided herein.

Sincerely,



Kathleen M. Sgamma
President
WESTERN ENERGY ALLIANCE



Chelsie Miera
Executive Director
WEST SLOPE COLORADO OIL AND GAS ASSOCIATION



William Groffy
Director of Regulatory and Legislative Affairs
COLORADO OIL AND GAS ASSOCIATION