BLM- WYOMING RESPONSE TO PUBLIC COMMENTS

2024 THIRD QUARTER COMPETITIVE OIL AND GAS LEASE SALE ENVIRONMENTAL ASSESSMENT DOI-BLM-WY-0000-2024-0003-EA

For the 2024 Third Quarter sale, the BLM prepared one EA that covered all 5 parcels initially nominated. This EA was released for a 30-calendar day comment period starting May 22, 2023, and ending June 21, 2024.

Similar comments have been summarized and one response provided. Only substantive comments are addressed by the BLM. All comments submitted have been evaluated by the BLM and are retained in the BLM's administrative record.

To the extent that identical or similar issues were raised in any of the public comments, the BLM refers the reader to the other responses to comments.

Where appropriate, the BLM has modified portions of the EA to correct administrative acreage refinement, and to acknowledge new planning decisions. The BLM currently intends to prepare and issue the signed FONSI/DR for this sale concurrently with the resolution of any protests to parcels included in the sale. Note: Where the BLM has decided to delete or defer parcels or portions of parcels from the 2024 Third Quarter sale, those parcels are not listed in the Sale Notice. The deletions and deferrals are generally described in the EA, FONSI, and in our responses to public comments.

Comment No.	Comment By:	Comment (May be Excerpted/Summarized);	Comment Issue	Agency Response
1	Not Provided	Is it fracking? Fracking explosions have damaged my house foundation!!! This one will be close to my house if it is and may do significant damage!	General	The lease sale does not authorize development to take place. When actual development is proposed at a specific location, the BLM may require COAs at that time. Adding Wyoming Standard Lease Notice No. 1 allows for appropriate modification at the site-specific stage if operations are proposed within ½ mile of occupied dwellings.
2	Kevin Reeve	The BLM should continue to make gas and oil leases available. The United States must become energy independent and with large available acreage of land in states like Wyoming managed by BLM it is really important. There is plenty of land that it does not make sense to release oil and gas leases but there is ample land that should be available for such.		We have received and reviewed your comment. Based on the review, no response is required.
3	Fiends of the Earth (FOE)	The proposal for the upcoming oil and gas lease sales threaten our most critical public lands. Fossil fuel extraction threatens to poison public lands and pollute surrounding communities. We cannot prioritize oil and gas drilling over the health of people and the planet. Continuing to extract and burn fossil fuels in the midst of a global climate crisis is a grave mistake. Recent wildfires and intensifying hurricanes demonstrate the dangers of what's to come if we continue to allow public lands to be a tool for the fossil fuel industry to line their pockets. I urge you to cancel the upcoming oil and gas lease sale on our public land	General	BLM received one submission with two attachments. The first attachment was a petition letter containing 15,074 names. The petition had the same language as the comment submission. The second attachment contained approximately 266 individual comment letters. Each comment letter was similar, and in some cases identical to, the comment submission. The original comment submission is responded to here. BLM has received and reviewed the comment letters. Land open for oil and gas leasing and those impacts can be located in the respective field office resource management plan (RMP (see EA, Section 1.3). Air quality information can be located in Sections 3.1, 3.2 and 4.1 of the EA. Information regarding surrounding communities can be located in Sections 3.7 and 4.6 of the EA. Information containing hydraulic fracturing can be located in the white paper (see EA, Section 5.3).
4	Petroleum Association of Wyoming (PAW)	The BLM has developed a process for reviewing and offering parcels for sale in response to provisions included in the 2022 Inflation Reduction Act. The BLM has briefly explained this process, generally reviewing Expressions of Interest received during one	Expressions of Interest (EOI)	BLM accepts EOIs the first two months of each quarter (IM 2023-006) and holds any EOIs received the third month of the quarter, which will be processed with the EOIs received within the first two months of the next quarter. Each EOI is reviewed to determine if the lands are open for lease, are not currently leased, are not currently proposed for lease, etc. Any

quarter and offering only those parcels in a subsequent lease sale. For the 2024 Q3 sale, the four parcels being offered were submitted to the BLM in Q3 of 2023.

PAW objects to this process, as to date the BLM has not offered acreage to which this industry has expressed interest in prior to passage of the IRA. The process is overly restrictive and is counter to its responsibility to make lands available for sale which are eligible for oil and gas development in their respective resource management plans.

lands which may be encumbered by existing nominations, proposals or leases are removed from further consideration. All remaining lands within the EOI are placed into a parcel within existing parcel requirements under 43 CFR § 3120.2-3 and BLM Handbook 3120-1 (H-3120-1). Parcels are then reviewed for any other conflicts which may prevent land from being offered. Once all lands are reviewed a second time, parcels are posted for a 30-day scoping period (IM 2023-010) to provide the public an opportunity to comment and help BLM establish potential alternatives and issues to consider in the NEPA analysis. Time required to review all EOIs nominated is approximately 45-days. IM 2023-010, II. E. NEPA Compliance Documentation directs the BLM to provide a minimum scoping period of 30 days, a draft NEPA review and comment period of 30 days (minimum), and a 30day protest period.

Concurrently with the 30-day Public Scoping period, BLM completes internal reviews for sage-grouse prioritization, reviews per IM 2023-007, prepares draft delete/deferral recommendations for the state director to consider, and attaches appropriate stipulations. After the scoping period, BLM reviews the scoping comments and prepares the NEPA documentation (EA) using all of the information gathered and published the NEPA document for a 30-day public comment period. Time between the close of the scoping period and the beginning of the comment period is approximately 45calendar days. After the comment period ends, BLM gathers and responds to all public comments, updates the NEPA analysis if/where necessary and reviews all comments and NEPA changes prior to publishing the NEPA analysis for a 30-day protest period. The time necessary between the end of public comment period and the beginning of the protest period is approximately six weeks. After the 30-day public protest period closes, BLM gathers and responds to all public protests, finalizes the NEPA analysis and sends the NEPA and Protest Responses to various specialists, including the state director for final review and signature. The time necessary for this last step is approximately 6 weeks. All of the timeframes, taken together, requires approximately 270 days from the time

				the EOI nomination period ends to the date of sale. Therefore, if EOIs were submitted during September 2023, the EOIs would not be published for a 30-day scoping period until early January 2024 placing these EOIs in a Third Quarter 2024 sale. It is also important to note that BLM Wyoming has three sales that all overlap. For example, when reviewing and responding to the Protests for a third quarter sale, BLM is reviewing and responding to comments for fourth quarter sale, and BLM is reviewing and preparing for scoping on a first quarter sale.
5	PAW	Information pertaining to EOIs received by the BLM is posted on its National Fluids Lease Sale System (NFLSS). NFLSS shows that the Wyoming BLM actually received 14 EOIs in Q3 of 2023, totaling 3,877 acres. The BLM states that the one parcel proposed for deferral is due to the fact that no federal minerals underly the surface. By the BLM's leasing process, that would mean that 13 parcels with federal minerals are available for development, totaling 3,797 acres. Yet, the BLM is only making available four parcels covering 159 acres. The BLM's current policy is to offer parcels submitted during a single quarter. For this lease sale, 14 were received but only four are being offered. What is the BLM's justification for not adhering to its own policy regarding which parcels it will make available? Why are the remaining nine parcels not being offered in this lease sale? This gets to a question PAW has repeatedly asked but not received an answer: Of the EOIs available to the BLM to select for lease sales, what is the first step in the BLM's process of selecting EOIs for a lease sale? For industry, this has financial and regulatory certainty implications. The Inflation Reduction	Inflation Reduction Act (IRA)/EOI	BLM is working to review expressions of interest (EOI) that were in NFLSS before the implementation of the Inflation Reduction Act (IRA). Part of BLMs review process involves sending letter to individuals who submitted EOIs before the IRA was implemented to see if they are still interested in the EOI. While BLM adjudication staff waited for a response to these letters, 8 EOIs were temporary assigned to the 2024-09 sale in the National Fluid Lease Sale System (NFLSS). BLM acknowledges that this caused confusion for the public and has subsequently reassigned all EOI's waiting on a nominator response letters to a sale date in 2030. If the BLM receives as response from the nominator that they are still interest in the EOI, those EOIs will be moved to the next available sale. It is important to note the 2030 sale is not a scheduled sale at this time, and NFLSS requires a proposed sale date for each parcel. Rather this is a designated (by the BLM) sale to further review previously deferred parcels (and EOIs received prior to the IRA) to verify if the deferral reason is still valid, and the parcel needs to remain deferred or if the parcel can be added to the next available sale. One additional EOI was accidentally left off the scoping list and was moved to the 2024-12 lease sale parcel list. The remaining 5 EOIs were included in the 2024-09 lease sale. As stated in Chapter 2 of the EA, one parcel (WY-2024-09-1839) was deleted from the parcel list after further adjudication identified this parcel did not contain federal minerals.

	Act requires operators to pay a \$5/acre fee for every EOI submitted. Additionally, on June 22, the BLM is ratcheting up its EOI application processing fee from \$195 to \$3,100. In light of this, industry has no certainty whether an EOI submitted will ever see the light of day. Understanding the considerations the BLM incorporates into this initial selection process is deserved.		In addition, please see Response to Public Comment No. 4.
6 National Wildlife Federation (NWF) and Wyoming Wildlife Federation (WWF)	We appreciate the BLM's efforts to apply existing laws and policies, including the Final Leasing Rule, IM 2023-007, and applicable resources management plans (RMPs), when evaluating sage grouse impacts on the proposed lease parcels. Consistent with this direction, we urge the BLM to reconsider leasing parcels with important Greater sage-grouse habitat, including parcels WY- 2024-09-1842, WY- 2024-09-7298, and WY-2024-09-1844. Parcel WY-2024-09-1842 is located within 3.1 miles of an unoccupied lek, although its status is unknown. Parcel WY-2024-09-7298 is also near a lek.3 Parcels WY-2024-09-1842 and WY-2024-09-1844 are also within genetic connectivity corridors. To the extent that the BLM decides to offer these parcels, it must apply all relevant stipulations to ensure habitat functionality. Under the 2015 Approved Resource Management Plan Amendment for Greater Sage-Grouse (ARMPA), the BLM should protect priority habitat management areas (PHMA), avoid impacts to general habitat management areas (GHMA) by requiring developers to follow proper stipulations, and avoid activity near leks; the 2015 ARMPA also requires that the BLM prioritize habitat outside of PHMA and GHMA. It also requires a 0.25-mile buffer around occupied leks. As the BLM	Greater sage-grouse (GSG)	Parcels WY-2024-09-1842, 1843, 1844 and 7298 are located within Greater Sage-Grouse General Habitat Management Areas (GHMA). The 2015 ARMPA requires a 2-mile timing limitation stipulation (TLS) for parcels in GHMA. The Wyoming Governor's Executive Order 2019-03 (EO 2019-03) also indicates that a 2-mile TLS be applied to parcels/projects within GHMA. Accordingly, the Wyoming Game and Fish Department (WGFD) did not indicate any additional stipulations or recommendations through their review. All appropriate stipulations are attached to each parcel (see EA, Appendix 5.1, pg. 61-62.

		properly details, development within 3.1 miles		
		of a lek can still negatively impact sage grouse.		
		We are concerned that the agency is not		
		properly complying with these rules in the		
		context of leks and connectivity corridors.		
7	NWF and	Under the 2015 ARMPA, the BLM must	GSG Leks	Please see Public Comment No. 6.
	WWF	prioritize development outside of lek buffers. Parcel WY-2024-09-1842 is within 3.1 miles of		In addition, any proposed development will be further
		an unoccupied lek who status is unknown.		evaluated if/when a site-specific project proposal is submitted.
		Parcel WY- 2024-09-7298 is near a lek as		While BLM does assume that each parcel will have
		well—the Draft EA suggests within 1 mile. The		development, most (97%) of the drilling within the past five
		BLM should treat unoccupied leks with an		years has been horizontal or directional (EA, Section 4, pg.
		unknown status as occupied until they can		30-31, specifically pg. 31). BLM does acknowledge there are
		confirm if it is unoccupied or not to avoid		many other development uncertainties that exist as well (EA,
		causing disturbance that will inadvertently		Section 3, pg. 18; Section 3.1.1, pg. 19; and Section 4.1.2.1,
		reduce distribution or abundance of Greater		pg. 34). Therefore, any predictions or assumptions to
		sage-grouse. This will avoid unnecessary and		prioritize development outside of lek buffers is outside the
		avoidable damage to all sage grouse leks and		scope of this EA.
		critical habitat. This damage could linger		
		beyond the duration of the project itself.		
8	NWF and	Parcels WY-2024-09-1842 and WY-2024-09-	GSG Connectivity	Please see Public Comment No. 6.
	WWF	1844 sit within genetic connectivity corridors,	Corridors	
		which connect species across fragmented		In addition, the referenced parcels (WY-2024-09-1842 and
		habitats to support the exchange of genetics and		1844) are located in GHMA and not located within a
		species individuals. The BLM must consider		designated connectivity corridor (see EA, Section 4.3.2, Table
		connectivity corridors when they are evaluating		4-6, pg. 46). Due to their location within GHMA, BLM did
		the conservation impacts of energy		not recommend deferral of these parcels and their location
		development. Per IM 2023-007, the BLM must		within a genetic connectivity area per IM 2023-007.
		consider the "presence of important fish and		
		wildlife habitats or connectivity areas' to 'not		
		impair their functioning" when making leasing		
		decisions. Northwest Wyoming demonstrates		
		low rates of connectivity, which prevent the		
		flow of genetic variation that helps sustain the		
		species. Landscape connectivity is critical for		
		the long-term health and outlook of the species.		
		For these reasons, we ask that the agency avoid		
		leasing these parcels or, at the very least, attach		
		appropriate stipulations.		

9	NWF and WWF	We appreciate the BLM's efforts to protect Wyoming big game from development, especially, in this case, antelope. We also appreciate BLM's coordination with the Wyoming Game and Fish Department to protect big game migration corridors and critical habitat under Wyoming EO 2020-01. This being said, we ask that the agency reconsider leasing parcel WY-2024-09-1843 because it is in antelope critical winter range. Per IM 2023-007 and the updated Final Leasing Rule, the BLM should consider both critical habitat and winter range as low preference for leasing. IM 2023-007 reads: "The presence of important fish and wildlife habitats or connectivity areas, giving preference to lands that would not impair the proper functioning of such habitats or corridors." Moreover, as the BLM acknowledges, pronghorn unit populations range between 32.37% above to 76.92% below objective.11 This variability is shaped by ever-changing factors, such as climatic conditions. Today, the Wyoming pronghorn populations are still recovering from a harsh winter in 2022-2023.12 Oil and gas activity poses a significant threat to Wyoming pronghorn populations. Because parcel WY-2024-09-1843 is in crucial winter range for antelope, we ask that the agency defer this parcel. To the extent that the BLM decides to offer this parcel, it must include all stipulations meant to mitigate impacts to big game. We appreciate the BLM's efforts to include stipulations, like WY_LFO_TLS_BGCW4061, on parcel WY-2024-09-1843 to protect pronghorn and their winter range habitat. This stipulation will prevent surface disturbing activities from November 15th through April 30th. However, it	Crucial Winter Range	BLM appreciates the comment indicating parcels are located with big game crucial winter range (specifically antelope and mule deer). The EA has been updated to include this information and potential impacts, see section 4.4 (pg. 48-52). BLM also reviewed the stipulations in Appendix 5.1 and verified the appropriate stipulations are attached to each parcel. BLM reviewed all parcels again, and none of the parcels are located within designated big game migration corridors. In addition, the WGFD did not raise migration corridors as an issue during their review. See sections 3.4 (pg. 25-27) and 4.4 (pg. 48-52) for full discussion of the affected environment and impacts to big game. Finally, BLM appreciates the commenter pointing out the missing stipulation within the EA. BLM has added the WY LFO_TLS_BGCW4061 (big game crucial winter range) and WY LFO_TLS_MPN4094 (mountain plover nesting habitat) stipulations to Appendix 5.2, pg. 63.
---	-------------	--	----------------------	--

		d (d DIMI 69 to 1 to 2		
		appears that the BLM has failed to include this		
		in its list of stipulation codes and descriptions		
		in Appendix 5.2 in the draft EA; we urge the		
		agency to ensure all relevant stipulations are		
10	NWF and WWF	included in its final NEPA analysis. We applaud the BLM's decision to remove parcel WY-2024-09-1839 for very low potential for oil and gas development. This deferral will protect taxpayers and allow the BLM to manage these lands for other uses under the multiple use standard. We urge the BLM to reconsider leasing parcels WY-2024-09-1842 and WY-2024-09-1843, which are also on lands that have a low and very low potential for oil and gas development respectively. The Final Leasing Rule and IM 2023-007 requires the BLM give leasing preference to parcels with the highest potential for oil and gas development, ensuring that the BLM can still meet its multiple use mandates. Under the Federal Land Policy and Management Act (FLPMA), leasing WY-2024-09-1842 and WY-2024-09-1843 is unwise due to the low return of development and the inability for the BLM to effectively manage these parcels for other values. There are other high potential parcels offered in this sale, including WY-2024-09-7298 and WY-2024-09-1844, which should be prioritized over the other parcels. As such, we	Development Potential	BLM uses the criteria as outlined in IM 2023-007 (see EA, pg. 16-17). The first step is question 1 - Does the parcel have existing development within five miles of the exterior of the parcel boundary? For this the BLM uses ArcPro© (a Geographic Information System {GIS} database) and buffers all existing, producing wells by five miles. BLM then uses the Intersect tool in ArcPro© to identify if any of the parcels are intersected by the five mile well buffer. If any of the parcels are intersected, then the leasing preference value is HIGH. If the leasing preference value is LOW, the recommendation is to defer the parcel per IM 2023-007. However, if the leasing preference value is HIGH, BLM moves to question 2. Under question 2 the BLM uses ArcPro© to identify if any of the parcels are located within designated big game migration corridors or designated sage-grouse connectivity areas. If any parcel is located in one of these designated areas, the leasing preference value is LOW and the recommendation is to defer per IM 2023-007. However, if a parcel is not located within one of these designated areas, the leasing preference value is HIGH and the BLM further evaluates the parcel using question 3. The same method described for question 2 is used for questions 3, 4 and 5 per IM 2023-007. In addition, these propose parcels are located in high development potential areas (Lease Preference Criteria 5, IM
		ask that the agency give low leasing preference to lands with low or no potential for development and instead focus leasing in areas with medium to high potential. Parcels WY-2024-09-1842 and WY-2024-09-1843 should not be offered for sale.		2023-007). For further information, please see Section 2.3 of this EA (pg. 16-17, specifically pg. 17 regarding lease preference criteria and IM 2023-007).
		Per the Final Leasing Rule and IM 2023-007, the BLM must give leasing preference to parcels that are near existing oil and gas		

11	NWF and WWF	development. However, the Draft EA contains limited discussion on the proximity of these parcels to existing development; we ask for additional analysis and information. As we note in our scoping comments, it is critical that the BLM consider the potential impacts oil and gas development may have on the health, safety, and wellbeing of front-line communities, especially Indigenous peoples, people of color, and low-income populations. We appreciate the agency's recognition of these potential impacts on those who live, work, and recreate nearby and its commitment to continued outreach and engagement with these	Minority and low-income populations	The BLM, for the September 2024 lease sale, has included maps of each parcel which include current producing oil and gas wells, active leases, towns, and cities, if present. The BLM has identified, in the EA, potential communities of concern in each county that could be adversely or disproportionately affected by oil and gas development and has discussed how the potential for development could affect such communities. Because of the rural disposition of the parcel locations, any mitigation would be developed with any specific individuals that may be adversely or disproportionally affected by the development of any of these parcels and would be identified at the time of APD submission and additional
		front-line communities as the agency moves forward.		site-specific environmental analysis.
12	The Wilderness Society (TWS)	We commend the BLM for considering whether parcels are in Priority Habitat Management Areas (PHMA) and General Habitat Management Areas (GHMA) for Greater Sage-Grouse. However, this sale consists entirely of parcels that overlap GHMA (WY-2024-09-1842, WY-2024-09-1843, WY-2024-09-1844, WY-2024-09-7298). The BLM should prioritize deferring all parcels or those portions of parcels that contain acreage designated as GHMA under the 2015 Greater Sage-Grouse Resource Management Plan Amendments (the 2015 Plans). Deferral is required for at least two reasons.	GSG	All parcels containing Greater Sage-grouse habitat management areas are fully analyzed in the EA (see EA section 4.3 (pg. 45-48) and Appendix 5.5 (pg. 94-97) for a full discussion of Greater Sage-grouse prioritization.) The proposed action is in conformance with the 2015 GSG ARMPA and field office RMPs. The ARMPA, and the respective field office RMPs, indicate which lands are available for lease. Stipulations are applied to each lease, as applicable, to help minimize impacts to sage-grouse. If and/or when, a site-specific development plan is received by the BLM, further analysis will occur to locate disturbance in locations which minimize impacts to sage-grouse and their habitat.
		First, a key component of the 2015 Plans requires the BLM to prioritize new oil and gas leasing outside of PHMA and GHMA to protect that habitat from future disturbance. In May 2020, BLM's national policy addressing		Additionally, the BLM is not required to defer leasing while RMPs are being revised or supplemented. RMP amendments are outside the scope of this EA. Nothing in BLM policy, or regulation, requires that BLM not manage lands in accordance with existing RMP decisions (see 4th Quarter 2018,

prioritization, IM 2018-026, was struck down by a court. The BLM has not adopted new national guidance on the prioritization requirement and has represented to the Montana court that the agency's previous prioritization guidance (adopted in 2016) also is not in effect. As a result, there is currently no national guidance providing directions on how prioritization is to be applied.

Further, the Draft EA fails to comply with the existing 2015 Plans because it does not prioritize leasing outside GHMA. Under the Federal Land Policy and Management Act (FLPMA), the BLM must manage public lands "in accordance with the [applicable] land use plans..."

Second, all parcels in sage-grouse habitat should be deferred in light of the BLM's ongoing consideration of revisions to the 2015 Plans. The BLM's pending plan revision process requires deferral of parcels in sagegrouse habitat because the terms and conditions of the 2015 Plans must be strengthened to ensure protection of the grouse and avoid the need for an Endangered Species Act listing. Sage-grouse populations have continued to decline under the 2015 Plans. Ensuring healthy sage-grouse populations across their range will require amending the 2015 Plans to address the variety of threats faced by this species. In the meantime, leasing in PHMA and GHMA must be deferred to safeguard future conservation opportunities, especially given the breadth of undeveloped leased lands in Wyoming.

To the extent the BLM does press ahead with leasing in PHMA or GHMA while it reconsiders the 2015 Plans, it must provide a

Supplemental February 2019 Protest Decision, February 22, 2019, at 9).

13	TWS	full analysis of the reasonably foreseeable impacts to sage-grouse from development on those particular leases. Earlier this year, a court found that BLM's lease sale analysis of sage-grouse impacts violated the National Environmental Policy Act (NEPA). The court recognized that BLM's practice of simply claiming that impacts from leases will be "similar" to those discussed in the NEPA documents for the 2015 Plans falls short of what the law requires. Instead, the NEPA analysis must address the specific lands being offered and develop a "prediction of how this lease sale will likely impact sage grouse populations in light of all available evidence, including the more recent science that has motivated [BLM] to redraft the existing [2015 Plans]." Thus, if the BLM chooses to offer sage- grouse habitat in this lease sale, it must revise its approach to sage-grouse analysis in order to comply with NEPA. This lease sale has one parcel that overlaps with pronghorn crucial winter range (WY- 2024-09-1843). This parcel should be designated as low preference and deferred. The BLM is required to manage public lands "in a manner that will provide food and habitat" for all wildlife. The research is clear that big game suffers	Big Game Habitat	The WGFD, who has regulatory authority over populations of big game, has not requested that BLM change management direction for these wildlife species, or requested that BLM not offer the subject lands. BLM has recognized that the TLS is in support of the big game populations when they may be in their most vulnerable state during harsh winter conditions. As BLM has responded prior, at the site-specific stage, BLM can
13	TWS	sage- grouse habitat in this lease sale, it must revise its approach to sage-grouse analysis in order to comply with NEPA. This lease sale has one parcel that overlaps with pronghorn crucial winter range (WY- 2024-09-1843). This parcel should be designated as low preference and deferred. The BLM is required to manage public lands "in a manner that will provide food and habitat" for all wildlife. The	Big Game Habitat	big game, has not requested that BLM change management direction for these wildlife species, or requested that BLM not offer the subject lands. BLM has recognized that the TLS is in support of the big game populations when they may be in their most vulnerable state during harsh winter conditions. As BLM
		game herds. By avoiding leasing lands on which these species depend, the BLM can uphold its duty under the FLPMA to ensure food and habitat essential for mule deer and pronghorn.		well, mitigation has to be tailored to the project at hand which cannot be done without a proposal for occupancy. See section 4.4 (pg. 48-52) for full discussion on impacts to big game which has been updated in response to this comment and others.

		The regional pronghorn population in the		
		Upper Green was especially hit hard in		
		previous winters. Following a Mycoplasma		
		bovis outbreak, concern for the Sublette		
		Antelope herd is heightened. In 2022, the		
		population of this herd that summers in and		
		around Grand Teton consisted of about 708		
		animals according to the Nation Park Service,		
		Wyoming Game and Fish Department, and the		
		National Elk Refuge combined ground count.		
		In the summer of 2023, only 79 pronghorns		
		were counted in the Jackson Hole and Gros		
		Ventre drainage area.20 Given the recent loss		
		of over 90% of the Grand Teton area pronghorn		
		and over 50% of the Sublette Pronghorn herd, it		
		is more imperative than ever to conserve the		
		species migration pathways and sensitive		
		habitat and defer parcels that overlap with		
		crucial pronghorn winter range.		
		If the BLM does offer leases in this habitat, it		
		must provide a more thorough analysis of the		
		reasonably foreseeable impacts to big game		
		populations from development on those		
		particular leases. As with sage-grouse, a court's		
		decision earlier this year recognized that the		
		BLM's approach to analyzing big game		
		violates NEPA because it relies on the analysis		
		prepared for agency's resource management		
		plans (RMPs) and lacks "anything resembling		
		an estimate of how the lease sale here will		
		impact these species." This approach is		
		especially inadequate because many of the		
		BLM's Wyoming RMPs are decades old, and		
		new research has shown that big game are suffering substantial population losses in areas		
		of intensive oil and gas development.		
14	TWS	We commend the BLM for documenting and	Proximity to	The BLM discusses potential impacts to environmental justice
17	1 44 2	providing analysis of community health and	Residences	communities in Sections 3.6 (pg. 27-31) and 4.6 (pg. 52-60) in
		environmental justice considerations, values the	Residences	the EA. The EJ screening and analysis informing these
		on in the first public considerations, values the		the EA. The EJ screening and analysis informing these

		Administration has committed to upholding. However, the BLM should treat these factors with greater weight when designating preference status.		sections of the EA complies with the requirements set forth in CEQ guidance, Executive Order 12898, and BLM policy (as BLM's IM 2022-059). Please also see response to public comment number 60.
		As noted in the Draft EA, each of the nominated parcels is within 1.25 miles of a building footprint. Such proximity of oil and gas development to residences presents a heightened risk for occupants to experience the adverse effects of air pollution. As such, we recommend that the BLM apply an environmental justice and community impacts criterion to this sale, designating as low preference those parcels within 1.25 miles of a residence, and accordingly deferring the parcels or portions of parcels, which would allow for an increased buffer distance between the proposed parcels and existing building footprints.		
15	TWS	The BLM will preference lands with "high potential" for oil and gas development. We commend the BLM's decision to limit leasing in this proposed lease sale to parcels with "high potential" for oil and gas development. Accordingly, we hope the BLM continues to prioritize leasing only those parcels that demonstrate a high potential for oil and gas development in future lease sales.	Low Development Potential	We have received and reviewed your comment. Based on the review, no response is required.
16	TWS	The Draft EA's discussion of greenhouse gas (GHG) emissions and climate impacts resulting from this lease sale requires additional analysis to take the proper "hard look at environmental consequences" that NEPA demands. Additionally, the BLM fails to factor GHG emissions into leasing decision-making. In terms of analyzing GHG emissions pursuant to NEPA, on January 9, 2023, the Council on Environmental Quality (CEQ) released updated	Reasonably Foreseeable GHG Emissions	The BLM analyzes potential impacts from climate change and GHG in detail in the EA. The document also incorporates by reference the 2022 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends which provides a more robust assessment of cumulative emissions, climate change impacts, and reputable climate science sources. In accordance with various statutory and policy requirements, BLM conducted a robust assessment of air quality emissions and climate change impacts using reputable science-based

compensate for climate effects."	emissions at global, national, and state scales; and Chapter 10 discussed potential options within the BLM authority to mitigate impacts of emissions. Lease EAs data, methods, and analysis tools are updated regularly, and specialist reports are updated annually by air quality, fluid minerals, and leasing specialists across the BLM, to utilize and present the best data and statistics available for estimating emissions. As new information and modeling become available, the BLM will continue to improve and revise emission estimates, methodologies, and assumptions. The EA section 1.2 (page 7) discusses the Purpose and Need and Decision to be Made. Analyzing an alternative that would reduce GHG emissions does not fall within the Purpose and Need of the EA and is therefore outside the scope of this EA.
analyze GHG emissions and climate change in NEPA reviews. To that end, the BLM should follow this guidance, including quantifying the reasonably foreseeable GHG emissions— both direct and indirect—of the lease sale under each alternative. The BLM must "[d]isclose and provide context for the GHG emissions and climate impacts associated with the lease sale and alternatives." As part of its analysis, the BLM must also consider the effects of climate change on reasonably foreseeable oil and gas activities that will result from the sale. This requires evaluating how climate impacts will affect the resources, ecosystem, communities, and oil and gas infrastructure, making it more vulnerable to adverse effects and stranded assets. Finally, the BLM must analyze reasonable alternatives, "including those that would reduce GHG emissions relative to baseline conditions, and identify available mitigation measures to avoid, minimize, or	an overview of applicable Federal and state regulatory laws and policies to protect human health and environment and utilized a variety of air quality information, air diffusion modeling, and specialized tools to evaluate air quality and greenhouse gas emissions as wells as describes mitigation strategies, best management practices, and potential impacts to air quality. In addition, the 2022 Specialist Report was incorporated by reference in the EA which provides a detailed discussion and analysis of greenhouse gases including direct and indirect emissions from BLM-authorized federal mineral estates, short-term and long-term oil and gas projections, and climate change impacts. BLM provided the emissions from the proposed action in which past and in-process BLM leases as well as lease approval timeframes and development status of approved and in-process leases were considered. Specifically, Chapter 2 of the 2022 Specialist Report discusse other federal and state agencies that regulate emissions to protect human health and environment; Chapter 5 provides direct and indirect greenhouse gas emission estimates for both existing and projected federal fossil fuel production; Chapter provided a background on cumulative greenhouse gas

GHG emissions pursuant to NEPA, on January 9, 2023, the Council on Environmental Quality (CEQ) released updated guidance on how agencies should consider and analyze GHG emissions and climate change in NEPA reviews. To that end, the BLM should follow this guidance, including quantifying the reasonably foreseeable GHG emissions— both direct and indirect—of the lease sale under each alternative. The BLM must "[d]isclose and provide context for the GHG emissions and climate impacts associated with the lease sale and alternatives." As part of its analysis, the BLM must also consider the effects of climate change on reasonably foreseeable oil and gas activities that will result from the sale. This requires evaluating how climate impacts will affect the resources, ecosystem, communities, and oil and gas infrastructure, making it more vulnerable to adverse effects and stranded assets. Finally, the BLM must analyze reasonable alternatives, "including those that would reduce GHG emissions relative to baseline conditions, and identify available mitigation measures to avoid, minimize, or compensate for climate effects."

The climate guidance instructs the BLM not to fractionalize GHG emissions from this lease sale so as to appear insignificant compared to global or national emissions. The BLM's climate effects analysis "must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum." Further, the BLM must place emissions and climate damages "in the context of relevant climate action goals and commitments, . . . summarizing and citing to available scientific literature to help explain real world effects."

lease sale EA, discusses health impacts related to climate change in Section 9.5. The BLM analyzes potential impacts, including cumulative impacts, from climate change and GHG in detail in the EAs (see EA Chapter 4.1, pg. 31-40). The EAs incorporate by reference information from the recently published 2022 BLM Air Resources Technical Report for Oil and Gas Development. The emissions used in this analysis are estimated using the 2022 BLM Lease Sale Emissions Tool and evaluated with the EPA GHG equivalency calculator. The BLM also includes a monetized social cost of carbon analysis for the estimated emissions associated with future potential development. The BLM has not yet made a decision about which parcels will be offered for sale.

See also Response to Public Comment No. 16 and 84.

		CEQ guidance also includes accounting for national climate policy in the analysis for the sale. The CEQ climate guidance directs agencies "to discuss whether and to what extent the proposal's reasonably foreseeable GHG emissions are consistent with GHG reduction goals, such as those reflected in the U.S. nationally determined contribution under the Paris Agreement." The BLM should conduct this consistency evaluation with U.S. climate commitments and targets.		
		Relatedly, BLM's NEPA analysis must not only address the social and economic costs resulting from development of any leases it offers, but also explain what benefits warrant incurring those costs, which the Draft EA fails to do.		
		The BLM must, however, do more than simply analyze GHG emissions. It must also address GHG emissions in its leasing decisions. Earlier this year, a court held that "the complexity of the task does not give the [BLM] a free pass to avoid making these tough decisions by asserting that GHG emissions did not factor into its decision-making." While we appreciate the analysis of GHG emissions in the Draft EA, the BLM must take the further step of "explain[ing] how its GHG analysis inform[s] the decision to select" lease parcels.		
18	TWS	The Draft EA violates NEPA because it contains a limited analysis of the reasonably foreseeable impacts to groundwater from drilling on these particular lease sale parcels. The Draft EA contains generic boilerplate about potential water impacts from oil and gas development.43 In large part, these statements could be made about any oil and gas lease	Ground Water	When a specific parcel is sold, the BLM does not know certain specific details of development. These include: drill rig type (e.g. a Tier II or Tier IV rig) how a proposed well may be developed (e.g. will the well be hydraulically fractured or not, vertical, directional, or horizontal wellbores), the mineral resources a well might target (oil vs. gas), where water for drilling activities may be obtained (e.g. town water supplies,

anywhere in Wyoming or nearby states—they tell the agency and the public nothing at all about how the development of these leases will impact the region.

Groundwater is a critical resource that supplies many communities, particularly rural ones, with drinking water. Protecting these resources is imperative to protect human health and the environment, especially because groundwater will become more important as increased aridity and higher temperatures due to climate change alter water use, quality, and availability. The U.S. Environmental Protection Agency (EPA) has noted that existing drinking water resources "may not be sufficient in some locations to meet future demand" and that future sources of fresh drinking "will likely be affected by changes in climate and water use." As a result, the BLM must protect aguifers currently used for drinking water and deeper and higher- salinity aquifers that may be needed in coming decades.

Oil and gas drilling involves boring wells to depths thousands of feet below the surface, often through or just above groundwater aquifers. Without proper well construction and vertical separation between aquifers and producing formations, oil and gas development can contaminate underground sources of water.46 However, federal rules and regulations do not provide specific directions for the BLM and operators on how to protect all usable water. As a result, agency regulations, like the 43 C.F.R. § 3172.7 (formerly Onshore Order No. 2) requirement to "protect and/or isolate all usable water zones" are inconsistently applied and often disregarded in practice.

water well, recycled water from previous drilling activities), or even if freshwater zones will be encountered when drilling. Upon receipt of a development proposal, BLM will conduct additional review to ensure that all usable water zones are protected through proper cementing and casing, as required by regulation and 43 CFR 3172. The use of a White Paper, like BLM WY has prepared and incorporated by reference into the lease sale EA, was recently affirmed in: Ctr. for Biological Diversity v. United States BLM, No. 3:17-CV-553-LRH-WGC, 2019 U.S. Dist. LEXIS 7525 (D. Nev. Jan. 15, 2019): "As the Court stated in the previous section, BLM was not required to conduct a site-by-site analysis of the impacts of fracking at the leasing stage because at the time the leases were sold, BLM did not know what parcels would be sold, what type of ground development the lessees would choose to pursue, and if fracking would even take place." As wells as The Wilderness Society, et al. v. Debra Haaland, No. 1:22-cv-01871-CRC (Mar. 22, 2024): "Other courts have upheld BLM's use of the Hydraulic Fracturing White Paper to assess the impacts on groundwater and rejected calls that the Bureau "conduct[] a specific analysis of the impacts of fracking on the parcels . . . to be offered for lease." Such an approach is indeed fairly commonplace, as this case shows. The Court cannot substitute its own judgment for the Bureau's informed assessment of what level of analysis was reasonably possible and useful at the leasing stage and, as a result, cannot conclude that the Bureau's general approach was unreasonable." Within the White Paper that was incorporated by reference into the EA, there is an assessment of reasonably foreseeable water demands and an assessment of water availability. This information suggests that there is an adequate supply of water available to support the lease-sale specific RFD analyzed in the EA without causing site specific impacts.

See section 3.2 (pg. 22-23) and Appendix 5.4 (pg. 88-93) for full discussion of the affected environment of water resources. While the commenter references wells in Montana, BLM has

Industry has admitted that it often does not protect usable water in practice. Western Energy Alliance and the Independent Petroleum Association of America have told the BLM that the "existing practice for locating and protecting usable water" does not measure the numerical quality of water underlying drilling locations, and therefore does not consider whether all usable water would be protected during drilling. Multiple reports studying samples of existing federal oil and gas wells in Wyoming and Montana confirm industry admissions that well casing and cementing practices do not always protect underground sources of drinking water. Indeed, multiple courts have invalidated BLM lease sales in recent years due to the agency's failure to grapple with this evidence. Similarly, a study of hydraulic fracturing in Pavillion, Wyoming, indicated that oil and gas drilling had contaminated underground sources of drinking water in that area due to lack of vertical separation between the aquifer and target formation.

First, as a threshold matter, the BLM must provide a detailed account of all groundwater resources that could be impacted in the areas considered for leasing, including usable aquifers that may not currently be used as a drinking water supply. The accounting must include, at minimum, all aquifers with up to 10,000 parts per million total dissolved solids (the standard for usable water and underground sources of drinking water). This data is readily available from the USGS and other resources, and the BLM cannot substitute existing drinking water wells or other inadequate proxies for a full description of all potentially usable groundwater resources in the area.

reviewed the comment and has included additional discussion at pages 22-23, 40-45 and Appendix 5.4.

		Second, the BLM must use that accounting to		
		assess how new oil and gas wells might impact these resources. That evaluation must assess the		
		sufficiency of protective measures that will be		
		employed, including wellbore casing and		
		cementing and vertical separation between		
		aquifers and the oil and gas formations likely to		
		be hydraulically fractured. In assessing these		
		protections, the BLM cannot presume that state		
		and federal regulations will protect		
		groundwater, because of the shortcomings and		
		industry noncompliance described above.		
		Third, the BLM may not defer its analysis until		
		the APD stage because information is readily		
		available at the lease sale stage to evaluate		
		groundwater risks. As noted above, data is		
		available to identify the depth and quality of		
		aquifers in the area of proposed leasing. And the BLM can look to nearby existing oil and		
		gas wells for a forecast of the likely depth of		
		new wells and whether those wells present		
		concerns over adequate casing and cementing.		
		A failure to conduct further thorough analysis		
		would violate NEPA.		
19	TWS	The BLM must take the requisite hard look at	Methane Emissions	The lease sale does not authorize development to take place
1		the impacts of methane emissions that will		and is not the appropriate level of NEPA to identify mitigation
1		result from development of and production on		measures before an operator even proposes to drill or submits
1		these leases, including the economic, public		an APD. When actual development is proposed at a specific
1		health, and public welfare impacts of venting and flaring. In 2019 alone, venting or flaring		location, the BLM may require COAs at that time.
		accounted for roughly 150 billion cubic feet of		Furthermore, the BLM does not have the regulatory authority
		methane, resulting in the loss of over \$50		to require mitigation for GHG emissions or climate change
		million in federal royalty revenue. This waste		impacts because no authorizing legislation, legacy act or
		also means lost royalty revenues for taxpayers		regulation defines significance levels or gives the BLM
		and Tribes. A recent analysis conducted by		regulatory authority to require mitigation. Both EPA and State
		Synapse Energy Economics determined the		regulatory agencies regulate emissions such as methane via
		value of lost gas in the form of: (1) lost		existing and proposed regulatory measures. The BLM has
		royalties; (2) lost state revenue from taxes; and		finalized its Waste Prevention Rule that, will allow the BLM

		(3) lost revenue from wasted natural gas that could be used for other purposes. The study found that \$63.3 million in royalties, \$18.8 million in state revenue from taxes (from the top six states), and \$509 million in gas value was lost due to venting, flaring, and leaks on federal and Tribal lands. The report found that, in 2019, leaks accounted for 46% and flaring for 54% of lost gas. Wyoming had among the highest volumes of gas lost from federal and Tribal lands. Venting and flaring on Tribal and federal public lands has significant health impacts on frontline and fence line communities. Proximity to oil and gas infrastructure creates disproportionate adverse health risks and impacts on Indigenous communities in particular. According to an Environmental Defense Fund (EDF) analysis, roughly 1,100 adults with asthma, 800 adults with chronic obstructive pulmonary disease, 700 adults with coronary heart disease, and 400 adults who have experienced a stroke live within a half mile of a flaring well. Another study links flaring to shorter gestation and reduced fetal growth. Reducing waste from flaring on federal and Tribal lands would lessen these harms and would be consistent with the Administration's environmental justice commitments. Therefore, the BLM should not issue additional oil and gas leases until the agency addresses waste on Tribal and federal public lands.		to require additional waste prevention measures to address methane emissions. Furthermore, the 2022 BLM Specialists Report on GHG Emissions and Climate Trends, which was incorporated by reference in the lease sale EA, discusses health impacts related to climate change in Section 9.5. Refined analysis of the health effects, such as asthma, may occur with project -level NEPA compliance if ozone and particulate matter concentrations are identified as an environmental concern. Please also see response to public comment number 60.
20	Theordore Roosevelt Conservation Partnership (TRCP)	We encourage the Wyoming BLM State Office and participating Field Offices to address in the EA ambiguities present in the language of the Inflation Reduction Act (IRA) with respect to fluid mineral leasing, and to implement the reforms outlined in IM 2023-007: Evaluating Competitive Oil and Gas Lease Sale Parcels for	IRA	Please see Response to Public Comment No. 10. In addition, BLM specialists did not identify any parcels as "low" preference for leasing (which could be recommended for deferral) under Criteria 2, 3 or 4 of the IM. Also, neither the WGFD nor the Wyoming Governor's office requested any additional deferrals under these Criteria.

Future Lease Sales – particularly with respect to evaluation of Expressions of Interest (EOIs) for competitive lease sale parcels. This IM provides guidance for leasing parcels with the	
for competitive lease sale parcels. This IM	
provides guidance for leasing parcels with the	
least potential for conflicts with other resources	
by screening parcels with low potential for	
economic oil and gas recovery, and those that	
overlap important fish and wildlife habitats –	
such as connectivity areas and migration	
corridors.	
To implement and adhere to IM 2023-007, we	
encourage the BLM to incorporate in the EA	
and forthcoming decisions a transparent	
methodology to carefully scrutinize each parcel	
included in this sale, evaluate the real	
likelihood for oil and gas development on each	
parcel based on documented potential for	
economically viable mineral resources, and	
weigh the development of each eligible parcel	
against other competing multiple use mandates	
and implementation of other Administration	
priorities such as Secretarial Order 3362 –	
Improving Habitat Quality in Western Big-	
Game Winter Range and Migration Corridors,	
BLM's Record of Decision and Approved	
Resource Management Plan Amendments	
(ARMPA) for the Rocky Mountain Region,	
Including Greater Sage-Grouse Sub-Region of	
Wyoming, September 2015, and the Council on	
Environmental Quality's (CEQ) March 21,	
2023, Guidance for Federal Departments and	
Agencies on Ecological Connectivity and	
Wildlife Corridors.	
21 TRCP Winter 2022-2023 had devastating impacts on Big Game The WGFD, who has regulatory authority over	
many of Wyoming's Mule deer and pronghorn big game, has not requested that BLM change in	
antelope populations, including the herd direction for these wildlife species, or requeste	
segment that occupies parcel WY-2024-09- offer the subject lands. BLM has recognized the	
1843. Prior to the 2022 winter 708 pronghorn support of the big game populations when they	may be in their
were documented in the regional population, most vulnerable state during harsh winter cond	
which plummeted to a low of 79 animals in the has responded prior, at the site-specific stage, I	BLM can

		summer of 2023. The Loss of 90% of the Grand Teton area pronghorn and over 50% of the Sublette Pronghorn herd is of major concern for Wyoming sportspeople.6 We ask the BLM to avoid leasing in crucial winter range by deferring parcel WY-2024-09-1843. This deferral reflects Criteria #2 under IM 2023-007. In addition to meeting criteria #2 of IM 2023-007, deferring this lease meets the responsibility outlined in SO3362 which states that the DOI has: a responsibility as a Department with large landholdings to be a collaborative neighbor and steward of the resources held in trust." Accordingly, it established big game habitat and migration as a priority for the Department and directs the BLM to ensure they are: (iv)avoiding development in the most crucial winter range or migration corridors (v)minimizing development that would fragment winter range and primary migration corridors. (vi)limiting disturbance of big game on winter range;" Additionally, the BLM is required to manage public lands "in a manner that will provide food and habitat" for all wildlife under 43 U.S.C. § 1701(a)(8). Should the BLM decide to lease parcels within important crucial range we ask that it include an analysis of the reasonably foreseeable impacts from development to big		identify other mitigation and with sufficient justification, control the maintenance and production actions of any future wells occurring in CWR. Until a discrete proposal is submitted, and BLM can assess the conditions that exist at the time of submittal, more precise analysis would be speculative. As well, mitigation has to be tailored to the project at hand which cannot be done without a proposal for occupancy. See section 4.4 (pg. 48-52) for full discussion on impacts to big game which has been updated in response to this comment and others.
22	TRCP	game on these parcels. Recent studies document range-wide Greater sage-grouse (GRSG) populations continuing to decline approximately 3.0% annually from 1965-2019, with a nearly 40% decline since 2002.7 A report issued in 2022 found that every year 1.3 million acres of largely intact sagebrush habitat are transitioning to less functional habitat.8 The BLM is currently	GSG	All parcels containing Greater Sage-grouse habitat management areas are fully analyzed in the EA (see EA section 4.3, pg. 45-48, and Appendix 5.5, pg. 94-97 for a full discussion of Greater Sage-grouse prioritization.). Through this process the BLM has considered relevant information regarding each parcel and has considered how the parcels may be developed in the future if they are sold and a lease issued, in identifying potential impacts to Greater Sage-grouse.

considering revisions to the 2015 plan that would improve management direction to address the numerous threats faced by this species. We thank the BLM for deleting parcel WY-2024-09-1843, which contains Sage Grouse General Habitat Management Areas (GHMA) from leasing consideration. To avoid further declines and a possible Endangered Species Act Listing, we request that Wyoming BLM defer all leases within GHMA (See Appendix).

Under the Record of Decision and Approved Resource Management Plan Amendments (ARMPA) for the Rocky Mountain Region, Including Greater Sage-Grouse Sub-Region of Wyoming, September 2015, BLM must: prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs . . . to further limit future surface disturbance and to encourage new development in areas that would not conflict with GRSG. This objective is intended to guide development to lower conflict areas and, as such, protect important habitat and reduce the time and cost associated with oil and gas leasing development. It would do this by avoiding sensitive areas, reducing the complexity of environmental review and analysis of potential impacts on sensitive species, and decreasing the need for compensatory mitigation. Rocky Mountain Region ROD at 1-25.

The Wyoming BLM ARMPA echoes this directive and includes the following objective: "Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs" (ARMPA Management Objective No. 14, at 24). Although BLM issued amendments to the 2015 Greater Sage-grouse Plans in

Additionally, parcel WY-2024-09-1843 was deleted because the parcel did not contain federal minerals (see EA section 2.2, pg. 15)

23 TRCP	March 2019, these amendments were enjoined in a 2019 court ruling, which restored the 2015 plan requirements for states, including Wyoming. Consequently, even though the requirement to prioritize oil and gas leasing and development outside sage-grouse habitat was formally removed from the Wyoming ARMPA for General Habitat Management Areas (GHMA) in the 2019 amendment, BLM must comply with all aspects of the 2015 Sage-grouse Plans. Should the BLM decide to lease parcels within GHMA in advance of revisions to the 2015 plan we ask that it include an analysis of the reasonably foreseeable impacts from development to sage grouse on these parcels. The impacts of energy development on wildlife habitat on public land throughout the West have been well documented and studied. Management of federal public lands administered by the BLM within important wildlife habitat is of great interest to the TRCP and our members, as Wyoming's mule deer, elk, and pronghorn herds are renowned for world-class hunting. Wyoming is also a stronghold for greater sage grouse, and the conservation of this icon of the west is critical to avoid Endangered Species Act listing. Hunter opportunity, and the funding for wildlife management and conservation generated from hunting, would be negatively impacted if herds and grouse continue to decline. We thank you for deferring some of the parcels we requested in scoping comments. For the reasons stated in our comments above, we ask that you defer all parcels from leasing in: •Crucial big game winter range	General	Please see response to public comment 21 and 22. In addition, each Field Office Resource Management Plan (RMP) indicates which lands are open to oil and gas development, and which stipulations apply. Each field office reviewed the potential parcels within the field office boundaries and applied stipulations as appropriate. The proposed lease sale is in conformance with each field office RMP and impacts to specific cultural, Wilderness Study Ares, and Special Status Species are discussed within the respective RMP. BLM will consider current conditions and apply appropriate mitigation at the APD stage should the parcels be sold and development proposed.
	Crucial big game winter range Greater Sage Grouse General Habitat Management Areas		

Г		T	T
	If BLM opts not to defer the parcels within important wildlife habitat, BLM should apply no surface occupancy, or development density and timing limitation stipulations (taking into account all development, maintenance, and service-related surface disturbance and use) to protect the habitats identified in these comments. This would also protect access and opportunity for sportsmen and sportswomen.		
24 Western Environmental Law Center (WELC)	As an initial matter, we note nothing in the recently enacted Inflation Reduction Act of 2022, H.R. 5376 ("IRA" or "Act") requires BLM to offer any onshore oil and gas leases or alters BLM's inherent authority under FLPMA and the MLA to hold or postpone lease sales or to issue leases sold. While the IRA conditions the Interior Department's ability to issue rights-of-way for renewable energy development on new oil and gas leasing, BLM cannot take as a given that new renewable rights-of-way must be issued in the coming months. The entire purpose of prioritizing renewable energy development on public lands is to benefit the climate and facilitate a just transition. If oil and gas leasing pursuant to the IRA offsets or eliminates those climate benefits, the rationale for renewable projects disappears. BLM should not approve renewable projects in that circumstance, because doing so consumes significant staff resources and the projects will cause their own adverse impacts to public lands and wildlife. Before moving forward with any new oil and gas lease sales, BLM must provide a reasoned explanation for that choice, supported by record evidence relevant to the IRA. Among other relevant factors, BLM must consider: (a)	IRA/ Leasing	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 33) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 13) Competitive Lease Sale EA. The BLM has a statutory responsibility to respond to Expressions of Interest submitted by the public to develop federal mineral resources. It is the policy of the BLM to make mineral resources available for use and to encourage development of mineral resources to meet national, regional, and local needs. This policy is based on various laws, including the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976 (FLPMA). In accordance with the Federal Onshore Oil and Gas Leasing Reform Act of 1987 and BLM Manual 3120, each BLM state office will hold sales at least quarterly if lands are determined to be eligible and available for competitive leasing. At such time that a renewable energy project was to be developed, as a result/correlation of leasing federal minerals, all information requested should be available through the BLMs ePlanning page, in the analysis for the individual project.

	1	1 1 11 11 11 2		T
		whether and how many renewable rights-of-		
		way are ready for issuance; (b) when those		
		renewable projects would come on-line and		
		how the energy they produce would compare		
		with the energy and carbon pollution generated		
		by production on the proposed oil and gas		
		leases; and (c) alternatives that would minimize		
		or mitigate the carbon pollution from the		
		proposed oil and gas leases.		
25	WELC	The IRA was signed into law by President	IRA/ GHG	Based on our review of the record, it does not appear the
		Biden on August 16, 2022. The administration	Reductions	WELC's public comments vary significantly from those
		has asserted that passage of the Act will result		raised during the 30-day public Comment for the 2024-06
		in a 40%—or one gigaton—reduction of		Competitive Lease Sale EA. BLM refers the reader to
		greenhouse gas emissions by 2030, and has		Response to Public Comments for the 2024-06 Competitive
		lauded the Act as a means to "significantly cut		Lease Sale.
		the social costs of climate change." There is		
		little question that the Act's \$369 billion		Please refer to "2022 BLM Specialist Report on Annual
		investment in energy security and climate		Greenhouse Gas Emissions and Climate Trends" for climate
		change programs represents an essential		related impacts from BLM -authorized actions (i.e., lease
		infusion of resources toward tackling the		sales, etc.).
		climate crisis. Nonetheless, BLM may not rely		
		on the Act as a basis for assuming a		IM 2023-006 does state, "Section 50265 of the IRA provides
		quantifiable decrease in emissions or as an		that the Bureau of Land Management (BLM) "may not issue a
		offset to emissions under the lease sale for three		right -of-way for wind or solar energy development on
		reasons: (1) the Act itself contains provisions		Federal land" unless it has (1) held an onshore oil and gas
		that undercut its goals of effecting a clean		lease sale1 during the 120 -day period ending on the date of
		energy transition by perpetuating the federal oil		the issuance of the right -of-way, and (2) "the sum total of
		and gas program, contrary to all scientific		acres offered for lease in onshore lease sales during the 1-year
		mandates; (2) even provisions that directly		period ending on the date of the issuance is not less than
		address supply-side sources of greenhouse gas		the lesser of 2,000,000 acres[] and 50 percent of the
		emissions have the potential to increase		acreage for which expressions of interest have been submitted
		emissions in the near-term; and, finally; (3) the		for lease sales during that period[.]" The acres proposed for
		majority of the IRA's climate provisions will		sale within this EA are a portion of the "sum total of acres
		vary in efficacy (i.e. emissions reductions)		offered for lease" and any plans to issue renewable rights-
		depending on how they are implemented by the		of-way are outside of the scope of this EA.
		federal government, as well as state and local		of may are considered and seepe of and Erri
		governments, and it is therefore impossible to		
		reliably assume that a given level of reductions		
		will be achieved.		
		will be achieved.		

	1	T		-
26	WELC	Section 50265 of the Act requires that for any	IRA Leasing	Based on our review of the record, it does not appear the
		renewable energy right-of-way issued during	Counter to Climate	WELC's public comments vary significantly from those
		the first ten years following ratification of the	Science	raised during the 30-day public Comment for the 2024-06 (see
		Act, at least one onshore lease sale must have		Response to Public Comment No. 35) and the 30-day Public
		been held in the 120 days prior to its issuance		Protest period for the 2024-06 (see Response to Public Protest
		and a minimum number of acres must have		No. 14) Competitive Lease Sale EA.
		been offered for lease during the twelve-month		
		period preceding the right-of-way's issuance.		The BLM analyzes potential impacts from climate change and
				GHG in detail in the EA. The document also incorporates by
		In order to maintain a coin flip chance of		reference the 2022 BLM Specialist Report on Annual
		maintaining warming below 1.5°C, global		Greenhouse Gas Emissions and Climate Trends which
		fossil fuel production must decrease by		provides a more robust assessment of cumulative emissions,
		approximately 6% per year between 2020 and		climate change impacts, and reputable climate science
		2030, and approximately 60% of global fluid		sources. The BLM did not assume that GHG reductions would
		mineral resources must be left in the ground.		occur based on passage of the IRA. The effects of
		For developed nations, including the U.S., in		implementing the provisions of the IRA are outside the scope
		order to maintain a 50% or better chance of		of the EA.
		avoiding 1.5°C of warming, "coal production		
		needs to fall by 50% within five years and be		In accordance with various statutory and policy requirements,
		effectively eliminated by 2030," while oil and		BLM conducted a robust assessment of air quality emissions
		gas production must be cut by 74% by 2030		and climate change impacts using reputable science-based
		and end by 2035. To maintain a 67% chance of		sources. The draft EA for the proposed lease action provided
		avoiding 1.5°C of warming, the U.S. must end		an overview of applicable Federal and state regulatory laws
		oil and gas production by 2031. Instead of		and policies to protect human health and environment and
		falling, greenhouse gas concentrations continue		utilized a variety of air quality information, air diffusion
		to rise, and modest reductions have done little		modeling, and specialized tools to evaluate air quality and
		to check their trajectory.		greenhouse gas emissions as wells as describes mitigation
				strategies, best management practices, and potential impacts
		By dictating that additional onshore leasing		to air quality. In addition, the 2022 Specialist Report was
		must occur to allow development of urgently		incorporated by reference in the EA which provides a detailed
		needed renewable energy infrastructure on		discussion and analysis of greenhouse gases including direct
		public lands, the Act holds hostage potential		and indirect emissions from BLM-authorized federal mineral
		emissions reductions to the continuance of		estates, short-term and long-term oil and gas projections, and
		federal fossil fuel leasing, in direct		climate change impacts. BLM provided the emissions from
		contravention of the scientific reality that fossil		the proposed action in which past and in-process BLM leases
		fuel production must end within the decade.		as well as lease approval timeframes and development status
		Moreover, the requirement that a quota for both		of approved and in-process leases were considered.
1				

Specifically, Chapter 2 of the 2022 Specialist Report discusses

other federal and state agencies that regulate emissions to protect human health and environment; Chapter 5 provides

sales held and acres offered be met before any

development can be issued virtually ensures

new right-of- way for renewable energy

	that the minimum amounts set forth in Section 50265 will be exceeded, because BLM must ensure that these criteria are met proactively, rather than in response to a particular renewable development project. The IRA's mandate for additional onshore fluid mineral development over the next decade jeopardizes humanity's ability to constrain warming to 1.5°C, and flies in the face of an overwhelming scientific consensus.		direct and indirect greenhouse gas emission estimates for both existing and projected federal fossil fuel production; Chapter 6 provided a background on cumulative greenhouse gas emissions at global, national, and state scales; and Chapter 10 discussed potential options within the BLM authority to mitigate impacts of emissions. Lease EAs data, methods, and analysis tools are updated regularly, and specialist reports are updated annually by air quality, fluid minerals, and leasing specialists across the BLM, to utilize and present the best data and statistics available for estimating emissions. As new information and modeling become available, the BLM will continue to improve and revise emission estimates, methodologies, and assumptions.
27 WEI	Section 60113 of the IRA amends the Clean Air Act to implement the Methane Emissions Reduction Program (MERP), which provides both incentives for methane reduction and taxes on excessive releases of the greenhouse gas from oil and gas infrastructure. Because the MERP program allows EPA to use and enforce state methane regulations when they meet or exceed federal regulations, it is entirely possible – due to tax subsidies and other factors that may incentivize leasing in currently undeveloped areas – that implementation of MERP may have the effect of actually <i>increasing</i> oil and gas production and consequent methane emissions in states that already have strong methane regulations at a time when production should be decreasing. The effects of this increase will be compounded by the fact that neither these states nor the EPA have implemented or shown a willingness to implement strong enforcement mechanisms, meaning that the effects of such "strong regulations" are diluted. GHG concentrations in the atmosphere have risen dramatically in the past two years despite	IRA Reduce GHGs have Opposite Effect	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 36) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 15) Competitive Lease Sale EA. The 2022 BLM Specialists Report on GHG Emissions and Climate Trends, which was incorporated by reference in the lease sale EA, discusses health impacts related to climate change in Section 9.5. Furthermore, refined analysis of the health effects, such as asthma, may occur with project-level NEPA compliance if ozone and particulate matter concentrations are identified as an environmental concern. In addition, see Public Comment Response No, 26

28	WELC	efforts at reduction. These increases have been particularly troubling with respect to methane. Because methane is a far more potent greenhouse gas than CO2 over the short-term, additional methane emissions made possible by the IRA's fossil-fuel leasing mandates will undercut—at least in part—the longer-term consumption-based reductions the IRA is designed to encourage. This is particularly true with respect to methane because of its high near-term radiative forcing characteristics, which have the potential to trigger climate feedback loops that may be irreversible by the time reductions achieved through energy infrastructure changes take effect. BLM must acknowledge these realities, and must incorporate them into its analysis of cumulative effects for the lease sales, particularly in the context of disclosing the public health and climate impacts of burning fossil fuels from the lease parcels. Most of the IRA's provisions seek to facilitate the transition away from fossil-fuel energy sources by expanding tax credits for and investing in renewable energy, energy efficiency, and as-yet unproven carbon capture and storage technology. Because nothing in the legislation requires emissions cuts, its efficacy at reducing emissions will depend on how quickly lower and zero-emission energy sources can displace fossil-fuel based energy sources. This transition in turn depends on the willingness and ability of state and local government entities to overcome transmission shortages, political agendas, and setbacks in the	IRA Emissions Reduction/ Implementation	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 37) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 16) Competitive Lease Sale EA. The BLM analyzes potential impacts from climate change and GHG in detail in the EAs (see Sections 3.2). The EA incorporates by reference information from the recently published 2022 BLM Specialists Report on GHG. NEPA allows agencies to prepare an EA "on any action at any time in order to assist agency planning and decision-making" (43 CFR § 1501.3; see also 43 CFR § 1508.9 [defining
		sources. This transition in turn depends on the willingness and ability of state and local government entities to overcome transmission		published 2022 BLM Specialists Report on GHG. NEPA allows agencies to prepare an EA "on any action at any time in order to assist agency planning and decision-making" (43
		global supply chain. As a result, the IRA's provisions may be		CFR § 1501.3; see also 43 CFR § 1508.9 [defining "environmental assessment"]). An agency need not prepare an EIS if it determines the action will not have significant effect on the human environment or where such effects may be mitigated by adoption of appropriate measures. The level of
		viewed as creating the <i>potential</i> for significant		

	T	1		T
		As current climate science tells us, immediate		2024 Lease Sale is consistent with the purpose and
		cuts are not only desirable, they are an absolute		requirements of NEPA
		necessity if the direst outcomes of climate		
		change are still to be averted. Because of this		In addition, please see response to public comment number
		reality, NEPA dictates that BLM may not count		26.
		on the IRA as an offset to emissions projected		
		under these lease sales but must instead analyze		
		the IRA in the context of its imprimatur of		
		continuing fossil-fuel development on public		
		lands. And particularly in the absence of a		
		significance threshold for these emissions and		
		impacts, BLM cannot assume that any		
		speculative offsets from the IRA would render		
		GHG emissions and climate impacts from this		
		lease sale "insignificant." Moreover, even if the		
		IRA did result in substantial emissions cuts in		
		the future, NEPA requires BLM to take a hard		
		look at GHG emissions and impacts—and other		
		potentially significant impacts—of oil and gas		
		leasing and development before moving		
		forward with a lease sale.		
29	WELC	The IRA, and now BLM, tie issuance of rights-	Disclose Wind or	Based on our review of the record, it does not appear the
		of-way for wind and solar development on	Solar Right-of-Way	WELC's public comments vary significantly from those
		public lands to recent issuance of oil and gas	Supported by Lease	raised during the 30-day public Comment for the 2024-06 (see
		leases within the last 120 days (and offers for	Sale	Response to Public Comment No. 38) and the 30-day Public
		lease within the last year). Accordingly, BLM		Protest period for the 2024-06 (see Response to Public Protest
		must identify which renewable development		No. 17) Competitive Lease Sale EA.
		rights-of- way the proposed Wyoming oil and		
		gas lease sale will facilitate.		The purpose and need for the proposed action in the EA are to
				respond to EOIs to lease parcels of land for oil and gas
		While BLM's April 2023 Instruction		development as mandated by Federal laws, including the
		Memorandum 2023-036, "Inflation Reduction		Mineral Leasing Act of 1920, as amended, Federal Land
		Act Conditions for Issuing Rights-of-Way for		Policy and Management Act of 1976, and Federal Onshore Oil
		Solar or Wind Energy Development," provides		and Gas Leasing Reform Act of 1987. Offering parcels for
		the agency instructions for issuing rights-of-		competitive oil and gas leasing provides opportunities for
		way in compliance with the IRA, it does not		private individuals or companies to explore and develop
		identify the specific rights-of-way under		federal oil and gas resources after receipt of necessary
		consideration. BLM must provide information		approvals, and to sell the oil and gas in public markets.
		on upcoming wind or solar rights-of-way to the		
		public through this NEPA process and make		

	available any publicly- accessible tracking system for renewable rights-of-way that are under consideration. BLM must explain in its NEPA reviews which specific renewable rights-of-way are facilitated by these decisions. For the sake of efficiency and transparency, given the leasing provisions of the IRA, Conservation Groups further request that in addition to providing this information in specific NEPA reviews, BLM establish a publicly-accessible system for tracking potential and recently- issued rights-of-way for wind and solar development on public lands.		The mandate of the BLM is derived from various laws, including the Mineral Leasing Act (MLA) and the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, to promote the exploration and development of oil and gas on the public domain. Additionally, the Federal Onshore Oil and Gas Leasing Reform Act of 1987 states lease sales shall be held for each State where eligible lands are available at least quarterly and more frequently if the Secretary of the Interior determines such sales are necessary.
30 WELC	BLM must consider and address whether the proposed leasing is consistent with U.S. climate commitments and national policy. The United States committed in 2021 to reduce the nation's greenhouse gas emissions 50–52% by 2030. President Biden also has recognized the need for action, stating that the "United States and the world face a profound climate crisis. We have a narrow moment to pursue action in order to avoid the most catastrophic impacts of that crisis." Exec. Order No. 14008. Similarly, the Interior Department has acknowledged the need to address climate change when making management decisions on federal lands. Interior Secretarial Order 3289. And in 2021, the Secretary recognized that the "Nation faces a profound climate crisis," ordering the Interior Department to "prioritize[] action on climate change." Interior Secretarial Order 3399. A fundamental disconnect exists, however, between the federal government's commitment to address climate change, and how public lands are managed for energy production.	Analysis Consistent with Climate Commitments	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 39) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 18) Competitive Lease Sale EA. The 2022 BLM Specialist Report presents 6 pages of analysis in Section 2.0 Relationship to Other Laws and Policies focused on orders, laws, and regulations related to GHGs and climate change. The 2022 Specialist report was incorporated by reference in the lease sale EA. BLM has considered the effects of its onshore oil and gas lease sales on greenhouse gas emissions and climate change, and the Mineral Leasing Act provides the Secretary of the Interior with discretion to tailor those sales—including which parcels are offered for sale and the terms of leases—in light of climate effects. See, e.g., Wilderness Soc'y v. Dept. of the Interior, No. 22-cv-1871 (CRC), 2024 U.S. Dist. LEXIS 51011, at *91-92 (D.D.C. Mar. 22, 2024). For this sale, the Bureau of Land Management relied on its own specialist report and other data to compare the sale's emissions with national and global emissions, and further explained that it lacks the data and tools to estimate specific, climate-related effects from the sale. [FONSI at page 5, Short and long-term effects]. These methodological shortcomings prevent BLM from relying on

		BLM has failed to adequately address national climate policy in the draft EA for the proposed lease sale.		the methodology described herein to qualitatively compare alternatives, and BLM has therefore not exercised its discretion to tailor this lease sale to account for global climate change.
		Relatedly, BLM's NEPA analysis must address the social and economic costs resulting from development of any leases it offers, and explain what benefits warrant incurring those costs. We appreciate that the draft EA includes the social cost of greenhouse gases (SC-GHG) metric. Draft EA at 38. However, while BLM uses this metric to project that foreseeable development would cause millions of dollars in social and environmental harms, BLM provides no analysis on why it would choose to incur such enormous societal costs by proceeding with leasing, nor any discussion of how its cost analysis informs the agency's decision making. Moreover, BLM has once again used the SC-GHG in a cursory and piecemeal fashion that fails to account for the impacts of the proposed sale in the context of other contemporaneous lease sales, much less in the context of BLM's		
		oil and gas leasing program as a whole.		
31 W	VELC	In a recent decision, the federal District Court in Montana held that BLM violated NEPA in amending the Buffalo Field Office Resource Management Plan ("RMP"). Specifically, the court held that BLM failed to take a hard look at the climate and non-climate public health impacts of downstream use of fossil fuels produced under the plans: "BLM must disclose the public health impacts, both climate and non-climate, of burning fossil fuels from the planning areas." WORC v. BLM. The court instructed BLM to correct the NEPA deficiencies the court identified in both the remand for the RMPs and in any future analyses supporting fossil fuel leases within the planning	Analyze Climate and Non-Climate Public Health Effects Downstream	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 41) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 20) Competitive Lease Sale EA. The BLM is required to analyze direct and indirect effects as part of the cumulative impacts analysis. The BLM also makes clear that we do not have authority or ability to regulate downstream uses or impacts, but we are required to disclose reasonably foreseeable future impacts as part of the NEPA analysis.

		areas. Under the court's clear instruction to BLM, "[a]ny new or pending leases of coal, oil, or gas resources in the planning areas subject to the Buffalo RMP and the Miles City RMP must undergo comprehensive environmental analyses in compliance with this order and all existing procedural requirements under NEPA and the APA. At a minimum BLM must analyze and disclose the climate and non-climate public health impacts of downstream use of fossil fuels from these leases, which it has not done in the draft EA. While the Montana District Court order specifically directs BLM's analysis with respect to those leases within the Buffalo Field Office, once BLM analyzes foreseeable downstream impacts for the Montana leases, there is no reason to expect it could not undertake the same analysis for the Wyoming lease sale at issue here, or for any other lease sales. NEPA requires BLM to analyze foreseeable indirect effects, 40 C.F.R. § 1508.1(g)(2), and this provides BLM with the independent obligation to analyze non-climate, public health effects of its leasing decision decisions for Wyoming, including non-climate public health effects of foreseeable downstream end-use of fossil fuels.		The BLM can only mitigate emissions which it has continuing authority over (i.e., lease emissions sources). Approximately 95% of GHG emissions related to the proposed lease sale result from downstream use and transportation of produced fossil fuels which is beyond the BLM's jurisdiction or authority to regulate. Mitigation is more appropriate at the proposed development stage such as APDs or EISs for larger proposed projects when a plan of development/operation has been submitted and emissions sources are known with a higher degree of certainty. At the proposed development stage, the BLM can consider mitigations measures that comply with regulations, such as EPA's draft regulation on methane emissions in the oil and gas industry and align with climate policies enacted at that time. Lease notices identifying that a lessee may be required to complete additional air resource analysis and apply mitigation measures is sufficient at the leasing stage.
32	WELC	On July 16, 2020, the Council of Environmental Quality (CEQ) published in the Federal Register its final rule to revise the NEPA regulations (2020 Rule), which went into effect on September 14, 2020. The 2020 Rule immediately drew five lawsuits challenging the Rule on a variety of grounds, including under the Administrative Procedure Act, NEPA, and the Endangered Species Act, contending that the 2020 Rule exceeded CEQ's authority and that the related rulemaking	NEPA Review Under Secretarial Order 3399	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 42) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 21) Competitive Lease Sale EA. Secretarial Order 3399 instructs the BLM to identify opportunities to reduce GHG emissions. In addition, CEQ's 2023 interim guidance provides guidance on the consideration of GHG emissions and climate change in NEPA analyses. Consistent with both, the BLM has quantified and disclosed

process was procedurally and substantively defective.

Following the inauguration of President Biden in January 2021, CEQ moved the courts to stay the litigation mentioned above, pending the new administration's review of the 2020 Rule. In response to CEQ and joint motions, the districts courts have issued temporary stays in each of the cases.

On April 16, 2021, the Secretary of the Interior issued Secretarial Order 3399, which directs Interior's bureaus and offices to "not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect." To the extent BLM may rely on or apply the 2020 Rule for purposes of administering this lease sale proposed for Q3 2024, we find that reliance on and application of the 2020 Rule unlawful for the reasons explained in the stayed litigation of the 2020 Rule referenced above.

Further, on April 20, 2022, CEQ finalized the first of two proposed rulemakings (the "Phase 1 Final Rule") to revise its NEPA regulations pursuant to direction set forth in Executive Order No. 14008, and Executive Order 13990. Both executive orders directed federal agencies to engage in a comprehensive review of regulations issued during the previous administration. The Phase 1 Final Rule involved a narrow set of revisions essentially restoring long-standing regulations that were in effect prior to the promulgation of the 2020 Rule. The final Phase 2 Rule, published in the Federal Register on May 1, 2024, bolsters agency decision-making by including important

potential emissions from the lease sale based on the methodologies outlined in the 2022 Specialists Report using the best available data and in accordance with the requirements of Secretarial Order 3399. The report provides a cumulative assessment of potential GHG emissions from the federal mineral estate relative to several metrics and analysis levels at various scopes and scales. The report also identifies potential mitigation options that can be applied to any subsequent lease development via conditions of approval once specific plans of development are submitted for analysis and permitting. If/when a proposed action for development is submitted, the BLM can determine appropriate mitigation measures to reduce/offset GHG emissions.

SO3399 also requires that "Bureaus/Offices will not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020. Bureaus/Offices will continue to follow the Department's NEPA regulations at 43 C.F.R. Part 46, Department Manual procedures (516 DM Ch. 1-15), and guidance and instruction from the Office of Environmental Policy and Compliance." The EA has specifically considered direct and indirect impacts, cumulative impacts, has analyzed environmental justice and considered the significance of impacts as part of that analysis. For example, although the 2020 rule reformulates the 1978 significance factors into only four, the discussion in the FONSI includes explanation of the specific character of GHG emissions and climate change that addresses the elements of the 1978 "intensity" factors pertaining to issues with which science is still grappling. Accord WildEarth Guardians v. Zinke, 368 F. Supp. 3d 41 and cited in Dakota Resource Council et al v. U.S. Dep't of Interior et al., Or. Summ. J., March 22, 2024, ECF 1:22-cv-01853-CRC at 44 And, as stated in the FONSI: As of the publication of this FONSI, there is no scientific data in the record, including scientific data submitted during the comment period for these lease sales, that would allow the BLM, in the absence of an agency carbon budget or similar

	provisions for the consideration of climate change and environmental justice effects of a proposed action. We encourage BLM to exercise its discretion to apply the Phase 2 Rule in advance of the July 1, 2024, date on which it takes effect. Prior to the effective date of the Phase 2 Rule, under the plain terms of NEPA and Secretarial Order 3399, the BLM's NEPA processes for the proposed Q3 2024 Lease Sale must take place under the CEQ's pre-2020 regulations implementing NEPA as modified by its Phase 1 Final Rule. As set forth below, BLM's NEPA analysis must also include the cumulative impact analysis of GHG emissions in the BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends from Coal, Oil, and Gas Exploration and Development on the Federal Mineral Estate. Moreover, in January 2023, the CEQ issued interim NEPA Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (CEQ Interim Guidance). BLM should ensure that its analysis and disclosure of GHG emissions and climate		standard, to evaluate the significance of the greenhouse gas emissions from this proposed lease sale. BLM has implemented the provisions of CEQ's Phase I NEPA regulations. Because the Phase II CEQ Rule was not in effect at the time this EA was prepared, it will be considered for any future sale NEPA analysis.
	disclosure of GHG emissions and climate change impacts, including climate <i>justice</i> considerations and impacts, adhere to this		
33 WELC	Guidance. As set forth above, the parcels proposed for sale in Wyoming are driven by the Interior Department's incorrect rationale that the IRA mandates new oil and gas leasing. In addition, BLM has proposed lease sales in 2024 in other states, such as New Mexico, Colorado, and the Montana-Dakotas. Each of the proposed lease sales in 2024 are plainly part of a larger national initiative to implement the IRA and must be analyzed as such under NEPA.	EIS to Address Cumulative Impacts	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 43) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 22) Competitive Lease Sale EA. The BLM must comply with statutory and policy requirements with respect to lease sales. It is the policy of the BLM to make mineral resources available for use and to encourage

That means preparing an environmental impact statement (EIS) to address the cumulative impacts of the tens of millions of acres that may be leased both onshore and offshore. Cumulative impacts include not only those related to climate and greenhouse gases, but also wildlife habitat, water pollution, impacts to wildlife and recreation and other uses of these lands and waters, health and environmental justice, cultural resources, and other relevant issues.

NEPA's cumulative impacts requirement mandates that BLM must evaluate impacts "result[ing] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.1(g)(3) (2022).

Taking NEPA's requisite hard look at those impacts will require an EIS. NEPA requires an agency to prepare an EIS for any major federal action that may significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C). Here, it is arbitrary and capricious to conclude that leasing on such a scale is not significant. As a result, all 4 parcels for the Wyoming Q3 2024 lease sale, listed in Appendix A, in addition to the parcels proposed to-date for lease in other states, require the preparation of such an EIS.

BLM fails to analyze the cumulative greenhouse gas emissions and climate impacts from this lease sale, cumulatively with other 2024 lease sales or program-wide, in the draft EA. The Draft EA quantifies the reasonably foreseeable GHG emissions from this sale under the proposed alternative, making it entirely feasible to aggregate and assess all the

and local needs. The BLM IMs 2023-006 and 2023-007 are based on various laws, including the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976 (FLPMA). The Federal Onshore Oil and Gas Leasing Reform Act of 1987 Sec. 5102(a)(b)(1)(A) directs the BLM to conduct quarterly oil and gas lease sales in each state whenever eligible lands are available for leasing. As such, the purpose and need for the proposed action in the EA are to respond to EOIs to lease parcels of land for oil and gas development as mandated by said Federal laws, including the Mineral Leasing Act of 1920, as amended, the Federal Land Policy and Management Act of 1976, and Federal Onshore Oil and Gas Leasing Reform Act of 1987. Offering parcels for competitive oil and gas leasing provides opportunities for private individuals or companies to explore and develop federal oil and gas resources after receipt of necessary approvals.

The BLM and USFS have prepared multiple EISs that allocate land uses overlying the mineral estate. The BLM has disclosed the GHG emissions from the Proposed Action and provided context for those emissions compared to existing federal onshore GHG emissions in the state and nationally. The BLM has included an evaluation of the climate change impacts that could result from the proposed action and incorporated by reference the 2022 BLM Specialists Report on Annual Greenhouse Gas Emissions and Climate Trends which provides a more robust assessment of cumulative emissions, climate change impacts, and reputable climate science sources. If/when a proposed action for development is submitted, the BLM can determine appropriate mitigation measures to mitigate GHG emissions that are not already required by law or proposed by the operator.

Climate impacts are one of many factors that are considered in the NEPA analysis to evaluate the significance of a proposed action and the BLM's exercise of its discretion in deciding leasing actions. Other factors include wildlife habitat, water pollution, impacts to wildlife, recreation, health and environmental justice, cultural

		2024 lease sales' cumulative emissions and impacts. Even if such an analysis would be an estimate, see id., that does not excuse BLM from providing any forecast of cumulative emissions from the 2024 lease sales. Moreover, while BLM does also quantify GHG emissions nationally and in Wyoming, the agency fails to take a hard look at the reasonably foreseeable climate impacts of those emissions, fails to define or indicate a significance threshold for those emissions and impacts, and otherwise provides no meaningful context for those emissions and impacts, either relative to other contemporaneous lease sales or with respect to BLM's oil and gas program as a whole.		resources, and other relevant issues. The reasonably foreseeable development scenario developed for this EA has enabled the BLM to evaluate impacts to these resources based on the development potential of each proposed lease. These proposed leases account for total impacts of the lease sale, not piecemealed for each potential isolated project. Currently, there is not a formal Federal policy establishing a national carbon budget or a final international consensus on which carbon budget the world should use for limiting global warming (1.5°C or 2.0°C) that the BLM can use to evaluate the significance of a proposed action. However, this may change in the future, such as via CEQ direction on addressing climate change and GHGs in NEPA. The BLM works in concert with other U.S. stederal agencies (including EPA and DOE) to implement U.S. strategies and meet committed goals, including applicable executive and secretary's orders, to reduce GHG. Furthermore, at this time, BLM has not developed a standard or emissions budget that it can apply uniformly to make a determination of significance based on climate change or GHG emissions. Until such time as the Department develops further tools to analyze the relative emissions impact of its activities nationwide, the BLM can disclose GHG emissions and climate impacts, and provide context and analysis for those emissions and impacts; the agency cannot render a determination of significance for a proposed action based on GHG emissions or climate impacts alone. The 2022 Specialists Report, which was incorporated by reference in the lease sale EAs, provides a hard look and cumulative assessment of the Federal oil and gas program's contribution to state and national GHG emissions and the impacts of climate change, and includes forecasts of leasing activity across the various BLM states. Under this analysis and disclosure an EIS is not required. See, Dakota Res.
34	WELC	The proposed lease sale in Wyoming thus is plainly part of a larger national initiative and must be analyzed as such under NEPA. There is no remaining room in the carbon budget for any	EIS Hard Look at Impacts of Resumption of Leasing and Avoid	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 44) and the 30-day Public

new commitments of future greenhouse gas (GHG) pollution. Greenhouse gas pollution resulting only from existing federal fossil fuel development and potential development from leases and drilling permits already issued but not yet under production, would contribute to catastrophic climate change and unnecessary and undue degradation to the atmosphere and other public lands values that BLM is legally obligated to protect. The additional burden of new leasing would only exacerbate these extreme climate impacts. BLM has yet to acknowledge this data-driven reality at a programmatic level.

BLM and Interior must therefore take a hard and comprehensive look at the cumulative climate change impacts of authorizing *any* new leasing when combined with committed emissions already under lease or permit, and immediately defer ANY sale of new leases and APD approvals pending demonstration of compatibility with U.S. and global climate goals. This is the type of analysis that BLM and Interior had the opportunity to conduct under the auspices of the comprehensive review and reconsideration of Federal oil and gas permitting and leasing practices called for by Executive Order 14008, but failed to complete. The Department and BLM must do so now, along with other relevant agencies that manage fossil fuel development on federal lands and waters, including BOEM. BLM must also consider, as proposed in the Conservation Groups' scoping comments, a reasonable alternative of managed decline of GHG emissions from the approximately 13.5 million acres of fossil fuel estate already under lease but not producing.

New Greenhouse Gas Pollution Protest period for the 2024-06 (see Response to Public Protest No. 23) Competitive Lease Sale EA.

In addition, see Response to Public Comment No. 33.

				carefully consider what lands make the most sense to lease in terms of expected yields of oil and gas, prospects of earning a fair return for U.S. taxpayers, and conflicts with other uses, such as outdoor recreation and wildlife habitat. The BLM should always ensure it is considering the views of local communities, Tribes, businesses, State and local governments, and other stakeholders. While the leasing decisions for this lease sale result from the BLM's exercise of its discretion based on its analysis and review of the record, they are also consistent with the recommendations in the November 2021 Report, as well as numerous reports issued by the Governmental Accountability Office and Congressional Budget Office, including: ensuring public participation and Tribal consultation, addressing conflicts with other resources, avoiding lands with low potential for oil and gas development, focusing leasing near existing development and ensuring a fair return to taxpayers. This lease sale and NEPA process have included a 30-day scoping period, 30-day comment period on the environmental assessment (which was then extended by an additional 10 days) and 30-day protest period. The BLM has also ensured applicable Tribal consultation is current. The BLM's leasing decisions take into account comments received during this process and will further evaluate points raised in any protests received. In identifying parcels for leasing, the BLM has evaluated and worked to avoid potential conflicts with other resources, such as wildlife habitat, including connectivity, and areas of cultural importance.
36	WELC	The science is clear: there is simply no room for continuation of a "business as usual" approach on the federal mineral estate if humanity is to have a meaningful chance of curtailing truly catastrophic warming. Global fossil fuel production must decrease by approximately 6% per year between 2020 and 2030 if we hope to limit warming to 1.5°C. [R]esearchers at the University of Manchester's Tyndall Centre in 2022 published an analysis of phaseout pathways for coal, oil, and gas	Avoid Catastrophic Effects of Climate Change and Programmatic Necessary to Inform Future Action	See Response to Public Comment Nos. 33 and 35.

production compliant with carbon budgets for avoiding 1.5° C of warming. Their analysis finds that for developed nations, including the U.S., in order to maintain a 50% or better chance of avoiding 1.5° C of warming, "coal production needs to fall by 50% within five years and be effectively eliminated by 2030," while oil and gas production must be cut by 74% by 2030 and end by 2035. To maintain a 67% chance of avoiding 1.5° C of warming, the U.S. must end oil and gas production by 2031. In light of ongoing production, BLM must not lease any further parcels for development, as doing so jeopardizes meeting the 1.5° C target.

Similarly, the Intergovernmental Panel on Climate Change (IPCC) recently released the entirety of its sixth assessment report (AR6), including a synthesis of its findings. The IPCC Sixth Assessment provided the remaining carbon budget from the beginning of 2020 as 400 GtCO2 for a 67% probability of meeting the 1.5°C limit and 500 GtCO2 for a 50% probability of 1.5°C.

BLM has yet to complete either a project or program-level NEPA document that analyzes the federal oil and gas program in light of these scientific conclusions and with an eye to developing alternatives that respond to them. A programmatic NEPA review is the ideal vehicle for such an analysis. NEPA requires analysis before making decisions with potentially irreversible effects.

The leasing process "is the point of no return with respect to emissions," and it is therefore not only appropriate but critical that the Agency take not only a hard look but a comprehensive

i 				
		one before crossing that threshold. At this moment in time, we have very nearly reached the point of no return, not only with regard to the projected lease sales at issue here, but with regard to the ability to avert the worst impacts of climate change. President Biden recognized this in Executive Order 14008. The issuance of EO 14008 and its implementing secretarial orders represents both an opportunity and a demand for comprehensive action by the Department of Interior and BLM. Neither entity has yet responded to this directive to the extent explicitly contemplated by the Executive Order, but both retain the opportunity to do so before committing public lands to additional fossilfuel production. The "comprehensive review and reconsideration" of the federal leasing program called for in Section 208 of EO 14008 required a hard and wholistic look not only at emissions from federal fossil fuels but at how the program contributes to the climate crisis and what must be done to help the United States achieve and contribute to global climate security—not only by compliance with binding international agreements but in a way that		
		meaningfully reduces programmatic emissions.		
37	WELC	A programmatic review is particularly critical following release of the BLM Specialist Reports and Interior Report. The former constitutes—in large part—the quantification and context of federal mineral estate-associated GHG emissions courts have faulted BLM for not providing in the past. BLM must now take the logical next step, by completing the programmatic NEPA analysis it has effectively begun with the BLM Specialist Report. It must also do what it failed to do in the Interior Report – qualitatively and quantitatively	BLM Must Complete Analysis Begun in Specialist Report	See Response to Public Comment Nos. 33 and 35.

		discuss the climate change impacts of these		
		emissions in the context of the federal program,		
		leased but as yet undeveloped federal lands, as		
		well as national and global emissions. Failure		
		to do so will represent not only a derogation of		
		the action called for by EO 14008, but also a		
		lost opportunity to meaningfully evaluate the		
		outsized role the federal oil and gas leasing		
		program plays in the climate crisis, and to		
		explore alternatives to reduce its impacts		
		through the federal oil and gas program.		
		and again and reasons on and gas programs		
		BLM has, with the BLM Specialist Report,		
		fulfilled the lowest common denominator of		
		quantifying federal emissions against the		
		backdrop of federal laws and climate science. It		
		must now meaningfully analyze those		
		emissions in light of remaining national and		
		global carbon budgets, and must apply tools		
		such as the Social Cost of Greenhouse Gases to		
		describe the actual economic, ecologic, and		
		human costs of the program at national and		
		global scales. The BLM Specialist Report		
		briefly describes federal fossil fuel emissions in		
		the context of various carbon budgeting		
		mechanisms and global emissions		
		commitments (such as under the Paris		
		Agreement). However, more is required by		
		NEPA, and it must be done at a programmatic		
		level, as the quantification of GHGs in the		
		BLM Specialist Report was done.		
38	WELC	A final factor weighing in favor of the	Programmatic EIS	See Response to Public Comment Nos. 33 and 35.
		completion of a programmatic EIS is the	for Oil and Gas	200 Temponar to I work Comment (100, 22 wild 20)
		Federal Coal Program Review. Originally	Program is	
		initiated in response to Secretarial Order 3338	Consistent with	
		(January 15, 2016), the intent was to prepare a	Department's	
		programmatic EIS and review of the federal	Review of Coal	
		coal program designed to address a range of	Leasing Program	
		concerns, including but not limited to questions	2100116110610111	
		as to the fair return to American taxpayers from		
		as to the full retain to rimerican unpayers from		

federal coal royalties, market fluctuations and resultant impacts to coal-dependent communities, and the more fundamental question of whether the leasing and production of federal coal is consistent with the Nation's domestic and international goals to preserve a livable climate and meet international commitments to maintain global warming below certain critical thresholds, namely 1.5°C. Secretarial Order 3338 was rescinded by former Interior Secretary Ryan Zinke through Secretarial Order 3348, which also lifted the federal coal leasing pause that had been implemented by SO 3338. On August 20, 2021, the BLM issued a Federal Register notice in response to Secretarial Order 3398 (issued by Interior Secretary Deb Haaland), indicating its intent to reinstitute a federal coal program review and soliciting public comment.

While SO 3398 did not reinstate SO 3338 or explicitly revive the PEIS, it did reinitiate review of the federal coal leasing program. The appropriate course for both that review and the "comprehensive review and reconsideration" called for by EO 14008 is one or more programmatic NEPA processes analyzing the climate, fiscal, and taxpayer impacts of all federal fossil fuel development. Until those analyses occur, no additional fossil fuel leasing should occur. As explained above, BLM and Interior must comply with EO 14008's mandates and retain the ability to do so before committing federal lands to additional GHG emissions. They are compelled to do so by both EO 14008 and existing statutory mandates under FLPMA.

For the above-described reasons, all 4 parcels for the Wyoming Q3 2024 lease sale, listed in

		Appendix A, should be withdrawn pending preparation of such an EIS.		
39	WELC	The NEPA alternatives analysis required by 42 U.S.C. § 4332(C)(iii) is "heart" of the NEPA process. 40 C.F.R. § 1502.14. For the reasons articulated below, BLM must comply with NEPA in its analysis of alternatives for the Wyoming Q3 2024 lease sale. BLM does not appear to consider, or adequately justify its failure to consider, any of the alternatives proposed by commenters. As discussed throughout these comments, nothing in FLPMA, the MLA, or any other statute or regulation <i>mandates</i> that BLM issue these leases. And NEPA <i>prohibits</i> BLM from authorizing leasing without taking a hard look at reasonably foreseeable effects of the lease sale and considering a range of reasonable alternatives, including alternatives proposed by commenters, which BLM has dismissed without any rational explanation.	Adequate Range of Alternatives	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 45) Competitive Lease Sale EA. NEPA directs the BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources" (42 U.S.C. 4332(E)). BLM analyzed in detail 3 alternatives and considered 5 additional alternatives which were not analyzed in detail. The suggested alternative constitutes an oil and gas program regulatory or policy preference rather than an alternative required for consideration for the 2024-09 Competitive Oil and Gas Lease Sale. The BLM has analyzed a range of alternatives for proceeding with lease sales taking into account a number of factors, including resource conflicts and development potential, as part of exercising its discretion in leasing decisions. The alternatives considered adequately weigh the courses of actions action that BLM could take based on potential resource conflicts and whether making certain lands available would meet the purpose and need of the EA. BLM has considered a reasonable range of alternatives and disclosed the impacts based on GHG emissions and SC GHG over the range of the Proposed Action which is what BLM has proposed as its decision, and the No Action which are less than the Proposed Action. Climate impacts are one of many factors that are considered in the NEPA analysis to evaluate the significance of a proposed action and the BLM's exercise of its discretion in deciding on leasing actions.
40	WELC	BLM's analysis of the no-leasing or no action alternative is incomplete and insufficient to adequately inform the public and the decision maker. The impacts to GHG emissions and climate according to the no action alternative (under which the parcels could not be leased)	No Leasing Alternative	See Response to Public Comment Nos. 33 and 35. Additional information on GHG emissions can be found in EA section 4.1.

considered in the EA are brief and fail to indicate the difference in estimated GHG emissions between the proposed alternatives and the no action alternative. The 2016 CEQ GHG Guidance indicates that in the alternatives analysis, agencies should compare anticipated levels of GHG emissions from each alternative, including the no-action alternative, and mitigation actions to provide information to the public and enable the decision maker to make an informed decision. The 2023 Interim CEO Guidance further underscores the importance of considering alternatives that would avoid or mitigate GHG emissions. The analysis of the no-action alternative also asserts that Federal production levels would remain static or even increase if the leases are not developed, a "perfect substitution" argument that courts have repeatedly rejected.

BLM should develop a single NEPA document analyzing all of the proposed 2024 lease sales to better evaluate the cumulative GHG emissions estimated from the proposed lease sales and their impact on climate change. Likewise, the no-action alternative should evaluate and discuss the cumulative effect of not leasing any of the 2024 parcels proposed for oil and gas development. This analysis should not only quantify the total GHG emissions that would be avoided as a result of not leasing but should also quantify and evaluate the cobenefits of not leasing, including the benefits of avoided air pollution, avoided water use, avoided produced water disposal, and the ability to put lands not leased to other beneficial uses. The co-benefits analysis should also reflect the cumulative value of the renewable energy-generating capacity of the federal lands

		and mineral estate that would be preserved under the no-action alternative.		
41	WELC	In our scoping comments, we requested BLM include an alternative that considers adopting a policy of managed decline of fossil fuel production from the entire federal mineral estate. BLM does not discuss this alternative, let alone analyze it in detail. We request BLM explain the basis for how and why it determines whether to consider proposed alternatives, and we request that BLM seriously consider an alternative involving a policy of managed decline of fossil fuel production from the entire federal mineral estate. The MLA provides BLM with authority to require zero GHG emissions. The MLA also allows the Secretary of the Interior to "alter or modify from time to time the rate of prospecting and development and the quantity and rate of production under such plan." Likewise, nearly all BLM leases for onshore oil and gas contain a clause which states: "Lessor reserves the right to specify rates of development and production in the public interest." To address climate impacts, BLM may require full mitigation of GHG emissions and associated climate impacts via lease stipulations and conditions of approval (COAs) designed "to minimize adverse impacts to other resource values." We request that BLM consider an alternative involving a policy of managed decline of fossil fuel production from the entire federal mineral estate.	Managed Decline Alternative	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 45) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 29) Competitive Lease Sale EA. The purpose and need for this leasing action are to respond to EOIs to lease parcels of land for oil and gas development as mandated by Federal laws, including the Mineral Leasing Act of 1920, as amended, Federal Land Policy and Management Act of 1976, and Federal Onshore Oil and Gas Leasing Reform Act of 1987 (EA Section 1.2). Offering parcels for competitive oil and gas leasing provides opportunities for private individuals or companies to explore and develop federal oil and gas resources after receipt of necessary approvals, and to sell the oil and gas in public markets. The mandate of the BLM is derived from various laws, including the Mineral Leasing Act (MLA) and the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, to promote the exploration and development of oil and gas on the public domain. Additionally, the Federal Onshore Oil and Gas Leasing Reform Act of 1987 states lease sales shall be held for each State where eligible lands are available at least quarterly and more frequently if the Secretary of the Interior determines such sales are necessary. Under the MLA, BLM must administer oil and gas development, including responding to project proposals, in accordance with the principles of multiple use and sustained yield. As such, the BLM cannot initiate or manage a decline of fossil fuel production from the entire federal mineral estate, and in many instances, the complexities of mixed ownership interests. Further, while the lease form does grant BLM authority to manage the rate of future development, that assumes that a lease is in place. BLM's Lease Form (Form 3100-11), Section 4 states that BLM "reserves right to specify rates of development and production

42	WELC	BLM must consider alternatives that would	Alternative that	for proper development and operation of area, field, or pool embracing these leased lands" (emphasis added). Because of BLM's statutory mandates, the requested alternative was not included. Additionally, the concurrent offering of leases across multiple states and/or offices does not constitute a connected action for purposes of NEPA analysis for several reasons: 1) The individual lease sales are not part of or dependent on a larger proposed action to proceed, and 2) The concurrent timing of offering the lease sales does not represent a connected action that authorizes concurrent development, or any development for that matter, to occur. The timing, scale, and locations of development that may occur as a result of the leasing actions will not be concurrent, and therefore do not represent similar connected actions for the purposes of NEPA analysis. For this reason, the BLM has not developed a single environmental impact statement for all onshore lease sales. The District Court for the District of Columbia recently affirmed this position Dakota Res. Council v. United States DOI, 2024 U.S. Dist. LEXIS 51013 Based on our review of the record, it does not appear the
		protect usable groundwater. Specifically, BLM should consider not leasing parcels within areas where there is less than 2,000 feet of vertical separation between the oil and gas formations likely to be targeted and any groundwater aquifer with 10,000 ppm TDS or less. BLM should also analyze an alternative whereby parcels would not be leased in areas overlying usable groundwater and surface water, and an alternative that includes other measures to ensure that all usable groundwater zones are protected. This might involve pre-leasing groundwater testing and adding a lease stipulation or lease notice requiring specified casing and cementing depths. Alternatively, or additionally, BLM should consider requiring a	Protects Groundwater	WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 46) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 30) Competitive Lease Sale EA. Protesters have not submitted any evidence documenting that oil and gas development approved by BLM has contaminated groundwater or that offering these parcels for lease will significantly impact water resources. The BLM has responded multiple times to similar comments in previous lease sales, and most recently in the March 2024 Oil and Gas Lease Sale Protest Responses. Updates to the EA have been incorporated in response to public comments. At the leasing stage, BLM completed a basin-wide assessment of the potential for hydraulically induced fractures to communicate with existing
		lease stipulation or lease notice requiring the lessee to perform groundwater testing prior to		fractures (or faults), thus potentially providing a pathway for gas or contaminates to pose a risk to water quality. The BLM

	drilling to identify all usable water, and consultation with the U.S. Geological Survey and other agencies to identify those waters with up to 10,000 ppm TDS. BLM failed to consider such an alternative. As with other impacts, BLM attempts to defer a hard-look analysis of groundwater impacts, or consideration of alternatives that eliminate or mitigate those impacts, to the APD stage. This is arbitrary and capricious and contrary to the requirements and fundamental purpose of NEPA. The intent of NEPA is for agencies to study the impact of their actions on the environment—here, leasing—before the action is taken. And BLM cannot presume that state and federal regulations will protect groundwater, particularly given the shortcomings and industry noncompliance described elsewhere in these comments. Even if such regulations were adequately protective, they do not absolve BLM of its duty to take a hard look at impacts and consider all reasonable alternatives under NEPA. BLM may not defer its analysis of groundwater impacts and consideration of more protective alternatives to the APD stage.		also looked at distance and depth of existing water wells in relation to the formations likely to be targeted on the lease parcels. Based upon this review, the BLM concludes there would be no anticipated effects to usable groundwater if the lease parcels based on best available data and information, are developed, and BLM has prepared an appropriate level of analysis. Cumulative impacts have been adequately disclosed in ARMPs and this EA. Site specific water resource impacts of proposed operations would be addressed at the APD stage and will be in accordance with 43 CFR 3172. In addition, at the APD stage, if during field office review, concerns are raised concerning specific issues, freshwater depths and/or drinking zones, drilling techniques, etc. the field office could place additional restrictions on the APD prior to approval. These restrictions could include cementing the well bore from top to bottom to protect any usable water zone.
43 WELC	BLM must include in their analysis an alternative that applies a stipulation that mandates the use of best available methane reduction technologies to parcels. Recent research has demonstrated that the use of ten 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. See Harvey Report.	Alternative that Minimizes Methane Waste Through Technology and Regulatory Authority	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 47) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 31) Competitive Lease Sale EA. Prior to project-specific approval, additional air resource analyses may be required in order to comply with the NEPA, FLPMA, and/or other applicable laws and regulations. Analyses may include equipment and operations information,
	In addition to these best available methane reduction technologies, BLM must also		emission inventory development, dispersion modeling or photochemical grid modeling for air quality and/or air quality

		consider an alternative that implements its legal obligation to use all reasonable precautions to prevent waste, including a stipulation on leases that provides for no routine venting or flaring, similar to regulations that are already being implemented in the states of Colorado and New Mexico. We are aware that BLM is currently undertaking a rulemaking effort pursuant to its authority to prevent waste under 30 U.S.C. §§ 187, 225. As currently drafted, BLM's proposed rule does not go nearly far enough to prevent waste from routine flaring on BLM managed leases on Tribal and federal public lands. BLM must adopt a final rule pursuant to its authority under the MLA and its commensurate responsibilities under FLPMA that puts an end to routine flaring and provides operators on Tribal and federal leases with clear guidance as to when short-term flaring (and venting) is appropriate. Pending adoption of such a final rule, BLM should not be holding lease sales or issuing leases, much less granting applications for permits to drill. Failing this, however, BLM must, at a minimum, use its existing authority under Notice to Lessees 4a (Jan. 1, 1980) ("NTL-4A) and the Inflation Reduction Act to condition such leases as it does issue to limit the environmental and human health harms caused by routine venting		related value impact analysis, and/or emission control determinations. These analyses may result in the imposition of additional project-specific control measures to protect air resources. At the proposed development stage, the BLM will consider additional mitigations measures and will comply with the Waste Prevention Rule that was recently finalized [https://www.federalregister.gov/documents/2024/04/10/2024-06827/waste-prevention-production-subject-to-royalties-and-resource-conservation].
		and flaring and to safeguard Tribal and publicly held resources from unreasonable and undue waste.		
44	WELC	Under the requirements of the 2015 sage- grouse plan, BLM is required to prioritize leasing outside of sage-grouse habitat. In light of the unabated nationwide decline of sage- grouse populations, due in part to BLM's systemic practice of deprioritizing habitat relative to development, BLM should consider an alternative that removes from consideration,	Alternative that Prioritizes Conservation of All Greater Sage-Grouse Priority and General Habitat	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 48) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 32) Competitive Lease Sale EA.

45	WELC	General Habitat Management Area and Priority Habitat Management Area from consideration. Such an alternative is fully consistent with the 2015 Greater Sage Grouse Approved Resource Management Plan Amendments (the 2015 plans) and is not precluded simply because the 2015 plans allow for leasing, see EA at 19. Moreover, such an alternative is warranted in light of BLM's March 2024 Greater Sage-Grouse Draft Resource Management Plan Amendment and Environmental Impact Statement, which addresses changed conditions and new information since 2015. In fact, Alternative three of BLM's March 2024 draft Sage-Grouse Plan closes all Priority Habitat Management Areas to fluid mineral leasing. BLM improperly rejected consideration of alternatives that would have deferred either priority sage-grouse habitat parcels or all sage-grouse habitat parcels.	BLM Improperly	management areas are fully analyzed in the EA (see EA section 4.3 (pg. 45-48) and Appendix 5.5 (pg. 94-97) for a full discussion of Greater Sage-grouse prioritization.) The BLM does not have a policy which directs deferral of all parcels in priority habitat management areas. Additionally, the proposed action is in conformance with the 2015 GSG ARMPA and field office RMPs. The ARMPA, and the respective field office RMPs, indicate which lands are available for lease. Stipulations are applied to each lease, as applicable, to help minimize impacts to sage-grouse. If and/or when, a site-specific development plan is received by the BLM, further analysis will occur to locate disturbance in locations which minimize impacts to sage-grouse and their habitat. Based on our review of the record, it does not appear the
70	WELC	offer portions of the federal mineral estate for fossil fuel development. Rather than evaluate all the proposed 2024 lease sales and their associated environmental impacts in a single NEPA analysis, BLM separated the environmental analysis despite the connected nature of the leasing actions and the reasonably foreseeable cumulative climate impacts associated with the potential GHG emissions from authorized leases. To assess the effects of a proposed action, BLM should account for the proposed action — including "connected" actions — subject to reasonable limits based on feasibility and practicality. "Connected actions" are actions that are closely related and therefore should be discussed in the same impact statement. 40	Segmented NEPA Analysis of Lease Sale	WELC's public comments vary significantly from those raised during the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 33) Competitive Lease Sale EA. After careful review, BLM calculated past emissions related to BLM fossil fuel approvals over the preceding 5 years, estimated total emissions related to BLM fossil fuel approvals for the 12-month period including the lease sale, and projected total emissions for the lifecycle of potential BLM leases which was the appropriate reasonably foreseeable scope of emissions for decision making by BLM State Directors. This analysis scope provides a thorough cumulative assessment of GHG emissions. All past and in-process BLM leases were considered in the preparation of the estimates. Current lease approval timeframes along with current data on the development status of all approved and in-process leases were also considered. The 2022 BLM Specialist Report provides

C.F.R. 1508.25(a)(1). Actions are connected if, among other circumstances, the actions are interdependent parts of a larger action and depend on the larger action for their justification. *Id.* at (a)(1)(iii). Other types of actions that should be considered in a single impact statement also include "cumulative actions," actions which when viewed with other proposed actions have cumulatively significant impacts, and "similar actions," actions which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

Rather than segment the NEPA analysis according to individual oil and gas lease sales, the CEQ NEPA regulations regarding connected actions, cumulative actions, and similar actions suggest BLM should analyze the environmental impacts of the proposed lease sales in a single NEPA analysis. The proposed 2024 lease sales meet the definition of "cumulative actions" based on their cumulatively significant emissions of GHGs and their impacts on climate change. In addition, the proposed 2024 lease sales are properly understood as "similar actions" because the NEPA analysis and proposed sale dates are expected to be common in time, and the best way to adequately assess their cumulative GHG emissions is through a single impact statement.

BLM does not appear to address the possibility of analyzing potential GHG emissions that could occur from other lease sales during 2024. This is nonsensical, as BLM has previously estimated the emissions from all the parcels

information on non-BLM related emissions by presenting data from the most recent EPA GHG Emissions and Sinks Report, which presents estimates of total U.S. GHG emissions as well as breakdown subtotals by economic sector and specific GHG. The EPA report represents an authoritative accounting of cumulative U.S. GHG emissions, including emissions related to BLM actions. In addition, the 2020 Specialists Report presents the range of projected Climate Change effects across basin and range states at length in Section 8.3, Section 8.4, and Chapter 9.0. This information is incorporated by reference in the EA. This analysis provides emissions estimates and then goes well beyond that to describe actual environmental effects in terms of temperatures, drought, snowpack, growing season, and other impacts to vegetation with details from several representative States. Although these comparisons and examples are illustrative and support good decision-making. there is, at this time, no practicable way to correlate any specific amount of GHG emissions to any specific level of climate effect at any specific location.

The 2022 Specialist Report provides a long-term projection of all federal oil, gas, and coal emissions via projections made from the Energy Information Administration's Annual Energy Outlook Report (AEO). These projections look far beyond 2024 and constitute the foreseeable extent of potential federal fossil fuel use (and GHG emissions) beyond BLMs 5-year average projection for the 12-months succeeding the Specialist Report publication (i.e. the short-term projection). Both estimates are refined annually using all available updated data. Further, the Specialist Report uses the long-term (2050) data to present climate impact modeling results in section 9.0. This data is therefore representative and inclusive of any and all potential leasing that could occur for the entirety of the projection period.

Additionally, the concurrent offering of leases across multiple states and/or offices does not constitute a connected action for purposes of NEPA analysis for several reasons: 1) The individual lease sales are not part of or dependent on a larger proposed action to proceed, and 2) The concurrent timing of

		offered in a year in the EA associated with each sale. BLM plainly can analyze the potential GHG emissions of all the actions and should do so in a single impact statement. For the reasons stated throughout these comments, BLM's incorporation of the 2022 Specialist Report, which is itself insufficient to meet NEPA's hard look standards, does not cure its failure to take a hard look at cumulative GHG emissions and climate impacts of new leasing for all 2024 lease sales across the federal oil and gas program, or its failure to define a significance threshold for such emissions and impacts.		offering the lease sales does not represent a connected action that authorizes concurrent development, or any development for that matter, to occur. The timing, scale, and locations of development that may occur as a result of the leasing actions will not be concurrent, and therefore do not represent similar connected actions for the purposes of NEPA analysis. For this reason, the BLM has not developed a single environmental impact statement for all onshore lease sales. The District Court for the District of Columbia recently affirmed this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013
46 W	VELC .	BLM evaluated GHG emissions estimated from the proposed lease sale and from the cumulative GHG emissions from BLM's onshore federal fossil fuel program using several analytical tools, all of which indicate federal fossil fuel emissions of GHGs are significant under NEPA. BLM used EPA's greenhouse gas equivalency calculator to express the estimated annual GHG emissions from the lease sale in terms of the GHG emissions produced from gas-fueled vehicles driven for one year, or the emissions that could be avoided by operating wind turbines as an alternative energy source or offset by the carbon sequestration of forest land. As we explained above, BLM improperly segmented its NEPA analysis and only analyzed GHG emissions using EPA's GHG equivalency calculator for this individual lease sale. We request BLM contextualize the GHG emissions of the 2024 lease sales by using the EPA GHG equivalency calculator to consider the GHG emissions over the average 30-year production life of the leases. We also request BLM contextualize the cumulative GHG emissions from the federal fossil fuel program	EPA GHG Equivalency Calculator	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 50) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 34) Competitive Lease Sale EA. The BLM has already included a reference and example to the EPA GHG Equivalency calculator in the lease sale EA in addition to providing multiple comparisons and context for the lease sale emissions both annually and over the life of the lease. The information is not value added for the decision maker since the equivalency calculator does not apportion Federal oil and gas to multiple uses and end-use consumption thereby presenting an inaccurate substitution representation. The BLM provided a wide range of potential impact contexts in the 2022 Specialists Report, which was incorporated by reference into each EA. The Specialists Report presents the life-cycle representation of the Federal onshore mineral estate GHG emissions relative to various local, state, national and global emissions, and impact contexts. The BLM is not applying additional calculation methods at this time. The District Court for the District of Columbia recently affirmed

	using EPA's GHG equivalency calculator. While BLM does compare the life of lease emissions from the proposed action as a percentage of other federal oil and gas emissions, this is precisely the type of decontextualized, fractional comparison of emissions that courts have held is unlawful. BLM cannot fulfill its NEPA obligations with this type of comparison, which artificially minimizes significance and tells the public nothing about the actual impacts of emissions.		this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013
47 WELC	BLM also used the social cost of greenhouse gases (SC-GHG) as another tool to assess GHG emissions and climate change effects from the proposed lease sale. The social cost of greenhouse gases provides an estimate of the monetized global damages associated with the incremental increases of GHGs. Again, because BLM improperly segmented its NEPA analysis of the proposed 2024 lease sales, the Draft EA only provides the social cost of GHGs for each individual lease sale rather than a cumulative total. Additionally, although BLM provided SC- GHG, it failed to provide any analysis of the decision making pursuant to those numbers. BLM did not use the social cost of GHGs tool to assess the impacts of the cumulative cost of global damages from BLM's fossil fuel program in the BLM Specialist Report, and BLM failed to explain the basis for its decision to omit this analysis. We request BLM contextualize the cumulative GHG emissions from the federal fossil fuel program using the social cost of GHGs. The cumulative cost of the federal fossil fuel program is an important consideration for BLM to weigh, as it is many orders of magnitude greater than the already significant costs of just the proposed 2024 lease sales.	Social Cost of Greenhouse Gases	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 51) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 35) Competitive Lease Sale EA. In the EA, the BLM evaluates the potential impacts of the leasing decision using best available data and methods. There is no regulation requiring these impacts be presented in monetary terms. To do so is not feasible for lease sales given the data and analytical requirements for monetizing all nonmarket values, many of which are location and project dependent. The BLM does present the estimates of the SCGHG for each alternative alongside other (nonmonetized) impacts for the decision maker to consider. Output, royalties, and tax revenue are not measures of economic benefits that would be used in a benefit cost analysis (i.e., they do not measure changes in consumer or producer surplus). These metrics should not be directly compared to estimates of the SCGHG even where both concepts are calculated. Estimating the economic benefits (change in social welfare) associated with oil and gas leasing is not feasible, nor is it required for NEPA. The BLM analyzes the impacts associated with the alternatives using the best available information, which is typically not monetized estimates of benefits or costs. The District Court for the District of Columbia recently affirmed this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013

	1			T
		Moreover, we are concerned by the way BLM frames its understanding and weight of the social cost of GHG analysis. BLM states: "[The SC-GHG] numbers were monetized; however, they do not constitute a complete cost-benefit analysisSC-GHG is provided only as a useful measure of the benefits of GHG emissions reductions to inform agency decision-making," Draft EA at 22-23. However, BLM must be clear that the SC-GHG is a measure of impacts to the human environment (reflected in 2020 U.S. dollars) that BLM is obligated to evaluate pursuant to NEPA regardless of whether or not BLM conducts a complete or partial cost cost-benefit analysis of the proposed lease sales. As discussed elsewhere in these comments, there are scientifically established standards and findings that can inform BLM's analysis. The agency should use existing, accepted methodologies, tools, and information such as the social cost of greenhouse gases and carbon budgeting, and the findings of the IPCC in the recently-released AR6, and develop a cumulative significance threshold for reasonably foreseeable greenhouse gas emissions from projects authorized by BLM.		
48	WELC	In addition to SC-GHG, BLM references the Specialist Report, where it used the "MAGICC model" and other tools to evaluate the impact	Carbon Budgeting	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see
		of GHG emissions associated with BLM's		Response to Public Comment No. 52) and the 30-day Public
		onshore fossil fuel authorizations on the		Protest period for the 2024-06 (see Response to Public Protest
		remaining atmospheric capacity to take on		No. 36) Competitive Lease Sale EA.
		further GHG emissions without exceeding		
		different degrees of additional warming. Draft		Currently, there is not a formal Federal policy establishing a
		EA at 33. [B]LM improperly omitted carbon budget analysis of the United States' share of		national carbon budget or a final international consensus on which carbon budget the world should use for limiting global
		the global carbon budget. Nonetheless, GHG		warming (1.5° C or 2.0° C) that the BLM can use to evaluate
		emissions from the onshore federal fossil fuel		the significance of a proposed action. However, this may
		chilosions from the offshore rederal fossil fuel		the significance of a proposed action. However, this may

program consume a tremendous amount of the global budget – 1.37% of the remaining global carbon budget of 380 GtCO₂ needed to limit global warming to 1.5 C.

In addition to the tools BLM used to contextualize and evaluate federal fossil fuel GHG emissions, we request BLM evaluate and consider the impacts of climate change that have already occurred as a result of the cumulative emissions of GHGs. BLM's NEPA analysis of GHGs and climate change tends to frame the impacts of climate change as long-term impacts, estimated to be realized at some future point in time. However, the climate has already changed as a result of anthropogenic GHG emissions and the consequences of global climate change are already being realized.

BLM's analysis of the proposed lease sale acknowledges that anthropogenic GHG emissions have resulted in impacts associated with the change in global climate. Similarly, the BLM Specialist Report refers to the IPCC climate assessment report, which states: "Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentration of greenhouse gases have increased." We request BLM consider, discuss, and evaluate the climate science regarding past and present impacts from climate change to further contextualize the climate impacts from the cumulative emissions of GHGs associated with the proposed lease sales and the federal fossil fuel program.

change in the future. The BLM works in concert with other U.S. federal agencies (including EPA and DOE) to implement U.S. strategies and meet committed goals, including applicable executive and secretary's orders, to reduce GHG.

At this time, BLM has not developed a standard or emissions budget that it can apply uniformly to make a determination of significance based on climate change or GHG emissions. Until such time as the Department develops further tools to analyze the relative emissions impact of its activities nationwide, the BLM can disclose GHG emissions and climate impacts, and provide context and analysis for those emissions and impacts; the agency cannot render a determination of significance for a proposed action based on GHG emissions or climate impacts alone. If/when a proposed action for development is submitted, the BLM can determine appropriate measures to mitigate GHG emissions that are not already required by law or proposed by the operator. As provided in the EA, BLM evaluated the potential effects of the proposed leasing action on climate change by estimating and analyzing potential GHG emissions from projected oil and gas development on the parcels proposed for leasing using estimates based on past oil and gas development and available information from existing development. The potential emissions resulting from the proposed action were compared to state, national, and global GHG emission totals to provide context of their significance and potential contribution to climate change impacts. In addition, the 2022 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends, which was incorporated by reference in the EA, provided a hard look and detailed assessment of GHG emission trends and potential climate impacts from energy development projects from Bureau BLM-authorized coal, oil, and gas leases and approved development on public lands (including the federal mineral estate) managed by the BLM as well as direct and indirect GHG emission estimates for both existing and projected federal fossil fuel production. The District Court for the District of Columbia recently affirmed this position in Dakota Res. Council v. United States DOI, 2024 U.S. Dist. LEXIS 51013

		1		
49	WELC	Throughout the BLM Specialist Report and the Draft EA for the proposed lease sale, BLM mischaracterizes its duty and authority to address climate change programmatically and in the context of project level actions. BLM's mischaracterizations misinform the public and decision makers and prejudice its NEPA analysis and conclusions. To carry out these responsibilities in the context of oil and gas leasing, BLM has a corresponding array of authorities to address the impacts of oil and gas leasing and development. These authorities include choosing not to lease the federal mineral estate for oil and gas development, withdrawing federal minerals from leasing; prohibiting leasing in resource management plans and through resource management plan amendments, requiring conditions of approval in new authorizations of oil and gas leases, as well as managing the rate of oil and gas production in federal leases. To BLM's authority to choose not to lease the federal mineral estate, development of public lands is not required but must instead be weighed against other possible uses, including conservation to protect environmental values. [T]he court in <i>Louisiana v. Biden</i> confirmed that BLM is authorized to postpone lease sales to address NEPA and similar concerns tied to particular lease proposals. <i>Louisiana v. Biden</i> , No. 2:21-cv-778-TAD-KK at *14. Under the Mineral Leasing Act (MLA), "the DOI Secretary enjoys wide discretion when it comes to determining which federal lands will be offered for oil and gas development." Id. at *10 (citing 30 U.S.C. § 226(a)("lands with known	Meaningful and Measurable Mitigation of Cumulative Climate Change from Global Emissions	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the Public Protest period for the 2024-06 (see Response to Public Protest No. 37) Competitive Lease Sale EA. The BLM can only mitigate emissions which it has continuing authority over (i.e., lease emissions sources). Approximately 95% of GHG emissions related to the proposed lease sale result from downstream use and transportation of produced fossil fuels which is completely outside of the BLM's jurisdiction or authority to regulate. Mitigation is more appropriate at the proposed development stage such as APDs or EISs for larger proposed projects when a plan of development/operation has been submitted and emissions sources are known with a higher degree of certainty. At the proposed development stage, the BLM can consider mitigation measures that comply with regulations, such as EPA's draft regulation on methane emissions in the oil and gas industry and align with climate policies enacted at that time. Lease notices identifying that a lessee may be required to complete additional air resource analysis and apply mitigation measures is sufficient at the leasing stage. Additionally, the BLM will conduct analysis and make decisions regarding leasing actions in compliance with applicable federal laws, including FLPMA, NEPA, and the Mineral Leasing Act. Should development occur as a result of the lease, the BLM will complete additional NEPA for site-specific proposed actions that may include additional mitigation measures for GHGs that are not already required by law or proposed by the operator. The BLM may also limit the scale and intensity of proposed development based on the site-specific NEPA analysis that is completed for the proposed action. The BLM has disclosed the GHG emissions from the Proposed Action and provided context for those emissions compared to existing federal GHG emissions in the state and nationally. The BLM has included an evaluation of the climate change impacts that c

or suspected oil and gas deposits *may* be leased by the Secretary")(emphasis added).

Just as BLM can deny a project outright to protect the environmental uses of public lands, it can also condition a project's approval on the commitment to mitigation measures that lessen environmental impacts.

BLM's authority to mitigate environmental impacts is importantly related to BLM's NEPA obligations to consider ways to avoid, minimize, and mitigate impacts in accordance with the mitigation hierarchy. 40 C.F.R. §§ 1508.8, 1502.14, 1502.16, 1508.20. Specifically, BLM must "include appropriate mitigation measures not already included in the proposed action or alternatives." Id. §§ 1502.14(f), 1502.16(h). Thus, based on sitespecific NEPA reviews that rationally connect to FLPMA's mandates, BLM must impose constraints on new well approvals to avoid catastrophic climate change and protect and advance the public interest. This includes the robust use by BLM of conditions of approval to, in sequenced priority, avoid, mitigate, or compensate for climate, public lands, or community impacts.

The Mineral Leasing Act (MLA) also authorizes BLM to reduce the rate production over a defined period of time, limiting the amount of extraction and greenhouse gas pollution that would result. The MLA authorizes the Secretary of the Interior to "alter or modify from time to time the rate of prospecting and development and the quantity and rate of production under such a plan." 30 USCA § 226(m). Likewise, nearly all BLM leases for onshore oil and gas contain a clause

incorporated by the reference the 2022 BLM Specialists Report on Annual Greenhouse Gas Emissions and Climate Trends which provides a more robust assessment of cumulative emissions, climate change impacts, and reputable climate science sources. If/when a proposed action for development is submitted, the BLM can determine appropriate mitigation measures to reduce/offset GHG emissions that are not already required by law or proposed by the operator.

Mitigation may be appropriate at the proposed development stage, such as APDs or EISs for larger proposed projects, when a plan of development/operation has been submitted and emissions sources are known with a higher degree of certainty. At the proposed development stage, the BLM can consider mitigations measures and align with climate policies, regulations and guidance enacted at that time. Lease notices identifying that a lessee may be required to complete additional air resource analysis and apply mitigation measures are sufficient at the leasing stage.

The 2022 BLM Specialist Report presents 6 pages of analysis in Section 2.0 Relationship to Other Laws and Policies focused on orders, laws, and regulations related to GHGs and Climate Change. The report was incorporated by reference in the lease sale EA.

		which states that "Lessor reserves the right to specify rates of development and production in the public interest." According to these authorizations, the Secretary and BLM could set a declining rate of production over time that provides for an orderly phase-out of onshore fossil fuel production. BLM's legal duty and authority provide a variety of mitigation actions BLM could take to meaningfully and measurably to address cumulative climate change resulting from global emissions. We request BLM revise its NEPA analyses to correctly reflect its legal duties and authorities.		
50	WELC	Neither the EA for the proposed lease sale nor the BLM Specialist Report adequately analyze whether the estimated GHG emissions associated with the proposed lease sales and the cumulative GHG emissions from the federal fossil fuel program are compatible with the U.S. goal of avoiding 1.5 C of warming. Among other pledges and commitments, the United States has pledged to reduce its emissions by filing an intended nationally determined contribution with the United Nations to reduce net GHG emissions by 17 percent below 2005 levels by 2020, and by 26-28 percent by 2025. However, BLM's NEPA analyses fail to analyze the compatibility of cumulative federal fossil fuel program emissions with the United States' commitments to avoid 1.5 C of warming. This is despite federal agencies including the Bureau of Ocean Energy Management, which oversees offshore leasing, having conducted this type of analysis in the context of reviewing other federal projects pursuant to NEPA. The 2023 Interim CEQ Guidance also directs agencies to "place emissions in the context of relevant climate	EA and Specialist Report Inadequately Analyze Compatibility of New Commitments of Fossil Fuels with U.S. Goal Avoiding Warming	Currently, there is not a formal Federal policy establishing a national carbon budget or a final international consensus on which carbon budget the world should use for limiting global warming (1.5C or 2.0C) that the BLM can use to evaluate the significance of a proposed action. However, this may change in the future, such as via CEQ direction on addressing climate change and GHGs in NEPA. The BLM works in concert with other U.S. federal agencies (including EPA and DOE) to implement U.S. strategies and meet committed goals, including applicable executive and secretary's orders, to reduce GHG. The requested alternative is embedded within the No Action. A separate alternative crafted whose purpose and need is to consider reducing GHG emissions is outside the scope of this EA and its stated purpose and need.

		action goals and commitments." 2023 Interim CEQ Guidance at 1201. We request BLM consider, discuss, and evaluate the compatibility of this lease sale and the federal oil and gas program as a whole on avoiding 1.5 C of warming. In the 2022 BLM Specialist Report section 9.4, "Goal Alignment", BLM states that "At present, the BLM's short-term projections of potential emissions from existing and near-term authorizations are consistent with the nation's net zero by 2050 goal and the shorter-term 2030 commitments made for the NDCs under the Paris Agreement. This is primarily due to a decline in projected production of oil, gas, and coal through mid-century (see Figure 7-1) from existing and foreseeable Federal fossil fuel leases, and increases in Federal renewable energy right of ways (see Table 10-4). The longer-term estimates that include the modeled effects of the Inflation Reduction Act also show progress towards meeting national goals, such that the economy-wide influences of the law are likely to shape additional federal fossil fuel development in the years to come." However, as discussed elsewhere in these comments, BLM cannot use future predictions of GHG.		
		BLM cannot use future predictions of GHG reductions based on the IRA to justify the authorization of GHG emissions now.		
51	WELC	BLM's Draft EA for the proposed lease sale omits analyzing and evaluating the estimated GHG emissions from the lease sales and cumulative GHG emissions within the context of the widening production gap. The production gap is the difference between global fossil fuel production projected by governments and fossil	Draft EA and Specialist Report Inadequately Analyze Global and National Over Commitment of Fossil Fuels Relative	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 54) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 38) Competitive Lease Sale EA.
		fuel production consistent with the 1.5 C- warming pathway and other pathways. In 2019, the Stockholm Environment Institute (SEI)	to Carbon Budget	The analysis requested is included for in the 2022 BLM Specialist Report on Annual GHG Emissions and Climate Trends which was incorporated by reference in the lease sale

		released a report on the production gap with grave findings that the world's projected fossil fuel production was seriously out of sync with the level of fossil fuel production consistent with limiting warming to 1.5 C. The United Nations, in collaboration with SEI and other academic institutions, has since issued comprehensive updates to its original 2019 production gap analysis. The most recent UN Production Gap Report, released in November 2023, raises yet more alarm that despite the most recent IPCC findings that the world is running out of time to limit long-term global warming to 1.5°C that the world's governments continue to plan to produce more than double the amount of fossil fuels in 2030 than would be consistent with a 1.5°C-warming pathway. BLM failed to consider the production gap reports discussed above, which indicate an imperative to rapidly transition away from		EAs. This analysis includes information from the United Nations emissions gap report which shows the difference between global emissions pathways required to limit warming to 1.5°C or 2.0°C (i.e., carbon budgets) with the anticipated emissions based on national commitments to reduce GHG emissions. However, at this time, the Administration's goals, commitments, and pledges have not resulted in actionable requirements, regulations, or thresholds that can be applied in the NEPA analysis for determining compliance or significance of the proposed action with regards to GHG emissions and global climate change. The District Court for the District of Columbia recently affirmed this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013
52	WELC	fossil fuels using supply side policies. The BLM failed to properly complete a cumulative impacts analysis of the proposed 2024 lease sales, including an assessment of the cumulative impact of greenhouse gas emissions from the federal fossil fuel program. BLM must analyze greenhouse gas emissions from any and all federal, state, and private fossil fuel leasing and development projects. As we discussed above, BLM may not improperly segment its NEPA analysis of the proposed lease sales and must more effectively conduct an analysis of the cumulative impacts of fossil fuel leasing and development in the context of a programmatic review of the federal fossil fuel program. Should BLM choose to carry on without a programmatic review, it must still	Draft EA and BLM Specialist Report Fail to Adequately Quantify All Past, Present and Reasonably Foreseeable GHG Emissions and Climate Impacts	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 55) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 39) Competitive Lease Sale EA. As described in the EA, climate change is a global process that is affected by the total amount of GHGs in the atmosphere. Therefore, the contribution to global GHGs from a single proposed land management action cannot be accurately translated into potential effects on global climate change or any localized effects in the area specific to the action. Currently, global climate models are unable to forecast local or regional effects on resources because of emissions from a specific project. BLM evaluated the potential effects of

T		41
	comprehensively analyze cumulative GHG	the proposed leasing action on climate change by estimating
	emissions pursuant to its statutory obligations	and analyzing potential GHG emissions from projected oil and
	under NEPA.	gas development on the parcels proposed for leasing using
		estimates based on past oil and gas development and available
		information from existing development. In addition, the 2022
		BLM Specialist Report on Annual Greenhouse Gas Emissions
		and Climate Trends, which was incorporated by reference,
		provided a detailed assessment of GHG emission trends and
		potential climate impacts from energy development projects
		from BLM-authorized coal, oil, and gas leases and approved
		development on public lands (including the federal mineral
		estate) managed by the BLM. The 2022 BLM Specialist
		Report also provided estimated GHG estimates from the full
		oil life cycle including emissions from oil and gas from both
		onshore and offshore sources. BLM calculated past emissions
		related to BLM fossil fuel approvals over the preceding 5
		years, estimated total emissions related to BLM fossil fuel
		approvals for the 12-month period including the lease sale,
		and projected total emissions for the lifecycle of potential
		BLM leases which was determined to be appropriate and a
		reasonably foreseeable scope of emissions for decision
		making by BLM State Directors. This analysis scope provides
		a thorough cumulative assessment of GHG emissions. All past
		and in-process BLM leases were considered in the preparation
		of the estimates. Current lease approval timeframes along with
		current data on the development status of all approved and in-
		process leases were also considered. In addition, Chapters 8, 9
		and 10 of the 2022 Specialists Report presents the range of
		potential climate change impacts based on results of
		observations, experimental research, and model simulations
		conducted by thousands of scientists from all over the world
		as well as mitigation strategies to reduce impacts of climate
		change. Overall, the analysis provided emissions estimates,
		compared the emissions to state, national, and global GHG
		emissions, and described potential cumulative environmental
		impacts of the proposed action. The District Court for the
		District of Columbia recently affirmed this position in <i>Dakota</i>
		Res. Council v. United States DOI, 2024 U.S. Dist. LEXIS
		51013

53	WELC	BLM failed to assess the cumulative greenhouse gas emissions and impacts from recent and reasonably foreseeable federal offshore oil and gas lease sales. Recent and reasonably foreseeable federal offshore oil and gas lease sales, whose GHG emissions and the cumulative impacts must be assessed include: Sale Numbers 257, 259, 258 and 261 (<i>Table Ommitted</i>). The U.S. Bureau of Ocean Energy Management produced a Programmatic Environmental Impact Statement, analyzing the estimated GHG emissions that would potentially be produced if the 2017-2022 Outer Continental Shelf (OCS) Oil and Gas Leasing Program were implemented. The four offshore oil and gas lease sales identified above are among the lease sales studied in the PEIS for the 2017-2022 OCS Oil and Gas Leasing Program. That PEIS estimated that if the 2017-2022 OCS program were implemented, the estimated future lifecycle GHG emissions from that program would be 7,886,680,000 metric tons of CO ² e.	GHG Emissions and Impacts from Federal Offshore Oil and Gas Leasing	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 40) Competitive Lease Sale EA. In addition, the BLM Specialist Report discusses the present and projected cumulative GHG emissions at the global, national, and state level based on a variety of sources such as the U.S. Energy Information Administration, U.S. Energy Information Administration, and U.S. Environmental Protection Agency. The report also provides a full life-cycle assessment that includes estimates of projected emissions on both a short-term and long-term basis in which the short-term estimates are based on reasonably foreseeable development trends derived from leasing and production statistics and long-range estimates based on the analysis of energy market dynamics developed by the U.S. Energy Information Administration. Chapter 7 of the BLM Specialist Report provides direct and indirect GHG emission estimates for both existing and projected federal fossil fuel production including emissions from oil and gas from both onshore and offshore sources.
54	WELC	BLM also failed to assess the cumulative greenhouse gas emissions and impacts from recent and reasonably foreseeable federal fossil fuel lease sales and similar federal actions, as required by NEPA. Examples of pending coal lease applications that, if authorized, would contribute to GHG emissions include: Freedom Mine, Falkirk Mine and the Spring Creek Mine (Table Omitted).	GHG Emissions and Impacts from Federal Fossil Fuel Projects	The mines mentioned are outside of the state of Wyoming and the scope of this analysis. The Spring Creek Mine expansion has been cancelled, and the Dept. of Interior is not currently authorizing new coal lease applications in the region.
55	WELC	BLM continues to fail to assess cumulative greenhouse gas emissions and impacts from recent and reasonably foreseeable non-federal oil and gas leasing and development projects. For example, just in 2022 10 states held 45 lease sales, and in 2023, 10 states held 40 lease	GHG Emissions and Impacts from Non- Federal Oil and Gas Leasing	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 55) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 41) Competitive Lease Sale EA.

		sales, selling tens of thousands of acres for oil and gas development.		The BLM analysis presented in the EA and the 2022 Specialists Report is the agency's "hard look" at GHG emissions related to agency fossil fuel approvals. Comparing all potential emissions from fossil fuel approvals within BLM jurisdiction to emissions totals at state, national and global levels represent a comprehensive "hard look" focused on the subject matter set before BLM decision makers. Given the highly complex and so-far undecipherable relationship between GHG emissions from a specific location and climate effects at that or any other location, smaller scale comparisons cannot be made. The BLM also included comparisons of projected emissions to familiar GHG emission sources (passenger vehicles), alternative energy sources (a wind turbine), and acres of forest sequestration. These standard comparisons provided by EPA illustrate the level of impact expected from GHG emissions related to the lease sale. There are no established thresholds for NEPA analysis to contextualize the quantifiable greenhouse gas emissions or social cost of an action in terms of the action's effect on the climate, incrementally or otherwise. The BLM acknowledges that all GHGs contribute incrementally to climate change and has displayed the greenhouse gas emissions and social cost of greenhouse gas in the EA in comparison to a variety of emissions sources and metrics. As of the publication of this FONSI, there is no scientific data in the record, including scientific data submitted during the comment period for these lease sales, that would allow the BLM, in the absence of an agency carbon budget or similar standard, to evaluate the significance of the greenhouse gas emissions from this proposed lease sale. Short and long-term effects of Alternative B are within the impacts analyzed in the EAs. The District Court for the District of Columbia recently affirmed this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013
56	WELC	BLM continues to improperly frame and weigh the context and intensity factors for assessing the significance of reasonably foreseeable GHG	Draft EA's Emissions Comparisons Fail	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see

emissions from the proposed lease sales and	NEPA's "Hard	Response to Public Comment No. 55) and the 30-day Public
their cumulative climate impacts. Although	Look" Standard	Protest period for the 2024-06 (see Response to Public Protest
BLM acknowledges that all GHGs contribute		No. 42) Competitive Lease Sale EA.
incrementally to the climate change		
phenomenon, BLM persists in comparing the		
estimated emissions associated with the		
proposed action to the total national, state, and		
other categories of GHG emissions to support		
its finding that the GHG emissions from the		
proposed actions are insignificant. BLM's		
attempt to minimize the estimated GHG		
emissions from the proposed actions in this		
way is precisely how the 2016 CEQ GHG		
Guidance and 2023 Interim CEQ Guidance		
directed federal agencies not to limit		
assessments of the significance of GHG		
emissions. This method of analysis doesn't		
reveal anything beyond the nature of the		
climate change challenge itself.		
Moreover, BLM's analysis of GHG emissions		
from the proposed lease sale in comparison		
with national, state, and other categories of		
emissions is incomplete and fails to inform the		
public and decision maker of comparisons that		
would more effectively reveal the context and		
intensity of the reasonably foreseeable GHG		
emissions. BLM correctly points out that GHGs		
have a long atmospheric lifetime, which allows		
them to become well mixed and uniformly		
distributed over the entirety of the Earth's		
surface, no matter their point of origin.		
However, BLM's Draft EA for the proposed		
lease sale never explains why this aspect of		
GHGs should limit BLM's comparison of		
potential emissions from the proposed actions		
to national, and state emission totals for		
purposes of providing context of their		
significance and potential contribution to		
climate change impacts. In other words, BLM		

		never compares or offers a rational explanation		
		for why it would be inappropriate to compare		
		potential GHG emissions from one proposed		
		lease sale to the potential GHG emissions from		
		another past or present lease sale. Similarly,		
		why not compare the potential GHG emissions		
		from one proposed lease sale with another past		
		or present federal (or non-federal) fossil fuel		
		action or project? Why not compare the		
		potential emissions to different individual		
		sources of GHG emissions, such as a gas-fired		
		power plant? A dairy operation? A landfill?		
		BLM does not adequately explain the basis for		
		its decision to limit its GHG emission		
		comparisons to the global, national, and state		
		levels, even though the examples of other		
		comparisons mentioned above would provide		
		valuable context and intensity information to		
		the public and the decision maker. We request		
		BLM include a more comprehensive		
		comparison of the estimated GHG emissions		
		associated with the proposed lease sale and the		
		cumulative GHG emissions from the federal		
		fossil fuel program to other emissions sources,		
		including but not limited to other individual		
		federal and non-federal fossil fuel leases,		
		individual coal-fired and natural gas electric		
		generating facilities, and individual		
		concentrated animal feeding operations (CAFOs).		
57	WELC	Neither the Draft EA nor the FONSI for the	BLM's Analysis of	Based on our review of the record, it does not appear the
		proposed lease sale clearly or properly assess	Cumulative	WELC's public comments vary significantly from those
		the significance of the cumulative impacts of	Emissions in EA and	raised during the 30-day public Comment for the 2024-06 (see
		the potential emissions of GHGs and their	BLM Specialists	Response to Public Comment No. 56) and the 30-day Public
		impact on climate change. The Draft EA did	Report Fail NEPA's	Protest period for the 2024-06 (see Response to Public Protest
		not adequately analyze or explain BLM's	"Hard Look"	No. 43) Competitive Lease Sale EA.
		assessment of the significance of the	Standard	
		cumulative impacts of GHG emissions and		
		their impact on climate change. The EA refers		

the public and decision maker to a discussion of past, current, and projected future climate change impacts in the BLM Specialist Report. However, nothing in the BLM Specialist Report ever provides BLM's basis for assessing significance of GHG emissions or its ultimate conclusion on significance. It is impossible to understand how BLM reached its conclusions regarding significance because BLM failed to discuss how it assessed the significance of GHG emissions in the Draft EA, as well as in the BLM Specialist Report.

In addition, although the BLM Specialist Report provided a discussion of cumulative GHG emissions from the BLM fossil fuel leasing program and future climate change impacts, BLM chose not to conduct an analysis of the monetized net harm to society associated with the cumulative increases in GHG emissions in the BLM Specialist Report. The BLM Specialist Report failed to analyze these cumulative impacts using the SC-GHG and failed to assess carbon budgets according to historic GHG contribution and equitable apportionment.

BLM should conduct a social cost analysis of the cumulative GHG emissions attributable to all federal fossil fuel development and production, as well as of the GHG emissions attributable to the proposed sale(s) in accordance with the 2021 United States Government, Interagency Working Group (IWG) Social Cost of Greenhouse Gas estimates. In doing so, BLM should acknowledge the fact that the IWG has consistently indicated that these numbers represent an underestimate of the actual social costs associated with a given ton of GHG

pollution. The fact that the EPA's social cost estimates, which are scientifically rigorous and reflect the best and most up-to-date scientific and economic data, are significantly higher than those of the IWG further illustrates the extent to which the IWG interim numbers may be considered an underestimate. Nonetheless, the IWG numbers represent the most current official estimate of social costs, and therefore constitute an important starting point for BLM's analysis, which must include a discussion of the ways in which the IWG estimates are likely to undervalue future climate damages.

The Specialist Report must also further contextualize its carbon budget analysis by evaluating carbon budgets according to the United States' historic contributions. It is welldocumented that the United States is the world's largest historic contributor of GHG emissions and, thus, bears a greater global responsibility to more quickly reduce the quantity of its GHG emissions. The BLM Specialist Report attempts to cast doubt on the utility of assessing GHG emissions according to carbon budgets, stating: "Carbon budgets have not yet been established on a national or subnational scale, primarily due to the lack of consensus on how to allocate the global budget to each nation, and as such the global budgets that limit warming to 1.5°C or 2.0°C are not useful for BLM decision-making as it is unclear what portion of the budget applies to emissions occurring in the United States." However, uncertainty in other contexts of GHG and climate change analysis has not prevented BLM from using averages, estimates, and models to address uncertainty and provide the public and decision makers helpful information. As such,

58	WELC	BLM should consult the best scientific reports and data available to determine a representative carbon budget that reasonably applies to emissions in the United States, given its historic contributions. The carbon budget analysis in the BLM Specialist Report, as currently drafted, is misleading because it inappropriately compares GHG emissions from the BLM federal fossil fuel program to the remaining global carbon budget. To the public or a decision maker, this analysis minimizes the GHG emissions from the BLM federal fossil fuel program and implies the emissions are insignificant to the global carbon budget, comparatively. The Draft EA's analysis of the significance of GHG emissions from the BLM federal fossil fuel program fails to take the hard look required by NEPA. BLM must take a hard look at the impacts of methane, preferably in both a programmatic NEPA review, and an aggregated EIS for the proposed 2024 sales as discussed above. Methane is an incredibly potent greenhouse gas. Methane has contributed to approximately 30% of the global rise in temperatures to date. Because of methane's potent short-term warming characteristics, curbing methane emissions is one of the most effective near-term ways to address the climate crisis. Methane emissions from fossil fuel operations represent nearly one-third of human-caused emissions. These emissions represent both a major climate threat and also an opportunity. Slowing and ultimately halting fossil fuel demand will not by itself achieve needed GHG cuts, particularly in the near-term. This means that curbing wasteful methane emissions from oil and gas production are an essential element of reducing climate-warming emissions.	BLM Must Take a Hard Look at Methane Emissions and Waste	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 57) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 44) Competitive Lease Sale EA. In the EA, the BLM analyzes greenhouse gas impacts associated with the Proposed Action, including methane. The BLM quantifies direct, indirect, and cumulative emissions from the combustion of oil and gas during the entire life of the lease (which includes operations and transport) and discusses the significance of these emissions. The BLM reviewed the environmental impacts of leasing, including quantifying and forecasting aggregate GHG emissions from oil and gas development and addressing the environmental effects of downstream oil and gas use including the effects on climate change. The EA discusses mitigation strategies designed to reduce methane and GHGs. The BLM has published its final rule for Waste Prevention,
		production are an essential element of reducing		

In 2019, oil and gas operators vented or flared approximately 150 billion cubic feet of methane, resulting in the loss of over \$50 million in federal royalty revenue. This is enough natural gas to meet the needs of 2.1 million households, which is nearly as many households as the states of New Mexico, North Dakota, Utah and Wyoming combined. This waste also means lost royalty revenues for taxpayers and Tribes. A recent analysis conducted by Synapse Energy Economics calculated natural gas methane emissions volumes from venting, flaring, and leaks in the production segment on federal and Tribal lands and determined the value of that lost gas in the form of (1) lost royalties, (2) lost state revenue from taxes, and (3) lost revenue from wasted natural gas that could be used for other purposes. It found that \$63.3 million in royalties, \$18.8 million in state revenue from taxes (from the top six states), and \$509 million in gas value was lost due to venting, flaring, and leaks on federal and Tribal lands. The report found that, in 2019, leaks accounted for 46% and flaring for 54% of lost gas. This report also found that the six states with the highest volumes of gas lost from federal and Tribal lands are New Mexico, North Dakota, Wyoming, Utah, Pennsylvania, and Colorado. The problem of flaring is particularly pernicious in North Dakota, which accounts for the vast majority of gas lost from flaring on federal and Tribal land and has the highest flaring intensity of any state in the U.S.

A high rate and intensity of flaring also has disproportionate consequences to human health. At a national level, such waste on federal and Tribal lands already has significant and disproportionate health and other impacts on

as identified in the Federal Register (89 Fed Reg. 25378-25432 (April 10, 2024) to be codified at 43 CFR Parts 3160 and 3170). The final rule replaces the BLM's current requirements governing venting and flaring which were contained in NTL-4A. The final rule is estimated to have economic impacts that result in costs and benefits to industry, increases in royalty revenues, and benefits to society.

The BLM has amended the Environmental and Human Health section of the EA to address lease development. The draft EA for this proposed lease action included the evaluation of the affected air quality and greenhouse gas emissions using various analytical methods and vetted climate science-based sources. In addition, the 2022 Specialist Report, which was incorporated by reference to the EA, provided an in-depth assessment of cumulative greenhouse gas emissions, climate change impacts, and mitigation strategies. As discussed in the specialist report, carbon dioxide, methane, and nitrous oxide are the three most common greenhouse gases associated with oil and gas development accounting for approximately 80%, 10%, and 7% of all greenhouse gas emissions, respectively. Methane can be emitted during the production and transportation of coal, natural gas, and oil but also produced biologically under anaerobic conditions in ruminant animals, wetlands, landfills, wastewater treatment facilities, fertilizer use, agriculture activities, and changes in land use.

As with oil and natural gas development activities such as drilling, production, gathering, and processing operations, flaring, and venting may occur from a variety of reasons such as a lack of gas delivery infrastructure, process upsets, or other emergency related safety concerns. While flaring and venting account for approximately 6% of the total global greenhouse gas emissions, flaring significantly reduces the emissions of greenhouse gases (including methane) and other hazardous air pollutants by over 95 percent compared to venting. In order to reduce flaring and venting of natural gas from oil and gas production facilities, various state and federal laws, regulations, and policies have been implemented over the years. For example, the EPA has issued and amended

minority and low-income communities, including Indigenous communities. On federal and Tribal lands in the U.S., there are roughly 12,000 people living within a half mile of a well with flaring. This includes approximately 1,000 children under the age of five, more than 1,600 older Americans over the age of 65, 1,800 people living in poverty, and almost 6,000 people of color, including 3,000 Native Americans. These groups live near flaring wells at much higher rates when compared to the nation at large. For example, Native Americans are 25% more likely to live within one mile of wells compared to the populations in the counties studied, while nationally they represent less than 2% of the country. Proximity to oil and gas infrastructure creates disproportionate adverse health risks and impacts on frontline communities. Moreover, the Indigenous people living on these lands are more likely to be living in poverty compared to the population of the encompassing state(s), which exacerbates the already disparate health burdens faced by these individuals and communities. Waste from flared gas in particular has disparate health impacts on Indigenous people and other overburdened communities. Studies have found that "flaring is an environmental justice issue." The majority of lost gas on Tribal lands is flared.

Flaring has significant health impacts, and those impacts are clearly seen communities near oil and gas infrastructure. A recent study found that a 1% increase in flared natural gas in North Dakota increases the respiratory-related hospitalization rate by 0.73%. Such effects are clearly documented in communities living near oil and gas infrastructure. According to an Environmental Defense Fund (EDF) analysis,

various regulations such as the New Source Performance Standard (NSPS) for Crude Oil and Natural Gas Facilities (49 CFR 60, Subpart OOOOa) which impose emission limits, equipment design standards, and monitoring and reporting requirements at oil and gas facilities. Similarly, North Dakota Department of Mineral Resources' Oil and Gas Division includes regulations that require vented gas to be flared while the North Dakota Department of Environmental Quality's Division of Air Quality established air pollution control rules and submerged fill and flare requirements. In addition to current rules and regulations, BLM and EPA have also published new proposed rules in 2022 to supplement current regulations in order to further reduce emissions (including from venting, flaring, and leaks) associated with oil and gas production on Federal and/or Indian leases. Therefore, along with planned increases in processing and pipeline capacities, updated laws and regulations, and improved reduction alternatives, flaring and venting options for facilities should be expected to

decrease over time. For additional information, please refer to Chapter 2.0 (Relationships to Other Laws and Policies) that discusses other federal and state agencies that regulate emissions to protect human health and environment and Chapter 10 of the specialist report which discusses potential options within the BLM authority to mitigate impacts of emissions.

roughly 1,100 adults with asthma, 800 adults with chronic obstructive pulmonary disease, 700 adults with coronary heart disease, and 400 adults who have experienced a stroke live within a half mile of a flaring well. Another study links flaring to shorter gestation and reduced fetal growth. Those in frontline communities bearing the brunt of excessive flaring therefore face significant adverse health risks and impacts. Reducing waste from flaring on federal and Tribal lands would lessen these harms and would be consistent with the Biden Administration's environmental justice goals and commitments.

BLM failed to take a hard look at the direct, indirect, and cumulative methane emissions that will result from development of these leases and their commensurate impacts 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 also failed to consider the other environmental impacts of this wasted resource, including the public health and welfare impacts of flaring.

While Conservation Groups understand that BLM is currently undertaking rulemaking on methane waste, and while this is necessary regulatory action, BLM should not be issuing additional leases until it takes affirmative steps to address waste on Tribal and federal lands. At a minimum, BLM must adequately address the impacts of methane waste from these sales both individually and collectively, and identify pathways to mitigate both the emission of methane and its impacts.

WELC 59 BLM is well-aware that flaring results in waste **BLM Must Consider** Based on our review of the record, it does not appear the of federal and tribal minerals, loss of revenue, Flaring and its WELC's public comments vary significantly from those and social and environmental impacts. Yet, **Impacts** raised during the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 45) Competitive Lease BLM has repeatedly ignored flaring in its NEPA analyses for oil and gas lease sales in Sale EA. Wyoming. We urge BLM to correct this deficiency and consider flaring and its impacts The lease sale does not authorize development to take place and is not the appropriate level of NEPA to identify mitigation in the EA for this lease sale. BLM must: measures before an operator even proposes to drill or submits • Consider an alternative that would an APD. When actual development is proposed at a specific mitigate flaring. To fulfill its legal location, the BLM may require COAs at that time. obligation to prevent waste under the Furthermore, the BLM does not have the regulatory authority Mineral Leasing Act, we recommend to require mitigation for GHG emissions or climate change that BLM consider a stipulation limiting flaring to situations where it is impacts because no authorizing legislation, legacy act or infeasible or unsafe to capture the gas regulation defines significance levels or gives the BLM regulatory authority to require mitigation. Both EPA and State and not allowing routine flaring where there is simply inadequate pipeline regulatory agencies regulate emissions such as methane via existing and proposed regulatory measures. At the proposed capacity or timing issues. Similar approaches to flaring have been development stage, the BLM will consider additional adopted through regulations by New mitigations measures and will comply with the Waste Mexico and Colorado. Prevention Rule that was recently finalized (https://www.federalregister.gov/documents/2024/04/10/2024-Consider the direct, indirect, and 06827/waste-prevention-production-subject-to-royalties-andcumulative socioeconomic impacts of resource-conservation) flaring. A recent analysis conducted by Synapse Energy Economics calculated natural gas methane emissions volumes from venting, flaring, and leaks in the production segment on federal and tribal lands and determined the value of that lost gas in the form of (1) lost royalties, (2) lost state revenue from taxes, and (3) lost revenue from wasted natural gas that could be used for other purposes. In 2019, about 13.9 BcF of natural gas was wasted from federal and tribal lands in Wyoming, and a portion of this waste came from flaring. This amounts to lost state revenues of \$2.5 million from state

taxes and \$2.63 million from federal royalty payments. BLM must consider these socioeconomic impacts. Consider the direct, indirect, and cumulative human health impacts of flaring. For example, a recent study found that a 1% increase in flared natural gas in North Dakota increases the respiratory-related hospitalization rate by 0.73%. BLM must examine how flaring affects people living in the region. Consider the direct, indirect, and cumulative environmental justice impacts of flaring. On April 21, 2023, President Biden reaffirmed his administration's commitment to working towards environmental justice in Executive Order 14,096 on Revitalizing Our Nation's Commitment to Environmental Justice for All. Executive Order 14.096 requires all federal agencies to "consider adopting or requiring measures to avoid, minimize, or mitigate disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities on communities with environmental justice concerns, to the maximum extent practicable, and to address any contribution of such Federal activities to adverse effects including cumulative impacts of

environmental and other burdens—already experienced by such

communities." To fulfill this mandate, BLM must not only consider the impacts of flaring on Indigenous

		_		
60	WELC	communities but also mitigate those harms. BLM must include an analysis of reasonably foreseeable direct, indirect, and cumulative human health impacts resulting from oil and gas leasing and development. 40 C.F.R. § 1508.1(g). NEPA requires federal agencies "to use all practicable means, consistent with other essential considerations of national policy" to "assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings." 42 U.S.C 4331(b). In addition, NEPA's use of the term "human environment" expressed Congressional intent that NEPA should promote public policy attentive to the inexorable link between human well-being and environmental integrity. Yet, in the Draft EA for this proposed lease sale, BLM fails to analyze several important issues related to health and safety risks and impacts—whether direct, indirect, or cumulative. The Draft EA contains subsections entitled "Environmental Justice" and "Public Health and Safety" for the two. And BLM summarizes some of its obligations to analyze disproportionately high and adverse human health effects on "minority" and "low-income populations" under Executive Order 12898, along with CEQ and EPA Guidance on environmental justice and BLM's own recent Instruction Memorandum IM 2022-059. But the agency fails to take NEPA's requisite hard look at the reasonably foreseeable future health and	BLM Must Take a Hard Look at Impacts to Human Health	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 58) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 46) Competitive Lease Sale EA. The BLM has not discounted public health impacts based on the location of the parcels included in this lease sale; rather the BLM has determined that there are very few individuals, if any, that reside within 1 mile of the proposed parcels who may be affected by the potential development of the parcels. Furthermore, the reasonably foreseeable development scenario for all parcels is 40 wells over 11,250.55 acres as analyzed for Alternative 2 (Proposed Action), or 36 wells over 10,155.33 acres as analyzed for Alternative 3 (Modified Proposed Action). All identified building footprints occurring within 1.25 miles of parcel boundaries, while spatially proximal, are attributable to rural, remote, and sparsely populated US Census Bureau block groups whose actual building residency statuses or associated levels of use or access are unknown at this time. Therefore, the BLM may require or recommend site specific Conditions of Approval (COAs) at the APD stage, based on site-specific environmental review to protect human health. Reasonable measures that may be considered include restricting the rate or intensity of development to minimize impacts to other resource values, land uses, or users not addressed in the lease stipulations at the time operations are proposed (43 CFR § 3101.1-2).
				proposed (43 Cr K § 3101.1-2).
		safety impacts that could result from this sale,		
		including disproportionate and adverse impacts		The BLM has included maps of each parcel which include
		to "environmental justice" populations. As stated above, BLM cannot defer its analysis of		current producing oil and gas wells, active leases, towns, and
		health impacts to the leasing stage. And BLM's		cities, if present. The BLM has identified, in the EA, potential
		vague references to unspecified "relevant rules"		communities of concern in each county that could be adversely or disproportionately affected by oil and gas
		vague references to unspecified relevant rules		adversely of disproportionalely affected by oil and gas

	and regulations" designed to protect public health and safety do not absolve BLM of its duty to take a hard look at health risks and effects from its own actions and decisions, at this leasing stage. BLM offers no other explanation for its failure to fully analyze human health and safety effects.		development and has discussed how the potential for development could affect such communities. Because of the rural disposition of the parcel locations, any mitigation would be developed with any specific individuals that may be adversely or disproportionally affected by the development of any of these parcels and would be identified at the time of APD submission and additional site-specific environmental analysis.
61 WELC	An extensive and ever-growing body of peer-reviewed research has shown what people living near oil and gas operations already know firsthand—that proximity to drilling and fracking operations and other oil and gas facilities is linked to adverse health risks and impacts. One excellent, frequently updated, and easy-to-use resource for keeping up with this growing body of peer-reviewed research is the Physicians, Scientists, and Engineers for Healthy Energy ("PSE Healthy Energy") database, the Repository for Oil and Gas Energy Research, or "ROGER." ROGER is an extensive repository of peer-reviewed literature, "a near-exhaustive collection of bibliographic information, abstracts, and links to many of [sic] journal articles that pertain to shale and tight gas development." This database is organized into several categories, and for the "Health" category alone, there are over 260 studies listed, including several recent studies from 2019-2022. BLM should avail itself of this invaluable resource in order to take NEPA's requisite hard look at health impacts. Multiple peer-reviewed papers have identified adverse health effects and risks arising from exposure to unconventional oil and gas drilling operations, even within a large radius of	Overview of Human Health Impacts and Sources of Peer- Reviewed Literature Related to Proximity to Oil and Gas Development	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 59) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 47) Competitive Lease Sale EA and Response to Public Comment No. 60 (above).

residences—potentially up to ten miles. For example, one study found that babies whose parents lived in close proximity to multiple oil and gas wells were 30% more likely to be born with heart defects than babies born to mothers who did not live close to oil and gas wells. Other adverse health impacts documented among residents living near drilling and fracking operations include increased reproductive harms, asthma attacks, higher rates of hospitalization, ambulance runs, emergency room visits, self-reported respiratory problems and rashes, motor vehicle fatalities, trauma, and drug abuse.

"No Surface Occupancy" (NSO) stipulations could be implemented within a certain distance of residences, schools, or other occupied areas that might mitigate some of these effects, but they do not eliminate BLM's obligation to take a hard look at health effects at the leasing stage, as NEPA requires. Stipulations and notices are used to comply with FLPMA and the MLA, and are not a substitute for a NEPA analysis. Moreover, most existing oil and gas setbacks or NSO stipulations (typically < 1000 feet) are likely inadequate to protect people and communities against health and safety risks and adverse effects. At minimum, some health experts have called for a one-mile minimum distance between drilling facilities and schools, hospitals, and occupied dwellings, in light of the heightened health risks of residing within close proximity to unconventional oil and gas drilling sites. Many others call for setbacks of even greater distances. One study found adverse health impacts at distances of six miles. Another study found increased risk of congenital heart and neural tube defects in babies born to mothers living within 10 miles

		of natural gas wells. BLM must take a hard		
		look at the adverse health risks and effects		
		associated with proximity to oil and gas activity		
		and facilities and disclose them to the public.		
62	WELC	associated with proximity to oil and gas activity	Cumulative Health Risks and Impacts to Social and Structural Factors Affecting Health	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 60) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 48) Competitive Lease Sale EA, and Response to Public Comment No. 60 (above).
		treating, and mitigating adverse health impacts		
		(e.g. lack of access to health care providers		
		makes it more difficult to manage asthma).		
		BLM must take a hard look at the reasonably		

foreseeable cumulative health impacts of its actions, including cumulative impacts as they relate to social and structural factors—often referred to as social determinants of health—and environmental justice. These "social determinants" can include both positive and negative factors.

Moreover, the CEQ guidance on environmental justice in the NEPA process specifically directs agencies to incorporate relevant underlying health data, and what amounts to social determinants of health, into their NEPA analyses, and to use this data to identify cumulative risks and reasonably foreseeable cumulative effects. It emphasizes the importance of using public health data to identify "the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available..." and notes that "[a]gencies should consider these multiple, or cumulative effects, even if certain effects are not within the control or subject to the discretion of the agency proposing the action." Although BLM discusses this guidance, BLM does not appear to adequately analyze health or cumulative impacts in the context of environmental justice, in relation to the Guidance or otherwise, in the Draft EA-despite the clear language of the Guidance and the inexorable link between health and environmental justice.

BLM's full analysis and disclosure of health and safety risks and impacts, including cumulative impacts, is particularly important given that typical methods of collecting and analyzing emissions data have often underestimated health risks by failing to adequately measure the intensity, frequency, and duration of community exposure to toxic chemicals from fracking and drilling; failing to examine the effects of chemical mixtures; and failing to consider vulnerable populations. emissions often fail to consider impacts on vulnerable populations including environmental justice communities and children. For example, a recent analysis of oil and gas development in California found that 14 percent of the state's population totaling 5.4 million people live within a mile of at least one oil and gas well. More than a third of these residents, totaling 1.8 million people, also live in areas most burdened by environmental pollution.

The existing health status and pollution burdens experienced by individuals and populations in the lease sale areas, and the disproportionate health risks they face in light of social determinants of health and environmental justice concerns, are precisely the kinds of "incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions" that NEPA requires BLM to analyze here. BLM cannot simply dismiss the "incremental" addition of wells from a particular lease sale (or the "incremental" increase in air pollution from those wells) as insignificant merely because they constitute a small percent increase compared to state, regional/basin-wide, or national well counts or emissions, or a small percent of total air pollutant emissions. This misses the entire point of NEPA's requisite cumulative impacts analysis—it is not to

determine what fraction of regional, state, or national wells and emissions the wells and emissions from a particular lease sale make up. Quite the opposite—as with GHG emissions, rather than breaking emissions from an individual lease sale down into annual fractions or "component parts" in attempt to dismiss them as insignificant, BLM must analyze additive short and long-term emissions and their direct, indirect, and cumulative health effects from these lease sales—the impacts which result "from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions". And, as with GHG emissions, BLM must put these emissions into context and discuss their potentially significant impacts, including health risks and impacts.

In addition, BLM must not summarily dismiss health and safety impacts as temporary simply because some exposures (e.g., to emissions and fugitive dust from construction) are temporary. It is arbitrary, and contrary to scientific understanding, to assume that just because an exposure is temporary, so too are the effects resulting from that exposure. The health effects that can arise from environmental exposures, especially in conjunction with social determinants of health and environmental justice issues, may endure long after the acute exposure source is gone. It is arbitrary and capricious for BLM to dismiss health impacts as insignificant, without further justification and without further elaboration on these effects specific to the populations in this lease sale area. We appreciate BLM's general acknowledgment, in this EA, of the potential for health effects arising from both short and long-term exposures to Hazardous Air

Pollutants (HAPs), EA at 59. However, the agency still fails to take a hard look at cumulative or long-term HAPs emissions and impacts.

BLM also cannot dismiss cumulative health impacts as temporary, and thus avoid taking a hard look at cumulative health impacts, by simply assuming that wells will be properly plugged and reclaimed at the end of their useful lives, and thus cease to cause unspecified health risks and impacts at that time. For one, a well's time in production can span decades. BLM must analyze cumulative emissions and their impacts over the full life course of a well, in conjunction with other wells in the lease sale area and other past, present, and reasonably foreseeable future actions and emissions. Moreover, information from several states, and nationally, indicates that wells often are not properly plugged and reclaimed at the end of their "useful lives." For example, while it is sometimes difficult to obtain an exact count of "orphaned" or improperly plugged and abandoned wells, reports indicate that there are hundreds, even thousands, of such wells across private, state, and federal lands, including in Western states such as Colorado and Wyoming. These wells can leach toxic chemicals and contaminate water supplies, posing direct and cumulative health risks to nearby communities. State and BLM bonding requirements are usually insufficient to meet the costs associated with plugging and abandoning these wells, retiring other equipment, and cleaning up the well sites. Thus, idle or orphaned wells and abandoned well sites pose not only health risks and impacts, but also financial ones, which can further compound existing health impacts,

		including cumulative impacts, and related health inequities.		
63	WELC	BLM also failed to take a hard look at the inexorable relationship between health and environmental justice. Executive Order 12898 ("EO 12898") on environmental justice requires each federal agency to make the achievement of "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." The Draft EA failed to adequately link health and environmental justice for these lease sales, despite the clear mandate of EO 12898, and even more recently, EO 14008. As mentioned above, BLM does not adequately analyze health and safety impacts in the Draft EA. It is difficult to see how BLM can possibly analyze, let alone take NEPA's requisite hard look at, environmental justice impacts without properly analyzing health and safety impacts, particularly cumulative and disproportionate risks and impacts.	Health and Environmental Justice	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 61) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 49) Competitive Lease Sale EA and Response to Public Comment No. 60 (above).
		[C]EQ guidance on environmental justice in the NEPA process specifically directs agencies to incorporate relevant underlying health data, and social and structural factors, into their NEPA analyses, and to use this data to identify cumulative risks and reasonably foreseeable cumulative effects. An environmental justice analysis must contain more than a textbook citation to Executive Order 12898, agency guidance, or tables listing demographic data and identifying the general existence of "environmental justice" populations of concern or potential for disproportionate impacts in the lease sale area, with no discussion of actual		

risks and impacts to those populations or how those risks and impacts might be mitigated or avoided. Merely providing a textbook citation to the requirements of Executive Order 12898 or the definitions of environmental justice populations, or listing and describing environmental justice populations in the lease sale area, as BLM does here without engaging in any further analysis or public disclosure of the impacts of its leasing decisions on these populations, is arbitrary and capricious and fails to satisfy NEPA's hard look mandate.

The inequities at which BLM must take a hard look in an environmental justice analysis are not incidental, nor are they biologically determined—they are structural, systemic, and part of an unjust historical and ongoing pattern and practice of environmental racism, settler colonialism, and treatment of communities in the leasing areas as energy sacrifice zones. And, as discussed throughout these comments, there are several other health risks and impacts BLM should also analyze in the context of health and environmental justice, particularly in light of social and structural factors that affect health. BLM must engage in a thorough analysis of these and other inequities that NEPA requires, apply this analysis to its decision-making, and articulate a "rational connection between the facts found and the choices made" in coming to its ultimate conclusions in light of that analysis. In conducting this analysis, BLM can and should synthesize existing local health, socioeconomic, and other data in the lease sale areas—for example, county health statistics and reports, locally-conducted health impact assessments, where available, or mapping of pollution exposure risks and demographic data through

i 				
		tools like U.S. EPA's "EJ Screen" or the		
		Climate and Economic Justice Screening Tool,		
		and the best available science, including but not		
		limited to the peer-reviewed studies and		
		sources mentioned in these comments.		
		Moreover, BLM's own September 2022		
		Instruction Memorandum 2022-059,		
		"Environmental Justice Implementation,"		
		mandates environmental justice analyses in		
		BLM's NEPA reviews. This Instruction		
		Memorandum, the accompanying FAQ/guide		
		to Addressing Environmental Justice in NEPA		
		Documents, and the numerous tools and		
		resources listed therein, should—indeed, must—		
		-help guide not just BLM's identification of		
		environmental justice "populations" or		
		"communities of concern," but actual		
		environmental justice analysis, including an		
		analysis of any disproportionate, adverse, or		
		cumulative health impacts, for these lease sales.		
		As discussed above and throughout these		
		comments, IM 2022-059, EO 12898 and EO		
		14008, NEPA, and the APA require more than		
		mere identification of EJ communities. BLM		
		must take a hard look at risks and impacts to		
		those communities that could result from these		
		lease sales, and factor those findings into its		
		decision-making. And here, BLM offers no		
		evidence or justification for its apparent		
		conclusion that EJ impacts will not be		
		significant.		
64	WELC	Air pollution is of particular concern with	Air Pollution and	Based on our review of the record, it does not appear the
		respect to health impacts of these lease sales,	Health Impacts	WELC's public comments vary significantly from those
		including not only direct impacts, but also	Titaliii iiipaata	raised during the 30-day public Comment for the 2024-06 (see
		cumulative risks and impacts and historical		Response to Public Comment No. 62) and the 30-day Public
		patterns of multiple and cumulative exposures.		Protest period for the 2024-06 (see Response to Public Protest
		The potential harms resulting from exposure to		No. 50) Competitive Lease Sale EA and Response to Public
		dangerous air pollutants associated with		Comment No. 60 (above).
		fracking and drilling are serious and wide-		Comment 110. 00 (40010).
		macking and drining are serious and wide-		

ranging. A growing body of scientific research has documented adverse health impacts from air pollution related to unconventional oil and gas development or fracking, including studies showing air pollutants at levels associated with reproductive and developmental harms and increased risk of morbidity and mortality. More broadly, a recent study found that if implemented, nationwide efforts to eliminate energy-related emissions, including from oil and gas production could prevent as many as 53,200 premature deaths each year and would provide \$608 billion in benefits from avoided PM2.5-related illness and death.

A comprehensive review of the risks and harms of fracking to human health came to several key findings, including: (1) "drilling and fracking contribute to toxic air pollution and smog (ground-level ozone) at levels known to have health impacts," (2) "public health problems associated with drilling and fracking include poor birth outcomes, reproductive and respiratory impacts, cancer risks, and occupational health and safety problems"; and (3) "fracking infrastructure poses serious potential exposure risks to those living near it."

The range of illnesses that can result from the wide array of air pollutants from fracking were summarized in a study by Dr. Theo Colburn, which charts which fracking chemicals have been linked to certain illnesses. This study analyzed air samples taken during drilling operations near natural gas wells and residential areas in Garfield County, Colorado, and detected 57 chemicals between July 2010 and October 2011, including 44 with reported health effects.

The study found extremely high levels of methylene chloride, which may be used as cleaning solvents to remove waxy paraffin that is commonly deposited by raw natural gas in the region. These deposits solidify at ambient temperatures and build up on equipment. While none of the detected chemicals exceeded governmental safety thresholds of exposure, the study noted that such thresholds are typically based on "exposure of a grown man encountering relatively high concentrations of a chemical over a brief time period, for example, during occupational exposure." Consequently, such thresholds may not apply to individuals experiencing "chronic, sporadic, low-level exposure," including sensitive populations such as children, the elderly, and pregnant women. For example, the study detected polycyclic aromatic hydrocarbon (PAH) levels that could be of "clinical significance," as recent studies have linked low levels of exposure to lower mental development in children who were prenatally exposed. In addition, government safety standards do not take into account "the kinds of effects found from low-level exposure to endocrine-disrupting chemicals..., which can be particularly harmful during prenatal development and childhood.

A rigorous study by Johns Hopkins University, which examined 35,000 medical records of people with asthma in Pennsylvania, found that people who live near a higher number of, or larger, active gas wells were 1.5 to 4 times more likely to suffer from asthma attacks than those living farther away, with the closest groups having the highest risk. Relatedly, a 2018 study of pediatric asthma-related hospitalizations found that children and adolescents exposed to newly spudded

unconventional natural gas development wells within their zip code had 1.25 times the odds of experiencing an asthma-related hospitalization compared to children who did not live in these communities. Furthermore, children and adolescents living in a zip code with any current or previous drilling activity had 1.19 times the odds of experiencing an asthma-related hospitalization compared to children who did not live in these communities. Amongst children and adolescents (ages 2-18), children between 2 and 6 years of age had the greatest odds of hospitalization in both scenarios.

BLM should analyze these asthma-related effects in relation to existing asthma rates and related impacts in the communities adjacent to and counties encompassing the proposed lease sales. BLM's previously-mentioned IM 2022-059 on implementing environmental justice, and the accompanying FAQ, outline ways of collecting such data. And air pollution-related asthma, in particular, can exert profound and widespread cumulative health effects throughout a person's life course, especially when combined with social determinants of health. For example, children with asthma are much more likely to miss school, hurting their educational prospects as well as their health (with some adverse health effects enduring into adulthood), and resulting in significant funding losses for local schools. As the New Mexico Department of Health has noted, and nationwide studies confirm, "low-income" populations and "environmental justice" populations face not only disproportionate asthma risks, but also significant difficulty managing their asthma, in part due to lack of access to health care.

Ozone is a criteria pollutant of particular concern that contributes to asthma and missed school days (and one that can, in general, adversely affect health, especially for "sensitive groups" such as children, the elderly, and those with pre-existing health issues). Background concentrations of ozone in some of the lease sale areas are already at or exceed the National Ambient Air Quality Standards ("NAAQS"), leaving virtually no room for growth in emissions. Several studies that measured and/or modeled gas-related air emissions in various states have identified significant increases in ground level ozone as a result of natural gas development. Ozone was once a summertime urban phenomenon but is now being seen increasingly in western rural areas during the winter due to the natural gas boom, so much so that some relatively small cities are no longer in compliance with the federal regulations that set allowable ozone levels This is insufficient to comply with NEPA's requirements. BLM must go further and address how the proposed sale is consistent with meeting NAAQS requirements, as well as addressing the health and environmental impacts of such exceedances as are already occurring and those that are likely to occur or be exacerbated by the proposed action.

In addition, oil and gas air pollution exacerbates cancer risks. A recent Yale University study identified numerous fracking chemicals that are known, probable, or possible human carcinogens (20 air pollutants) and/or are linked to increased risk for leukemia and lymphoma (11 air pollutants), including benzene, 1,3-butadiene, cadmium, diesel exhaust, and polycyclic aromatic hydrocarbons.

And a 2018 study by McKenzie et al. conducted in the Denver Julesberg Basin on the Colorado Northern Front Range (CNFR) found that the established setback distance of 152 m (500 ft) did little to protect people in that proximity. In analyses of nonmethane concentrations from 152 to >1600 meters from oil and gas facilities, the study found that the EPA's minimum cumulative lifetime excess cancer risk benchmark of 1 in a million was exceeded. Cumulative lifetime excess cancer risk increased with decreasing distance from the nearest oil and gas facility. Residents living within 610 meters of and oil and gas facility had an overall cancer risk in excess of the EPA's upper bound for remedial action of 1 in 10,000. Furthermore, residents within 152 meters of an oil and gas facility had an overall excess cancer risk of 8.3 in 10,000, along with an increased likelihood of neurological, hematological, and developmental health effects. Over 95% of the total risk was due to benzene, with additional risk due to the presence of toluene, ethylbenzene, xylene, and alkanes. Other studies have found that residents living closer to drilling and fracking operations had higher hospitalization rates and reported more health symptoms including upper respiratory problems and rashes.

Despite these known risks and impacts, BLM fails to adequately analyze the health risks and impacts of air pollution from this lease sale, on specific populations in this lease sale area, or from oil and gas leasing and development overall. BLM's discussion of air quality impacts— with respect to health or otherwise—in the Draft EA falls short of NEPA's requisite hard look. In the Draft EA, BLM includes tables with projected air pollutant emissions

quantities resulting from well construction and operations—specifically, PM10, PM2.5, NOx, SO2, CO, VOC, and HAPs—for this lease sale, under the proposed alternative. However, as with GHG emissions and climate change, BLM fails to adequately analyze cumulative air pollutant emissions, fails to analyze or even mention the effects of these emissions—on health or otherwise—and fails to provide any metric by which BLM or the public can put these emissions in context or analyze their significance. BLM's discussion of hazardous air pollutant emissions and impacts fails to link lease sale emissions to specific impacts (rather than general categories of health risks and impacts) and only discusses comparative cancer rates at the county levels, which tells BLM and the public little about cancer risks associated with these lease sales.

[I]t is difficult to see how continued authorization of oil and gas leasing and drilling, is consistent with managing the public lands "in a manner that will protect the quality of air and atmospheric values." As to the third obligation, BLM should discuss in its NEPA analysis (and ultimately, build into its Resource Management Plans) what these lease provisions are and how BLM plans to monitor for, and act on, noncompliance with air quality standards or implementation plans.

Of note, too, is BLM's own acknowledgment that it is authorized to, and sometimes must, go beyond the requirements of the Clean Air Act in fulfilling its FLPMA obligations, including its obligation to prevent unnecessary or undue degradation. This includes not only its obligations to protect air quality today, but also in accounting for "the needs of future"

				1
		generations," who will be harmed by		
		greenhouse gas emissions and climate change		
		resulting from oil and gas leasing		
		authorizations, and could face additional risks		
		and impacts to their health from degradation of		
		the airshed in the lease sale area, and pollution		
		exposures prenatally or in early childhood that		
		can have intergenerational adverse impacts.		
65	WELC	With respect to water quality and quantity and	Water Quality and	Based on our review of the record, it does not appear the
		health impacts, in addition to the considerations	Quantity and Health	WELC's public comments vary significantly from those
		discussed, BLM should also consider how its	Impacts	raised during the 30-day public Comment for the 2024-06 (see
		authorization of this lease sale and reasonably	•	Response to Public Comment No. 63) and the 30-day Public
		foreseeable development of the leases could		Protest period for the 2024-06 (see Response to Public Protest
		exacerbate water quality-related health impacts		No. 51) Competitive Lease Sale EA and Response to Public
		associated with PFAS contamination. For		Comment No. 60 (above).
		example, a new report by Physicians for Social		
		Responsibility (PSR) reveals the staggering		In addition, protest points specific to oil and gas development
		amount of these health-harming "forever		in New Mexico are outside of the scope of this EA.
		chemicals" known to be used in oil and gas		in item interior are outside of the scope of this Err.
		operations in New Mexico—not to mention		
		additional PFAS chemicals that are likely		
		present but not disclosed due to trade secret		
		protections. BLM should take this report and		

66	WELC		*	
			Impacts	
		of more than 1.1 million births in Pennsylvania		No. 52) Competitive Lease Sale EA and Response to Public
		found evidence of a greater incidence of low-		Comment No. 60 (above).
		birth-weight babies and significant declines in		
		average birth weight for babies born to people		
		living within 3 kilometers of fracking sites. The		
		study estimated that about 29,000 U.S. births		
66	WELC	found evidence of a greater incidence of low- birth-weight babies and significant declines in average birth weight for babies born to people living within 3 kilometers of fracking sites. The	Maternal, Paternal and Child Health Impacts	

		each year occur within 1 kilometer of an active		
		fracking site and "that these births therefore		
		may be at higher risk of poor birth outcomes."		
		A study of 9,384 pregnant people in		
		Pennsylvania found that those who live near		
		active drilling and fracking sites had a 40		
		percent increased risk for having premature		
		birth and a 30 percent increased risk for having		
		high-risk pregnancies. Another Pennsylvania		
		study found that pregnant people with greater		
		exposure to gas wells during pregnancy—		
		measured in terms of proximity and density of		
		wells—had a much higher risk of having low-		
		birthweight babies; the researchers identified		
		air pollution as the likely route of exposure. In		
		rural Colorado, those with greater exposure to		
		natural gas wells during pregnancy had a higher		
		risk of having babies with congenital heart		
		defects and possibly neural tube defects. A July		
		2020 study found that residential proximity to		
		flaring (the open combustion of natural gas)		
		from oil and gas development was associated		
		with an increased risk of preterm birth,		
		specifically for "Hispanic" women, in the Eagle		
		Ford Shale of Texas. Here, again, these		
		documented risks are of particular concern in		
		certain communities near the proposed lease		
		sales in light of environmental justice concerns,		
		like proximity of homes to multiple wells (an		
		exacerbating factor in the Eagle Ford Shale		
		study), and social and structural inequities, such		
		as limited access to prenatal care. BLM should		
		have taken local health data like this into		
		account as part of its "hard look" at health		
		impacts, especially as they relate to social		
		determinants of health and environmental		
		justice.		
67	WELC	Those living near oil and gas development	Occupational Health	Based on our review of the record, it does not appear the
07	WELC	aren't the only ones at risk. Oil and gas workers	and Safety Impacts	WELC's public comments vary significantly from those
		also suffer high risks from toxic exposure and	and Safety Impacts	raised during the 30-day public Comment for the 2024-06 (see
	<u> </u>	also suffer high risks from toxic exposure and		Taised during the 50-day public Comment for the 2024-06 (see

		accidents. One study of the occupational inhalation risks caused by emissions from chemical storage tanks associated with fracking wells found that chemicals used in 12.4 percent of wells posed acute non-cancer risks, chemicals used in 7.5 percent of wells posed acute cancer risks, and chemicals used in 5.8 percent of wells posed chronic cancer risks. Drilling and fracking jobs are among the most dangerous jobs in the nation with a fatality rate that is four to seven times the national average. Irregularities in reporting practices mean that counts of on-the-job fatalities among oil and gas workers are likely underestimatesOccupational hazards in the fracking industry include head injuries, traffic		Response to Public Comment No. 65) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 53) Competitive Lease Sale EA and Response to Public Comment No. 60 (above). 43 CFR 3162.5-3 – Safety precautions: The operator shall perform operations and maintain equipment in a safe and workmanlike manner. The operator shall take all precautions necessary to provide adequate protection for the health and safety of life and the protection of property. Compliance with health and safety requirements prescribed by the authorized officer shall not relieve the operator of the responsibility for compliance with other pertinent health and safety requirements under applicable laws or regulations. From 43 CFR 3171.17(c)(4), the operator must maintain
		gas workers are likely underestimatesOccupational hazards in the		requirements under applicable laws or regulations.
		linked to silicosis and lung cancer, was singled out by the National Institute for Occupational Safety and Health as a particular threat to workers in fracking operations where silica sand is used. At the same time, research shows that many gas field workers, despite these serious occupational hazards, are uninsured or underinsured and lack access to basic medical care.		Industry Standards (29 CFR 1910). The safety hazards associated with oil and gas extraction activities, as outlined by OSHA, include Vehicle collisions, Explosions and Fires, Confined Spaces, Struck-by/Caught-in/Caught-between, Falls, Ergonomic Hazards, and Planning and Prevention. The BLM has the regulations, as listed above, to require safe operations within the lease boundary, but ultimately the Health and Safety authority within all oil field operations is OSHA and the implementation and enforcement of the 29 CFR 1910 regulations within the industry.
68	WELC	Radioactive wastes from oil and gas production can be found in produced water, flowback water from hydraulic fracturing, drilling waste including cuttings and mud, and/or sludge. This	Naturally Occurring Radioactive Materials and Technology	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 66).

_				,
		material can concentrate in pipes, storage tanks	Enhanced Naturally	
		and facilities, and on other extraction	Occurring	Thank you for the comment. When a specific parcel is sold,
		equipment, and may be left on site or be	Radioactive	the BLM does not know certain specific details of
		emitted into the environment. Some of these	Materials	development. These include: drill rig type (e.g. a Tier II or
		materials, such as Radium, can penetrate the		Tier IV rig) how a proposed well may be developed (e.g. will
		skin and raise the risk of cancer. The NEPA		the well be hydraulically fractured or not, vertical, directional,
		analysis conducted here must consider the		or horizontal wellbores), the mineral resources a well might
		potential health impacts of radioactive		target (oil vs. gas), where water for drilling activities may be
		materials, as well as all other potential health		obtained (e.g. town water supplies, water well, recycled water
		effects discussed herein.		from previous drilling activities), or even if freshwater zones
				will be encountered when drilling. Upon receipt of a
		Processes used to produce oil and gas often		development proposal, BLM will conduct additional review to
		generate radioactive waste containing		ensure that all usable water zones are protected through proper
		concentrations of naturally occurring		cementing and casing, as required by regulation and 43 CFR
		radioactive materials (NORM) and		3172. The use of a White Paper, like BLM WY has prepared
		Technologically Enhanced Naturally Occurring		and incorporated by reference into the lease sale EA, was
		Radioactive Materials (TENORMS). The		recently affirmed in: Ctr. for Biological Diversity v. United
		geological formations to be drilled will result in		States BLM, No. 3:17-CV-553-LRH-WGC, 2019 U.S. Dist.
		radioactive waste, containing both NORMS and		LEXIS 7525 (D. Nev. Jan. 15, 2019): "As the Court stated in
		TENORMs. The radioactive materials will		the previous section, BLM was not required to conduct a site-
		show up in formation drilling, production		by-site analysis of the impacts of fracking at the leasing stage
		wastes, and operations.		because at the time the leases were sold, BLM did not know
		Every single shale well that uses an on-site pit		what parcels would be sold, what type of ground development
		for disposal of drill cuttings and/or fluids likely		the lessees would choose to pursue, and if fracking would
		will leave behind some amount of concentrated		even take place." In addition, at the lease sale stage, the BLM
		radioactive materials. Further, Alpha-emitting		does not know what chemicals, if any, would be used, the
		radioactive decay elements concentrate at the		chemical compound, if radioactive materials were contained,
		pipe scale, so the waste is much more		etc., if hydraulic fracturing were to occur. BLM also does not
		radioactive than any of the constituent parts.		know which naturally occurring elements, radioactive or not,
		BLM must also evaluate radiation exposure		may be encountered if and when a well were to be completed,
		risks as part of its obligation to take a hard look		or if an on-site pit will be used on a specific lease.
		at public health and safety. Further, BLM		
1		should conduct a baseline groundwater analysis		
		in the lease sale areas before any more leasing		
		and development occurs, to ensure that no		
		environmental contamination occurs from		
		disposal of radioactive sludge/scale.		
69	WELC	BLM must also take a hard look at	BLM Must Take a	Based on our review of the record, it does not appear the
		environmental justice—not just in relation to	Hard Look At	WELC's public comments vary significantly from those
1		health, but also in its own right. As defined by		raised during the 30-day public Comment for the 2024-06 (see

the U.S. Environmental Protection Agency, "environmental justice" means "the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, in the development, implementation, and enforcement of environmental laws, regulations, and policies." Executive Order 12898 (EO 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." Even more recently, President Biden's January 27, 2021 "Executive Order on Tackling the Climate Crisis at Home and Abroad" (EO 14008) explicitly recognizes the inexorable links among climate, health, and environmental justice (which includes social and economic justice), and the corresponding need to address all of them in concert, with a whole-ofgovernment approach.

According to EPA Guidance on environmental justice in the NEPA process, an environmental justice analysis must also include "the cultural values that the community and/or Indian Tribe may place on a natural resource at risk." The Guidance also states that it is "essential" for the "NEPA analyst to consider the cumulative impacts from the perspective of these specific resources or ecosystems which are vital to the communities of interest." BLM must incorporate Tribes' and community members' knowledge of, and concerns about, such cultural values and cumulative impacts in its NEPA analyses for the lease sales.

Environmental Justice

Response to Public Comment No. 67) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 54) Competitive Lease Sale EA and Response to Public Comment No. 60 (above).

Despite identifying low-income, minority, and Tribal communities within the study area representative of the areas that could potentially be impacted by the proposed lease sale, BLM dismisses environmental impacts as insignificant and attempts to defer analysis of environmental justice impacts to the drilling and development stage. It is arbitrary and capricious, a failure to "articulate a rational connection between the facts found and the choices made," for BLM to acknowledge that there are "environmental justice" communities in the lease sale area who could experience adverse and disproportionate risks or impacts, without actually analyzing the risks and impacts of its leasing decisions on these populations—let alone taking these risks, impacts, and concerns into account in its decision- making. "Where BLM has acknowledged increased risk, it cannot then conclude impacts are not significant absent a comprehensive analysis." And BLM cannot defer that analysis to the APD stage. The intent of NEPA is for agencies to study the impact of their actions on the environment before the action is taken.

BLM must also adhere to the "process" requirements of environmental justice—fair treatment and meaningful involvement. If BLM ignores or excludes the very people and communities who are most affected by its leasing decisions, BLM is not only denying them fair treatment and meaningful involvement in decision-making—and, in the case of indigenous peoples and Tribes, abrogating the right to self-determination and free prior and informed consent but also depriving itself, and the general public, of invaluable knowledge and expertise that would

		enable better-informed and more transparent decision-making. "Better decisions" are indeed a fundamental goal of NEPA, and they require		
		extensive, meaningful public involvement		
		throughout an agency's decision-making		
		process—not just "input" on pre- determined		
		agendas.		
70	WELC	BLM must analyze and disclose the reasonably	BLM Must Take a	Based on our review of the record, it does not appear the
		foreseeable impacts to a variety of non-climate	Hard Look at	WELC's public comments vary significantly from those
		resources from drilling on these particular	Impacts to	raised during the 30-day public Comment for the 2024-06 (see
		leases. In particular, BLM must take a hard	Resources Other	Response to Public Comment No. 68) and the 30-day Public
		look at the impacts to groundwater, wildlife and	than Climate	Protest period for the 2024-06 (see Response to Public Protest
		other resources that will be harmed by oil and		No. 55) Competitive Lease Sale EA.
		gas development resulting for its leasing		-
		decisions.		The BLM has prepared multiple EISs covering the lands BLM
				is considering making available for competitive auction. From
		Courts have long made clear that "the sale of		those EISs, the BLM has completed a Reasonably Foreseeable
		leases cannot be divorced from post-leasing		Development scenario for all parcels associated with the June
		exploration, development, and production."		2024 lease sale and has identified all resources for analysis
		BLM's issuance of leases typically is an		associated with the parcels. As such, the BLM has taken a
		irretrievable commitment of resources, and		hard look at the impacts to groundwater, wildlife, and other
		before taking that step the agency must		resources as the comment describes. The BLM has identified
		consider the reasonably foreseeable impacts—		that the issuance of leases is an irretrievable commitment of
		such as oil and gas drilling—to other resources.		resources and has analyzed the impacts that may occur as a
		Making an irreversible commitment of		result of leasing. This second-tier environmental analysis (the
		resources, without analyzing effects of		first being the EIS) is appropriate at the leasing stage as, even
		developing those leases, is an "approve now		though the analysis is not site-specific, it is not as broad of a
		and ask questions later" approach—"precisely		view as the district-wide EIS (Resource Management Plan)
		the type of environmentally blind decision-		and can analyze impacts to resources from as small as 1 acre
		making NEPA was designed to avoid."		to as large as 2560 acres, as nominated lands vary in size. The
		DIM many made simulation and 1 to 1		BLM uses all available information and best science to
		BLM may not simply provide broad		perform this analysis and to foresee the potential for parcels to
		descriptions of categories of impacts that result		be developed. The results of this lease sale analysis and the
		from oil and gas development generally,		application of stipulations will be reviewed upon the
		without examining how severe those impacts		submission of an APD, at which time additional site-specific
		are likely to be for the particular leases being		NEPA will be completed to evaluate the effects of
		offered here. Such boilerplate could be applied		development at an even smaller scale than what was
		to virtually any oil and gas proposal anywhere		completed here. Many times, the approval of an APD includes
		on public lands, and provides the agency and		Conditions of Approval that are site-specific requirements the
		the public no useful information about the		operator must undertake to mitigate additional resources

		specific leases proposed in these lease sales. This does not satisfy NEPA. "General statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." Similarly, an assertion that additional analysis is not feasible at the leasing stage is arbitrary and capricious and violates NEPA. There is ample information available to forecast reasonably foreseeable development on the specific leases being offered, and to evaluate the potential impacts of that development on groundwater, wildlife and other resources. [I]t is entirely feasible for BLM to project future development on the leases to estimate impacts to other resources. BLM can use evidence of impacts from existing development on wildlife, groundwater, etc., to predict what will happen from allowing even more oil and gas development in these areas. While any projection of future development		issues that were identified at the site-specific analysis. Through these three levels of analysis, and based on the information about resources that BLM has today, the BLM has appropriately mitigated impacts to all non-climate resources. Such analysis has been affirmed in numerous cases, most recently in <i>Wilderness Society et al. v. U.S. Dep't Interior et al.</i> , Or. Cross-Mot. Summ. J. 11-17, Mar. 22, 2024, ECF No. 1:22-cv-01871-CRC.
71	WELC	While any projection of future development impacts necessarily involves uncertainty, that uncertainty does not excuse BLM from making any projection at all. Failure to use readily available resources to forecast reasonably foreseeable impacts to these resources would be arbitrary and capricious and violate NEPA. The Draft EA violates NEPA by failing to analyze the reasonably foreseeable impacts to groundwater from drilling on the proposed	BLM Failed to Take a Hard Look at Impacts to	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see
		lease sale. The Draft EA contains generic boilerplate about potential water impacts from oil and gas development and identifies the watersheds that will potentially be affected, but it tells the agency and the public little at all about the development of these leases.	Groundwater from Well Construction Practices and Hydraulic Fracturing	Response to Public Comment No. 69) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 56) Competitive Lease Sale EA. The BLM has used the best available data from USGS and other sources in its analysis of potential impacts to

As federal courts have explained, the issuance of a non-NSO represents an irreversible commitment of resources because it gives the leaseholder the right to engage in ground-disturbing activity. Accordingly, detailed environmental analysis and ESA consultation must occur at the leasing stage.

NEPA requires BLM to assess all the potential environmental impacts from oil and gas leases, before it offers those leases to operators. That responsibility includes taking a "hard look" at how ensuing development could impact groundwater.

Groundwater is a critical resource that supplies many communities, particularly rural ones, with drinking water. Protecting both the quality and quantity of these resources is imperative to protect human health and the environment. especially because groundwater will become more important as increased aridity and higher temperatures alter water use. The U.S. Environmental Protection Agency (EPA) has noted that existing drinking water resources "may not be sufficient in some locations to meet future demand" and that future sources of fresh drinking "will likely be affected by changes in climate and water use." As a result, BLM must protect both aquifers currently used for drinking water, and deeper and highersalinity aquifers that may be needed in coming decades.

Oil and gas drilling involves boring wells to depths thousands of feet below the surface, often through or just above groundwater aquifers. Without proper well construction and vertical separation between aquifers and groundwater from the leasing of the proposed parcels, including aguifer data from the Wyoming State Geological Survey. All usable aquifers that may not be currently used as a drinking water supply could include TDS as high as 10,000 ppm. While no standard definition for 'brackish' groundwater currently exists, it is generally accepted that brackish groundwater is water that has a greater dissolved solids content than occurs in freshwater, but not as much as seawater (35,000 milligrams per liter*). It is considered by many investigators to have dissolved-solids concentration between 1,000 and 10,000 milligrams per liter (mg/L). While brackish groundwater is a potentially developable source of drinking water, it is not drinkable or usable for livestock/agriculture in its naturally occurring form and would need to be desalinated and to undergo further purification processes to be made drinkable. Another consideration is whether brackish groundwater sources that may be present would be considered aquifers. Under the Safe Drinking Water Act, an aquifer is defined as an underground source of drinking water 1) which supplies any public water system; or 2) which contains a sufficient quantity of groundwater to supply a public water system; and a) currently supplies drinking water for human consumption; or b) contains fewer than 10,000 mg/L total dissolved solids (TDS); and 3) which is not an exempted aquifer. In order to meet these criteria, a brackish groundwater source would need to contain fewer than 10,000 mg/L TDS, and also contain a sufficient quantity of groundwater to supply a public water system. Regulation 43 CFR § 3172 similarly defines "usable water" generally as those waters containing up to 10,000 ppm of total dissolved solids. This regulation details the BLM's uniform national standards for the minimum levels of performance expected from lessees and operators when conducting drilling operations on Federal and Indian lands and for abandonment immediately following drilling. The purpose also is to identify the enforcement actions that will result when violations of the minimum standards are found, and when those violations are not abated in a timely manner. The regulation requires the following of cementing and casing programs:

fractured formations, oil and gas development can contaminate underground sources of water. However, federal rules and regulations do not provide specific direction for BLM and operators to protect all usable water. Even rules that purport to do so, like Onshore Order No. 2's requirement to "protect and/or isolate all usable water zones," are inconsistently applied and often disregarded in practice. State regulations are similarly inadequate to ensure protection of groundwater.

Moreover, industry has admitted that it often does not protect usable water in practice. Western Energy Alliance and the Independent Petroleum Association of America have told BLM that the "existing practice for locating and protecting usable water" does not measure the numerical quality of water underlying drilling locations, and therefore does not consider whether potentially usable water would be protected during drilling. For example, reports studying samples of existing oil and gas well records in Wyoming and Montana confirm industry admissions that well casing and cementing practices do not always protect underground sources of drinking water. Similarly, a study of hydraulic fracturing in Pavillion, Wyoming, confirmed that oil and gas drilling had contaminated underground sources of drinking water in that area due to lack of vertical separation between the aquifer and target formation.

In light of these risks to a critical resource, BLM must evaluate potential groundwater impairment. As a threshold matter, BLM must provide a detailed account of all regional groundwater resources that could be impacted, including usable aquifers that may not currently The proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported." (emphasis added). Therefore, an operator that fails to protect usable water as defined in the Order or fails to report indications that usable water was present would be subject to potential enforcement actions. Adequate isolation of zones containing usable water from the production zone(s), is confirmed through the use of completion reports and well logs. Where adequate isolation is not confirmed. remedial measures will be required.

If the proposed parcels are leased, and the lessee submits an APD, the proposed well-bore and site-specific casing program will be reviewed, and the proposal's adequacy in protecting and isolating usable waters and existing groundwater wells in the project area will be determined at that time. Until site-specific information is known (drill site, depth, etc.), BLM can only analyze the impacts at the leasing level by reviewing the potential depths of known aquifers within the proposed lease parcels. A lease specific analysis was completed for all parcels in the June 2024 lease sale comparing recent oil and gas development in surrounding acreage to determine the probable development scenario for each parcel. The probable development scenario for each parcel is greater than 2000ft below existing groundwater wells.

However, while the regulations at 43 CFR 3172.7(a) require usable water zones to be protected and/or isolated, this provision works in concert with the requirement to isolate and

be used as a drinking water supply. The accounting must include, at minimum, all aguifers with up to 10,000 parts per million total dissolved solids, and it cannot substitute existing drinking water wells or any other incomplete proxy for a full description of all usable or potentially usable groundwater in the region. Second, BLM must use that accounting to assess how new oil and gas wells might impact these resources. That evaluation must assess the sufficiency of protective measures that will be employed, including wellbore casing and cementing and vertical separation between aquifers and the oil and gas formations likely to be hydraulically fractured. In assessing these protections, BLM cannot presume that state and federal regulations will protect groundwater, because of the shortcomings and industry noncompliance described above. BLM may not defer this analysis of groundwater impacts to the APD stage.

In order to adequately protect water resources and comply with NEPA, BLM must complete a detailed, project-specific analysis of water resources prior to approving the lease sale. BLM must also consider cumulative effects of the proposed action pursuant to Secretarial Order 3399, recent case law, and BLM's NEPA Handbook.

protect the other identified resources or formation conditions; -specifically, that the producing formations must also be isolated. The goal of casing and cementing is to protect the wellbore from potentially harmful downhole conditions, allow for safe drilling and production operations, protect other potentially valuable mineral deposits from produced fluids and/or gases, and to ensure that produced fluids are not allowed to enter non-producing formations – including those containing usable water. Adequate casing and cementing of the production formation isolates other formations along the well bore from mixing of production fluids with other formation fluids, and surface casing is always cased and cemented to protect freshwater supplies, and to assist in wellbore integrity because surface deposits tend to be unconsolidated or contain soft and more porous geologic materials.

BLM has reviewed the Tisherman study submitted as part of this protest and notes that none of the wells identified are within Montana BLM's jurisdiction. While the Tisherman study alleges that uncemented sections of a wellbore are not protective of usable water zones in violation of Onshore Order #2 (43 CFR 3172), where uncemented sections of a well bore are approved at the APD stage, it is because during the geological and engineering review it was determined that cement is not necessary to inhibit fluid flow and mixing between those zones and the deeper production zone that contains hydrocarbons and/or saline water (or helium in the case of Montana). It may also be true that although a certain interval may contain usable water, there is no active flow of fluids in that section, or the usable water interval is not prevalent throughout the formation. Lack of fluid flow generally does not require cementing for isolation purposes. See Flow-Zone-Isolation, API Standard 65- Part 2 (2010) at page 21. The surface casing depth is chosen to find a competent formation with a fracture gradient in excess of known pore pressures in deeper horizons. This allows the operator to increase mud weight to safely continue drilling to the next casing point. Once the secondary casing point is reached, another casing string will be run into the hole. Where

casing and cementing plans include a proposal to leave a section cased but not cemented, the BLM considers the following during geologic review: Formation fluids (including water), confining layers, minerals, pressures, and temperatures. In many cases, it is not necessary to cement the secondary casing back to the surface in order to provide the required level of isolation. See API recommended Practice 100-1: 5.4.2. As part of the geologic evaluation, formation properties such as porosity, permeability, water salinity, fracture gradient, and pore pressure are considered as part of the review process. The goal is to ensure that the drilling plan has appropriately placed the casing points in competent formations, and determine which zones are acceptable to allow to remain open behind the casing string. The uncemented casing string allows the operator to reenter the wellbore and reclaim large portions of pipe when the well is eventually plugged. But this analysis cannot be completed until site specific information is provided in an APD and effects are reasonably foreseeable or even known.

BLM further protects usable water zones by ensuring that compatible drilling fluids are used (i.e. not allowing the use of oil-based mud in zones that are identified as having freshwater or usable water zones).

If the proposed parcels are leased, and the lessee submits an APD, the proposed well-bore and site-specific casing, cementing and mud program will be reviewed, and the proposal's adequacy in protecting and isolating usable waters and existing groundwater wells in the project area will be determined at that time as part of the APD review process. The operator is given the opportunity to correct any deficiencies that are found prior to approval, and if the operator cannot correct the deficiency, the APD is denied.

As part of the APD drilling plan the operator is required to submit site specific information including geologic formations, casing weights and grades, casing depths, casing conditions, cement properties, cement volumes, expected pore pressures, planned mud weights and types, blowout

prevention, and all testing that will be performed. The engineering and geologic review compares this data to ensure usable water zones are isolated from potential hydrocarbons and saline waters. Isolated does not necessarily mean the zone will be cemented behind pipe. Uncemented zones are still isolated as long as there is sufficient cement above and below the zone in the annular space of the wellbore. Casing is also a valid means of isolating formations when the bottom of the casing is cemented.

While some target formations for production may contain "usable waters" (less than 10,000 TDS), production from that target formation is going to be authorized consistent with lease rights granted, assuming the APD is compliant with regulation. If an application is submitted that would produce from a formation that contains usable water and is an underground source of drinking water, additional development restrictions may be necessary including the use of non-toxic drilling and completion fluids (such as in the case of coal bed methane where the wells are drilled and completed with freshwater). Before BLM could grant an APD, review of the drilling plan would have to confirm that those specific resources would be protected. For the parcels included in this lease sale, based on existing well production in the area, future wells are not expected to produce from zones that contain usable water zones that are being used as a source of drinking water or supporting agriculture. Without a discrete development proposal, a finer level of analysis cannot be completed.

Groundwater contamination investigations have also been conducted at the Pavillion gas field in Wyoming and according to a November 7, 2016, fact sheet from the Wyoming Department of Environmental Quality (WDEQ), it is unlikely that the hydraulic fracturing activities have caused impacts to water supply wells (https://deq.wyoming.gov/water-quality/groundwater/investigations/pavillion-area-investigation)—A companion report was published in 2019 by WDEQ which confirmed prior findings that it was unlikely

				that hydraulic fracturing activities caused impacts to water supply wells in the Pavillion gas field. This report considered findings in a publication by DiGuilio and Jackson which posited that hydraulic fracturing may have been the source of detected organic compounds. As noted above, a lease specific analysis was completed for all parcels in the April 2024 lease sale comparing recent oil and gas development in surrounding acreage to determine the probable development scenario for each parcel. The probable development scenario for each parcel is greater than 2000ft below existing groundwater wells. Development similar to the situation in Pavillion (shallow production and hydraulic fracturing) is not expected to occur across these lease parcels.
72	WELC	BLM should defer all parcels that contain acreage designated as a Priority Habitat Management Area (PHMA) or General Habitat Management Area (GHMA) under the 2015 Greater Sage-Grouse Resource Management Plan Amendments (the 2015 Plans). Deferral is required for at least two reasons. First, the 2015 Resource Management Plan Amendments (the 2015 Plans) require BLM to prioritize new oil and gas leasing outside of PHMA and GHMA, in order to protect that habitat from future disturbance. In May 2020, BLM's national policy addressing prioritization, Instruction Memorandum 2018-026, was struck down by a court. BLM has not adopted new national guidance on the prioritization requirement, and has represented to the Montana court that the agency's previous prioritization guidance (adopted in 2016) also is not in effect. As a result, there is currently no national guidance providing direction on how prioritization is to be applied. Complying with the prioritization requirement of the 2015 Plans must be a central consideration for any lease parcels in PHMA	All Parcels in Priority Habitat Management Areas and General Habitat Management Areas for Greater Sage- Grouse Should Be Deferred	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 70) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 57) Competitive Lease Sale EA, and Response to Public Comment No. 44 (above).

and/or GHMA, and BLM should defer all parcels containing PHMA and/or GHMA at least until new national guidance is issued. The Montana Wildlife Federation ruling demonstrates the need for a well-reasoned national directive that fully complies with the purpose and language of the 2015 Plans' prioritization objective.

Following the Montana Wildlife Federation decision, BLM Wyoming has taken the approach of prioritizing leasing only outside of PHMA, but not GHMA. This approach does not comply with the 2015 Plans.

The 2015 Wyoming RMP amendment echoes this directive and includes the following objective: "Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs." Wyoming Plan Management Objective No. 14, at 24 (emphasis added). Thus, the prioritization requirement applies to both GHMA and PHMA.

The Draft EA, however, fails to prioritize leasing outside GHMA. To the contrary, the prioritization analysis for the sale uses a flow chart, Draft EA at 100, that includes nothing to guide new leasing away from GHMA. That approach violates FLPMA. In any lease sale, BLM must direct new leasing away from both PHMA and GHMA in its prioritization analysis.

Moreover, all parcels in sage-grouse habitat should be deferred in light of BLM's ongoing consideration of revisions to the 2015 Plans. While Instruction Memorandum 2021-027 states that "BLM will not routinely defer

	1			,
		leasing when waiting for an RMP amendment		
		or revision," it also recognizes that where		
		"necessary terms and conditions under which		
		leasing would be appropriate are not in		
		conformance with the RMP, it will be		
		necessary to amend the RMP before leasing is		
		appropriate." In such cases, "the affected lease		
		parcels must be withdrawn or deferred from		
		leasing until a plan amendment or revision can		
		be completed at a later date." BLM's pending		
		RMP revision process requires deferral of		
		parcels in sage-grouse habitat because the terms		
		and conditions of the 2015 Plans must be		
		strengthened to ensure protection of the grouse		
		and avoid the need for an Endangered Species		
		Act listing. Sage-grouse populations have		
		continued to decline under the 2015 Plans. In		
		addition, implementation and enforcement of		
		the prioritization objective and other key		
		components of the 2015 Plans have proven		
		very challenging.		
		Maintaining and increasing sage-grouse		
		populations will require amending the 2015		
		Plans to add new terms and conditions, such as		
		closing PHMA and/or GHMA to new leasing.		
		Notably, Alternative three of BLM's March		
		2024 draft Sage-Grouse Plan closes all Priority		
		Habitat Management Areas to fluid mineral		
		leasing. In the meantime, leasing in PHMA and		
		GHMA must be deferred to avoid committing		
		additional habitat to mineral development under		
		terms that are inadequate to protect the sage-		
		grouse.		
73	WELC	BLM has failed to fully evaluate the reasonably	BLM Failed to Take	Based on our review of the record, it does not appear the
		foreseeable impacts to big game from	a Hard Look at	WELC's public comments vary significantly from those
		development on the proposed leases. This	Impacts on Big	raised during the 30-day public Comment for the 2024-06 (see
		extends beyond a description of: (a) the	Game	Response to Public Comment No. 71) and the 30-day Public
		regulatory and management frameworks		Protest period for the 2024-06 (see Response to Public Protest
		applicable to big game species, along with the		No. 58) Competitive Lease Sale EA.
				No. 30) Competitive Lease Sale EA.

	scientific literature, (b) existing conditions, and which lease parcels are in different categories of habitat (such as crucial winter habitat and migration corridors), (c) the lease stipulations that would apply, and (d) how BLM selected which parcels in big game habitat to offer or defer. Such information provides a basis for analyzing the likely impacts to big game from development on the proposed leases—but it would not substitute for that analysis. Failure to analyze the likely impacts to big game populations from the leases it proposes to offer and boilerplate statements about categories of impacts do not satisfy NEPA. BLM instead must analyze the site-specific, direct, indirect, and cumulative impacts of leasing the parcels on the biology, ecology, reproduction, migration, connectivity, and viability of individual herds and entire populations of pronghorn, mule deer, and other big game species. This must be done for the proposed parcels in connection with parcels sold in other, past federal and non-federal oil and gas lease sales and developments.		The WGFD, who has regulatory authority over populations of big game, has not requested that BLM change management direction for these wildlife species, or requested that BLM not offer the subject lands. BLM has recognized that the TLS is in support of the big game populations when they may be in their most vulnerable state during harsh winter conditions. As BLM has responded prior, at the site-specific stage, BLM can identify other mitigation and with sufficient justification, control the maintenance and production actions of any future wells occurring in CWR. Until a discrete proposal is submitted, and BLM can assess the conditions that exist at that time, more precise analysis would be speculative. As well, mitigation has to be tailored to the project at hand which cannot be done without a proposal for occupancy. See section 4.4 (pg. 83-88) for full discussion on impacts to big game which has been updated in response to this comment and others.
74 WELC	BLM also failed to take a hard look at impacts to other resources. For example, BLM failed to adequately analyze foreseeable impacts to cultural and heritage resources, wilderness study areas and lands with wilderness characteristics, and special status species. One example of a special status species is the Pallid Sturgeon, an endangered species listed in 1990. The Yellowstone River and its tributaries are critical to the survival and recovery of this unique species because—unlike the upper Missouri River—the Yellowstone River provides vital spawning habitat for a small	Other Species and Resources	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 72) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 59) Competitive Lease Sale EA. The RMP indicates which lands are open to oil and gas development, and which stipulations apply. Each field office reviewed the potential parcels within the field office boundaries and applied stipulations as appropriate. The proposed lease sale is in conformance with each field office RMP and impacts to specific cultural, Wilderness Study Areas, and Special Status Species are discussed within the respective RMP.

group of Pallid Sturgeon that has not hybridized with other sturgeon species. Since 2014, Pallid Sturgeon have repeatedly migrated up the Powder River in Montana, traveling as far as 96 miles beyond the confluence with the Yellowstone River.

Oil and gas operations may harm both water quality and water quantity in the Powder River Basin. The cumulative impacts of oil and gas development, other fossil fuel development, and climate change may adversely impact the survival and recovery of pallid sturgeon in the Yellowstone and Powder Rivers (and indeed, in the upper Missouri River basin). This habitat—in which Pallid Sturgeon populations have not hybridized—is impacted by fossil fuel development in the Powder River basin and oil and gas development in the Bakken. Both cause water pollution, which threaten Pallid Sturgeon.

BLM must take a hard look at the reasonably foreseeable impacts to the Pallid Sturgeon. In addition, we note that the Miles City Field Office has already reinitiated consultation with the Fish and Wildlife Service regarding the impacts of the Mile City RMPs on the Sturgeon.

Additionally, BLM failed to take a hard look at impacts to backcountry recreation non-motorized use areas. BLM must discuss the implications that a NSO stipulation would have on oil and gas development on that parcel. Specifically, BLM should discuss whether such a stipulation would necessitate horizontal drilling, and what impacts such a style of drilling would have. BLM must also take a hard look overall at how development would impact non-motorized areas, which are valued for their

		recreational opportunities and natural		
75	WELC	appearance. BLM improperly limited the context and scope of the potentially affected environment in which the proposed leasing actions, and their cumulative impacts, will occur. Significance assessments under NEPA require consideration of "context," meaning the significance of the proposed action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. Despite these requirements for considering the context of the proposed lease sale and despite the global nature and impacts of cumulative GHG emissions and climate change, BLM's FONSI limits the consideration of context to the localities wherein the oil and gas development would take place, if authorized, and finds that the impacts of oil and gas development would not have international, nation, regional, or statewide importance. We request BLM consider a wide array of contexts, including society as whole, global, national, and regional contexts, that reflect the cumulative and global nature of climate change impacts.	BLM Must Not Improperly Limit the Context of Significance Analysis	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 73) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 60) Competitive Lease Sale EA. The BLM provided a wide range of potential impact contexts in the 2022 Specialists Report, which was incorporated by reference into each EA. The Specialists Report presents the life-cycle representation of the federal onshore mineral estate GHG emissions relative to various local, state, national and global emissions, and impact contexts. This fact is demonstrated by the relative federal mineral estate emissions levels presented in the EA and the report, and more specifically the "direct emissions" for which future permitting conditions of approval would apply. For the purposes of the EA, leasing is an administrative action for which no emissions are authorized, and many leases are never developed. The cumulative emissions scope in the Specialists Report is inclusive of the offshore federal mineral estate (U.S. Totals for production and emissions). To be clear, the 2022 Specialists Report represents a focused GHG analysis that would be found in a programmatic level document and thus an EIS is not required.
76	WELC	BLM's Draft EA and FONSI do not adequately evaluate and discuss the impacts of GHG emissions and climate change on public health and safety, and we request BLM clearly address these impacts in an EIS. For example, with regard to public health and safety impacts the Draft EA does not adequately discuss climate change, even though the BLM Specialist Report describes both the existing health threats caused by climate change and the predicted intensification and new emerging health threats caused by continued GHG emissions. BLM	BLM's Analysis of Public Health and Safety Impacts from GHG Emissions and Climate Change is Absent	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 74) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 61) Competitive Lease Sale EA, and Response to Public Comment No. 60 (above).

	1	should thoroughly analyze and disclose those		1
		threats as they relate to this lease sale and the		
		federal oil and gas program in an EIS. As		
		discussed throughout these comments, NEPA,		
		FLPMA, and the APA require BLM to do more		
		than acknowledge possible effects or risks in		
		general terms. BLM must take a hard look at		
		these risks and effects, factor them into its		
		decision- making, and articulate a rational		
		connection between the facts found and the		
		choices made with respect to this lease sale and		
		the federal oil and gas program.		
77	WELC	BLM's consideration of uncertainty in the Draft	BLM's Analysis of	Based on our review of the record, it does not appear the
		EA is inadequate. The BLM Specialist Report	Uncertainty is	WELC's public comments vary significantly from those
		identifies countless areas of uncertainty	Inadequate	raised during the 30-day public Comment for the 2024-06 (see
		regarding the analysis of GHGs and climate	•	Response to Public Comment No. 75) and the 30-day Public
		change.		Protest period for the 2024-06 (see Response to Public Protest
				No. 62) Competitive Lease Sale EA.
		Well-documented scientific research and		
		BLM's own analysis demonstrate that the		The 2022 BLM Specialist Report on GHG Emissions and
		potential effects of climate chance are highly		Climate Trends was incorporated by reference in the Lease
		uncertain and involve unique and unknown		Sale EA and provides a detailed discussion and cumulative
		risks. BLM must properly address this NEPA		assessment of Federal oil and gas emissions and climate
		intensity factor in light of these impacts, and		change impacts. The BLM has disclosed the GHG emissions
		we request BLM do so for all of the 2024 lease		from the Proposed Action and provided context for those
		sales in a single EIS.		emissions compared to existing federal onshore GHG
				emissions in the state and nationally. The BLM has included
				an evaluation of the climate change impacts that could result
				from the proposed action and incorporated by reference the
				2022 BLM Specialists Report on Annual Greenhouse Gas
				Emissions and Climate Trends which provides a more robust
				assessment of cumulative emissions, climate change impacts,
				and reputable climate science sources. This analysis scope
				provides a thorough cumulative assessment of GHG
				emissions. All past and in-process BLM leases were
				considered in the preparation of the estimates. Current lease
				approval timeframes along with current data on the
				development status of all approved and in-process leases were also considered. The 2022 BLM Specialist Report provides
	1			information on non-BLM related emissions by presenting data

		global body of scientific research and understanding of climate change reflects, there is controversy concerning critical aspects of the nature and effect of GHG emissions and their impact on climate change. This controversy is exemplified by the BLM's conclusions that the emissions from the proposed lease sales and the	Impacts from GHGs is Absent	raised during the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 63) Competitive Lease Sale EA. WildEarth Guardians v. Zinke, 368 F. Supp. 3d 41 affirmed that the effects of leasing were not highly controversial where
78	WELC	BLM's omission of the intensity factor of controversy in the Draft EA is improper. As the	BLM's Analysis of Controversy Over	"the risks of GHG emissions are not 'unique or unknown'" such that they must be analyzed in an EIS. Based on our review of the record, it does not appear the WELC's public comments vary significantly from those
				This is a similar argument made and dismissed in Dakota Resource Council, Summ. J., March 22, 2024, ECF 1:22-cv-01853-CRC "First, the Conservation Groups contend that the effects of GHG emissions are "highly uncertain or involve unique or unknown risks" and should be assessed in an EIS under 40 C.F.R. § 1508.27(b)(5) (2019). The DRC court cited the prior finding in WildEarth I, 368 F. Supp. 3d at 83: that
				from the most recent EPA GHG Emissions and Sinks Report, which presents estimates of total U.S. GHG emissions as well as breakdown subtotals by economic sector and specific GHG. The EPA report represents an authoritative accounting of cumulative U.S. GHG emissions, including emissions related to BLM actions. In addition, the 2022 Specialists Report presents the range of projected Climate Change effects across basin and range states at length in Section 8.3, Section 8.4, and Chapter 9.0. This information is incorporated by reference in the EA. This analysis provides emissions estimates and describes actual environmental effects in terms of temperatures, drought, snowpack, growing season, and other impacts to vegetation with details from several representative States. These comparisons and examples are illustrative and support the decision-making process. There is no significant scientific controversy as to whether or not anthropogenic GHGs contribute to climate change resulting in adverse impacts to the environment, which is why the BLM developed the 2022 Specialists Report on GHG Emissions and Climate Change.

		cumulative emissions from the federal fossil fuel program are not significant as compared to a robust scientific literature, indicating current and foreseeable fossil fuel development is not aligned with the GHG reductions necessary to prevent warming exceeding 1.5°C. We request BLM address the NEPA intensity factor for controversy and do so for all of the 2024 lease sales in a single EIS.		challenges raised by the interested parties and addressed their concerns appropriately," and because Plaintiffs did not otherwise identify serious flaws in BLM's methods, the Wyoming Lease Sales' environmental effects were not "highly controversial." Citing Nat'l Parks Conservation Ass'n, 311 F. Supp. 3d at 365. The BLM's 2022 Specialists Report on GHG Emissions and Climate Change incorporated by reference into the lease sale EA has appropriately analyzed GHG emissions and the EA has appropriately placed them in context. The protesting party has not identified any flaws in our analysis or provided additional information that the BLM has not considered.
79	WELC	BLM fails to evaluate the estimated GHG emissions from the proposed lease sale in the associated FONSI. The omission of this NEPA intensity factor is astounding given the seriousness and cumulative nature of climate change. Considering both the impacts of climate change that are already occurring as a result of historic anthropogenic emissions of GHGs and forecast impacts of continued GHG emissions, it is clear that significant cumulative effects are expected from the proposed oil and gas lease sale. We request BLM fully inform the public and the decision makers by providing a complete and comprehensive justification for how the agency reached its significance determination on this NEPA intensity factor.	BLM's Analysis of the Cumulative Impacts of GHG Emissions is Absent	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 76) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 64) Competitive Lease Sale EA. The BLM has already included a reference and example to the EPA GHG Equivalency calculator in the lease sale EA in addition to providing multiple comparisons and context for the lease sale emissions both annually and over the life of the lease. The information is not value added for the decision maker since the equivalency calculator does not apportion Federal oil and gas to multiple uses and end-use consumption thereby presenting an inaccurate substitution representation. The BLM provided a wide range of potential impact contexts in the 2022 Specialists Report, which was incorporated by reference into each EA. The Specialists Report presents the life-cycle representation of the Federal onshore mineral estate GHG emissions relative to various local, state, national and global emissions, and impact contexts. The BLM is not applying additional calculation methods at this time. The District Court for the District of Columbia recently affirmed this position in <i>Dakota Res. Council v. United States DOI</i> , 2024 U.S. Dist. LEXIS 51013

	1		T	
80	WELC	BLM also fails to adequately indicate how the lease action will violate federal or state law and policy, but there are several federal and state government laws and policies that set GHG emission reduction targets or commitments, which authorization of the proposed leases will likely threaten. On the federal side, President Biden announced a goal to achieve net-zero emissions by 2050, as well as a target to reduce GHG emissions by 50-52% by 2030, compared to 2005 levels. In addition, the United States is a signatory to the 2015 Paris Agreement, committing to a goal of limiting global temperature increase well below 2 C, pursuing efforts to limit the increase to 1.5 C, and committing to reaching global peaking of GHGs as soon as possible. On the state side, for example, both Colorado and New Mexico have statutes and executive orders setting emission reduction goals. In Colorado, HB19-1261 requires the state to reduce GHG emissions by at least 26 percent in 2025, at least 50 percent by 2030, and at least 90 percent by 2050, relative to 2005 pollution levels. In New Mexico, Executive Order 2019-003 declares the state's support of the 2015 Paris Agreement goals and orders the state to achieve statewide reduction of GHG emissions of at least 45% by 2030, relative to 2005 levels. BLM's Draft EA and FONSI for this proposed lease sale must discuss and evaluate how the proposed lease sale and its estimated GHG emissions may threaten violation of such federal and state laws and policies.	BLM's Analysis of Federal or State Law and Policy is Insufficient	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 77) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 65) Competitive Lease Sale EA. This protest response applies to the Wyoming lease sale EA and FONSI only and will not address the references to Colorado and New Mexico. As such, the 2022 BLM Specialist Report presents 6 pages of analysis in Section 2.0 Relationship to Other Laws and Policies focused on orders, laws, and regulations related to GHGs and Climate Change. This report was incorporated by reference in the lease sale EA.

		T	T	T
		Appendix A, in addition to all parcels proposed		
		to date for lease in 2024, require a NEPA		
		analysis.		
81	WELC	The Federal Land Policy and Management Act	Leasing New	Based on our review of the record, it does not appear the
		("FLPMA"), 43 U.S.C. § 1701 et seq., directs	Federal Fossil Fuels	WELC's public comments vary significantly from those
		that "the public lands be managed in a manner	for Development	raised during the 30-day public Comment for the 2024-06 (see
		that will protect the quality of [critical resource]	Would Cause	Response to Public Comment No. 78) and the 30-day Public
		values; that, where appropriate, will preserve	Unnecessary and	Protest period for the 2024-06 (see Response to Public Protest
		and protect certain public lands in their natural	Undue Degradation	No. 66) Competitive Lease Sale EA.
		condition; that will provide food and habitat for		
		fish and wildlife and domestic animals; and that		Undue degradation has been previously defined as "that which
		will provide for outdoor recreation and human		is excessive, improper, immoderate or unwarranted" and
		occupancy and use." 43 U.S.C. § 1701(a)(8).		unnecessary as "that which is not necessary" for authorized
		This substantive mandate requires that BLM		action to occur, in this case the leasing of parcels for potential
		not elevate the development of oil and gas		oil and gas development. The BLM has taken many steps
		resources above other critical resource values in		throughout the leasing process to ensure that, if the parcels are
		the planning area. To the contrary, FLPMA		leased, undue and/or unnecessary degradation would not
		requires that where oil and gas development		occur. If the parcels are leased, and an APD is submitted, the
		would threaten the quality of critical resources,		site-specific proposal would be evaluated to ensure that no
		conservation of these resources should be the		undue or unnecessary degradation would occur as a result of
		preeminent goal.		this development. Implementation of best management
				practices at the APD stage is the most effective way to ensure
		Under FLPMA's "multiple use and sustained		that impacts from an oil and gas project do not result in undue
		yield" management directive, id. § 1701(a)(7),		or unnecessary degradation. BLM would review the site-
		the federal government must manage public		specific proposal and identify measures for reducing or
		lands and resources in a manner that "takes into		eliminating potential sources of undue or unnecessary
		account the long-term needs of future		
				development EIS, and whether the seasonal waiver of oil and
		*		
				al., Or. Summ. J., March 22, 2024, ECF 1:22-cv-01853-CRC
				at 53 ("it appears entirely appropriate for the Bureau to wait
		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[.]" Id. § 1702(3) (emphasis added). BLM's obligation to manage for multiple use does not mean that development must be allowed. Rather, [d]evelopment is a possible use, which BLM must weigh against other possible uses—		degradation. The referenced case involves an oil and gadevelopment EIS, and whether the seasonal waiver of ogas stipulations would result in undue or unnecessary in which is unrelated to the proposed action, where BLM is deciding which lands to make available for this lease sa While BLM has considered reasonably foreseeable future development, should the leases be issued and development proposed, the BLM will consider whether the proposed would cause unnecessary or undue impacts from surfact disturbance or occupancy of the leasehold as part of that environmental analysis. This approach was recently affir in <i>Dakota Resource Council et al v. U.S. Dep't of Interval.</i> , Or. Summ. J., March 22, 2024, ECF 1:22-cv-01853

including conservation to protect environmental values[.]"Under these authorities, BLM is required not only to evaluate the impacts that federal fossil fuel leasing has on public lands, waters, and wildlife resources, but to avoid harm to those resources whenever possible.

These directives are not simply aspirational, but grounded in the substantive requirements of FLPMA. "In managing the public lands," the agency "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). This protective mandate applies to BLM planning and management decisions, and should be considered in light of its overarching mandate that the agency employ "principles of multiple use and sustained yield." 43 U.S.C. § 1732(a).

Here, the actions that BLM must determine meet the substantive requirements of FLPMA as outlined above include: (1) the programmatic resumption of oil and gas leasing on federal lands; and (2) the decision of whether or not to offer to sell and issue oil and gas leases on each of the specific parcels identified. Critically, however, BLM's consideration of these substantive requirements must not be viewed in the abstract, but within the specific "context" of the agency's analysis and the scientific information available to it. 238Accordingly, and of foundational importance, is whether the continued leasing and development of oil and gas will result in unnecessary and undue degradation to lands, resources, and species as a result of climate impacts.

Courts have recognized, "[t]he impact of [GHG] emissions on climate change is

until the APD stage to impose more specific lease requirements tailored to the projects and tracts at issue" to avoid "unnecessary and undue degradation".)

precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." Moreover, BLM has a duty to "consider the cumulative impact of GHG emissions generated by past, present, or reasonably foreseeable BLM lease sales in the region and nation." This consideration must be contextual. An "agency's [environmental analysis] must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum." In other words, it is not sufficient to simply list estimated emissions in a table, without relating those emissions to other BLM decisions and without "analysis of that catalogue and 'their combined environmental impacts.""

BLM has endeavored to satisfy the requirement to consider the cumulative climate impacts of its leasing decisions by preparing the Specialist Reports. Setting aside the deficiencies of the Specialist Report, discussed above, the underlying conclusions are chilling. Annual greenhouse gas emissions from existing federal fossil fuel production totals 913.9 MTCO2e, with total projected cumulative "life-of-project" emissions of 3,774.2 MTCO2e over the next 12 months. Already permitted but not yet producing leases add 800.6 MTCO2e to this total over the next 12 months. And the long-term onshore fossil fuel emissions projection is 24,298.99 MTCO2e. BLM also applies these emissions in the context of the remaining Global Carbon Budget, which recognizes that there are 420 GtCO2 that remain for a 66% chance to prevent warming above a 1.5C threshold. Report at 7.2 Carbon Budgets and Carbon Neutrality. With a federal fossil fuel emissions estimate of 2.24 GtCO2 during that timeframe, this represents

1.47% of the total remaining global budget to avoid catastrophic warming. The Specialist Report at 7.2 In other words, any additional emissions are entirely incompatible with maintaining a livable planet. The Specialist Report also details past and present climate impacts, projected future climate impacts under varying mitigation pathways, as well as state specific climate projections.

What the agency fails to do, however, is apply this analysis to its substantive duty to avoid unnecessary and undue degradation under FLPMA.

These requirements are distinct from BLM's requirements under NEPA. "A finding that there will not be significant impact [under NEPA] does not mean either that the project has been reviewed for unnecessary and undue degradation or that unnecessary or undue degradation will not occur." In the instant case, the BLM's failure to specifically account for unnecessary and undue degradation in its decision to continue the leasing and development of oil and gas—which is distinct from its compliance under NEPA—is actionable on procedural grounds and must occur before the leasing decision is approved.

BLM must therefore take sufficient measures to prevent degradation unnecessary to, or undue in proportion to, its oil and gas leasing decisions. BLM must define what constitutes "unnecessary or undue degradation" in the context of continued oil and gas leasing and development, either at a programmatic level or within these specific sales—and with particular consideration of greenhouse gas emissions and resulting climate impacts—and explain why its

82	WELC	chosen alternative will not result in such degradation, as required by FLPMA, 43 U.S.C. § 1732(b). Yet BLM does not even mention its obligations with respect to preventing unnecessary and undue degradation— or mention it at all in the Draft EA. BLM also cannot defer the fulfillment of this substantive duty to the APD stage. BLM's failure to define, analyze, or take action to prevent the unnecessary or undue degradation of lands in the context of climate impacts from this lease sale and the federal fossil fuel program as a whole is arbitrary and capricious agency action, an abuse of discretion, and action without observance of procedures required by law, pursuant to the APA. 5 U.S.C. § 706(2).	BLM is Required	Based on our review of the record, it does not appear the
		opportunity for BLM to meaningfully reduce GHG emissions associated with the federal oil and gas program. BLM is not only required to	Take Every Opportunity to Reduce Methane	WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 79) and the 30-day Public
		analyze alternatives that address this highly potent short-term GHG, it also has substantive	Emissions	Protest period for the 2024-06 (see Response to Public Protest No. 67) Competitive Lease Sale EA.
		mandates under FLPMA to prevent, reduce, or mitigate methane emissions, independent of the agency's MLA duty to prevent waste.		The purpose and need for the proposed action in the EA are to respond to EOIs to lease parcels of land for oil and gas development as mandated by Federal laws, including the
		These statutory directives enable Interior to		Mineral Leasing Act of 1920, as amended, Federal Land
		take action before lease rights are conferred,		Policy and Management Act of 1976, and Federal Onshore Oil
		whether at the planning or leasing stages, that		and Gas Leasing Reform Act of 1987. Offering parcels for
		will eliminate methane emissions and otherwise protect public lands. That includes the authority		competitive oil and gas leasing provides opportunities for private individuals or companies to explore and develop
		and responsibility to (1) reduce acres available		federal oil and gas resources after receipt of necessary
		for leasing to address the contribution of		approvals, and to sell the oil and gas in public markets.
		methane emissions to the climate crisis and the		11 -, 22 330 m public mannels.
		impacts of the crisis to public lands, (2) attach		The BLM must comply with statutory and policy requirements
		methane and other harmful emission reduction		with respect to lease sales. It is the policy of the BLM to make
		stipulations to an oil and gas lease to protect air		mineral resources available for use and to encourage
		and atmospheric resources and to mitigate		development of mineral resources to meet national, regional,
		climate impacts to public lands, and (3)		and local needs. The BLM IMs 2023-006 and 2023-007 are
		condition lease development at the permitting		based on various laws, including the Mineral Leasing Act of

stage. In the absence of existing methane waste and air quality regulations, and even following the conclusion of current EPA and BLM rulemaking efforts with regard to methane, BLM has a duty to leverage its considerable authority under FLPMA to the fullest extent permitted by law, including by identifying stipulations and conditions of approval for all of the proposed 2024 lease sales, to minimize, reduce, and mitigate methane impacts to the greatest extent possible.

1920 and the Federal Land Policy and Management Act of 1976 (FLPMA). The Federal Onshore Oil and Gas Leasing Reform Act of 1987 Sec. 5102(a)(b)(1)(A) directs the BLM to conduct quarterly oil and gas lease sales in each state whenever eligible lands are available for leasing.

The BLM has analyzed the economic benefits and revenues that come from the lease sale in the form of total bonus bid payments and total rental payments that result from the lease sale. The EA states that "a portion of these Federal revenues are distributed to the state and counties where the parcels are located. The amount that is distributed is determined by the federal authority under which the Federal minerals are being managed. Forty-nine percent of Federal revenue associated with oil and gas from public domain lands are distributed to the state. Output, royalties, and tax revenue are not measures of economic benefits that would be used in a benefit cost analysis (i.e., they do not measure changes in consumer or producer surplus). These metrics should not be directly compared to estimates of the SCGHG even where both concepts are calculated. Estimating the economic benefits (change in social welfare) associated with oil and gas leasing is not feasible, nor is it required for NEPA. The BLM analyzes the impacts associated with the alternatives using the best available information, which is typically not monetized estimates of benefits or costs. Additionally, an economic analysis of royalty incomes cannot be completed because of the speculative nature of doing such an analysis; The reasonably foreseeable development scenario may reasonably predict the number of wells that could be drilled, however the production of those wells and nature of the operation is unknown. Therefore, to include such an analysis would be out of scope and of no benefit to the environmental analysis.

The BLM has published its final rule for Waste Prevention, Production Subject to Royalties, and Resource Conservation as identified in the Federal Register (89. Fed Reg. 25378-25432 (April 10, 2024) to be codified at 43 CFR Parts 3160 and 3170). This proposed rule was available for public comment for 30 days (11/30/2022 – 12/30/2022) and

				finalized. The final rule replaces the BLM's current requirements governing venting and flaring which contained in NTL-4A. The final rule is estimated to have economic impacts that result in costs and benefits to industry, increases in royalty revenues, and benefits to society.
83	WELC	BLM should defer all leases in General Habitat Management Area (GHMA) or Priority Habitat Management Area (PHMA) while it revisits the 2015 RMP amendments. Notably Alternative three of BLM's March 2024 draft Sage-Grouse Plan closes all Priority Habitat Management Areas to fluid mineral leasing. At a minimum, however, it must comply with the prioritization requirement of the 2015 RMP amendments. Those plans require the agency to prioritize new oil and gas leasing outside of PHMA and GHMA in order to protect that habitat from future disturbance. In May 2020, BLM's national policy addressing prioritization, Instruction Memorandum 2018-026, was struck down by a court. BLM has not adopted new national guidance on the prioritization requirement, and has represented to the Montana court that the agency's previous prioritization guidance (adopted in 2016) also is not in effect. As a result, there is currently no national guidance providing direction on how prioritization is to be applied. Complying with the prioritization requirement of the 2015 Plans must be a central consideration for any lease parcels in PHMA and/or GHMA. BLM must comply with the prioritization requirement because it is prioritizing leasing only outside of PHMA, but not GHMA. Under FLPMA, BLM must manage public lands "in accordance with the [applicable] land use plans" 43 U.S.C. § 1732(a); see also 43	Failure to Prioritize Greater Sage-Grouse Habitat Violates FLPMA	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 80) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 68) Competitive Lease Sale EA, and Response to Public Comment No. 44 (above).

		C.F.R. § 1610.5-3(a). The Supreme Court has explained that the statutory directive that BLM manage "in accordance with" land use plans, and the regulatory requirement that authorizations and actions "conform to" those plans, prevent BLM from taking actions inconsistent with the provisions of a land use plan. The 2015 Wyoming RMP amendment echoes this directive and includes the following objective: "Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs." Wyoming Plan Management		
		Objective No. 14, at 24 (emphasis added). Thus, the prioritization requirement applies to both GHMA and PHMA. BLM is required by FLPMA to apply prioritization to GHMA to the proposed lease sale.		
		BLM has failed to direct new leasing away from both PHMA and GHMA in its prioritization analysis.		
84	WELC	While BLM provides an analysis of the potential greenhouse gas emissions associated with this lease sale—and calculates the social cost of greenhouse gases resulting from the lease sale, which are estimated to run into the millions of dollars, the Draft EA arbitrarily ignores an important aspect of the problem: what justification does BLM have for proceeding with the lease sale, given the enormous social and environmental costs of that sale? The Draft EA's Analysis of the costs	BLM May Not Arbitrarily Assume the Potential Benefits Outweigh the Social and Environmental Costs	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 81) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 69) Competitive Lease Sale EA. The purpose and need for the proposed action in the EA are to respond to EOIs to lease parcels of land for oil and gas development as mandated by Federal laws including the Mineral Leasing Act of 1920, as amended, Federal Land
		of the lease sale is minimal and inadequate.		Policy and Management Act of 1976, and Federal Onshore Oil and Gas Leasing Reform Act of 1987. Offering parcels for competitive oil and gas leasing provides opportunities for

Offering hundreds of leases that will impose billions of dollars in social and environmental harms without offering any justification for such a decision is arbitrary and capricious and inconsistent with FLPMA. Here, it would be arbitrary and capricious to quantify the costs of selling so many leases, but proceed with the lease sale in spite of these costs, without any justification. Such a one-sided analysis also violates NEPA.

private individuals or companies to explore and develop federal oil and gas resources after receipt of necessary approvals, and to sell the oil and gas in public markets.

The BLM must comply with statutory and policy requirements with respect to lease sales. It is the policy of the BLM to make mineral resources available for use and to encourage development of mineral resources to meet national, regional, and local needs. The BLM IMs 2023-006 and 2023-007 are based on various laws, including the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976 (FLPMA). The Federal Onshore Oil and Gas Leasing Reform Act of 1987 Sec. 5102(a)(b)(1)(A) directs the BLM to conduct quarterly oil and gas lease sales in each state whenever eligible lands are available for leasing.

The BLM has analyzed the economic benefits and revenues that come from the lease sale in the form of total bonus bid payments and total rental payments that result from the lease sale. The EA states that "a portion of these Federal revenues are distributed to the state and counties where the parcels are located. The amount that is distributed is determined by the federal authority under which the Federal minerals are being managed. Forty-nine percent of Federal revenue associated with oil and gas from public domain lands are distributed to the state. Output, royalties, and tax revenue are not measures of economic benefits that would be used in a benefit cost analysis (i.e., they do not measure changes in consumer or producer surplus). These metrics should not be directly compared to estimates of the SCGHG even where both concepts are calculated. Estimating the economic benefits (change in social welfare) associated with oil and gas leasing is not feasible, nor is it required for NEPA. The BLM analyzes the impacts associated with the alternatives using the best available information, which is typically not monetized estimates of benefits or costs. Additionally, an economic analysis of royalty incomes cannot be completed because of the speculative nature of doing such an analysis; The reasonably foreseeable development scenario may reasonably predict the number of wells that could be drilled, however the

				production of those wells and nature of the operation is unknown. Therefore, to include such an analysis would be out of scope and of no benefit to the environmental analysis. The BLM has considered the effects of its onshore oil and gas lease sales on greenhouse gas emissions and climate change, and the Mineral Leasing Act provides the Secretary of the Interior with discretion to tailor those sales—including which parcels are offered for sale and the terms of leases—in light of climate effects. See, e.g., Wilderness Soc'y v. Dept. of the Interior, No. 22-cv-1871 (CRC), 2024 U.S. Dist. LEXIS 51011, at *91-92 (D.D.C. Mar. 22, 2024). For this sale, the Bureau of Land Management relied on its own specialist report and other data to compare the sale's emissions with national and global emissions, and further explained that it lacks the data and tools to estimate specific, climate-related effects from the sale. [FONSI at page 5, Short and long-term effects]. These methodological shortcomings prevent BLM from relying on the methodology described herein to qualitatively compare alternatives, and BLM has therefore not exercised its discretion to tailor this lease sale to account for global climate change.
85	WELC	For every discretionary action, Section 7(a)(2) of the Endangered Species Act ("ESA") requires each federal agency, in consultation with the nation's wildlife agencies, to "insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species" using the best scientific data available. The Supreme Court has unequivocally stated that the Act's "language, history, and structure" made clear "beyond doubt" that "Congress intended endangered species to be afforded the highest of priorities" and endangered species should be	BLM Must Consult with the National Marine Fisheries Service and U.S. Fish and Wildlife Service on Greenhouse Gas Emissions	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 82) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 70) Competitive Lease Sale EA. The BLM is complying with its legal obligations regarding appropriate consultation under applicable law, including but not limited to the National Environmental Policy Act ("NEPA"), the Endangered Species Act ("ESA"), the National Historic Preservation Act, the Federal Land Policy & Management Act, and the Mineral Leasing Act. With respect to the ESA, where the BLM determines that a particular action may affect a species listed as threatened or endangered, the BLM will consult with the U.S. Fish & Wildlife Service

given "priority over the 'primary missions' of federal agencies" especially during such consultations. Even with a global threat to biodiversity such as climate change, "the plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost." Because resuming federal oil and gas leasing will have an appreciable, cumulative impact on climate-threatened species, BLM must include these species as part of its consultation with both the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively the "Services").

For this proposed action, it is clear that the anticipated greenhouse gas pollution from federal oil and gas leasing will harm listed species far beyond the immediate area of the proposed activity in a manner that is attributable to the agency action.

("FWS") and/or the National Marine Fisheries Service, as appropriate, under section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2) and the implementing regulations. The BLM consults with USFWS on projects that may have a physical effect on threatened and endangered species or their habitats. BLM commits to continue this long-established practice for any proposed plan of development that may result from the lease sale. Buying or holding a lease does not by itself convey the right to impact threatened or endangered species or their habitats, and therefore consultation with other Federal agencies is not required at the leasing stage. The BLM includes a stipulation in all leases to ensure threatened and endangered species will be addressed prior to any development.

The BLM continues to review the available climate science in connection with its statutory responsibilities, including under NEPA, and has found that despite advances in climate science, "global climate models are unable to forecast local or regional effects on resources as a result of specific emissions." See, e.g., Supplemental Environmental Assessment Analysis for Greenhouse Gas Emissions Related to Oil and Gas Leasing in Seven States from February 2015 to December 2020 Environmental Assessment DOI-BLM-WO-3100-2023-0001-EA (November 2022). Any contribution to global climate processes from the approval of an individual APD is simply too remote, speculative, and undetectable to trigger ESA Section 7 consultation, given accumulated and persisting greenhouse gases ("GHG") already in the atmosphere, the annual volume of GHG emissions that will occur globally regardless of whether a particular APD is approved, and projected continued climate change. See, e.g., BLM 2022 Specialist Report on Report on Annual Greenhouse Gas Emissions and Climate Trends (finding that, "[u]nlike other common air pollutants, the ecological impacts that are attributable to the GHGs are not the result of localized or even regional emissions but are entirely dependent on the collective behavior and emissions of the world's societies"; and noting "the lack of climate analysis tools and techniques that lend themselves to describing the physical climate or

				earth system responses, such as changes to sea level, average surface temperatures, or regional precipitation rates, that could be attributable to emissions associated with any single [land management] action or decision."); see also FWS, Threatened Species Status for Emperor Penguin With Section 4(d) Rule, 87 Fed. Reg. 64,700, 64,704 (Oct. 26, 2022) ("based on the best scientific data available we are unable to draw a causal link between the effects of specific GHG emissions and take of the emperor penguin in order to promulgate more specific regulations under [ESA Section] 4(d).") In summary, the BLM is complying with NEPA, the ESA and other federal statutes in implementing the Federal Land Policy and Management Act, including managing public lands in a manner that considers the policies to protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values, while applying principles of multiple use and sustained yield.
86	WELC	As an initial matter, the science is overwhelmingly clear that climate change represents a stark threat to the future of biodiversity within the United States and around the world. The Fifth National Climate Assessment warns that "the effects of human-caused climate change are already far-reaching and worsening across every region of the United States." The best available science shows that anthropogenic climate change is causing widespread harm to life across the planet, disrupting species' distribution, timing of breeding and migration, physiology, vital rates, and genetics—in addition to increasing species extinction risk. Climate change is already affecting 82% of key ecological processes that underpin ecosystem function and support basic human needs. Climate change-related local extinctions are widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed. Nearly	Greenhouse Gas Emissions Have Direct, Predictable, and Devastating Effects on Endangered Species and Habitats	Based on our review of the record, it does not appear the WELC's public comments vary significantly from those raised during the 30-day public Comment for the 2024-06 (see Response to Public Comment No. 83) and the 30-day Public Protest period for the 2024-06 (see Response to Public Protest No. 71) Competitive Lease Sale EA, and Response to Public Comment Nos. 84 and 85. The HQ-TES-1 stipulation is intended to protect threatened and endangered species through consultation with the USFWS for any proposed project where habitat or species has been identified. Stipulation HQ-TES-1 specifically states that the BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat.

half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds are estimated to have been negatively impacted by climate change in at least part of their range. Furthermore, across the globe, populations of terrestrial birds and mammals that are experiencing greater rates of climate warming are more likely to be declining at a faster rate. Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress.

Species extinction risk will accelerate with continued greenhouse gas pollution. One million animal and plant species are now threatened with extinction, with climate change as a primary driver. At 2°C compared with 1.5°C of temperature rise, species' extinction risk will increase dramatically, leading to a doubling of the number of vertebrate and plant species losing more than half their range, and a tripling for invertebrate species. Numerous studies have projected catastrophic species losses during this century if climate change continues unabated: 15 to 37% of the world's plants and animals committed to extinction by 2050 under a mid-level emissions scenario; the potential extinction of 10 to 14% of species by 2100; global extinction of 5% of species with 2°C of warming and 16% of species with business-as-usual warming; the loss of more than half of the present climatic range for 58% of plants and 35% of animals by the 2080s under the current emissions pathway, in a sample of 48,786 species; and the loss of a third or more of animals and plant species in the next

50 years. As summarized by the Third National Climate Assessment, "landscapes and seascapes are changing rapidly, and species, including many iconic species, may disappear from regions where they have been prevalent or become extinct, altering some regions so much that their mix of plant and animal life will become almost unrecognizable."

Methane emissions are particularly alarming. Immediate, deep reductions in methane emissions are critical for lowering the rate of global warming in the near-term, preventing the crossing of irreversible planetary tipping points, and avoiding harms to species and ecosystems from methane's intensive near-term heating effects and ground-level ozone production. Methane is a super-pollutant 87 times more powerful than CO2 at warming the atmosphere over a 20-year period, and is second only to CO2 in driving climate change during the industrial era. Methane also leads to the formation of ground-level ozone, a dangerous air pollutant, that harms ecosystems and species by suppressing plant growth and reducing plant productivity and carbon uptake. Deep cuts in methane emissions that reduce near-term temperature rise are also critical for avoiding the crossing of planetary tipping points—abrupt and irreversible changes in Earth systems to states wholly outside human experience, resulting in severe physical, ecological and socioeconomic harms.

[S]cientists can now predict specific harms to individual species from the incremental emissions increases directly attributable to the federal agency actions, and can also assess the consequences of emissions for listed species' conservation and recovery. For example, the

	1			1
		recovery plan for the polar bear predicts three		
		different scenarios for polar bear populations		
		under scenarios where emissions are abated		
		early, emissions are abated later, and where		
		emissions continue unabated. Likewise, with		
		respect to particular agency actions, scientists		
		were able to calculate that the rollback of		
		vehicle emissions standards by the Trump		
		administration would have resulted in a		
		sustained loss of more than 1,000 square miles		
		of summer sea ice habitat for the polar bear and		
		nearly one full additional day of ice-free		
		conditions in Alaska and many other parts of		
		the Arctic, which would reduce the length of		
		the polar bear feeding season and lower		
		reproductive success and survival. Thus as a		
		scientific matter, there is no basis for any		
		federal agency to assert that climate change		
		does not harm endangered and threatened		
		species or that it is scientifically impossible to		
		ascertain the particular harm caused by an		
		agency's contribution to greenhouse gas		
		emissions.		
		Accordingly, all federal agencies must assess		
		whether the emissions that result from their		
		activities harm climate-threatened species.		
87	WELC	If the agency determines that an action may	BLM's Proposed	Based on our review of the record, it does not appear the
0,	,, LLC	affect a species—even if the effect is small,	Leasing Action	WELC's public comments vary significantly from those
		indirect, or the result of cumulative actions—it	Crosses the "May	raised during the 30-day public Comment for the 2024-06 (see
		must formally consult with the Services. Only a	Affect" Threshold	Response to Public Comment No. 84) and the 30-day Public
		scientific finding of "no effect" is sufficient to	for Climate-	Protest period for the 2024-06 (see Response to Public Protest
		avoid the consultation process altogether.	Threatened Species	No. 72) Competitive Lease Sale EA, and Response to Public
		avoid the consultation process altogether.	and Requires	Comment Nos. 84 and 85.
		It is abundantly clear in this instance the	Consultation	Comment 1105. 07 and 05.
		proposed agency action will result in a	Consultation	
		significant fraction of all global greenhouse gas		
		emissions, and consequently there are real		
		impacts that cross the "may affect" threshold,		
		even if some of those impacts are still of an		
		even it some of those impacts are suit of an		

undetermined character at this point. The purpose of the consultation process, by Congressional design, is to allow the expert wildlife agencies to assess these impacts using the best available science, so that they can evaluate the harm that may be caused. Any attempt by the Bureau of Land Management (or U.S. Fish and Wildlife Service) to simply assert that it is unable to determine the impacts of greenhouse gas emissions on listed species is illegal and ultra vires. Only the expert wildlife agencies, with best scientific data available, can determine the effects of a federal action on species or habitat.

With respect to the greenhouse gas emissions that will result from federal fossil fuel leasing, the best available science suggests that this action, along with other federal onshore mineral production will result in approximately 24,112 megatons of carbon dioxide equivalent through 2050. These emissions are appreciable and significant, and must be assessed under the ESA's consultation framework. This analysis is also consistent with President Biden's "whole of government" approach to addressing the climate crisis, as well as Executive Order 13990, which states that all federal agencies "must be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making."

Consultation on climate-threatened species that may be affected by cumulative impacts of emissions caused by the agency's action is similar to many other complex consultations undertaken by the Services. Furthermore, the Services have regularly relied on surrogates, such as habitat, ecological conditions, or a similarly-affected species that are easier to

monitor in instances where the biology of a listed species or the nature of the proposed action makes it difficult to detect or monitor take of individual animals.

[T]he Services must also assess the negative impacts of greenhouse gases on critical habita

impacts of greenhouse gases on critical habitat. Assessing the loss of critical habitat in a climate consultation is complex, but no more difficult than assessing critical habitat in other nationwide programmatic consultations. Under the Services' regulations, critical habitat is only adversely modified or destroyed when it appreciably diminishes the value of the "whole" designation. In many cases, climate impacts to critical habitat will affect the entirety of a designation — likely to the same extent in a relatively similar manner. Thus, to the extent that the impacts to critical habitat are significant, the Services must develop RPAs and RPMs — including through surrogate metrics — to address the habitat degradation that climate change is bringing.

For this proposed action, it is clear that the anticipated greenhouse gas pollution from federal oil and gas leasing will harm listed species far beyond the immediate area of the proposed activity in a manner that is attributable to the agency action. Pending consultation, BLM should postpone the Wyoming Q3 2024 lease sale.