



United States Department of the Interior



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DECISION

Western Environmental Law Center : Protest of Parcels in the
Melissa Hornbein : June 30, 2022
103 Reeder's Alley : Competitive Oil and Gas Lease Sale
Helena, MT 59601

Protest Dismissed Parcels Offered For Sale

On May 18, 2022, the Bureau of Land Management (BLM), Nevada State Office (NVSO), timely received a protest¹ from The Western Environmental Law Center, et al (WELC), which protested all five parcels located in the Battle Mountain District scheduled to be offered at the June 2022 Competitive Oil and Gas Internet Lease Sale (the Sale). The five protested parcels rely on the Battle Mountain District Office's (BMDO) Environmental Assessment (EA), DOI-BLM-NV-B000-2021-0007-Other and Finding of No Significant Impact (FONSI).

BACKGROUND

The BLM posted the Sale Notice on April 18, 2022 offering five parcels for the June 2022 Lease Sale. The five nominated parcels included land in federal mineral estate located in the BLM Nevada's Battle Mountain District. After the NVSO completed preliminary adjudication² of the nominated parcels, the NVSO screened each parcel to determine compliance with national and state BLM policies, including BLM's efforts related to the management of Greater Sage Grouse on public lands.

On October 30, 2021, the NVSO sent a preliminary parcel list to the BMDO for review. This interdisciplinary parcel review included internal scoping by a team of BLM specialists; review of

¹ The protest is posted on the BLM website, located at: <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/nevada>

² Preliminary adjudication is the first stage of analysis of nominated lands conducted by the State Office to prepare preliminary sale parcels for District/Field Office review. During preliminary adjudication, the State Office confirms availability of nominated lands for leasing pursuant to 30 U.S.C. § 181 *et seq.*, 43 CFR 3100 *et seq.*, and BLM policies. Once the State Office completes preliminary adjudication, it consolidates the nominated land available for leasing into a preliminary parcel list to send to the District/Field Office for National Environmental Policy Act (NEPA) analysis and leasing recommendations.

geographic information system (GIS) data; satellite imagery and other previously collected wildlife, habitat and other resource data; field visits to nominated parcels (where appropriate); review for conformance with the Land Use Plans (LUP); and preparation of an EA documenting National Environmental Policy Act (NEPA) compliance.³

The EA tiered to the existing Land Use Plans,⁴ in accordance with the BLM's NEPA Handbook, H-1790-1, and with the Code of Federal Regulations (CFR) at 40 CFR 1502.1-24.

The federal action, an oil and gas lease sale, is not a planning level action making resource allocation decisions (which are analyzed in a Resource Management Plan NEPA document), nor a specific implementation action (e.g., a permit to drill, analyzed in a site specific NEPA document).⁵ The federal action is to conduct an oil and gas lease sale and is supported by its own or existing NEPA documents.

The purpose for the federal action is to provide opportunities for private individuals or oil and gas companies with new areas to explore and potentially develop. Leasing is authorized under the Mineral Leasing Act of 1920 (MLA), as amended and modified by subsequent legislation, and regulations found at 43 CFR part 3100. Oil and gas leasing is recognized as an acceptable use of public lands under the Federal Land Policy and Management Act (FLPMA). BLM authority for leasing public mineral estate for the development of energy resources, including oil and gas, is described in 43 CFR 3160.0-3.

The need for the proposed action is to respond to the nomination of parcels by Expressions of Interest (EOIs) for leasing, consistent with the BLM's responsibility under the Mineral Leasing Act, as amended, to promote the development of oil and gas on the public domain. The public, BLM, or other agencies may nominate parcels for leasing. The BLM is required by law to consider leasing of areas that have been nominated for lease if leasing is in conformance with the applicable BLM land use plan, FLPMA, and other applicable laws, regulations, and policies. Offering parcels for competitive oil and gas leasing provides for the orderly development of fluid mineral resources under BLM's jurisdiction in a manner consistent with multiple use management and consideration of the natural and cultural resources that may be present. This requires that adequate provisions are included with the leases to protect public health and safety and assure full compliance with the spirit and objectives of NEPA and other federal environmental laws and regulations.

The EA considered three (3) alternatives:

- Alternative A- The "Proposed Action" alternative, which included offering all nominated parcels that were sent for review, with stipulations from the existing Resource Management Plans (RMPs).
- Alternative B- Alternative B removes parcels overlapping the Railroad Valley Wildlife Management Area (WMA). Under this alternative, parcels 1499, 1502, 1503, 1512, and

³ See BLM, H-1601-1, *Land Use Planning Handbook*, (Mar. 2005) (p. 42): "after the RMP is approved, any authorizations and management actions approved based on an activity-level or project-specific EIS (or EA) must be specifically provided for in the RMP or be consistent with the terms, conditions, and decisions in the approved RMP." See also 43 CFR 1610.5-3.

⁴ The EA is in conformance with the Tonopah RMP, approved in 1997, the associated Record of Decision, and all subsequent applicable amendments.

⁵ See BLM, H-1624-1, *Planning for Fluid Minerals Handbook*, (Feb. 2018)

6909 would not be offered. Parcels 1508, 1510, 1513, 6910, and 6912 would be offered, totaling 2,560 acres, with stipulations from the existing RMPs.

- Alternative C- The “No Action” alternative, which considered rejecting all parcels nominated for the lease sale. This alternative is included as a baseline for assessing and comparing potential impacts.

The EA analyzed the proposed action, an alternative removing parcels overlapping the Railroad Valley WMA, and the no action alternative. These alternatives provided a spectrum of effects for analysis and comparison, ranging from no parcels offered to offering all nominated parcels. Additional alternatives were proposed in internal scoping and public comments; however, they were not carried forward for further analysis as they would not provide a basis for evaluation of effects not encompassed by the analyzed range of alternatives. The additional proposed alternatives did not meet the Purpose and Need for the federal action and were not in compliance with BLM policy regarding the land use planning process and the oil and gas leasing process. These alternatives were discussed in the EA in Public Involvement, Public Comments and Responses, and Alternatives sections.

On April 18, 2022, the NVSO published a *Notice of Competitive Oil and Gas Internet Lease Sale for June 30, 2022*⁶ (Notice), resulting in a total of 5 parcels offered for lease. This protest challenges the Sale, BMDO EA (DOI-BLM-NV-B000-2021-0007-Other), FONSI, and the five parcels described in the Notice.⁷

ISSUES

The WELC protest generally alleges that the BLM failed to comply with the NEPA 42 U.S.C. § 4321 *et seq.*, the Endangered Species Act of 1973 (ESA), 16 U.S.C. § 1531 *et seq.*, the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.*, and the FLPMA of 1976, 43 U.S.C. § 1701 *et seq.* The following addresses WELC’s protest related to the Sale.

The BLM has reviewed WELC’s protest in its entirety; the substantive protests are numbered and provided in bold with BLM responses following.

I. EFFECT OF RECENT COURT DECISIONS AND EXECUTIVE ORDERS.

A. *Louisiana v. Biden Does Not Require Holding a Lease Sale or Issuing Any Leases.*

BLM Response:

The Proposed Action was triggered by the authorities listed in the Purpose and Need. The purpose of the proposed action alternatives is to respond to the public nominations as EOIs for oil and gas leasing on specific federal mineral estate through a competitive leasing process and either lease or defer from leasing, pending additional information. The need for the proposed action is to consider the action alternatives is established by the BLM’s responsibility under the MLA of 1920, as amended, the Mining and Minerals Policy Act of 1970 as amended, the Federal Onshore Oil and Gas Leasing Reform Act of

⁶ The Notice contains a memorandum of general sale information, the final parcel list, and the final stipulations.

⁷ The June 2022 Competitive Oil and Gas Lease Sale Protests and Protest Decisions are posted on the BLM website, located at: <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/nevada>

1987 as amended, and the FLPMA of 1976 as amended. These lease sales, which represent an exercise of the Secretary's broad discretion under the MLA, are consistent with applicable law, including any applicable injunctive relief from federal courts.

For these reasons, the above WELC protest is dismissed.

B. Adequate NEPA Review Under Secretarial Order 3399 Is Required Prior to Offering These Leases for Sale.

BLM Response:

The analysis contained in the EA and the BLM Annual GHG Report is consistent with NEPA requirements, case law, and other court decisions. The EA provides an assessment of potential direct, indirect, and cumulative Federal greenhouse gas (GHG) emissions and provides an appropriate discussion of the climate impacts that may occur.

The EA and FONSI follow the guidance in Secretarial Order 3399 and consider the significance factors and a full analysis of cumulative effects consistent with definitions in the 1978 regulations. This order states 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."

For these reasons, the above WELC protest is dismissed.

II. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

A. BLM Must Prepare an EIS to Address the Cumulative Impacts of All Lease Sales Announced August 31.

BLM Response:

The BLM has prepared multiple Environmental Impact Statements (EIS) covering the lands BLM is considering making available for competitive auction. 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 the reference the 2020 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. 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.

For these reasons, the above WELC protest is dismissed.

B. BLM Must Prepare a Programmatic EIS to Take a Hard Look at The Climate Impacts of The Resumption of Federal Oil and Gas Leasing and to Avoid Any New Greenhouse Gas Pollution

BLM Response:

BLM has adequately considered the impacts from offering the lands for competitive lease. In November 2021, the Department of the Interior released a Report on the Federal Oil and Gas Leasing Program (Report). The Report made specific recommendations to address documented deficiencies in the program to meet three programmatic goals:

- Providing a fair return to the American public and States from Federal management of public lands and waters, including for development of energy resources;
- Designing more responsible leasing and development processes that prioritize areas that are most suitable for development and ensure lessees and operators have the financial and technical capacity to comply with all applicable laws and regulations; and
- Creating a more transparent, inclusive, and just approach to leasing and permitting that provides meaningful opportunity for public engagement and Tribal consultation.

The Report also recommends: As an overarching policy, BLM should ensure that oil and gas is not prioritized over other land uses, consistent with BLM's mandate of multiple-use and sustained yield. The BLM should 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 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. The BLM has also avoided including low potential lands, which are less likely to produce oil and gas, taking into account identification of development potential in resource management planning as well as current information.

In addition, the BLM has worked to focus leasing near areas with existing development, which not only supports infrastructure such as roads and gathering systems that will help to reduce venting and flaring but also helps preserve the resilience of intact public lands and functioning ecosystems.

Finally, as discussed in detail above, the BLM is applying a royalty rate higher than the minimum to this lease sale. The current minimum royalty rate is significantly lower than those used in most states and on private land, and the BLM is providing an improved return to the taxpayer by using a royalty rate of 18.75% for the leases sold in this sale. Additional analysis and consideration of mitigation measures will be considered should the lease be sold, and development proposed.

For these reasons, the above WELC protest is dismissed.

1. The Incremental Nature of Climate Change Requires a Programmatic EIS.

BLM Response:

Please see above BLM response to protest point “B. BLM Must Prepare a Programmatic EIS To Take a Hard Look at The Climate Impacts Of The Resumption of Federal Oil and Gas Leasing And To Avoid Any New Greenhouse Gas Pollution.”

For these reasons, the above WELC protest has been dismissed.

a. There Is a Small Remaining Window to Avoid the Most Catastrophic Effects of Climate Change and a Programmatic Review Is Necessary to Inform Future Action.

BLM Response:

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office asserting delegated authority over sales administered by that administrative office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office. The offering of leases for different states at the same time does not constitute a connected action under NEPA. BLM recognizes the national and global impact potential of greenhouse gas (GHG) emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

For these reasons, the above WELC protest is dismissed.

b. BLM Must Complete the Analysis Begun in the “2020 BLM Specialist Report.”

BLM Response:

The BLM completed a social cost of greenhouse gases analysis as part of the review process for the proposed lease sales. The analyses for the 2022 sale incorporate the data from the 2020 BLM specialist report on greenhouse gas emissions and climate trends and build on it. The analysis in the 2022 EA includes a cumulative analysis of impacts from the federal oil and gas leasing program in the context of local, regional and national emissions. While BLM is not able to state specific impacts that the sales going forward will have on human health and the environment, the BLM has disclosed to the greatest extent feasible the potential impacts from these sales as part of a larger context.

For these reasons, the above WELC protest is dismissed.

c. A Programmatic EIS For the Federal Oil and Gas Program Is Consistent with The Department’s Review of the Federal Coal Leasing Program.

BLM Response:

Please see above BLM response to protest point: “a. There Is a Small Remaining Window to Avoid the Most Catastrophic Effects of Climate Change and a Programmatic Review Is Necessary to Inform Future Action.”

For these reasons, the above WELC protest is dismissed.

C. BLM Has Failed to Consider a Range of Alternatives.

1. No-Leasing Alternative.

BLM Response:

The BLM is not making a "perfect substitution" argument in the No Action alternative as claimed in the protest. The EA states that no GHG emissions would occur from the lease parcels should they not be leased. The No Action alternative has an appropriate qualitative discussion of the potential short term (30 years) impacts of reducing the output, domestic or otherwise, of oil and gas. There is no assertion that the no action alternative would result in lower, the same, or higher emissions relative to worldwide emissions over the same period.

This information in the EA is supported by the incorporation of the U.S. Energy Information Administration’s (EIA) short-term energy outlook (STEO) and annual energy outlook (AEO). While the selection of the No Action alternative prevents additional Federal GHG emissions from the subject leases it does not change the domestic or global demand for oil and gas forecasted by the EIA. The EA has been edited to clarify that the STEO is not projecting that Federal production will "remain

static or even increase," but rather that total U.S. production levels are expected to "remain static or increase."

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office acting as delegated authority over sales administered by that office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office. The offering of leases for different states at the same time does not constitute a connected action under NEPA.

BLM recognizes the national and global impact potential of GHG emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

For these reasons, the above WELC protest is dismissed.

2. BLM Failed to Consider Proposed Alternatives.

BLM Response:

While BLM offices in each state have the discretion to determine which alternatives to consider through NEPA analysis, and which to consider and dismiss, the below provides a general discussion of why certain proposed alternatives were not analyzed in greater detail:

No Leasing Alternative: The 2020 BLM Specialist Report on GHG Emissions and Climate Trends was incorporated by reference in the Lease Sale EA and provides a detailed discussion and cumulative assessment of Federal oil and gas emissions and climate change impacts. Additionally, the concurrent offering of leases across multiple states 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 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.

An alternative that imposes a minimum bonus bid higher than \$2.00 per acre: BLM must comply with existing statutory and policy requirements with respect to lease sales. 43 C.F.R. § 3120.1-2 (c) provides that the national minimum acceptable bid shall be \$2 per acre or fraction thereof on the payable on the gross acreage and shall

not be prorated for any lands in which the United States owns a fractional interest. BLM is implementing the current regulations regarding minimum bids, which can be amended only through new rulemaking.

An alternative that defers offering the proposed lease parcels for sale until at least 50% of all leased federal oil and gas acres in each of the states for which a Q1 2022 sale is proposed are put into production: The BLM has applied criteria to this sale to thoughtfully manage development, including taking into account development potential and proximity to existing development, which addresses similar concerns without using an arbitrary threshold. Also, the states at issue in this lease sale are at or approaching this threshold.

An alternative that analyzes and applies best available methane reduction technologies as a stipulation attached to all parcels in the lease sale: BLM may regulate emissions in the context of preventing waste, an issue that has recently prompted acute and occasionally conflicting judicial scrutiny. [see Wyoming v. DOI, 20-8073 (10th Cir.), and California Air Resources Board v. Bernhardt, Nos. 20-16793, 20-16794, 20-16801 (9th Cir.)]. To ensure it regulates within the bounds of the MLA, BLM is considering rulemaking what would detail when and how it will regulate emissions of methane and other gases released by flaring. Some states have a lease notice that is applied to each parcel, which provides: The lessee/operator is given notice that 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, emission inventory development, dispersion modeling or photochemical grid modeling for air quality and/or air quality 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.

For these reasons, the above WELC protest is dismissed.

3. BLM Should Consider an Alternative That Protects Groundwater.

BLM Response:

The protest does not submit 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. At the leasing stage, BLM completed a basin-wide assessment of the potential for induced hydraulic fractures to communicate with existing fractures (or faults), thus potentially providing a pathway for gas or contaminants to pose a risk to water quality. The BLM 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 are developed. Cumulative impacts have been adequately disclosed in the RMP and the EA. Site specific water resource impacts of proposed operations would be addressed at the APD stage.

For these reasons, the above WELC protest is dismissed.

4. BLM Must Consider an Alternative that Minimizes Methane Waste Through both Technology and Regulatory Authority

BLM Response:

BLM may regulate emissions in the context of preventing waste, an issue that has recently prompted acute and occasionally conflicting judicial scrutiny. [see *Wyoming v. DOI*, 20-8073 (10th Cir.), and *California Air Resources Board v. Bernhardt*, Nos. 20-16793, 20-16794, 20-16801 (9th Cir.)]. To ensure it regulates within the bounds of the MLA, BLM is considering rulemaking what would detail when and how it will regulate emissions of methane and other gases released by flaring. Some states have a lease notice that is applied to each parcel, which provides: The lessee/operator is given notice that 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, emission inventory development, dispersion modeling or photochemical grid modeling for air quality and/or air quality 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.

For these reasons, the above WELC protest is dismissed.

5. BLM Must Consider an Alternative That Prioritizes Conservation of All Greater Sage-Grouse Priority and General Habitat.

BLM Response:

In the BLM NEPA Handbook H-1790, and in Council on Environmental Quality (CEQ) guidance, the BLM is directed in NEPA documents to evaluate the proposed action, the no action alternative as a baseline, and other "Reasonable Alternatives" which meet the BLM's Purpose and Need and are within the BLM's authority. The BLM is not required to evaluate alternatives which do not meet the agency's Purpose and Need, are not within the BLM's discretion, or which are precluded by law. The EA analyzed the no action alternative, an alternative removing five parcels that overlapped or had parts overlapping the Railroad Valley WMA, and the proposed action. These alternatives provide a spectrum of effects for analysis and comparison, from not offering any parcels to offering all parcels nominated.

Additionally, BLM Nevada is offering no parcels for lease in the June 2022 lease sale that are in a Priority Habitat Management Area (PHMA) or General Management Area (GHMA) as designated in the 2015 GRSG AMRA HMA maps.

For these reasons, the above WELC protest is dismissed.

D. The BLM Has Failed to Take a Hard Look at Reasonably Foreseeable Environmental Consequences.

1. **The EA and 2020 BLM Specialist Report Fails NEPA’s “Hard Look” Test with Regard to Analyzing Climate Impacts of Resuming Federal Oil and Gas Leasing.**
 - a. **BLM Improperly Segmented Its NEPA Analysis of The Proposed Lease Sales.**

BLM Response:

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office acting as delegated authority over sales administered by that office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office. BLM recognizes the national and global impact potential of GHG emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

For these reasons, the above WELC protest is dismissed.

- b. **Federal Fossil Fuel Emissions are Significant Under NEPA.**
 - i. **EPA GHG Equivalency Calculator**

BLM Response:

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 additional information requested is not value-added for the decision maker. For example, contextualizing GHG emissions over the 30-year production life of a lease provides the same equivalency of 524,886 passenger vehicles but operating for 30-years instead of just a single year. WELC has not provided information to show how this provides added value to the decision maker. Similarly, contextualizing the cumulative emissions equivalency and SC-GHG from the Federal fossil fuel program are just different ways of expressing the cumulative Federal emissions already contained in the EA. Comparing the cumulative equivalencies and SC-GHG to those of the Proposed Action is essentially the same as the comparison of the emissions comparison in the EA.

For these reasons, the above WELC protest is dismissed.

- ii. **Social Cost of Greenhouse Gases**

BLM Response:

Please see above BLM response to protest point “i. EPA GHG Equivalency Calculator.”

For these reasons, the above WELC protest is dismissed.

iii. Carbon BudgetingBLM Response:

With respect to the commentor, the Department lacks an established carbon budget. Despite the ratification of the Paris Agreement, there is no single political or scientific consensus on precisely how to allocate global budget targets into national decarbonization trajectories, which is most likely due to the competing approaches for downscaling that exist. As a result, many countries are setting their own carbon reduction strategies, and are increasingly implementing net zero targets for mid-century. This Administration’s executive order on tackling the climate crisis, which sets a mid-century net zero target, is one such example. However, the lease sale EA did incorporate the 2020 BLM Specialists Report on federal fossil fuel greenhouse gas emissions and climate trends which discloses the impacts of climate change that have already occurred as a result of the cumulative emissions of GHGs (including all onshore and offshore federal emissions), and those that are projected to occur from continued cumulative emissions (see chapters 8 and 9). Chapter 7 also provides details of the projected long-term impacts on the global carbon budget relative to the entire onshore federal fossil fuels program (oil, gas, and coal) that is informative to decision-makers, even in the lease sale context.

Additionally, please see BLM response to protest point “2. BLM’s Assessment of the Significance of Impacts from GHG Emissions and Climate Change is Improper and Unjustified.”

For these reasons, the above WELC protest has been dismissed.

c. BLM Has the Ability to Provide for Meaningful and Measurable Mitigation Actions in the Context of Cumulative Climate Change Resulting from Global Emissions.BLM Response:

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 Applications for Permits to Drill (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 the Environmental Protection Agency's (EPA) 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 could result from the proposed action and incorporated by the reference the 2020 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.

For these reasons, the above WELC protest is dismissed.

d. The EA and 2020 BLM Specialist Report Omit Analysis of the Compatibility of New Commitments of Federal Fossil Fuels with the U.S. Goal of Avoiding 1.5 C Warming.

BLM Response:

The Lease Sale EAs incorporated the 2020 BLM Specialists Report on federal fossil fuel greenhouse gas emissions and climate trends which discusses the United Nations emissions gap (which is analogous to the production gap described by the commentor) and the Intergovernmental Panel on Climate Change (IPCC) carbon budgets in the context of current policy and executive orders outlining the Administration's response to the climate crisis and its commitment to achieve net zero GHG emissions by 2050 (see chapter 7.2). The specialists report provides a cumulative assessment of the onshore federal fossil fuel emission implications relative to the gap and budget targets, which is inclusive of the estimated projected emissions associated with all the proposed lease sale EAs. This broader assessment of existing and projected emissions provides better information for decision-makers to draw upon beyond the consumption context any individual or combined lease sale could provide, especially as GHGs and climate change are factually cumulative issues. At present, the specialist report shows that the cumulative projections of onshore production will be near "0" by 2050, which is in-line with effective executive orders.

For these reasons, the above WELC protest is dismissed.

- e. The EA and 2020 BLM Specialist Report Omit Analysis of the Global and National Over-Commitment of Fossil Fuels Relative to Global Carbon Budgets Necessary to Avoid 1.5 C Warming.**

BLM Response:

Please see above BLM response to protest point: “d. The EA and 2020 BLM Specialist Report Omit Analysis of the Compatibility of New Commitments of Federal Fossil Fuels with the U.S. Goal of Avoiding 1.5 C Warming.”

For these reasons, the above WELC protest has been dismissed.

- f. The EA and the 2020 BLM Specialist Report Fail to Adequately Quantify and Assess All Related Past, Present, and Reasonably Foreseeable GHG Emissions.**

BLM Response:

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office acting as delegated authority over sales administered by that office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office. The offering of leases for different states at the same time does not constitute a connected action under NEPA. BLM recognizes the national and global impact potential of GHG emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

The BLM has prepared multiple EISs covering the lands the BLM is considering making available for competitive auction. 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. 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.

For these reasons, the above WELC protest has been dismissed.

- i. GHG Emissions from Federal Offshore Oil and Gas Leasing.**

BLM Response:

Please see above BLM response to protest point “f. The EA and the 2020 BLM Specialist Report Fail to Adequately Quantify and Assess All Related Past, Present, and Reasonably Foreseeable GHG Emissions.”

For these reasons, the above WELC protest has been dismissed.

ii. GHG Emissions from Federal Fossil Fuel Projects.

BLM Response:

Please see above BLM response to protest point “f. The EA and the 2020 BLM Specialist Report Fail to Adequately Quantify and Assess All Related Past, Present, and Reasonably Foreseeable GHG Emissions.”

For these reasons, the above WELC protest has been dismissed.

iii. GHG Emissions from Non-Federal Oil and Gas Leasing.

BLM Response:

Please see above BLM response to protest point “f. The EA and the 2020 BLM Specialist Report Fail to Adequately Quantify and Assess All Related Past, Present, and Reasonably Foreseeable GHG Emissions.”

For these reasons, the above WELC protest has been dismissed.

g. The Emission Comparisons in the EA fails NEPA’s “Hard Look” Standard.

BLM Response:

The EA and FONSI disclosed the reasonably foreseeable future emissions of GHG emissions from the leases proposed to be offered for sale and has provided additional context for that information both as a proportion of reasonably foreseeable future emissions at the national and state levels and as an assessment using the Social Cost of Greenhouse Gases metrics. The EA also incorporated by reference the Specialists Report on Greenhouse Gases (2020), which includes an assessment of emissions from other Federal onshore oil and gas development, and national and global projections.

The BLM also added additional information to the EA to provide additional context surrounding existing GHG emission levels at the state scale from potential oil and gas related sources, including Federal and non-Federal, just prior to posting of the Notices of Competitive Lease Sales and opening of the protest period required by 43 CFR 3120.4 [*see* EA Section 3.2.2].

Given the information available to the agency, BLM can only analyze the reasonably foreseeable GHG emissions from the lease sales and other reasonably foreseeable actions: as BLM disclosed in the EA, future development of the leases is speculative. As such, any analysis of GHG emissions and future development involves a degree of

uncertainty. To be conservative, the analysis of impacts assumes that all of the lands will be developed at some time during the initial 10-year life term and subsequently held by production. This “held by production” assumption necessarily assumes that (1) each lease will actually be sold and a lease issued and (2) that the leases hold economically and technically recoverable reserves based on current understanding of reservoir environmental conditions. There is no guarantee that any or all of the aforementioned actions will occur, but because the lands are being made available for competitive lease under the Proposed Action, for purposes of this analysis it is assumed that the lands will be developed to their full Reasonably Foreseeable Development (RFD) scenario.

Additional environmental analysis is required prior to any development. This later analysis of proposed development will consider the technical aspects of such proposals in the context of those future, existing conditions. To the extent that GHGs can influence changes in climates across various scales, the EA and the associated Specialists Report on GHGs has analyzed and disclosed those relationships.

As detailed in the Specialists Report on GHGs, which BLM incorporated by reference, the BLM also looked at other tools to inform its analysis, including the MAGICC model (see Section 7.0 of the Specialists Report). This model run suggests that “30-plus years of projected federal emissions would raise average global surface temperatures by approximately 0.0158 °C., or 1% of the lower carbon budget temperature target.” BLM may apply additional analysis in the future as more tools become available. Consistent with our response to comments (*see* EA Supplemental Information, Section 16, CBD-4) to the argument that the lease sales should be considered together because they are connected actions, BLM maintains that there is no interdependency between the actions as each action is delegated to the Authorized Officer in each administrative BLM unit, subject to the allocation decisions in the Record of Decision for each of the controlling RMPs. Further, the BLM has evaluated the cumulative impacts of projected lease sales based on a 5-year average in the Specialists Report, which would encompass the leasing proposed in this sale. As of the publication of this EA, 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. Because of the issues raised in this protest, BLM has added additional information to its EA and FONSI consistent with our response above (*see* Section 16, EA Supplemental Information, comment response TWS-5).

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office acting as delegated authority over sales administered by that office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office. BLM recognizes the national and global impact potential of GHG emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future

agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

For these reasons, the above WELC protest is dismissed.

h. BLM’s Analysis of Cumulative GHG Emissions in the 2020 BLM Specialist Report Fails NEPA’s “Hard Look” Standard.

BLM Response:

Please see above BLM response to protest point “g. The Emissions Comparisons in the EA fails NEPA’s “Hard Look” Standard.”

For these reasons, the above WELC protest is dismissed.

i. BLM Must Take a Hard Look at Methane Emissions and Waste.

BLM Response:

For the Lease Sale EA, the BLM included (and took a "hard look" at) estimates of direct and indirect methane emissions that could result from the proposed action and incorporated by the reference the 2020 BLM Specialists Report on Annual Greenhouse Gas Emissions and Climate Trends that provides a robust assessment of cumulative methane emissions, climate change impacts, and reputable climate science sources. Using the lease sale specific GHG emissions estimates and cumulative Report, the BLM considered a reasonable range of alternatives and the potential GHG (including methane) emissions levels and climate change impacts were of the many factors considered for including specific alternatives for the NEPA assessments. It was determined through review and evaluation of the potential GHG emissions levels that could occur as a result of the proposed action and the potential impacts of those emissions to cumulative levels using the 2020 BLM Specialists Report on Annual Greenhouse Gas Emissions and Climate Trends that an environmental assessment was the appropriate NEPA path to take with respect to GHGs and Climate Change as no significant changes to cumulative (global) GHG levels and climate change are projected to occur as a result of the proposed action.

Following the FLPMA mandate to consider unnecessary or undue degradation (UUD), no UUD or excessive methane emissions are projected to occur as a result of the proposed action as future oil and gas operations on the lease parcels would be subject to and follow stringent Federal and State regulations and best management practice requirements included in future BLM project-level NEPA. Therefore, it was determined that no additional mitigation would be needed in support of the FONSI. Potential air quality impacts as a result of flaring were included in the lease sale EAs and project-level analyses will be completed for new oil and gas development / operations as BLM receives details for proposed actions where additional mitigation

could be required based on new analysis or policy. The Lease Sale EA for Nevada provided detailed information for future air quality impacts that could be associated with new oil and gas industry operations including flaring.

For these reasons, the above WELC protest is dismissed.

2. BLM Must Take a Hard Look at Impacts to Human Health.

BLM Response:

BLM and other government agencies have regulations and policies intended to protect the environmental health and thereby avoiding or minimizing public exposures to substances or emissions with the potential to affect human health. In the EA, BLM has analyzed reasonably foreseeable direct and indirect impacts of leasing the proposed parcels, as well as cumulative impacts. The EA referred to health and safety data provided by the EPA regarding topics such as ground level ozone, particulate matter, nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide. Additional data regarding the effects on public health and safety is taken from the Centers for Disease Control and Prevention (CDC) as reference in the 2020 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends. In addition, the Nevada Division of Environmental Protection (NDEP) Bureau of Air Pollution Control and Air Quality Planning (BAPC) has regulations, reporting, and permitting requirements for oil and gas operations in Nevada. The BLM currently requires all federal oil and gas development and operations in Nevada to obtain the necessary permits and follow the applicable rules and regulations set forth by the NDEP. Should the parcel be sold, a lease issued, and development proposed, BLM will be able to evaluate impacts in more detail at that time. BLM will use the suggested screening tool at the APD/project stage.

For these reasons, the above WELC protest is dismissed.

a. Overview of Human Health Impacts and Sources of Peer-Reviewed Literature Related to Proximity to Oil and Gas Development.

BLM Response:

Please see above BLM response to protest point “2. BLM Must Take a Hard Look at Impacts to Human Health.”

For these reasons, the above WELC protest is dismissed.

b. Cumulative Health Risks and Impacts to Social and Structural Factors Affecting Health.

BLM Response:

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 associated health impacts 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 publication, 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 and associated cumulative health impacts from this proposed lease sale.

For these reasons, the above WELC protest is dismissed.

c. Health and Environmental Justice.

BLM Response:

A socioeconomic profile for the lease sale geographic region was generated utilizing the Headwaters Economic Profile System (including US Census data) as identified in the EA (Section 3.2.15). Additionally, the BLM continuously ensures that all applicable Tribal consultation is current. At the time of leasing, the BLM does not know whether a parcel will be developed, and if so, where the operator will propose to place pads, wells, roads, and infrastructure. The site-specific details included in an APD show exactly where activities may occur, and this information allows for potential impacts to be analyzed in more geographically concise detail including environmental justice screening. In the screening process, the BLM will utilize the Socioeconomic Profile Tool along with the recently implemented BLM Environmental Justice GIS Tool. Should the parcel be sold, a lease issued, and development proposed, BLM will be able to evaluate impacts in more detail at that time. BLM will use the suggested screening tool at the APD/project stage.

For these reasons, the above WELC protest is dismissed.

d. Air Pollution and Health Impacts.

BLM Response:

The BLM included additional information and references to health impacts associated with emissions from oil and gas development in the Final EA. The 2020 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.

For these reasons, the above WELC protest is dismissed.

e. Maternal, Prenatal and Child Health Impacts.

BLM Response:

BLM and other government agencies have regulations and policies intended to protect the environmental health and thereby avoiding or minimizing public exposures to substances or emissions with the potential to affect human health. In the EA, BLM has analyzed reasonably foreseeable direct and indirect impacts of leasing the proposed parcels, as well as cumulative impacts. The BLM analysis presented in the EA and the 2020 Specialists Report is the agency's determination of a “hard look” at GHG emissions related to agency fossil fuel approvals. The NDEP has regulations, reporting, and permitting requirements for oil and gas operations in Nevada. The BLM currently requires all federal oil and gas development and operations in Nevada to obtain the necessary permits and follow the applicable rules and regulations set forth by the NDEP and BAPC. The Onshore Orders require that operators design and conduct drilling, completion, and production activities in a way that considers human health and safety. Identification of environmental justice (EJ) communities is discussed in Section 3.2.15 of the EA. When oil and gas operations are proposed, through an APD, BLM will ensure a site-specific NEPA compliance of the proposal(s) utilizing the best available and most current data, including EJ screening and ongoing Tribal consultation.

For these reasons, the above WELC protest is dismissed.

f. Occupational Health and Safety Impacts.

BLM Response:

In the United States, the health and safety of workers in the oil and gas extraction industry is strictly regulated by the US Department of Labor, Occupational Safety and Health Administration (OSHA). US employers must comply with all applicable OSHA standards. OSHA, the National Institute for Occupational Safety and Health (NIOSH), and industry and safety groups continue to evaluate the type and extent of chemical and other health hazards across the industry.

For these reasons, the above WELC protest is dismissed.

g. Naturally Occurring Radioactive Materials and Technology Enhanced Naturally Occurring Radioactive Materials.

BLM Response:

NEPA analysis was conducted to analyze impacts of a competitive oil and gas lease sale, not for a plan amendment. The referenced U.S. Geological Survey (USGS) study shows that naturally occurring radioactive elements in groundwater coexist with oil deposits, and that radioactive materials can contaminate soils in the immediate vicinity of production sites through spills or leakage of produced water and can accumulate in pipelines and other equipment. It is possible that this equipment may transport small amounts of radioactive decay products of radon gas. However, most sites with markedly higher radioactivity were concentrated in specific locations, namely Texas, Kansas, and Oklahoma, and are associated with shale wells. Increased industry awareness and understanding of the problem coupled with government regulatory efforts have provided much better control of oil-field naturally occurring

radioactive materials (NORM) wastes and have reduced the radiation exposure to workers and the public. Management of the present inventory of stored oil-field NORM waste and options for its disposal are designed to reduce radiation hazard to the general public. For example, North Dakota currently has two permitted technology enhanced naturally occurring radioactive material (TENORM) slurry wells in McKenzie County, and two disposal facilities in Williams County, for the disposal low level radioactive waste that occurs as a byproduct of oil and gas extraction. Disposal of these materials means that they do not remain on site, reducing the risk for potential exposure at the well location, and that they will not accumulate in equipment. Each disposal facility can accept approximately 25,000 tons of TENORM annually, and the capacity is higher for the slurry wells. Approximately 7,000 bbls of TENORM have been injected into the first permitted slurry well. North Dakota currently generates approximately 92,000 tons of TENORM annually, and the disposal facilities and wells are capable of handling this capacity. Additional facilities could be permitted in the future if needed. Proper disposal of these materials reduces the potential risk to human health and safety.

For these reasons, the above WELC protest is dismissed.

3. BLM Must Take a Hard Look at Environmental Justice.

BLM Response:

The BLM is committed to fair treatment and meaningful involvement with all the people on the lands when making decisions on preservation, protection and sustainable development of the natural resources on the public lands managed by BLM. The BLM received no comments during the public comment period from individuals or Tribal affiliates expressing EJ related concerns with the parcels to be offered. Furthermore, where tribal consultation was determined to be necessary and had not been completed, those parcels have been deferred from sale. Specific letters were sent to local tribes by the offices having administrative jurisdiction for their lease sales to ensure they were aware of the parcels proposed to be offered, and to request any feedback they may have. The EAs have disclosed which environmental justice populations are within the area of effect and disclosed the potential impacts to those populations from reasonably foreseeable future development of the parcels should they be sold and leases issued. For the work area of environmental justice (Executive Order 12898 published in 1994; guidance issued by the Council on Environmental Quality in 1997), the BLM is committed to using best practices. For example, the BLM has been actively upgrading databases, methodologies, tools, and analysis guidance and working with BLM offices at all levels as well as other federal agencies to collectively improve the analyses involving socioeconomic inputs.

For these reasons, the above WELC protest is dismissed.

4. BLM Must Take a Hard Look at Impacts to Resources Other Than Climate from Development of the Proposed Leases.

BLM Response:

The protest does not submit any evidence documenting that hydraulic fracturing has generally contaminated groundwater or that offering these parcels for lease will significantly impact water resources. At the leasing stage, BLM completed a basin-wide assessment of the potential for induced hydraulic fractures to communicate with existing fractures (or faults), thus potentially providing a pathway for gas or contaminants to pose a risk to water quality. The BLM 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 are developed. Cumulative Impacts have been adequately disclosed in RMP and the EA. Site specific water resource impacts of proposed operations would be addressed at the APD stage.

While an RFD was prepared to ascertain potential production volumes for preparation of GHG emission estimates, this RFD is not appropriate for use in all circumstances, specifically as to analyzing surface impacts, near well-bore impacts, or draw-down associated with water wells, because those are site specific impacts that need a discrete development proposal, whereas emissions from such activities are diffuse. Future analysis will be necessary to determine significance of a site-specific proposal and will include an analysis of the direct, indirect and cumulative impacts which could occur at the time development is proposed. BLM however commits to reviewing its existing impact analysis and will consider how to best incorporate the RFD prepared for the analysis of GHG emissions, into its analysis of reasonably foreseeable impact analysis for other resources beyond what it has provided here.

For these reasons, the above WELC protest is dismissed.

a. Groundwater Quality and Water Demands.

BLM Response:

The BLM has used the best available data from USGS and other sources in its analysis of potential impacts to groundwater from the leasing of the proposed parcels, including aquifer data. All usable aquifers that may not be currently used as a drinking water supply could include total dissolved solids (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. Therefore, in the unlikely event that a brackish groundwater aquifer would be contaminated by drilling or hydraulic fracturing processes, this contamination would be removed prior to the water being made available for human consumption and use.

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 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.

Onshore Oil and Gas Order No. 2 similarly defines “usable water” generally as those waters containing up to 10,000 ppm of total dissolved solids. This Order 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 Order requires the following of cementing and casing programs: “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.” 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.

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 groundwater aquifers and existing groundwater wells in the project area will be determined at that time. Until that time, BLM can only analyze the impacts at the leasing level by reviewing the potential depths of aquifers within the proposed lease parcels.

Additionally, please see above BLM response to protest point “4. BLM Must Take a Hard Look at Impacts to Resources Other Than Climate from Development of the Proposed Leases.”

For these reasons, the above WELC protest is dismissed.

b. Greater-Sage Grouse.

BLM Response:

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), if disturbance will occur on or off lease, the mineral resources a well might target (oil vs. gas), where water for drilling activities may be obtained (e.g. town water supplies, water well, recycled water from previous drilling activities), or even if fresh water zones will be encountered when drilling. Until there is a specific application that provides more detailed information regarding the proposed development of the Federal mineral estate, more precise analysis is not feasible.

The BLM has considered habitat conservation needs in both PHMA and GHMA and developed alternatives which are reflective of all relevant resource considerations. BLM has also reviewed the parcels in consideration of the November 12, 2021 Report prepared in response to Section 208 of Executive Order 14008. BLM is offering these parcels in conformance with the underlying RMPs and FLPMA's multiple use mandate and disclosed reasonably foreseeable impacts.

For these reasons, the above WELC protest is dismissed.

c. Big Game.

BLM Response:

The BLM has concluded that big game habitats are sufficiently protected by available measures. The Nevada Department of Wildlife (NDOW) reviewed all of the proposed lease parcels to assist the BLM in evaluating how future development of parcels may affect wildlife species in Nevada. The BLM also conferred with NDOW regarding wildlife population and habitat distribution when identifying the appropriate lease stipulations from the RMPs to apply for protection of wildlife. The RMPs in the BMD analyze big game habitats in each of the resource areas and the application of Timing Limit (TL) stipulations to minimize or eliminate impacts to big game habitats. For the protection of big game habitats, TLs apply to parcels within big game winter range and concentration areas, severe winter habitat, and production areas, and Controlled Surface Use (CSU) stipulations and Lease Notices (LN) apply to high value wildlife habitats and priority sagebrush habitats.

At the time of the lease sale, it is unknown whether the proposed parcels will be leased, whether a future lessee would propose to develop the lease, or what specific locations and operating procedures may be proposed. Currently, neither the BLM, nor NDOW, has further information about potential future operations. If oil and gas operations are proposed for any of the leases, the BLM would verify site-specific NEPA compliance of the proposal using the best available tools and most current data. If any sensitive species and habitat are identified during the site-specific evaluation at the APD stage, and the BLM determines that additional habitat conservation measures (beyond the BLM's lease stipulations) are needed, the BLM has discretion to incorporate those measures into the permit to drill as conditions of approval. If the analyses indicate the proposed action may affect listed species or critical habitat, the BLM will consult with U.S. Fish and Wildlife Service (USFWS), in compliance with Section 7 of the ESA.

For these reasons, the above WELC protest is dismissed.

E. BLM's Conclusion Regarding GHGs and Climate in Its Proposed Finding of No Significant Impact are Not Adequately Supported by NEPA Analysis in the EA.

1. BLM's FONSI's for the Proposed Lease Sales are Inconsistent and Fail to Properly Address the NEPA Intensity Factors.

BLM Response:

The EAs and FONSI's have disclosed the reasonably foreseeable future emissions of Greenhouse Gases (GHG) emissions from the leases proposed to be offered for sale and has provided additional context for that information both as a proportion of reasonably foreseeable future emissions at the national and state levels and as an assessment using the Social Cost of Greenhouse Gases metrics. The EA also incorporated by reference the Specialists Report on Greenhouse Gases (2020), which includes an assessment of emissions from other Federal onshore oil and gas development, and national and global projections.

The BLM also added additional information to the EAs to provide additional context surrounding existing GHG emission levels at the state scale from potential oil and gas related sources, including Federal and non-Federal, just prior to posting of the Notices of Competitive Lease Sales and opening of the protest period required by 43 CFR 3120.1-3. [see EA Section 3.2.2].

Given the information available to the agency, BLM can only analyze the reasonably foreseeable GHG emissions from the lease sales and other reasonably foreseeable actions: as BLM disclosed in the EAs, future development of the leases is speculative. As such, any analysis of GHG emissions and future development involves a degree of uncertainty. To be conservative, the analysis of impacts assumes that all of the lands will be developed at some time during the initial 10-year life term and subsequently held by production. This "held by production" assumption necessarily assumes that (1) each lease will actually be sold and a lease issued and (2) that the leases hold economically and technically recoverable reserves based on current understanding of reservoir environmental conditions. There is no guarantee that any or all of the aforementioned actions will occur, but because the lands are being made available for competitive lease under the Proposed Action, for purposes of this analysis it is assumed that the lands will be developed to their full RFD.

Additional environmental analysis is required prior to any development. This later analysis of proposed development will consider the technical aspects of such proposals in the context of those future, existing conditions. To the extent that GHGs can influence changes in climates across various scales, the EA and the associated Specialists Report on GHGs has analyzed and disclosed those relationships. As detailed in the Specialists Report on GHGs, which BLM incorporated by reference, the BLM also looked at other tools to inform its analysis, including the MAGICC model (see Section 7.0 of the Specialists Report). This model run suggests that "30-plus years of projected federal emissions would raise average global surface temperatures by approximately 0.0158 °C., or 1% of the lower carbon budget temperature target." BLM may apply additional analysis in the future as more tools become available.

Consistent with our response to comments to the argument that the lease sales should be considered together because they are connected actions, BLM maintains that there is no interdependency between the actions as each action is delegated to the Authorized Officer in each administrative BLM unit, subject to the allocation decisions in the Record of Decision for each of the controlling RMPs. Further, the BLM has evaluated the cumulative impacts of projected lease sales based on a 5-year average in the Specialists Report, which would encompass the leasing proposed in this sale.

As of the publication of this EA, 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. Because of the issues raised in this protest, BLM has added additional information to its EAs and FONSI's consistent with our response above (*see* EA Section 3.2.2). The 2020 BLM Specialist Report on GHG Emissions and Climate Trends was incorporated by reference in the Lease Sale EA and provides a detailed discussion and cumulative assessment of Federal oil and gas emissions and climate change impacts. Additionally, the concurrent offering of leases across multiple states 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 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.

BLM oil and gas lease sales are administered on a State Office by State Office basis for important statutory, policy, and administrative reasons, with the respective Director of each State Office acting as delegated authority over sales administered by that office. It is therefore necessary to effective decision making that the NEPA analysis for a lease sale focus on the jurisdictional area of the administering State office.

BLM recognizes the national and global impact potential of greenhouse gas (GHG) emissions and the likewise broad scope of climate change impacts related to them and has therefore prepared annual BLM Specialist Reports on Annual Greenhouse Gas Emissions and Climate Trends. These reports account for current and projected future agency wide GHG emissions related to fossil fuel actions on Public Land, national and global GHG emission trends, and potential climate impacts related to these emissions. The report is specifically referenced in and incorporated into each State Office lease sale NEPA analysis and provides the information necessary to properly assess agency wide, nationwide, and global reasonably foreseeable cumulative impacts of each State Office lease sale.

For these reasons, the above WELC protest is dismissed.

2. BLM’s Assessment of the Significance of Impacts from GHG Emissions and Climate Change is Improper and Unjustified.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

3. BLM Improperly Limits the Context of Significance Analysis.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

4. BLM’s Analysis of Public Health and Safety Impacts from GHG Emissions and Climate Change is Absent or Unsupported.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

5. BLM’s Analysis of Uncertainty is Contradictory.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

6. BLM’s Analysis of Controversy Over Impacts from GHGs is Absent or Unsupported.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

7. BLM’s Analysis of Cumulative Impacts of GHG Emissions is Absent or Unsupported.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

8. BLM’s Analysis of Federal or State Law and Policy is Absent.

BLM Response:

Please see above BLM response to protest point “1. BLM’s FONSI’s for the Proposed Lease Sales Are Inconsistent and Fail to Properly Address the NEPA Intensity Factors”

For these reasons, the above WELC protest is dismissed.

F. BLM’s leasing decisions are arbitrary and capricious and violate NEPA to the extent they rely on unlawful USGS assessments.

BLM Response:

The protest contends that the BLM cannot use the USGS United States Assessments of Undiscovered Oil and Gas Resources in the development of RFD scenarios, even though, as stated in the protest, the BLM is required to consider information from existing oil and gas assessments (including the USGS assessments) in developing the RFDs. The protest does not cite legal decisions or other evidence that the USGS assessment of undiscovered oil and gas resources in the United States is unlawful or statutorily defective. According to the protest, USGS has not provided sufficient updates regarding "the extent and nature of any restrictions or impediments to the development of oil and gas resources", thereby potentially overestimating the availability of these resources. However, the protest does not cite evidence of this occurring, or demonstrate how it may potentially affect an RFD scenario. The RFD is meant to be an estimate, not an exact number of potential oil and gas wells. In addition to considering information from existing oil and gas assessments, RFDs are based on historical drilling, geologic data, resource expertise, and current development in the area.

For these reasons, the above WELC protest is dismissed.

III. FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA)

A. Leasing New Federal Fossil Fuels for Development Would Cause Unnecessary and Undue Degradation that is Prohibited Under FLPMA.

BLM Response:

Undue degradation has been previously defined as “that which is excessive, improper, immoderate or unwarranted” and unnecessary as “that which is not necessary” for an authorized action to occur, in this case the leasing of parcels for potential oil and gas development. The BLM has taken many steps throughout the leasing process to ensure that, if the parcels are leased, undue and/or unnecessary degradation would not occur. While BLM has considered reasonably foreseeable future development, should the leases be issued and development proposed, the BLM will consider whether the proposed action would cause unnecessary or undue impacts from surface disturbance or occupancy of the leasehold as part of that environmental analysis.

If the parcels are leased, and an APD is submitted, the site-specific proposal would be evaluated to ensure that no undue or unnecessary degradation would occur as a result of this development. Implementation of best management practices at the APD stage is the most effective way to ensure that impacts from an oil and gas project do not result in undue or unnecessary degradation. BLM would review the site-specific proposal and identify measures for reducing or eliminating potential sources of undue or unnecessary degradation.

For these reasons, the above WELC protest is dismissed.

B. FLPMA Methane Section.

BLM Response:

BLM is required by FLPMA to take any action necessary to prevent unnecessary and UUD of the lands / resources. UUD means (with respect to methane emissions) methane emissions greater than what would normally occur, or failure to follow best management practices or comply with applicable Federal and State requirements to reduce excessive methane emissions. No UUD or excessive methane emissions are projected to occur as a result of the proposed action as future oil and gas operations on the subject parcels would be required to follow stringent any applicable Federal and State requirements. Following Federal and State requirements and implementing best management practices (required by BLM for project-level NEPA) would leave minimal (~ negligible) levels of uncontrolled methane emissions that are not feasible or practical to control. Using the robust Lease Sale GHG emissions analyses and the 2020 BLM Specialists Report on Annual Greenhouse Gas Emissions and Climate Trends, it was determined that no additional mitigation would be needed in support of the FONSI. The EA provided details for current (or foreseeable upcoming) Federal and State regulations and best management practices that would apply to future oil and gas development and operations, and potential additional emissions controls that could be required as a result of new analysis that informs different projected Federal oil and gas impacts (different than those for the Lease Sale EAs) or new policy.

Further, BLM may regulate emissions in the context of preventing waste, an issue that has recently prompted acute and occasionally conflicting judicial scrutiny. [see *Wyoming v. DOI*, 20-8073 (10th Cir.), and *California Air Resources Board v. Bernhardt*, Nos. 20-16793, 20-16794, 20-16801 (9th Cir.)]. To ensure it regulates within the bounds of the MLA, BLM is considering rulemaking what would detail when and how it will regulate emissions of methane and other gases released by flaring. Some states have a lease notice that is applied to each parcel, which provides: The lessee/operator is given notice that 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, emission inventory development, dispersion modeling or photochemical grid modeling for air quality and/or air quality 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.

For these reasons, the above WELC protest is dismissed.

C. BLM’s Approach to Prioritization of Greater Sage-Grouse Habitat Violates FLPMA.

BLM Response:

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), if disturbance will occur on or off lease, the mineral resources a well might target (oil vs. gas), where water for drilling activities may be obtained (e.g. town water supplies, water well, recycled water from previous drilling activities), or even if fresh water zones will be encountered when drilling. Until there is a specific application that provides more detailed information regarding the proposed development of the Federal mineral estate, more precise analysis is not feasible.

The BLM has considered habitat conservation needs in both PHMA and GHMA and developed alternatives which are reflective of all relevant resource considerations. BLM has also reviewed the parcels in consideration of the November 12, 2021 Report prepared in response to Section 208 of Executive Order 14008. BLM is offering these parcels in conformance with the underlying RMPs and FLPMA’s multiple use mandate and disclosed reasonably foreseeable impacts.

Additionally, BLM Nevada is offering no parcels for lease in the June 2022 lease sale that are in a PHMA or GHMA as designated by the 2015 GRSG AMRA HMA maps.

For these reasons, the above WELC protest is dismissed.

IV. ENDANGERED SPECIES ACT (ESA) AND CLEAN AIR ACT (CAA)

A. BLM Must Consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on the Greenhouse Gas Emissions Caused by Its Leasing

Proposal.

BLM Response:

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. To ensure threatened and endangered species will be addressed prior to any development, the BLM Nevada standard lease notices (NV-B-00-A-LN) are applied to all parcels and notify the prospective lessees that threatened, endangered, or other special status species may now or in the future be found on any parcel. The National Marine Fisheries Service (NMFS) has no jurisdiction over the proposed leasing action, as all parcels in this lease sale are onshore in the State of Nevada. Additionally, the BLM did not receive any comments or letters from USFWS or NMFS for the proposed lease sale.

The cumulative analysis requested is included for informational purposes in section 7.2 of the "2020 BLM Specialist Report on Annual GHG Emissions and Climate Trends" which was incorporated by reference in the lease sale EA. This analysis includes information from the United Nations emissions gap report which shows the difference between global emissions pathways required to limit warming to 1.5C or 2.0C (i.e. carbon budgets) with the anticipated emissions based on national commitments to reduce GHG emissions. However, at this time, the BLM does not have specific guidance, 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.

For these reasons, the above WELC protest is dismissed.

1. Greenhouse Gas Emissions Have Direct, Predictable, and Devastating Effects on Endangered Species and Habitats

BLM Response:

Please see above BLM response to protest point: "A. BLM Must Consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on the Greenhouse Gas Emissions Caused by Its Leasing."

For these reasons, the above WELC protest is dismissed.

2. The BLM's Proposed Leasing Action Clearly Crosses the "May Affect" Threshold for Climate-Threatened Species and Requires Consultation.

BLM Response:

Please see above BLM response to protest point: "A. BLM Must Consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on the Greenhouse Gas Emissions Caused by Its Leasing."

For these reasons, the above WELC protest is dismissed.

DECISION

To the extent that WELC has raised any allegations not specifically discussed herein, they have been considered in the context of the above responses and are found to be without merit. For this reason, and for those previously discussed, WELC's protest of the Sale, Battle Mountain District EA, and FONSI is dismissed, and five parcels were offered for sale on June 30, 2022.

APPEAL INFORMATION

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and Form 1842-1 (enclosed). If an appeal is taken, a notice of appeal and/or request for stay must be filed in writing, on paper, in this office, either by mail or personal delivery within 30 days after the date of service. Notices of appeal and/or request for stay that are electronically transmitted (e.g., email, facsimile, or social media) will not be accepted as timely filed. The notice of appeal is considered filed as of the date our office receives the hard copy and places our BLM date stamp on the document.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) (request) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate office of the Solicitor (*see* 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

If you have any questions regarding this decision, please contact Justin Abernathy, Deputy State Director, Division of Energy and Minerals, at (775) 861-6585.

Justin Abernathy
Deputy State Director, Energy and Minerals
Nevada State Office

Enclosure:

1- Form 1842-1

cc: Center for Biological Diversity
1536 Wynkoop Street Suite #421
Denver, CO 80202

Defenders of Wildlife
1130 17th Street NW
Washington, D.C. 20036

Friends of the Earth
P.O. Box 2333
Boulder, Colorado 80306

Montana Environmental Information Center
P.O. Box 1184
Helena, MT 59624

Sierra Club
2101 Webster St. Suite 1300
Oakland, CA 94612

Barbara Vasquez
P.O. Box 54
Cowdrey, CO 80434

Citizens for a Healthy Community
P.O. Box 1283
Paonia, Colorado 81428

Living Rivers/Colorado Riverkeeper
P.O. Box 466
Moab, Utah 84532

Rio Grande Waterkeeper (NM)
301 N. Guadalupe St., Ste. 201
Santa Fe, NM 87501

Western Watersheds Project
P.O. Box 779
Depoe Bay, OR 97341

WildEarth Guardians
301 N. Guadalupe, Ste. 201
Santa Fe, NM 87501

cc (electronic):
WO310
NVB0000
NVB0100

NVB0200

NV0920 (J. Abernathy)

NV0922 (A. Jensen, F. Kaminer, J. Menghini, J. Estrella)

bcc: Kathryn Brinton, Office of the Solicitor, Pacific Southwest Region,
2800 Cottage Way, Room E-1712, Sacramento, California, 95825
Lease Sale Book June 2022
Reading File: NV-922