

Federal Oil and Gas Leasing In the Rocky Mountain West

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February 4, 2021

Introduction

On January 27, 2021, President Joe Biden issued an [Executive Order on Tackling the Climate Crisis at Home and Abroad](#). One part of this order pauses federal oil and gas leasing while federal land management agencies review leasing and permitting practices, which have been broadly criticized for failing to generate a fair return for taxpayers or address climate change. A recent study by the U.S. Geological Survey shows that federal lands are a big contributor to U.S. emissions. The researchers found that together, coal, oil, and gas produced on federal lands account for approximately 25 percent of the total fossil fuels produced annually in the United States and that, on average, emissions from combustion and extraction of those fossil fuels accounted for 23.7 percent of national carbon dioxide emissions, 7.3 percent methane emissions, and 1.5 percent of nitrous oxide emissions from 2005-2014.

The President's Executive Order was met with harsh criticism from the oil and gas industry and its allies, along with outlandish claims of its impact on jobs, the economy and state revenues. The reality is that the industry is holding millions of acres of leases on federal land across the west, making the immediate impact of the order negligible.

To more fully show the extent of the oil and gas industry's holdings and the minimal impact a leasing pause will have in the near future, Rocky Mountain Wild conducted an analysis of leasing in the Rocky Mountain West. The states included in this analysis are those in the Continental United States with the most federal oil and gas leases. This consists of Colorado, Montana, Nevada, New Mexico, Utah and Wyoming. Arizona was not included in this analysis because there are currently only three parcels leased in the state for a total of about 4,200 acres and there has not been a lease sale in Arizona since September, 2018.

This results of this analysis show that the oil and gas industry currently has millions of acres of leases where they can continue operations during this pause. In addition, in many of these states, interest in leasing has gone down significantly in the last year. This report first presents key results from the analysis for each state. Then it presents tables with information on currently active leases, leasing and oil and gas potential, and lease sale information. Data sources and notes about the analysis are included at the end of this report.

Key Figures by State

Colorado

- Over 2.4 million acres are currently leased with 1.6 million acres on lands with the highest potential for oil and gas development.
- Almost 1.4 million acres leased are not developed.

Montana

- Over 1.5 million acres are currently leased with about 671 thousand acres on lands with moderate to high potential for oil and gas development.
- Over 1 million acres leased are not developed.
- In 2019 over 86 thousand acres of leases were sold. In 2020 that number was down to less than 17 thousand acres.

Nevada

- About 883 thousand acres are currently leased with about 449 thousand acres on lands with moderate to high potential for oil and gas development.
- Over 862 thousand acres leased are not developed.
- In 2019 almost 68 thousand acres of leases were sold. In 2020 that number was down to less than 17 thousand acres.

New Mexico

- Almost 4.3 million acres are currently leased with almost 1.6 million acres on lands with the highest potential for oil and gas development.
- Over 1.1 million acres leased are not developed.
- In 2019 over 58 thousand acres of leases were sold and in 2020 over 70 thousand acres were sold. In 2021 less than 6.7 thousand acres have been proposed to be sold.

Utah

- Over 2.7 million acres are currently leased with over 1.7 million acres on lands with the highest potential for oil and gas development.
- Over 1.1 million acres leased are not developed.
- In 2019 almost 225 thousand acres of leases were sold. In 2020 that number was down to about 60 thousand acres.

Wyoming

- Over 8 million acres are currently leased with over 3 million acres on lands with moderate to high potential for oil and gas development.
- Over 5 million acres leased are not developed.
- In 2019 almost 1.2 million acres of leases were sold. In 2020 that number was down to less than 242 thousand acres.

Analysis Results Tables

Current Leases

The following table shows how many acres are currently leased and how many are currently developed. There is more information about this table in the [Data Sources and Analysis Section](#).

Federal Oil and Gas Leases	Colorado	Montana	Nevada	New Mexico	Utah	Wyoming	Total
Developed Leases (held by production)	1,015,474	521,609	20,647	3,159,268	976,364	3,401,984	9,095,346
Leases Not Developed							
Held by production but not producing (allocated)	761,414	167,011	30,491	726,906	282,291	1,078,642	3,046,755
Not held by production	624,903	850,630	832,011	385,999	1,489,139	4,195,026	8,377,709
Total Not Producing	1,386,317	1,017,641	862,502	1,112,906	1,771,430	5,273,669	11,424,463
Total Leased	2,401,791	1,539,250	883,148	4,272,174	2,747,794	8,675,653	20,519,810

Leases and Oil and Gas Potential

As part of their energy development program, The Bureau of Land Management is required to create Reasonably Foreseeable Development Scenarios for oil and gas leasing for each of their field offices in each state or region. These documents include maps of oil and natural gas development potential. Rocky Mountain Wild has collected the data for oil and gas development potential and these are shown on an interactive map:

<https://tinyurl.com/ogpotential>

Rocky Mountain Wild also analyzed how many acres are currently leased on lands with moderate to high oil and gas development potential and the results of this analysis is shown in the table below. This table shows both developed (producing) and non-developed leases. There is more information about this table in the [Data Sources and Analysis Section](#).

	Colorado	Montana	Nevada	New Mexico	Utah	Wyoming	Total
Current Leases on Moderate Potential Land	160,000	458,000	187,000	1,510,000	510,000	2,160,000	4,990,000
Current Leases on High Potential Land	1,600,000	213,000	262,000	1,570,000	1,710,000	1,180,000	6,540,000
Current Leases on Moderate to High Potential Land	1,760,000	671,000	449,000	3,080,000	2,220,000	3,340,000	11,500,000

Lease Sales

2019 Calendar Year

The following table is a summary of federal oil and gas lease sales in 2019.

State	Total Receipts	Parcels Offered Day of Sale	Acreage Offered Day of Sale	Parcels Receiving Bids	Acreage Receiving Bids
Colorado	\$696,807	97	74,060	71	51,381
Montana	\$2,479,805	339	198,398	127	86,823
Nevada	\$464,054	573	1,070,175	54	67,759
New Mexico	\$45,709,028	109	58,387	109	58,387
Utah	\$9,045,254	286	354,360	176	224,778
Wyoming	\$140,940,467	1,235	1,605,481	1,000	1,195,504
Total	\$199,335,413	2,639	3,360,861	1,537	1,684,631

2020 Calendar Year

The following table is a summary of federal oil and gas lease sales in 2020.

State	Total Receipts	Parcels Offered Day of Sale	Acreage Offered Day of Sale	Parcels Receiving Bids	Acreage Receiving Bids
Colorado	\$2,355,372	117	136,132	96	123,579
Montana	\$292,947	20	16,894	20	16,894
Nevada	\$93,044	56	85,556	13	16,668
New Mexico	\$31,769,663	169	70,539	169	70,539
Utah	\$567,750	69	83,925	48	60,164
Wyoming	\$11,785,634	376	399,024	265	241,870
TOTAL	\$46,864,410	807	792,070	611	529,714

Proposed for Sales in 2021

The following table summarized the parcels proposed to be offered for sale in 2021

State	Parcels Proposed	Acreage Proposed	Quarters
Colorado	131	152,085	Q1 and Q2
Montana	17	11,607	Q1 Only; All Q2 Parcels managed by the Montana State Office are in North Dakota
Nevada	17	17,560	Q1 Only
New Mexico	39	6,665	Q1, Q2, Q3
Utah	9	7,213	Q1 Only
Wyoming	383	483,017	Q1 Only
TOTAL	596	678,147	

Important note: BLM's oil and gas lease sales are a reflection of the industry's demand for new leasing. The above data show that irrespective of a pause on new federal leasing, most states were poised to see far fewer acres leased to industry than in years past. Low industry demand, dwindling desirable federal acres, and other market forces combine to show industry's decline pre-dates any federal actions on oil and gas.

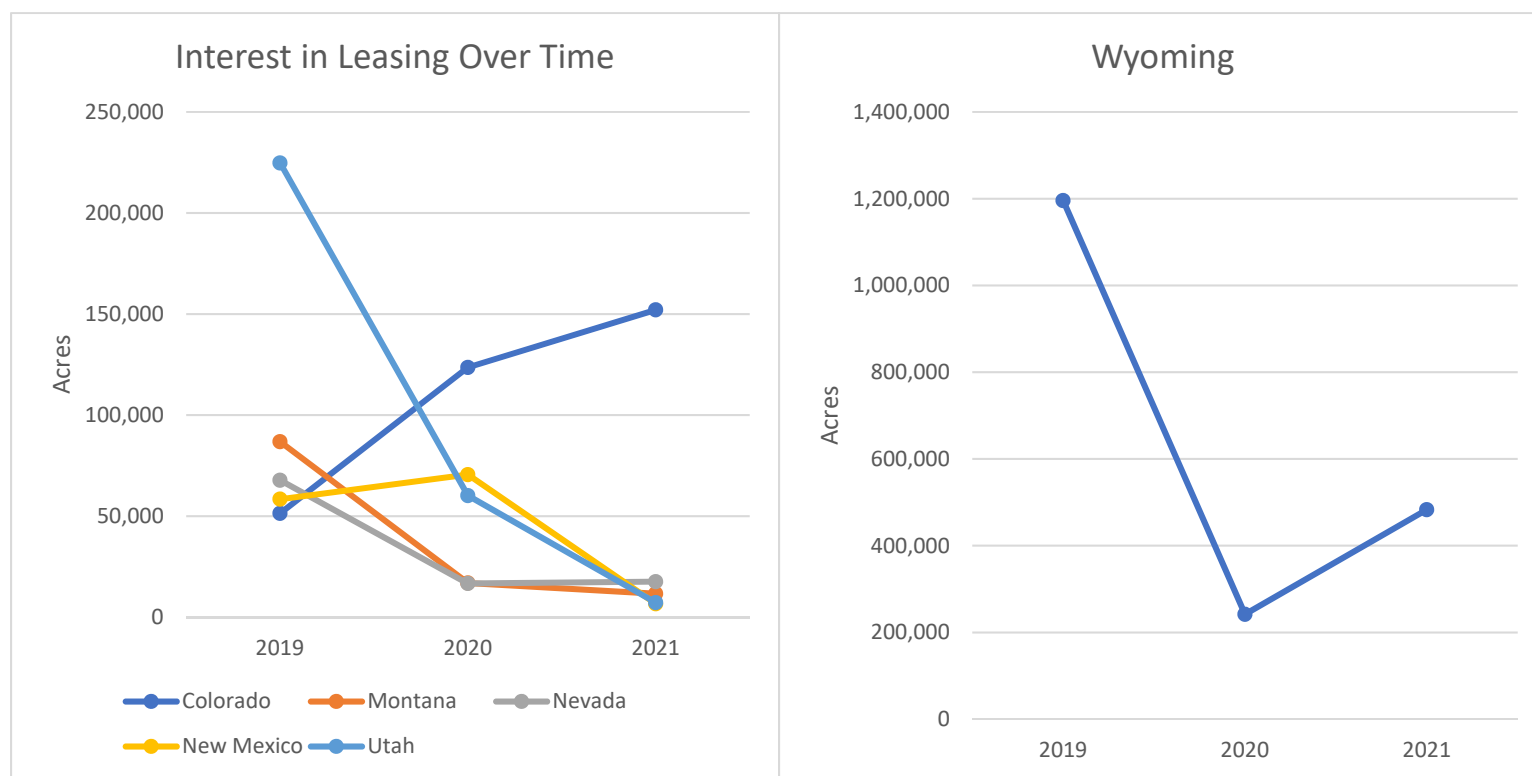
Leases Sold 2017 through 2020

The following table shows leases sold from 2017 through 2020. It also shows how the bonus bids received from the sales could have increased if the minimum bid were increased to \$10 per acre, to better reflect current market conditions.

State	Total Bonus Bids	Parcels Offered Day of Sale	Acreage Offered Day of Sale	Parcels Receiving Bids	Acreage Receiving Bids	Parcels Sold at Minimum Bid	Acres Sold at Minimum Bid	Minimum Bid Increased to \$10 per Acre	New Total Bonus Bids
Colorado	\$10,560,591	460	401,612	383	345,133	104	102,581	\$1,025,810	\$11,381,239
Montana	\$4,592,630	825	442,306	307	181,063	92	48,919	\$489,190	\$4,983,982
Nevada	\$909,382	1,379	2,569,295	145	224,798	108	187,963	\$1,879,630	\$2,413,086
New Mexico	\$1,250,463,595	614	286,235	613	286,075	9	2,130	\$21,300	\$1,250,480,635
Utah	\$22,731,628	731	997,741	507	691,624	169	240,174	\$2,401,740	\$24,653,020
Wyoming	\$439,193,230	2,784	3,135,887	2,361	2,474,852	416	545,856	\$5,458,560	\$443,560,078
TOTAL	\$1,728,451,056	6,793	7,833,076	4,316	4,203,545	898	1,127,623	\$11,276,230	\$1,737,472,040

Interest in Leasing Over Time

The following chart shows the acreage of leases sold in 2019 and 2020 and the acreage proposed to be sold in 2021 so far. Overall, there's a clear decline in interest from the oil and gas industry in new leases on federal land, which is particularly striking in New Mexico, where federal acreage has attracted [intense interest](#) from oil and gas companies in recent years. [Analysts argue](#) that financial and market headwinds facing the industry are likely to drive production to the most productive oil and gas fields, like the Permian Basin. This may explain industry's waning interest in development on federal lands elsewhere in the west, but it also raises the question- why isn't the industry more interested in federal land in New Mexico? The answer may be that industry already holds the valuable acreage in the state and is confident they don't need more, as [several companies have said](#).



Data Sources and Analysis

All of the data used in this analysis was based on reports, maps, and geospatial data from the United States Department of the Interior Bureau of Land Management (BLM). BLM manages leasing publicly-owned oil and natural gas, primarily on public lands.

Current Leases

The data for current leases is from the BLM Land & Mineral System Reports system (<https://reports.blm.gov/reports/LR2000/>) run on 12/21/2020 and attributes in the BLM National Oil and Gas Active Leases geospatial data from BLM Navigator (<https://navigator.blm.gov/>) dated 12/9/2020.

The acreage for *developed leases* is the acreage of leases with the status *Held by Production – Actual*. These are leases where the lease holder has informed the BLM that there is one or more well on the lease that is producing oil or natural gas. When a lease is Held by Production, the lease holder can renew the lease indefinitely, until it is no longer producing. Leases that are not Held by Production expire after 10 years. In addition to the *Held by Production – Actual* status, leases can also have the status *Held by Production – Allocated*. That status also allows a lease to be renewed indefinitely. Those leases do not have producing oil or natural gas wells but have been grouped together with other leases that are producing in a *Unit* approved by the BLM. For the purpose of this report, leases that are not held by production and or leases that are *Held by Production – Allocated* are considered not to be developed.

Contact Rocky Mountain Wild (info@rockymountainwild.org) for more information about the LR2000 queries used to determine the current leases and the leases with *Held by Production – Actual* and *Held by Production – Allocated* statuses.

Leasing Oil and Gas Potential

Oil and Gas Development Potential is from BLM Reasonable Foreseeable Development Scenarios developed at the Field Office level. This data is then used by the agencies when planning and assessing the impacts of oil and gas development. Note that different BLM offices may classify potential differently and that some offices have updated their potential information more recently than others.

The data for oil and gas potential used in this report and shown on the associated interactive map was provided either by BLM or state agencies or the data was created by Rocky Mountain Wild by digitizing maps in the Reasonable Foreseeable Development Scenario documents. BLM National Oil and Gas Active Leases geospatial data is from BLM Navigator (<https://navigator.blm.gov/>) dated 12/9/2020.

Contact Rocky Mountain Wild (info@rockymountainwild.org) for more information about the data sources for the Oil and Gas Development Potential.

Lease Sales

The data for the 2019 and 2020 lease sales was compiled from the BLM Oil and Gas Statistics (<https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/oil-and-gas-statistics>) for sales through September 2019 and from lease sale results (<https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing> and <https://eplanning.blm.gov/eplanning-ui/home>) for sales from September 2019 through December 2020. BLM provided the following definitions for the columns in the 2019 and 2020 Lease Sale Tables:

- **Total Receipts:** The total dollars generated from the Competitive Oil and Gas Lease Sale. This includes bonus bids, first-year rentals, and administrative fees.
- **Parcels (and acreage) offered day of sale:** The number of parcels (and acreage) that were offered for lease at the competitive auction.
- **Parcels (and acreage) receiving bids:** The number of parcels (and acreage) that received bids and sold at the auction.

Note that the Total Receipts for the Wyoming Sales is estimated because some of the Sale Results reports for Wyoming do not provide that data.

The data for 2021 Proposed Sales is from the most recent Scoping or Environmental Assessment documents provided for upcoming sales as of January 27, 2021. These documents are found on the BLM National NEPA Register – ePlanning site (<https://eplanning.blm.gov/eplanning-ui/home>) as referenced from the Regional Oil and Gas Lease Sale sites (linked to from <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing>).

Oil and gas parcels are offered for lease through an auction process. Companies and individual bid competitively on some or all of the parcels offered. Under current rules, the lowest amount that can be bid is \$2.00 per acre. This minimum bonus bid amount has not changed since 1920. The table Leases Sold 2017 through 2020 Section shows the number of parcels and acreage offered and sold along with the number of parcels and acreage sold at the minimum bid. Efforts to update the rules for oil and gas leases have included proposals to increase the minimum bonus bid to \$10 per acre. This table also shows approximately how much more revenue would have been raised if the same parcels had been sold with a minimum bonus bid of \$10 per acre. Note that this figure only addresses parcels sold at the minimum bid and does not take into account parcels sold for more than the minimum bid but less than \$10 per acre.

One legislative proposal to modernize the federal government’s oil and gas fiscal policies was introduced as [H.R. 4364 - Taxpayer Fairness for Resource Development Act of 2019](#).

Analysis done for [Center for Western Priorities’ Oil and Gas Leasing Dashboard](#) contributed to this report.