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Potential State Impacts of a Pause on Federal Onshore Oil and Natural Gas Leases

On January 27, 2021, President Biden signed Executive Order (E.O.) 14008, *Tackling the Climate Crisis at Home and Abroad*. Among other actions, this E.O. instructs the Secretary of the Interior (SOI) to "pause new oil and natural gas leases on public lands or in offshore waters pending completion of a comprehensive review and reconsideration of Federal oil and gas permitting and leasing practices." This E.O. was preceded by Secretarial Order (S.O.) 3395, issued by the Department of the Interior on January 20, 2021. The S.O. suspends certain delegated authorities to bureaus and offices for 60 days, including the authority to issue an authorization, including "a lease, amendment to a lease, affirmative extension of a lease, contract, or other agreement, or permit to drill"; the authority to authorize such actions is retained in a number of indicated positions.

The federal onshore mineral estate is approximately 710 million acres; much of this is open to mineral development, pursuant to various laws and authorities. Development of these resources contributes to total U.S. energy production: in 2019, approximately 6.1% of crude oil and 9.6% of natural gas production (percent of total U.S. production) came from onshore federal lands.

The SOI is authorized by the Federal Land Policy and Management Act (FLPMA), codified at 43 U.S.C. §§1701 et seq., to identify suitable uses of public lands, including if lands are suitable for mineral development. The Mineral Leasing Act of 1920 (MLA), codified at 30 U.S.C. §§181 et seq., requires onshore oil and natural gas lease sales to occur quarterly if suitable parcels are available.

Various interested parties have raised questions regarding the impacts of the EO's leasing pause, including questions of the severity of impacts on oil and natural gas production and state revenues from federal leases. Reviewing information related to federal onshore leases may assist in the discussion of the potential impacts of the leasing pause.

Potential Impacts of the Leasing Pause on Oil and Natural Gas Production

The leasing pause could affect a number of states with varied intensity. In 2019, 24 states produced some oil from federal onshore leases and 27 states produced some natural gas from federal onshore leases. Although bringing any lease (federal or nonfederal) into production depends on many factors unrelated to the leasing pause, this discussion focuses on how a temporal gap in new leases could affect production over time.

Some data suggest that the potential impacts of the pause on new leasing would not occur for years, as the completion of new wells on existing leases could continue to bring new production to market. The Bureau of Land Management (BLM) indicates that over 14,000 leases are not in producing status: out of 38,294 oil and gas leases, 24,127 were in producing status in FY2019. Bringing a federal lease into production can take years, and full production from each lease typically requires multiple wells. BLM indicates that 1,260 wells were completed in FY2019.

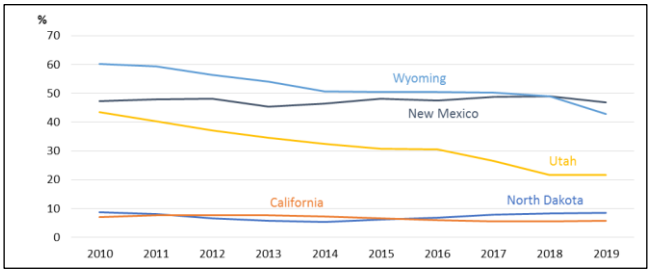
Some might assert that the non-producing leases represent resources that are not presently economical to develop, and that new federal leases (in areas with expected favorable economics) are necessary to avoid declines in production. Typical oil and natural gas wells under existing leases are drilled into shale formations and are completed using hydraulic fracturing. Such wells experience high initial levels of production, which decline rapidly over the first few years. If no new leases are signed and if relatively fewer new wells are completed on existing leases, production declines could result from the geophysical characteristics of hydraulically fractured wells.

Variation in Production for Selected States

Reviewing production contributions from some states with federal leases can inform an understanding of potential impacts to these and other states. In the two figures below, the five states shown for each commodity were the top producers of that commodity from federal leases in 2019 and the nine previous years.

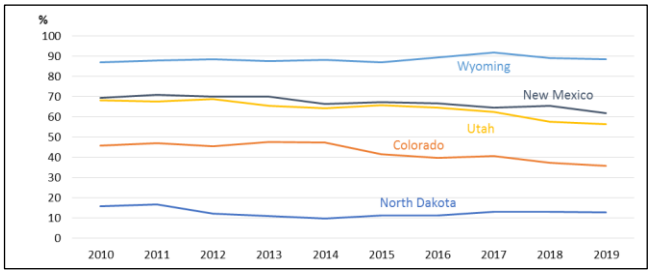
Figure 1 and **Figure 2** depict the top producing states' production from federal leases as a percent of that state's total production for oil and natural gas, from 2010 to 2019. The data generally indicate slow moving trends that are somewhat flat to negative; the ranking among these states changes little over the 10 years shown in both figures.

Figure 1. State's Oil Production from Federal Leases as a Percent of State's Total Oil Production



Source: CRS calculations using data from the Office of Natural Resources Revenue (ONRR) and the Energy Information Administration (EIA).

Figure 2. State's Natural Gas Production from Federal Leases as a Percent of State's Total Natural Gas Production



Source: CRS calculations using data from ONRR and EIA.

Two main factors contribute to the data shown in both figures: geology and the federal mineral estate. A given state's oil and natural gas production is greatly affected by its geology, and production from federal leases requires that any suitable geologic formation lies within the federal mineral estate. The locations of geologic formations in the United States suitable for oil and natural gas development using current technology fall predominantly outside the federal mineral estate. Approximately 24 million acres of suitable geologic formations (shale plays) fall within the federal mineral estate (i.e., 10% of onshore shale plays); the amount of suitable area varies greatly from state to state.

Potential Impacts on State Budgets

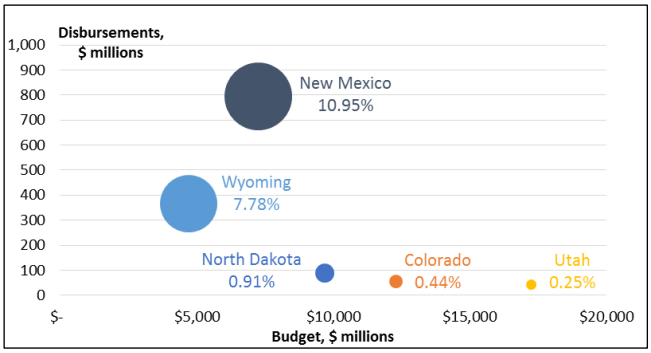
One concern raised by some states regards the potential for the leasing pause to reduce state revenues. States, other than Alaska, receive 49% of the revenues collected from federal onshore oil and natural gas leases. If the leasing pause leads to reduced production, royalty revenues would decline, reducing disbursements to states. Royalties are assessed on the value of the commodity produced and resulted in 95% of total federal revenues from onshore oil and gas leases in FY2020.

Figure 3 highlights contributions to state budgets from disbursements of federal oil and natural gas lease revenues. For five of the six states included in the previous two figures, this figure shows (for the states' FY2020) disbursements, budgets, and percentage contributions to the budget from the disbursements. New Mexico, which is the largest recipient of federal disbursements from oil and natural gas leases, is also the state with the greatest share of its budget (10.95%) stemming from these revenues. Wyoming is the only other state shown with more than 1% of its state budget (7.78%) originating from these disbursements. The potential impacts on other states, including those not included in this figure, would vary, but the impacts would likely be less than the impacts on these top producing states.

The one-year time period portrayed in **Figure 3** includes some impacts from the COVID-19 pandemic. These impacts could include reduced disbursements and reduced state budgets, among others.

In addition to the budget contributions these disbursements represent, states can derive revenue streams from activities related to federal oil and natural gas leases. Examples include severance taxes on production, taxes on corporations working in the sector, and income taxes on employment in the sector.

Figure 3. Federal Onshore Oil and Gas Lease Revenue Contributions to Selected State Budgets



Source: CRS calculations using data from ONRR and EIA.

Notes: The area of the circle represents the percentage of the state's budget from disbursements from federal oil and natural gas leases (also noted in data label text). All data are for the period July 2019 to June 2020. Data for California (not shown) are Budget: $127 billion; Disbursements: $31 million; and Percentage: 0.02%.

Potential Options for Congress

The leasing pause and the potential for associated impacts raise a number of options Congress could consider. Some potential options include:

Status Quo. As the potential impacts related to the leasing pause generally have yet to materialize, Congress could wait for such impacts to materialize before determining if congressional action is needed. Similarly, Congress could hold hearings or commission studies in advance of any impacts with the intent of assessing the timing and severity of the potential impacts.

Mitigate Potential Impacts. Congress could create a program to assist states potentially impacted by the leasing pause. Such a program, for example, could be structured to provide benefits only if potential impacts cross an indicated threshold. Alternatively, benefits could be determined by a formula incorporating historical revenue (similar to the Secure Rural Schools program, 16 U.S.C. §§7101-7153, which makes payments to counties based in part on historical revenues generated on certain federal lands).

Amend Related Laws. Congress sometimes considers amendments to the MLA and FLPMA. Congress could consider options such as amending the MLA to allow less frequent or to require more frequent lease sales, or amending FLPMA to rescind or strengthen the authority of the SOI to consider the suitability of lands for certain uses.

See also CRS Report R46537, *Revenues and Disbursements from Oil and Natural Gas Production on Federal Lands*, by Brandon S. Tracy.

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