

The Consequences of a New Leasing Ban on Federal Lands and Waters

Prepared for the American Petroleum Institute
Prepared By OnLocation, Inc.

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Outline

- Objective of This Study
- Background: Biden Executive Order
- Prior Study: Select Major Takeaways
- Approach/Key Assumptions
- Impacts of Moratoriums: Select Takeaways
- Caveats and Limitations

Objective of This Study

The goal of this effort is to provide an **impact analysis** of the moratorium on oil and natural gas leasing on Federal lands and waters using the results of the previous study “The Consequences of a Leasing and Development Ban on Federal Lands and Waters” September 2020

Background: Biden Executive Order

- The Biden Administration's Executive Order on Tackling the Climate Crisis at Home and Abroad ("Executive Order") indefinitely suspends the federal oil and gas leasing program. The Executive Order **imposes a moratorium** on any new oil and gas lease sales of federal land and water, to the extent consistent with applicable law, as the President's Administration reviews the program. The moratorium suspends new federal oil and gas leasing activity **by an unknown amount of time**.
- For purposes of this analysis, we developed two scenarios:
 - Moratorium lasting **4 years**
 - Moratorium lasting **8 years**

Study of Leasing AND Development Ban Projected 2 MMB/D Of Additional Oil Imports And The Peak Loss Of 1 Million Jobs

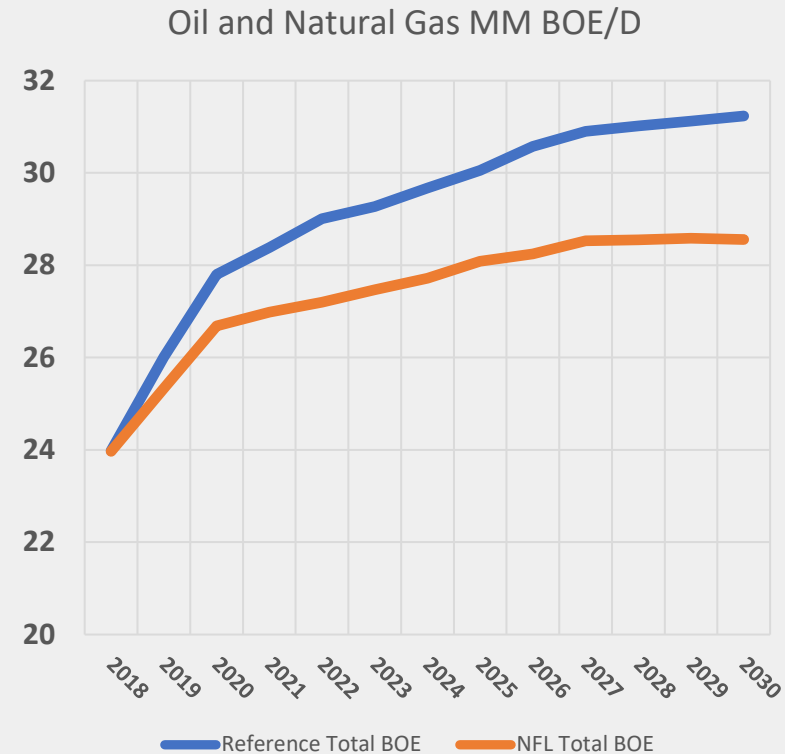


Projections from publicly-available information and OnLocation analysis

Select Major Takeaways

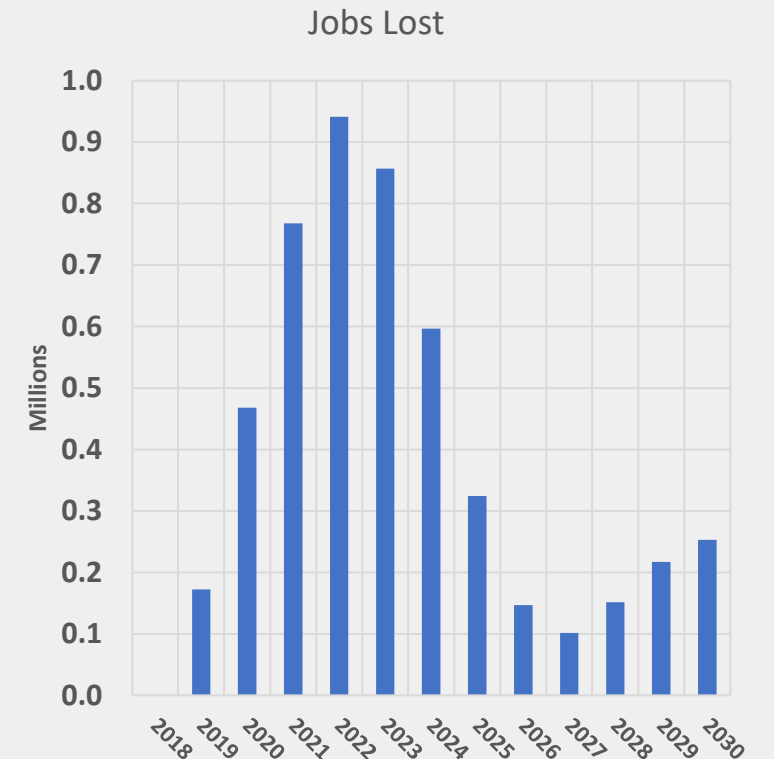
- Net Imports Of Crude Oil Rise by **2 MMB/D by 2030**
- Net Exports Of Natural Gas **Decrease by 0.8 TCF by 2030**
- Offshore Oil And Gas Production Are **Down By 44 And 68 Percent in 2030**, Respectively
- GDP Cumulative Decline Totals \$0.7 Trillion (\$2018)
- Relative To The Reference Case In 2022, **Job Losses Peak Around 1 Million And Over The Forecast Average 416,000 Jobs** Lost
- Power sector CO₂ emissions increase and keep rising such that by 2030 the total increase is **88.5 MMT** or a 5.5 percent higher

Energy Production



AEO 2019 Reference Case

Changes in Employment



Approach

This analysis makes several assumptions regarding the negative impacts on production of a leasing moratorium (a temporary leasing ban):

- Drilling continues on current leases
- Production goes down as output on existing leases decline and the inventory of undrilled leases is used up
- The longer the moratorium lasts, the more the impacts would accumulate and approach those of a permanent leasing and development ban
- Production impacts can be scaled and distributed over time in comparison to the prior study
- Job impacts can be derived based on the estimated change in production
- Other impacts can be estimated based on the production and job impacts

Moratoriums projected to result in a decline of 1.7 MM BOE/D energy production and 340,000 lost jobs in 2030 and increased CO2 emissions



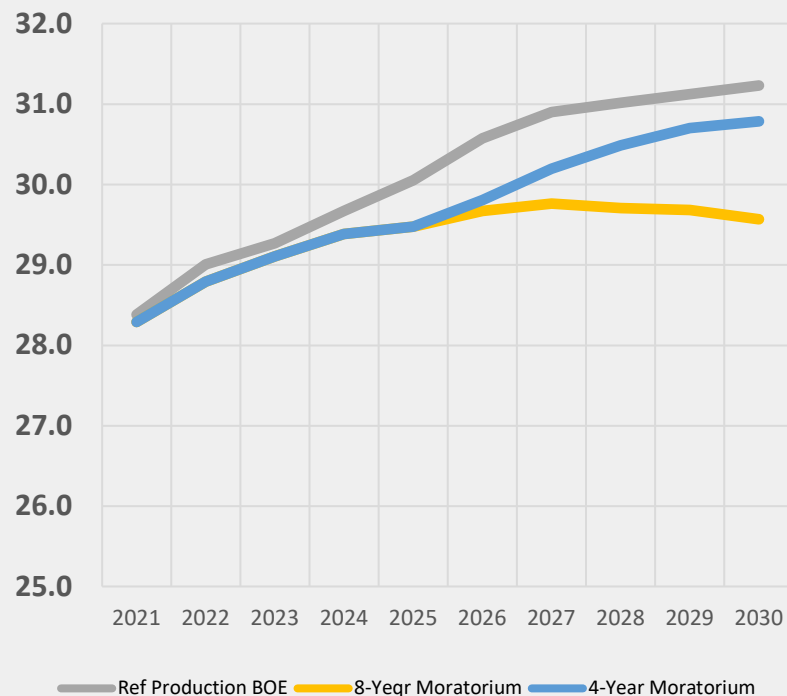
Projections from publicly-available information and OnLocation analysis

Updated Projections

- A Ban On New Federal Leasing For **8 Years** Results In A Decline Of **1.7 MMBOE/D** Of Energy Production And Eliminate Nearly **340,000 American Jobs By 2030**
- A Ban On New Federal Leasing For **4 Years** Results In A Decline Of **1.0 MMBOE/D** Of Energy Production In 2025 And Eliminate Nearly **157,000 American Jobs By 2025**
- Net Imports Of Crude Oil Rise by **1 MMB/D by 2030** With Associated Increased Payments To Foreign Energy Suppliers
- GDP Cumulative Decline Totals **\$400 Billion** (\$2018)
- Reductions In Natural Gas Production and Available Natural Gas Supply Will Lead To **Higher Coal-fired Generation And Associated CO2 Emissions**

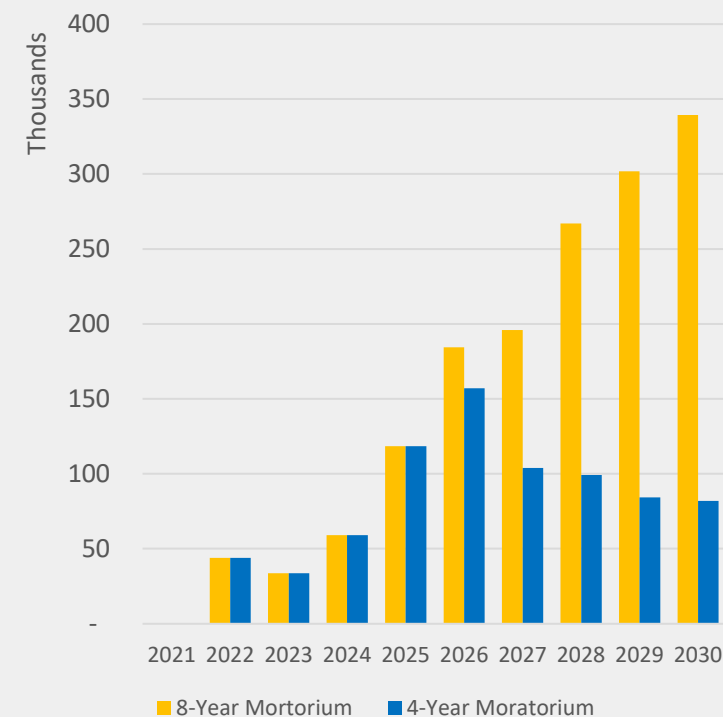
Energy Production

Oil and Natural Gas Production (MM BOE/D)



Changes in Employment

Jobs Lost



Moratorium lasting 4 Years are projected to result in 157,000 jobs lost in 2026

Moratorium lasting 8 Years are projected to result in 340,000 lost jobs in 2030



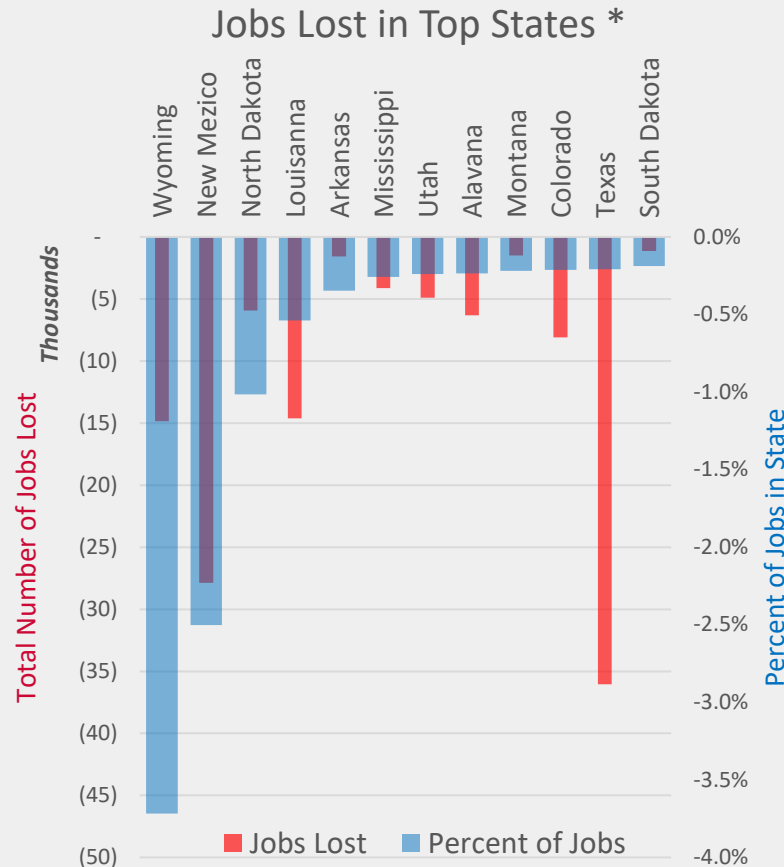
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Updated Projections

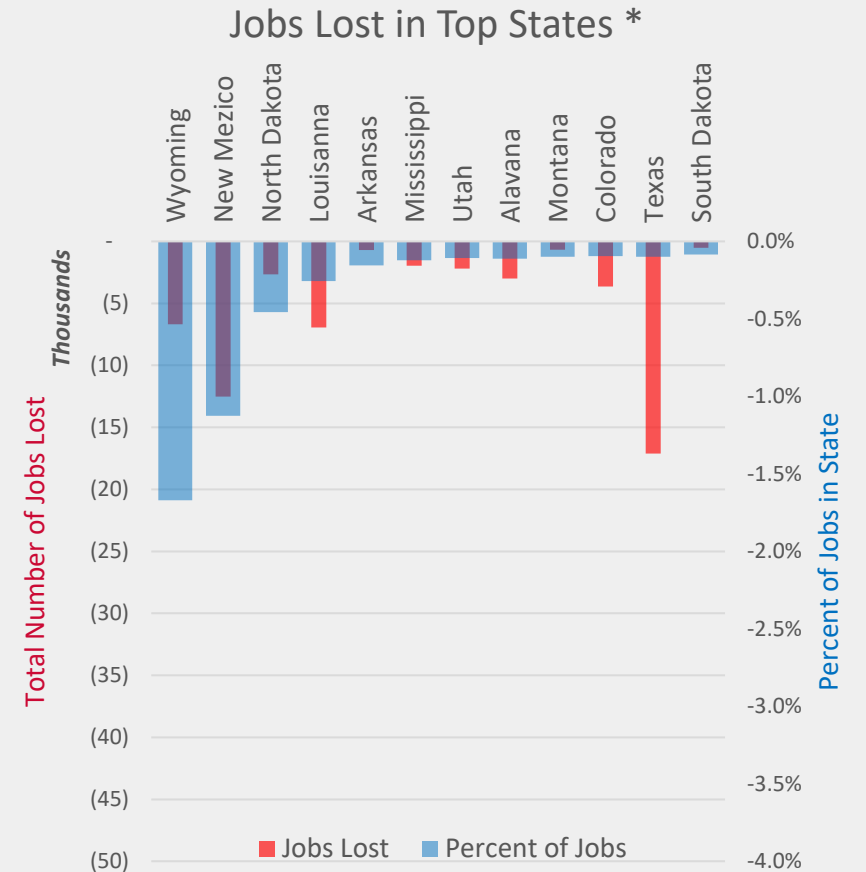
- A ban on new federal leasing would impact Wyoming, New Mexico, and North Dakota **disproportionately**
- These 3 states stand to lose a combined total of **20,000 jobs** and **50,000 jobs** under the 4-Year and 8-Year Moratoriums, respectively, which is a **much greater portion** of their employment than in other states

* This analysis used the same methodology as in the prior study to allocate job losses to the individual states.

Jobs Lost in 2030 8-Year Moratorium



Jobs Lost in 2026 4-Year Moratorium



Caveats and Limitations

- Prior study was based on AEO 2019 Reference Case
- Value is measured as the difference between scenarios
- Jobs impacts of prior study included the full integrated modeling effects of increases in energy prices, changes in personal income, among **many** other factors, which are beyond the scope of this study
- Energy markets (supplies and demand) have been seriously disrupted by the COVID19 pandemic which is not reflected in this analysis
- See **Study Notes** included in prior study