Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the NM Legislature. The LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

Current and previously issued FIRs are available on the NM Legislative Website (www.nmlegis.gov).

FISCAL IMPACT REPORT

	Sedillo Lopez / Roybal Caballero	ORIGINAL DATE LAST UPDATED	02/11/21 HB	
SHORT TITL	E Prohibit New Frac	SB	149	
		ANALYST	Iglesias	

REVENUE (dollars in thousands)

Estimated Revenue					Recurring or	Fund		
FY21	FY22	FY23	FY24	FY25	Nonrecurring	Affected		
*	(\$699,175.0)	(\$1,274,115.0)	(\$1,556,240.0)	(\$1,784,565.0)	Recurring	General Fund		
*	(\$170,825.0)	(\$292,635.0)	(\$374,490.0)	(\$445,695.0)	Recurring	Severance Tax Bonding Fund Revenue		
*	(\$536,545.0)	(\$717,430.0)	(\$852,815.0)	(\$895,845.0)	Recurring	Land Grant Permanent Fund (royalty contribution)		
*	(\$18,095.0)	-	(\$46,920.0)	-	Recurring	General Obligation Bonding Capacity		
*	(\$226,290.0)	(\$462,805.0)	(\$561,330.0)	(\$640,130.0)	Recurring	Local Governments		
*	(\$2,200.0)	(\$2,200.0)	(\$2,200.0)	(\$2,200.0)	Recurring	NMED Permit Fee Fund		
*	(\$1,653,130.0)	(\$2,749,185.0)	(\$3,393,995.0)	(\$3,768,435.0)	Recurring	TOTAL		

Parenthesis () indicate revenue decreases

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY21	FY22	FY23	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
Department of the Environment	-	\$1,150.0	\$650.0	\$1,800.0	Recurring	General Fund
Energy, Minerals, and Natural Resources Department	-	\$310.0	\$315.0	\$625.0	Recurring	General Fund
Office of the State Engineer	-	\$250.0	\$250.0	\$500.0	Recurring	General Fund
Department of Agriculture	-	Moderate	Moderate	Moderate	Recurring	General Fund
Department of Health	-	Moderate	Moderate	Moderate	Recurring	General Fund
Department of Transportation	-	Moderate	Moderate	Moderate	Recurring	General Fund
Indian Affairs Department	-	\$60.0	\$60.0	\$120.0	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

May conflict with the General Appropriation Act of 2021. Relates to HB50, HB136, HB181, and SB86.

SOURCES OF INFORMATION

LFC Files

Responses Received From

Energy, Minerals and Natural Resource Department (EMNRD)
Department of the Environment (NMED)
Department of Transportation (DOT)
Office of the State Engineer (OSE)
State Investment Council (SIC)
Attorney General's Office (NMAG)
Workforce Solutions Department (WSD)
Indian Affairs Department (IAD)
Workers Compensation Administration (WCA)
State Land Office (SLO)

SUMMARY

Synopsis of Bill

Senate Bill 149 amends the Oil and Gas Act by including a definition for "hydraulic fracturing" and prohibiting the issuance of new permits issued by the Energy, Minerals and Natural Resources Department (ENMRD) that allow hydraulic fracturing for the purpose of extracting oil or natural gas. The bill repeals this provision on June 1, 2025.

Furthermore, this bill adds annual reporting requirements for EMNRD on the number of active permits and applications received related to oil and gas development that involves hydraulic fracturing, and trends regarding methane and greenhouse gas emissions. The bill also requires additional annual reporting from various state agencies for the number of workers employed by the industry and the number injured and environmental and public health implications. Included in the annual reports would be recommendations for legislation and funding for research.

There is no effective date of this bill. It is assumed that the effective date is 90 days following adjournment of the Legislature.

FISCAL IMPLICATIONS

The LFC brief on the *December 2020 Consensus Revenue Estimate* reported considerable dependence on revenues from the oil and gas industry. Direct revenues from this industry – including severance and production taxes, bonuses and royalty payments on state and federal lands, and gross receipts taxes (GRT) – make up about 30 percent of the entire FY20 general fund revenue estimate. Additionally, the state receives other non-general fund revenue from the extractives industry, include royalties from state lands (to the land grant permanent fund), the severance tax (to the severance tax bonding fund), and ad valorem taxes that contribute to general obligation bonding capacity.

Substantial changes to how this industry operates in New Mexico – such as a temporary moratorium on hydraulic fracturing – would cause severe revenue losses. Without a source of revenues to replace these losses, this bill would have a substantial negative budgetary impact. The following table identifies the estimated revenue impact by funding source.

Although the bill halts the issuance of new permits for hydraulically fracked wells, and would not affect existing permits, the nature of fracked oil and gas wells will lead to sharp production declines if not offset by the completion of new wells. Production from a newly fracked well peaks within the first three months of completion, then rapidly decline over the next two years. If no new wells were brought online, New Mexico's oil production would decline about 14.8 percent in the first two months, and natural gas production would decline about 7.5 percent. After 12 months, oil and natural gas production would fall about 40 percent and 22 percent, respectively. By June 2025, the bill's proposed end date for the moratorium, oil production we be about 70 percent below current levels, and natural gas production about 45 percent below current levels. This effect is demonstrated in the attachment.

The fiscal impact table uses oil and gas price and volume assumptions from the December 2020 Consensus Revenue Estimate as a starting point. The December 2020 consensus estimate assumed 340 million barrel of oil production in FY21 and 1,760 billion cubic feet of natural gas production; these estimates grew to 370 million barrels of oil and 1,815 billion cubic feet of natural gas by FY25. The fiscal impact estimate assumes no change in commodity prices and applies the production decline rates for oil and gas wells using data from the Energy, Minerals and Natural Resources Department (EMNRD). Using the EMNRD data, oil production in FY22 would fall to about 220 million barrels in FY21 due to the natural decline rate, and natural gas production would fall to about 1,575 billion cubic feet. By FY25, the natural decline rates would reduce the state's oil production to about 120 million barrels and natural gas production to about 1,105 billion cubic feet. Notably, this assumes an effect on both state and federal production; however, EMNRD points out a potential preemption conflict if this bill's moratorium were to apply to federal or tribal lands (see discussion in Significant Issues section).

The volume changes are then used to estimate the impact on severance taxes (to the general fund and severance tax bonding fund), federal and state royalties (to the general fund and the land grant permanent fund), and ad valorem taxes (to local governments and general obligation bonding capacity).

The estimates also use econometric models to estimate the impact on state and local gross receipts tax (GRT) collections. Notably, GRT and Eddy County, Lea County, San Juan County, and out-of-state receipts are highly dependent on drilling activity in those regions, and would therefore experience significant declines if the state were to disallow new drilling to occur. While the fiscal impact estimate does not attempt to quantify the effect on other regions of the state, it is possible that gross receipts in other counties could experience declines from a reduction in activity associated with oil and natural gas drilling.

Lastly, the fiscal impact table uses personal income tax collections for oil- and gas-related employment as estimated by the New Mexico Tax Research Institute, and assumes declines in

¹ New Mexico Tax Research Institute, "State and Local Revenue Impacts of the Oil and Gas Industry, Fiscal Year 2020 Update",

those revenues due to potential employment losses (see discussion in Significant Issues section). Because of the steep natural decline rate of existing wells and due to lost revenues on drilling activity, the estimated fiscal impact in the first fiscal year is about \$1.7 billion, growing to about \$3.8 billion by FY25. Notably, this estimate does not attempt to quantify any changes to industry behavior and decision-making in reaction to the new provisions.

Below is a summary of the estimates by funding source:

Selow is a summary of the estimates by funding source.								
Estimated Minimum Impact (dollars in millions)								
General Fund		FY22		FY23		FY24		FY25
Oil & Gas School Tax (includes reserve distributions)	\$	(145.5)	\$	(251.4)	\$	(323.0)	\$	(385.3)
Oil & Gas Conservation Tax	\$	(7.8)	\$	(13.2)	\$	(16.9)	\$	(20.1)
Natural Gas Processors Tas	_\$	(1.4)	_	(0.0)	_		\$	0.0
Gross Receipts Tax	\$	(284.7)	\$	(582.4)	\$	(682.7)	\$	(759.2)
Federal Mineral Leasing (Royalties & Bonuses)	\$	(106.5)	\$	(271.1)	\$	(375.0)	\$	(458.4)
State Land Office Bonuses	\$	(15.0)	\$	(15.0)	\$	(15.0)	\$	(15.0)
Personal Income Tax	\$	(138.2)	\$	(140.9)	\$	(143.7)	\$	(146.6)
Total General Fund	\$	(699.2)	\$	(1,274.1)	\$	(1,556.2)	\$((1,784.6)
Severance Tax Bonding Fund (Severance Tax)	\$	(170.8)	\$	(292.6)	\$	(374.5)	\$	(445.7)
General Obligation Bonding Capacity	\$	(18.1)	\$	-	\$	(46.9)	\$	-
Land Grant Permanent Fund (SLO Royalties)	\$	(536.5)	\$	(717.4)	\$	(852.8)	\$	(895.8)
TOTAL STATE REVENUES	\$	(1,424.6)	¢	(2,284.2)	¢	(2 920 E)	œ /	(3,126.1)
TOTAL STATE REVENUES	Ψ	(1,424.6)	Φ	(2,204.2)	Ψ	(2,630.5)	Φ(3, 126. 1
Local Governments								
Gross Receipts Tax	\$	(172.2)	\$	(352.2)	\$	(412.8)	\$	(459.0)
Ad Valorem Taxes	\$	(54.1)	\$	(110.6)	\$	(148.5)	\$	(181.1)
Total Local Government	\$	(226.3)	\$	(462.8)	\$	(561.3)	\$	(640.1)
					_			
TOTAL REVENUE CHANGE	\$	(1,650.9)	\$	(2,747.0)	\$	(3,391.8)	\$((3,766.2)

Note: Gross receipts tax estimates include effects on Eddy and Lea Counties and out-of-state receipts. Estimates excludes permit fees and other state and local tax collections.

Separately, the Department of the Environment (NMED) states that if new drilling permits for hydraulic fracturing are halted pursuant to this bill, NMED will experience significant fiscal implications. NMED's Air Quality Bureau relies upon special revenue funds (permit fees) from the processing of air permit applications to fund a variety of state and federally mandated requirements and programs under the federal Clean Air Act. NMED receives approximately \$2.2 million from oil and natural gas production and from processing oil and gas facility permit applications each year, which helps fund the air mandates and programs required for New Mexico and approved by the United States Environmental Protection Agency (USEPA).

SIGNIFICANT ISSUES

The State Land Office notes the vast majority of new wells drilled in the Permian Basin are

hydraulically fractured wells. Thus, halting the issuance of APDs likely would significantly reduce revenues from oil and gas production, particularly over the long run if the prohibition on permits for hydraulically fractured wells remains in place.

The Energy, Minerals, and Natural Resources Department (EMNRD) states this bill directs EMNRD to halt "the issuance of new permits allowing hydraulic fracturing for the purpose of extracting oil or natural gas." However, the department's Oil Conservation Division (OCD) does not issue "hydraulic fracturing" permits, but instead processes Applications for Permit to Drill (APDs) for new wells. The division's primary objective in the issuance of APDs, and other administrative decisions related to drilling, are to insure the protection of correlative rights and the prevention of waste. Hydraulic fracturing is a completion process in developing a well, and OCD does not specifically regulate how wells are completed. EMNRD states this bill is vague on which permits the OCD could or could not issue.

EMNRD further points out the bill does not specify which lands are covered by the moratorium; wells on federal and tribal lands may not be covered. APDs for wells on federal or tribal agencies are issued by federal and tribal agencies and reviewed by the OCD. If New Mexico attempts to place a moratorium on mineral development on federal and tribal lands, there may be a preemption conflict.

The New Mexico Attorney General's Office (NMAG) state that oil and gas operators in New Mexico may challenge this bill on the grounds that it constitutes an unconstitutional regulatory taking, as prohibited by the 5th and 14th Amendments to the United States Constitution. A regulatory taking occurs when the government limits the uses of private property to such a degree that the regulation effectively deprives the property owners of economically reasonable use or value of their property to such an extent that the property loses utility or value, even though the regulation does not formally divest them of title to it. However, NMAG further notes that this bill is likely a legitimate use of the States police powers to protect public health and welfare. The Supreme Court of the United States has repeatedly upheld land use regulations in the face of takings claims over the years.

SIC states there is considerable concern that without ongoing and future contributions into the permanent funds, they will fail to grow with the state over time, and further, that their status as perpetual, permanent endowments to benefit New Mexicans today and tomorrow will potentially be at risk in the decades ahead. SIC further notes that, given the growing demands that policy-makers are seeking to utilize dollars from the permanent funds to meet the needs of today, the proposed curtailment of fracking creates an especially heightened risk to the funds and the significant benefits they can deliver to future generations. Additionally, and more immediately, SIC states that legislation of this nature would be likely to damage state budget reserves and New Mexico's bond rating, driving up the cost of capital the state would need to make up for potential budgetary shortfalls.

This bill's proposed temporary fracking moratorium will likely reduce oil and gas-related employment in the state. The Workforce Solutions Department notes that according to the Quarterly Census of Employment and Wages, total employment in the oil and gas industry in New Mexico in 2019 was 21,816. These jobs would be at risk if the state implemented a moratorium on fracking activity. Additionally, many other jobs in oil- and gas-producing regions of the state (e.g. Eddy, Lea, Chaves, and San Juan counties) are induced by the level of oil and gas activity in those areas. The economic impact of losses in this activity would likely lead to reduced levels of employment in these regions outside of the oil and gas industry (e.g.

accommodation and food services, real estate, professional services, wholesale trade, transportation, retail, etc.).

The Indian Affairs Department states that many tribes and tribal organizations in New Mexico have concerns regarding fracking in and around tribal lands and lands of cultural significance. Tribal communities have raised significant concerns with ongoing and proposed fracking operations, including impacts to the water and environment, health impacts, impacts to cultural resources and sacred sites, and the impact of the increased traffic and non-residents in tribal communities.

PERFORMANCE IMPLICATIONS

Office of the State Engineer (OSE) maintains records of new (water) appropriations for oil and gas development as well as the hydrologic impacts due to these new appropriations. OSE states that compiling these records annually for reporting purposes would require significant additional recurring financial resources that are currently unavailable. In addition, calculating the cumulative impacts of these appropriations, or more generally isolating the impacts of single industry on the surface and groundwater resources of the state, would require sophisticated modeling techniques and considerable resources. OSE notes the State Engineer has not yet ascertained the boundaries of all shallow and deep aquifers across the state. Reporting on actual impacts requires a network of groundwater monitoring systems and additional funding and staffing that are currently unavailable.

NMED notes several concerns with the bill's ambiguity on the scope of the bill's reporting requirements. For example, the department notes the bill does not specify whether the report should focus on hydraulic fracturing in New Mexico or on the practice generally, whether the report should provide a literature review or whether NMED should collect New Mexico-specific data and conduct its own research. NMED states the department does not have any groundwater quality data associated with hydraulic fracturing wells or other hydraulic fracturing infrastructure and would likely need to develop a program or coordinate with other state and federal agencies to obtain such data. Unlike environmental impact assessments conducted under the National Environmental Policy Act, NMED states this bill's reporting requirement is not specific to proposed projects but presumably applies to everywhere the practice is occurring.

ADMINISTRATIVE IMPLICATIONS

The Office of the State Engineer (OSE) notes that the bill does not specify the scope and the details involved in preparing the requested report. Accordingly, the precise extent of the fiscal impact on the agency are unknown. The requested report calls for analysis of "the actual and potential impact of oil and gas development that involves hydraulic fracturing on the surface and ground waters of the state." OSE preliminarily estimates this reporting requirement would be an annual cost to the agency of \$250 thousand.

The Energy, Minerals, and Natural Resources Department (EMNRD) notes the bill does not include funding for the department's Oil Conservation Division (OCD) to undertake studies or provide suggested legislation as required by the amendment, specifically the requirement to report on "trends regarding methane and greenhouse gas emissions globally, nationally and statewide." This is not a historical mandate for the OCD under the Act as the OCD regulates the

"waste" of natural resources, not emissions. The department states that studying emissions trends would require new OCD staff and budget to accomplish this mandate.

NMED states the department would need to hire a dedicated oil and gas expert to oversee contractor support for the research, analysis and report development required by this bill. The department's estimated FY22 costs include one FTE, plus \$500 thousand for contractor research and analysis, and a one-time expenditure of \$500 thousand to enhance information technology tools and other infrastructure resources and training in order to implement the provision of this bill. Recurring costs of \$650 thousand would cover the FTE and contractor support in future years to comply with the annual report requirement. NMED states that if this bill passes without an associated adequate appropriations, the department would be forced to shift resources away from other state and federally mandated work assignments. Implications would include backlogs for permit issuance and reductions in the already low numbers of compliance inspections and enforcement actions NMED is able to conduct.

The Indian Affairs Department (IAD) states it currently does not have staff dedicated to this specific issue. As a smaller department, IAD would need additional either staff or contract funds in order to effectively respond to the requirements of this bill. IAD estimates the impact to the department's budget is \$60 thousand to cover expenses incurred from hiring someone with expertise in this area to perform this study and create reports.

The Department of Agriculture states the department does not have the technical expertise necessary to evaluate the actual and potential agricultural impacts of oil and gas development that involve hydraulic fracturing. That expertise would require significant new staffing or contracted expertise.

The Workers Compensation Administration (ACA) states it does not have a mechanism or programing to collect the specific data requested, and an electronic data information upgrade would be required and the implementation of such an upgrade will require a modernization of the current computer system. Such a modernization is contemplated in the current WCA request for modification and C-2 funding.

The requires the Department of Transportation to implement annual reporting on the "actual and potential impact of oil and gas development that involves hydraulic fracturing on public transportation infrastructure." DOT states the department does not analyze or monitor fracking activities in New Mexico or otherwise directly study the impact of oil and gas development related to fracking activities on state transportation infrastructure. DOT is unable to estimate the impact of this bill at this time, but expects the department would require additional FTEs.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

This bill's effect on FY22 revenues may conflict with appropriations made in the General Appropriation Act of 2021.

Relates to House Bill 50, which proposes to create a private right of action for individuals pursuing enforcement of the Oil and Gas Act, Air Quality Control Act, Hazardous Waste Act, Solid Waste Act, and the Water Quality Act (acts).

Related to House Bill 136, which amends the New Mexico Subdivision Act to except "the division of land for oil or gas operations" from the definition of the term "subdivision."

Relates to House Bill 181, which amends the Oil and Gas Severance Tax Act to exempt the oil and gas severance tax on carbon dioxide when captured carbon dioxide is used in an enhanced oil recovery project.

Relates to Senate Bill 86, which would amend and create new sections of the Oil and Gas Act, Sections 70-2-12 and 70-2-33 NMSA 1978, to prohibit certain uses of fresh water in oil and gas operations, provide for penalties related to spills, and add new rulemaking authority and responsibility to the Oil Conservation Division (OCD) of EMNRD. The bill would also create a new fund to support the OCD.

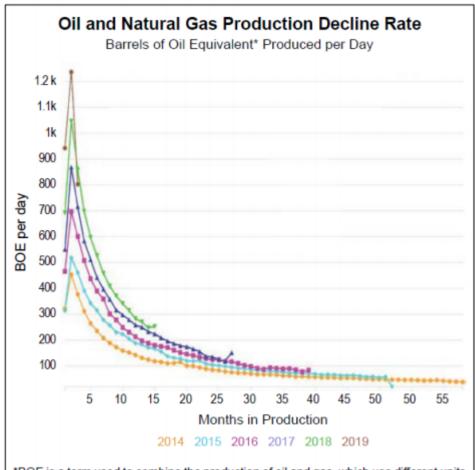
ALTERNATIVES

EMNRD states that if the department's Oil Conservation Division were provided with sufficient budget and staff to enforce the Act as it exists currently, the OCD could better succeed in its mission of protecting correlative rights, preventing waste, and protecting New Mexico's environment and freshwater resources.

DI/al

ATTACHMENT

Decline Rates of Oil and Natural Gas Wells



*BOE is a term used to combine the production of oil and gas, which use different units of measurement. Six thousand cubic feet of natural gas has the same energy content as a barrel of oil and is counted as the "equivalent" of a barrel of oil.

Source: DrillingInfo presentation to LFC July 2019