Congressional Budget Office
Cost Estimate

July 27, 2020

At a Glance

H.R. 2579, Hardrock Leasing and Reclamation Act of 2019

As ordered reported by the House Committee on Natural Resources on October 23, 2019

By Fiscal Year, Millions of Dollars	2020	2020-2025	2020-2030
Direct Spending (Outlays)	0	486	885
Revenues	0	2,096	3,942
Increase or Decrease (-) in the Deficit	0	-1,610	-3,056
Spending Subject to Appropriation (Outlays)	*	1,014	3,389

Statutory pay-as-you-go procedures apply?	**Yes**	**Mandate Effects**	
		Contains intergovernmental mandate?	**Yes, Under Threshold**
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2031?	**No**	Contains private-sector mandate?	**Yes, Over Threshold**

* = between zero and $500,000.

The bill would

- Establish a hardrock mineral leasing program on Western federal land
- Levy royalties, rents, and other fees on hardrock mineral development on federal land, and require that 25 percent of amounts collected be paid to states
- Establish the Hardrock Minerals Reclamation Fund, require that certain amounts be deposited into the fund, and authorize appropriations from the fund to be used for reclamation
- Require the Department of the Interior and the Forest Service to undertake related administration, inspections, and tribal consultation
- Impose private-sector mandates by requiring mine operators to pay royalties, rents, and other fees; by requiring nonproducing hardrock claims to be converted into noncompetitive leases; and by establishing new requirements for entities involved in production, transportation, development, and commercialization of hardrock minerals
- Impose intergovernmental mandates by terminating mining-related cooperative agreements between federal agencies and states and by requiring new agreements consistent with the bill

Estimated budgetary effects would primarily stem from

- New government income resulting from royalties, rents, and fees assessed under the bill
- Payments to states
- Spending from the Hardrock Minerals Reclamation Fund

Areas of significant uncertainty include

- Estimating the amount that the government would collect in royalties and other payments under the bill

Detailed estimate begins on the next page.

See also *CBO's Cost Estimates Explained*, www.cbo.gov/publication/54437;
How CBO Prepares Cost Estimates, www.cbo.gov/publication/53519; and *Glossary*, www.cbo.gov/publication/42904.

Bill Summary

H.R. 2579 would change the terms for hardrock mining on federal land, mostly in the Western United States. The bill would not allow new claims to be made under the current system; instead, it would establish a leasing program. Production from existing hardrock mines would be subject to a royalty of 8 percent; royalties, rents, and fees also would be levied on new leases and production; and the budgetary classification of claim maintenance fees would be changed. In addition, 25 percent of all royalties, rents, and certain other fees collected would be paid to the state in which the minerals are produced.

H.R. 2579 would establish the Hardrock Minerals Reclamation Fund and would require royalties, rents, and fees remaining after payments to the states be deposited into that fund. The bill would authorize appropriations from the fund to be used for mining reclamation. The Department of the Interior (DOI) and the Forest Service would be responsible for related administration, inspections, and consultation with tribes. Finally, the bill would require hardrock mining operators to pay royalties, rents, and other fees on their activities on federal land and would terminate current mining-related cooperative agreements between federal agencies and the states and require new agreements consistent with the bill.

Estimated Federal Cost

The estimated budgetary effect of H.R. 2579 is shown in Table 1. The costs of the legislation fall primarily within budget functions 300 (natural resources and environment) and 800 (general government).

Basis of Estimate

For this estimate, CBO assumes that the legislation will be enacted late in fiscal year 2020 and that the authorized and necessary amounts will be provided each year. On that basis, the federal government could incur some costs in 2020, but most costs would be incurred starting in 2021. Using the estimated timeframe for issuing the regulations and establishing the processes required under the bill, CBO expects that any amounts owed to the government in 2020 would be collected in 2021.

Table 1.
Estimated Budgetary Effects of H.R. 2579

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020-2025	2020-2030
	By Fiscal Year, Millions of Dollars												
Increases in Direct Spending													
Estimated Budget Authority	0	104	95	98	95	95	84	81	81	78	75	486	885
Estimated Outlays	0	104	95	98	95	95	84	81	81	78	75	486	885
Increases in Revenues													
Estimated Revenues	0	434	410	418	418	417	376	372	372	363	363	2,096	3,942
Net Decrease in the Deficit From Changes in Direct Spending and Revenues													
Effect on the Deficit	0	-330	-315	-320	-323	-322	-292	-291	-291	-285	-288	-1,610	-3,056
Increases in Spending Subject to Appropriation													
Estimated Authorization	*	471	455	466	478	488	468	483	497	501	519	2,358	4,825
Estimated Outlays	*	38	87	177	311	401	448	476	480	482	489	1,014	3,389

Components may not sum to totals because of rounding; * = between zero and $500,000.

Background

The General Mining Act of 1872 allows individual people and commercial entities to prospect for hardrock (nonfuel) minerals, such as gold, silver, and copper, on land in the public domain (federal land primarily in Western states). When miners make a discovery, they can locate, or stake, a claim, which gives them the right to mine, extract, and process those materials. In 2018, roughly 400,000 active mining claims were held, averaging 20 acres per claim.[1] Claim holders pay the federal government annual maintenance fees of $165 for each claim. Using information from DOI, CBO estimates that those fees totaled $65 million in 2019. Claim holders currently pay no rent or royalties to the federal government.

Under the General Mining Act, when a claim is patented on federal land, the government conveys the full title to the claim holder, and the land passes into private ownership. Since 1995, the Congress—in annual appropriations acts—has prohibited the issuance of new patents.

1. See Bureau of Land Management, *Public Land Statistics 2018*, vol. 203 (August 2019), https://go.usa.gov/xw95e (PDF, 6 MB).

H.R. 2579 would prohibit new claims and patents, establish a leasing program instead, and institute a new regulatory framework for hardrock mineral development. The framework would require miners to seek prospecting licenses and additional permits to explore for and develop mineral resources. Current claim holders with producing mines could maintain their claims if they continue to pay maintenance fees; those with nonproducing claims would generally be required to convert their claims to noncompetitive leases. New production would be subject to the terms of the leasing program.

Under H.R. 2579, lessees would pay annual rents until production began; after that, royalties would be paid based on the gross value of production. Producers considered “small miners” under the bill would be exempt from certain payments, including royalties. Under the bill, rents, application fees, and other payments would be adjusted every three years for inflation with the adjustment taking effect the year after it was made. Finally, the bill would establish new standards for reclaiming mined land.

Revenues

CBO estimates that enacting H.R. 2579 would increase revenues by $3.9 billion over the 2020-2030 period.

Royalties and Rents for Existing Claims. H.R. 2579 would establish an 8 percent royalty on current hardrock mineral production under existing claims, levied on the gross value of production. The bill also would establish rents and a 12.5 percent royalty on future production for claim holders that generally have not begun production before the date of enactment.

In CBO’s view, imposing payments on mine operators with existing claims is an exercise of the government’s sovereign power to levy compulsory fees. Thus, income from such payments would be classified in the federal budget as revenues. Payments of royalties, rents, and other fees under leases for new activities would be considered voluntary, however, because they result from businesslike transactions. Those amounts are classified in the budget as offsetting receipts and recorded as reductions in direct spending. (For more information, see the section on “Direct Spending.”)

DOI does not collect data on the production value of hardrock minerals mined on Western federal land, and CBO is not aware of any comprehensive information on such production. According to the department, an estimated 98 metric tons of gold was produced on Bureau of Land Management (BLM) land in Nevada in 2018; at $1,270 per troy ounce (the average price that year), the estimated gross production value was $4.2 billion.[2] On that basis, and using historical price and production information from the U.S. Geological Survey and projected commodity prices from the World Bank, CBO estimates that the total annual

2. See Department of the Interior, *Economic Report FY18* (September 2019), https://doi.sciencebase.gov/doidv.

income that would be subject to royalties under the bill would range from $5 billion to $7 billion; most of that income is earned by gold producers.[3]

CBO expects that paying royalties would increase mine operators' costs and would result in less mineral production than under current law. Using information from academic and industry sources, CBO estimates that over the 2020-2030 period, the bill would reduce the amount of income subject to royalties by 5 percent to 15 percent. Starting in 2021, the resulting annual federal collections would average about $500 million.

Under H.R. 2579, until production starts, rent on nonproducing claims that are converted to leases initially would range from $5 to $10 per acre; amounts would be adjusted periodically after that for inflation. CBO estimates that 15 percent to 20 percent of the existing 400,000 claims would be converted to leases; that, on average, leases would cover 20 acres each; and that gross rents would average $13 million annually over the 2021-2030 period but decrease as production rose.

Collection of rents and royalties would reduce the base for income and payroll taxes; consequently, revenues would be partially offset by lower income and payroll taxes. That offset would reduce gross revenues under the bill by 22 percent to 25 percent over the 2021-2030 period, CBO estimates. On net, rents and royalties collected on production from existing claims would increase revenues by roughly $400 million annually and by $3.9 billion over the 2021-2030 period.

Displaced-Material Reclamation Fee on Existing Claims. H.R. 2579 would impose a fee of 7 cents per ton of material displaced during hardrock production from existing nonproducing claims that are converted to leases. CBO expects that production under such leases would be minimal in the near term and we thus estimate that net revenues collected under that provision would be insignificant in each year over the 2020-2030 period.

Civil and Criminal Penalties. H.R. 2579 would impose civil and criminal penalties (which are classified in the federal budget as revenues) for violations of reporting, payment, and other requirements. CBO estimates that any penalties collected would be insignificant in any year.

Direct Spending

CBO estimates that enacting H.R. 2579 would increase direct spending by $885 million over the 2020-2030 period (see Table 2).

3. See U.S. Geological Survey, *Mineral Commodity Summaries 2019* (February 2019), https://tinyurl.com/y9bcru9u (PDF, 5.2 MB), and World Bank, *Commodities Prices Forecast* (October 2019), https://tinyurl.com/y9eua7k6 (PDF, 194 KB).

Table 2.
Changes in Direct Spending Under H.R. 2579

	By Fiscal Year, Millions of Dollars												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020-2025	2020-2030
	Increases or Decreases (-) in Direct Spending												
Claim Maintenance Fees													
Estimated Budget Authority	0	-53	-53	-53	-58	-58	-58	-62	-62	-62	-66	-275	-584
Estimated Outlays	0	-53	-53	-53	-58	-58	-58	-62	-62	-62	-66	-275	-584
Rents and Royalties For New Leases													
Estimated Budget Authority	0	*	-1	-1	-1	-1	-1	-1	-1	-1	-1	-4	-9
Estimated Outlays	0	*	-1	-1	-1	-1	-1	-1	-1	-1	-1	-4	-9
Payments to States[a]													
Estimated Budget Authority	0	152	145	147	148	148	138	139	138	136	137	740	1,427
Estimated Outlays	0	152	145	147	148	148	138	139	138	136	137	740	1,427
Administration of Reclamations													
Estimated Budget Authority	0	5	5	5	5	5	5	5	5	5	5	25	50
Estimated Outlays	0	5	5	5	5	5	5	5	5	5	5	25	50
Total Changes													
Estimated Budget Authority	0	104	95	98	95	95	84	81	81	78	75	486	885
Estimated Outlays	0	104	95	98	95	95	84	81	81	78	75	486	885

Components may not sum to totals because of rounding; * = between zero and -$500,000.

a. H.R. 2579 would require that 25 percent of income collected under title I—including rents, royalties, claim maintenance fees, fines, and certain penalties—be paid to the states in which the hardrock minerals are produced. Some of those collections would be recorded in the budget as revenues (see discussion under “Revenues” heading).

Maintenance Fees for Claims. Under current law, annual fees for claim maintenance are classified in the budget as discretionary offsetting collections because the authority to collect that fee is provided each year in appropriation acts. Section 109 would increase the fee from $165 to $200 per claim (with adjustments over time to account for inflation) and would permanently authorize the fee, thus reclassifying collections as mandatory offsetting receipts, which are recorded as reductions in direct spending. The amounts collected would be deposited into the Hardrock Minerals Reclamation Fund established under title IV of the bill. CBO expects that the fee increase would take effect in fiscal year 2021. We estimate that enacting H.R. 2579 would reduce the number of hardrock mining claims held by roughly one-third, because some claim holders would convert their claims into leases and others would relinquish their claims. Section 109 would generate offsetting receipts of roughly $60 million annually and $584 million over the 2020-2030 period, CBO estimates.

Rents and Royalties for New Leases. Under the bill, individuals and entities interested in prospecting for minerals on federal land would be required to obtain a prospecting license and pay an annual rent of $10 per acre under the license. Once a lease is executed, the bill would require the leaseholder to pay rent ranging from $5 to $10 per acre until production starts. H.R. 2579 also would establish application fees for licenses and leases. CBO estimates that collections of those amounts, which would be classified in the budget as offsetting receipts, would average about $1 million annually over the 2021-2030 period.

The bill also would establish a 12.5 percent royalty on production under leases for new activities and a reclamation fee of 7 cents per ton of displaced material. Because those fees would be for new activities, payment of those fees would be considered voluntary, resulting from businesslike transactions, and would be classified in the budget as offsetting receipts. According to BLM and industry experts, once a mining claim is located, it typically takes at least 10 years to explore, develop, and produce commercial quantities of minerals that would generate federal royalties. Therefore, CBO expects that such leases established over the 2020-2030 period would be unlikely to generate any significant royalties or reclamation fees until after 2030.

Payments to States. Section 107 of the bill would require that 25 percent of income collected under title I—including rents, royalties, claim maintenance fees, fines, and certain penalties—be paid to the states in which the hardrock minerals are produced. CBO expects that payments would be issued at the end of each fiscal year, and that 2020 payments would be issued in 2021. We estimate that those collections would average $570 million annually and that the resulting payments to states would average $143 million each year and total $1.4 billion over the 2021-2030 period.

Administration of Reclamations. Section 401 would authorize DOI to use amounts deposited into the Hardrock Minerals Reclamation Fund without further appropriation to administer reclamation projects. Based on the costs of similar activities, CBO estimates that enacting the provision would cost $5 million annually over the 2021-2030 period.

Other Fees and Donations. H.R. 2579 would authorize DOI and the Forest Service to establish application and user fees for administrative activities required under the bill, which would be classified in the budget as offsetting receipts. The bill also would authorize the federal government to collect donations, classified as offsetting receipts, for deposit into the

Hardrock Minerals Reclamation Fund. CBO estimates that such receipts would be insignificant in any year.

Crime Victims Fund. Criminal penalties, which are recorded as revenues, are deposited into the Crime Victims Fund and later spent without further appropriation. CBO estimates that any direct spending of those amounts would be insignificant in any year.

Payment of Costs from Litigation. H.R. 2579 would authorize people to sue other parties alleged to be in violation of the bill, including the federal government. The bill also would authorize judicial review of final actions issued by the federal government. Under the bill, judges could award attorney fees and other litigation costs to prevailing parties. In some cases, fees assessed against the government would be issued from the Judgment Fund, a permanent indefinite appropriation. Fees assessed against a nonfederal party and paid to the federal government would be classified in the federal budget as offsetting receipts. CBO estimates that the net effect on direct spending would be negligible in any year.

Spending Subject to Appropriation

CBO estimates that implementing H.R. 2579 would cost $1 billion over the 2020-2025 period (see Table 3), assuming appropriation of the estimated amounts.

Table 3.
Estimated Increases in Spending Subject to Appropriation Under H.R. 2579

	By Fiscal Year, Millions of Dollars						
	2020	2021	2022	2023	2024	2025	2020-2025
Hardrock Minerals Reclamation Fund							
Estimated Authorization	0	451	434	445	456	465	2,251
Estimated Outlays	0	23	67	156	289	378	913
Mining Administration							
Estimated Authorization	*	20	21	21	22	23	107
Estimated Outlays	*	15	20	21	22	23	101
Total Changes							
Estimated Authorization	*	471	455	466	478	488	2,358
Estimated Outlays	*	38	87	177	311	401	1,014

* = between zero and $500,000.

Hardrock Minerals Reclamation Fund. Section 401 would establish the Hardrock Minerals Reclamation Fund. Deposits into the fund would include 75 percent of gross rents, royalties, claim maintenance fees, fines, and penalties collected under title I; user fees collected under section 502; certain civil penalties; donations; and fees paid for displaced materials.

CBO estimates that, on average, $445 million would be deposited into the fund annually over the 2021-2025 period. H.R. 2579 also would require the Department of the Treasury to invest unspent balances in Treasury securities and credit interest to the fund. Based on the interest rate projections underlying CBO's March 2020 baseline, CBO estimates that enacting the bill would result in an additional $53 million being credited to the fund over the 2021-2025 period.

Amounts in the fund, including interest credited, would be available, subject to appropriation, for reclamation and restoration of land and water that is damaged by hardrock mining. Based on historical spending patterns for similar activities, CBO estimates that implementing the provision would cost $913 million over the 2020-2025 period.

Mining Administration. CBO expects that BLM and the Forest Service would incur additional costs to implement administrative activities required under the bill. Those activities include issuing regulations, managing royalty collections, implementing mineral withdrawals on certain lands, consulting with tribal officials, and conducting quarterly inspections. Using information from the agencies, CBO estimates that the federal government would incur costs totaling $101 million over the 2021-2025 period; that spending would be subject to the availability of appropriated funds.

Uncertainty
CBO aims to produce estimates that generally reflect the middle of the most likely budgetary outcomes that would result if the legislation was enacted. However, direct spending, revenues, and spending subject to appropriation under H.R. 2579 could differ from CBO's estimates because of the following sources of uncertainty:

- CBO cannot precisely predict the amount that the government would collect in royalties under existing claims. The exact production value of hardrock minerals on the affected federal lands is unknown and could be higher or lower than CBO estimates. CBO cannot forecast future hardrock mineral prices or the effect of the proposed royalty on future production with certainty.

- Information on existing claims is limited. CBO cannot predict with certainty how many holders of existing nonproducing claims would relinquish their claims or convert them to leases under the bill. As a result, CBO cannot estimate with certainty the amount that the government would collect in rents or claim maintenance fees under the bill.

As a result of those sources of uncertainty, payments to states and spending from the Hardrock Minerals Reclamation Fund also could be higher or lower under the bill.

Pay-As-You-Go Considerations

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays and revenues that are subject to those pay-as-you-go procedures are shown in Table 4.

Table 4.
CBO's Estimate of the Statutory Pay-As-You-Go Effects of H.R. 2579, the Hardrock Leasing and Reclamation Act of 2019, as Ordered Reported by the House Committee on Natural Resources on October 23, 2019

	By Fiscal Year, Millions of Dollars												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020-2025	2020-2030
	Net Decrease in the Deficit												
Pay-As-You-Go Effect	0	-330	-315	-320	-323	-322	-292	-291	-291	-285	-288	-1,610	-3,056
Memorandum:													
Changes in Outlays	0	104	95	98	95	95	84	81	81	78	75	486	885
Changes in Revenues	0	434	410	418	418	417	376	372	372	363	363	2,096	3,942

Increase in Long-Term Deficits: None.

Mandates

H.R. 2579 contains private-sector and intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the aggregate cost of the mandates on private-sector entities would exceed the annual threshold established in UMRA ($168 million in 2020, adjusted annually for inflation). CBO estimates that the cost of the public-sector mandate would fall below the annual threshold ($84 million in 2020, adjusted annually for inflation).

Mandates That Apply to Private Entities

H.R. 2579 would amend current hardrock mining laws by replacing the existing claims system with a leasing program and by establishing a new regulatory framework for the production of hardrock minerals. Producers would be subject to royalties, rents, and other fees, and 25 percent of all collections under the new framework would be paid to the states in which the minerals are produced.

Under the bill, mine operators would pay royalties, ranging from 8 percent to 12.5 percent of the gross value of the minerals produced, depending on whether the minerals come from existing or new mines. Using information from various public and private sources, CBO estimates that current operators would pay about $500 million annually in royalties.

The bill would require holders of claims for currently nonproducing mines to convert their claims into noncompetitive leases; to pay royalties and other fees, and meet new application, reporting, and other administrative requirements. CBO estimates that those new duties would increase the cost of mining operations by $30 million a year. Most of the additional cost would come from royalties and maintenance fees.

Other provisions of the bill would require holders of nonproducing claims to obtain various permits as their mining activities progress and require shale oil producers to comply with stringent reclamation standards. CBO cannot estimate the cost of those mandates because rules and regulations have not been issued by the Secretaries of the Interior and Agriculture.

Mandates That Apply to Public Entities

Cooperative agreements between federal agencies, states, and Indian tribes related to the management of mining would be terminated one year after enactment of H.R. 2579, and the parties to those agreements would be directed to develop revisions consistent with the new procedures under the bill. Those revised agreements would become effective at the end of the one-year period. CBO estimates that the costs to comply with this requirement would be insignificant.

Other Public-Sector Effects

H.R. 2579 would require 25 percent of amounts collected in royalties, rents, and other fees to be paid to the states where hardrock minerals are produced. CBO estimates that about $143 million annually would be distributed to the twelve states affected.

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