



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

November 21, 2017

Reconciliation Recommendations of the Senate Committee on Energy and Natural Resources

*As ordered reported by the Senate Committee on Energy and Natural Resources
(JAC17686) on November 15, 2017*

SUMMARY

The legislation would direct the Secretary of the Interior (DOI) to implement an oil and gas leasing program for the coastal plain of the Arctic National Wildlife Refuge (ANWR). It also would authorize DOI to spend \$300 million from proceeds from oil and gas leasing on the Outer Continental Shelf (OCS) over the 2018-2027 period. Finally, the legislation would direct the Department of Energy (DOE) to sell a portion of the petroleum stored in the Strategic Petroleum Reserve (SPR). On the basis of information provided by DOI, DOE, and individuals working in the oil and gas industry, CBO estimates that implementing the legislation would increase net offsetting receipts, which are treated as reductions in direct spending, by about \$1.1 billion over the 2018-2027 period.

Because enacting the legislation would affect direct spending pay-as-you-go procedures apply. Enacting the legislation would not affect revenues.

CBO estimates that enacting legislation would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

The legislation contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of the legislation is shown in the following table. The costs of this legislation fall within budget functions 270 (energy), 300 (natural resources and environment), 800 (general government), and 950 (undistributed offsetting receipts).

	By Fiscal Year, in Millions of Dollars										2018-	2018-
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2022	2027
INCREASES AND DECREASES (-) IN DIRECT SPENDING ^a												
Oil and Gas Leasing in ANWR												
Estimated Budget Authority	0	0	0	0	-725	*	*	-366	-1	-1	-725	-1,092
Estimated Outlays	0	0	0	0	-725	*	*	-366	-1	-1	-725	-1,092
Spending of OCS Receipts												
Estimated Budget Authority	0	0	0	150	150	0	0	0	0	0	300	300
Estimated Outlays	0	0	0	150	150	0	0	0	0	0	300	300
SPR Drawdown												
Estimated Budget Authority	0	0	0	0	0	0	0	0	-155	-160	0	-315
Estimated Outlays	0	0	0	0	0	0	0	0	-155	-160	0	-315
Total Estimated Budget Authority	0	0	0	150	-575	0	0	-366	-156	-161	-425	-1,107
Total Estimated Outlays	0	0	0	150	-575	0	0	-366	-156	-161	-425	-1,107

ANWR = Arctic National Wildlife Refuge; OCS = Outer Continental Shelf; SPR = Strategic Petroleum Reserve; * = between -\$500,000 and zero; Components may not sum to totals because of rounding.

a. In addition, CBO estimates that implementing this legislation would cost \$10 million over the 2018-2022 period subject to the availability of appropriated amounts.

BASIS OF ESTIMATE

For this estimate, CBO assumes that the legislation will be enacted near the end of 2017 and that the appropriated funds necessary to implement the legislation would be available.

Description of the Legislation

The legislation would direct the Secretary of the Interior to implement an oil and gas leasing program for lands located within the coastal plain of ANWR, which includes about 1.5 million acres of federal land on the northeast coast of Alaska. Under current law, activities related to oil and gas leasing in ANWR are prohibited.

The legislation would require the Secretary to hold two lease sales over a seven-year period following enactment and to offer at least 400,000 acres of land in ANWR for lease at each sale. Any lease sales in ANWR would be carried out in accordance with procedures used to conduct oil and gas leasing within the National Petroleum Reserve in Alaska. For each lease awarded, lessees would pay the federal government bonus bids to acquire the leases, annual rent to retain the leases, and royalties based on the value of any oil or gas production from the leases. The legislation would establish a 16.67 percent

royalty on oil and gas produced in ANWR. (Under current law, the federal government charges royalties of 12.5 percent for oil and gas produced onshore and 18.75 percent for oil and gas produced in the Outer Continental Shelf.) Under the legislation, Alaska would receive one-half of the gross proceeds generated from this leasing program.

The legislation would authorize DOI to spend \$300 million over the 2018-2027 period without further appropriation from receipts from oil and gas leases on the Outer Continental Shelf. In addition, the legislation would direct the Department of Energy to sell 5 million barrels of oil from the Strategic Petroleum Reserve over the 2026-2027 period, subject to certain conditions.

Direct Spending

CBO estimates that implementing the legislation would increase net offsetting receipts, and thus reduce direct spending, by about \$1.1 billion over the 2018-2027 period.

Oil and Gas Leasing in ANWR. CBO estimates that gross proceeds from bonus bids paid for the right to develop leases in ANWR would total \$2.2 billion over the 2018-2027 period. That estimate is based on historical information about oil and gas leasing in the United States and on information from DOI, the Energy Information Administration (EIA), and individuals working in the oil and gas industry about factors that affect the amounts that companies are willing to pay to acquire oil and gas leases. In addition, CBO relied on estimates prepared by the U.S. Geological Survey of the amount of oil that might be produced from the coastal plain of ANWR. As specified in the legislation, one-half of all receipts from leases in ANWR would be paid to Alaska, leaving net federal receipts totaling \$1.1 billion over the 2018-2027 period.

Estimates of bonus bids for leases in ANWR are uncertain. Potential bidders might make assumptions that are different from CBO's, including assumptions about long-term oil prices, production costs, the amount of oil and gas resources in ANWR, and alternative investment opportunities. In particular, oil companies have other domestic and overseas investment options that they would evaluate and compare with potential investments in ANWR. The potential profitability for a wide range of such global investment options would probably be a significant factor in prospective bidders' ultimate choices of how much to bid for ANWR leases. The number of factors that affect companies' investment decisions result in a wide range of estimates for bonus bids. CBO's estimate reflects our best estimate of the midpoint of that range.

In addition to receipts from bonus bids, CBO estimates that the federal government would collect net receipts from rental payments totaling about \$2 million over the 2022-2027 period. (Lease holders make an annual rental payment until production begins.) CBO also estimates that the federal government would receive royalty payments on oil produced from ANWR leases; however, based on information from EIA regarding

the typical amount of time necessary to drill exploratory wells, complete production plans, and build the necessary infrastructure to produce and transport any oil produced in ANWR, CBO expects that no significant royalty payments would be made until after 2027.

Spending of OCS Receipts. Section 20002 would authorize DOI to spend an additional \$300 million over the 2018-2027 period without further appropriation from receipts collected from certain OCS leases. Under current law, DOI is directed to pay a portion of the receipts from leases issued after 2006 in the Central and Western Gulf of Mexico to four states—Alabama, Louisiana, Mississippi, and Texas—and to the Land and Water Conservation Fund. Current law caps those payments at \$500 million a year through 2055. This legislation would raise that cap to \$650 million in 2020 and 2021. CBO estimates that enacting that change would increase spending by \$150 million in each of the fiscal years 2021 and 2022, reflecting the one-year lag between the time receipts are collected and spent.

SPR Drawdown. Section 20003 would direct DOE to sell 5 million barrels of oil from the SPR over the 2026-2027 period, subject to certain conditions. Under the legislation, the proceeds from such sales would be deposited in the general fund of the Treasury by the end of each fiscal year and could not be spent for other purposes. The legislation would limit the cash proceeds resulting from those sales by prohibiting DOE from offering oil for sale under this section after it has deposited \$325 million in the Treasury.

CBO estimates that enacting this section would increase offsetting receipts by \$315 million over the 2018-2027 period. That estimate is based on the projection of oil prices in CBO's June 2017 baseline forecast, adjusted for the technical characteristics of the oil being sold from the SPR, and reflects the net effect of the legislation's limit on total proceeds from the sales.

Spending Subject to Appropriation

CBO estimates that implementing the legislation would cost \$10 million over the 2018-2022 period for environmental reviews and administrative costs associated with the leasing program, subject to the availability of appropriated funds. Based on information provided by the Government Accountability Office, we estimate that completing the environmental reviews required under the National Environmental Policy Act would cost \$2 million. In addition, CBO estimates that other implementation costs would total between \$1 million and \$2 million per year over that period.

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 that are subject to those pay-as-you-go procedures are shown in the following table.

CBO Estimate of Pay-As-You-Go Effects for the Reconciliation Recommendations of the Senate Committee on Energy and Natural Resources, as ordered reported by the committee on November 15, 2017

	By Fiscal Year, in Millions of Dollars										2018-	2018-
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2022	2027
INCREASES OR DECREASES (-) IN THE DEFICIT												
Statutory Pay-As-You-Go Impact	0	0	0	150	-575	0	0	-366	-156	-161	-425	-1,107

MANDATES

The legislation contains no intergovernmental or private-sector mandates as defined in UMRA, and would benefit the State of Alaska by increasing the generation of royalties from oil and gas production on public lands in ANWR. Portions of the royalties would be shared with the state under formulas specified by the legislation and under federal laws governing oil and gas production. Over the 2018-2027 period, CBO estimates that Alaska would receive a total of about \$1.1 billion in royalties.

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting the legislation would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

PREVIOUS ESTIMATE

On November 8, 2017, CBO transmitted a cost estimate for a legislative proposal related to the Arctic National Wildlife Refuge, as posted on the website of the Senate Committee on Energy and Natural Resources on November 2, 2017. CBO's estimates of the budgetary effects for the provisions related to oil and gas leasing in ANWR are the same for each piece of legislation.

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