



CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE

December 20, 2017

H.R. 4475
National Volcano Early Warning and Monitoring System Act

*As ordered reported by the House Committee on Natural Resources
on December 13, 2017*

SUMMARY

H.R. 4475 would authorize the appropriation of \$15 million for each year over the 2018-2024 period for the U.S. Geological Survey (USGS) to establish a system to improve monitoring of active volcanoes. The bill also would direct USGS to conduct a study on the feasibility of establishing volcano observatories in the U.S. Pacific Island territories and would authorize USGS to enter into cooperative partnerships with states, territories, universities, and agencies to implement the system.

Assuming appropriation of the authorized amounts, CBO estimates that implementing H.R. 4475 would cost \$73 million over the 2018-2022 period.

Enacting H.R. 4475 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting the bill would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 4475 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 effect of H.R. 4475 is shown in the following table. The costs of this legislation falls within budget function 300 (natural resources and environment).

	By Fiscal Year, in Millions of Dollars					2018- 2022
	2018	2019	2020	2021	2022	
INCREASES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Level	15	15	15	15	15	75
Estimated Outlays	14	14	15	15	15	73

BASIS OF ESTIMATE

For this estimate, CBO assumes that the bill will be enacted near the beginning of calendar year 2018 and that the authorized amounts will be appropriated for each fiscal year.

H.R. 4475 would authorize \$15 million annually over the 2018-2024 period for USGS to establish a system to streamline and update monitoring of active volcanoes. The bill would require USGS to:

- Replace 143 outdated seismometers (instruments that measure the ground motion) on active volcanoes,
- Create a volcano watch office that would be in operation 7 days a week and 24 hours a day to monitor active volcanoes,
- Create a national volcano data center to collect and analyze data on volcanic activity,
- Implement a grant program to support research on volcano monitoring, and
- Conduct a study to assess the feasibility of establishing volcano observatories in Guam, the Northern Mariana Islands, and American Samoa.

USGS also would be authorized to enter into cooperative agreements with states, territories, and universities to assist in running the system.

Based on historical spending patterns for similar activities, CBO estimates that implementing H.R. 4475 would cost \$73 million over the 2018-2022 period and \$32 million after 2022.

PAY-AS-YOU-GO CONSIDERATIONS: None.

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting H.R. 4475 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

MANDATES

H.R. 4475 contains no intergovernmental or private-sector mandates as defined in UMRA.

PREVIOUS CBO ESTIMATE

On May 9, 2017, CBO transmitted an estimate for S. 346, the National Volcano Early Warning and Monitoring System Act, as ordered reported by the Senate Committee on Energy and Natural Resources on March 30, 2017. CBO's estimated costs for the two bills differ because H.R. 4475 would authorize the appropriation of specific amounts while S. 346 would authorize the appropriation of such sums as are necessary.

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