



**CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE**

July 19, 2000

S. 1066
Carbon Cycle and Agricultural Best Practices Act
*As ordered reported by the Senate Committee on Agriculture, Nutrition, and Forestry
on June 20, 2000*

SUMMARY

S. 1066 would authorize appropriations for fiscal years 2001 through 2005 for agricultural research and incentive programs related to the earth’s carbon cycle and other environmental concerns. Assuming appropriation of the necessary amounts and adjusting for anticipated inflation, CBO estimates that implementing the bill would cost \$417 million over the 2001-2005 period. (Without any adjustment for inflation, implementation costs would be about \$402 million over this period.) S. 1066 would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply. S. 1066 contains no inter-governmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

For this estimate, CBO assumes that the amounts authorized will be appropriated for each fiscal year and that spending will follow the pattern of past appropriations for similar projects. The estimated impact of S. 1066 is shown in the following table. The costs of this legislation fall within budget function 350 (agriculture).

	By Fiscal Year, in Millions of Dollars				
	2001	2002	2003	2004	2005
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated Authorization Level	101	93	94	96	97
Estimated Outlays	64	77	87	93	96

BASIS OF ESTIMATE

S. 1066 would amend the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to expand federal support for agricultural programs that benefit the environment, especially those that affect carbon storage in soils. For example, it would authorize the Department of Agriculture (USDA) to study the effects of agricultural systems and “best practices” on the carbon balance in soils develop a database on the carbon storage potential of soils and support interagency programs to monitor the carbon cycle. The bill also would authorize payments and technical assistance for agricultural producers that participate in research programs for best practices that protect the environment. All of the funding authorized in S. 1066 would be subject to appropriation.

Environmental Research

Based on information provided by USDA, CBO estimates that S. 1066 would authorize the appropriation of \$86 million for fiscal year 2001, including \$75 million for the following research initiatives outlined in the bill:

- \$30 million for the Agricultural Research Service to develop data and conduct research addressing soil carbon balance and storage;
- \$20 million for the Cooperative State Research, Education, and Extension Service to develop a research agenda on the carbon cycle and agricultural best practices, and to identify, develop, and evaluate agricultural best practices;
- \$15 million for the Natural Resources Conservation Service to develop a soil carbon database, linked electronically to county-level soil surveys and state-level soil maps, for an assessment of the carbon storage potential of soils in the United States;
- \$5 million as specified in the bill for up to two research consortia that would study and promote agricultural best practices related to the carbon cycle; and
- \$5 million as specified in the bill for a cooperative effort between USDA and the National Aeronautics and Space Administration for a remote sensing program that would focus on carbon sequestration.

CBO estimates that the above activities would continue under the bill at an annual cost of \$75 million adjusted for anticipated inflation over the 2002-2005 period.

In addition, the bill would authorize the appropriation of \$10 million for a joint research initiative between USDA and the National Oceanic and Atmospheric Administration to establish a national network for measuring trace gases that would document the flux of carbon between soil, air, and water. CBO assumes that all of those funds would be appropriated in fiscal year 2001.

Finally, the bill would direct the Economic Research Service to submit a report no later than one year after enactment that analyzes the impact of the financial health of the farm economy of the United States under the Kyoto Protocol and other international agreements under the Framework Convention on Climate Change. CBO estimates that preparing this report would require the appropriation of \$1 million in fiscal year 2001.

Incentive and Assistance Programs

CBO estimates that S. 1066 would authorize the appropriation of about \$15 million for each of fiscal years 2001 through 2005 for payments and technical assistance to producers that cooperate in scientific research on agricultural best practices on their farms. Based on information from USDA, CBO estimates that producers with 2 million acres (around 5 percent of acres enrolled in major conservation programs) would participate in these programs. For this estimate, CBO assumes that those producers would receive an annual payment of \$2.50 per acre for cooperating in the research programs. In addition, we estimate that requiring USDA to assist those producers in planning, designing, and implementing agricultural best practices and natural resource management plans would cost about \$5.00 per acre.

PAY-AS-YOU-GO CONSIDERATIONS: None.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

S. 1066 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

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