As ordered reported by the Senate C By Fiscal Year, Millions of Dollars				2022		
by Fiscal Tear, Willions of Dollars	2022	2022-2027	2022-2032			
Direct Spending (Outlays)	0	0	0	0		
Revenues	0	0	0			
Increase or Decrease (-) in the Deficit	0	0	0	0		
Spending Subject to Appropriation (Outlays)	*	31	not estimated			
Statutory pay-as-you-go procedures apply?	No	Mandate Effects				
Increases on-budget deficits in any of the four consecutive 10-year	No	Contains intergovernmental ma	nndate? No			
periods beginning in 2033?	140	Contains private-sector manda	te? No			

S. 3053 would direct the National Oceanic and Atmospheric Administration (NOAA) to improve precipitation estimates for the United States. Specifically, the bill would authorize the appropriation of \$1.5 million for NOAA to contract with the National Academy of Sciences to produce a report on current precipitation estimate practices, their shortcomings, and ways they can be improved. The bill also would direct NOAA to develop and publish estimates of the likelihood of extreme precipitation occurrences and to publish guidance on best practices for developing estimates of extreme precipitation.

Using information on the cost of similar weather research and reporting by NOAA and accounting for anticipated inflation, CBO estimates that it would cost NOAA \$29 million over the 2022-2027 period to develop and publish the guidance for estimating extreme precipitation. In total, assuming appropriation of the authorized and estimated amounts, CBO estimates that implementing the bill would cost \$31 million over that same period.

The Infrastructure Investment and Jobs Act (Public Law 117-58) provided NOAA with advance appropriations totaling \$492 million over the 2022 to 2026 period for flood mapping and water modeling activities, including modernized studies of precipitation frequency and volume. The authorization of appropriations and the estimated amounts needed to implement S. 3053 would be in addition to the funds already provided.

The costs of the legislation, detailed in Table 1, fall within budget function 300 (natural resources and environment).

Table 1.
Estimated Increases in Spending Subject to Appropriation Under S. 3053

	By Fiscal Year, Millions of Dollars						
	2022	2023	2024	2025	2026	2027	2022-2027
Precipitation Estimates Report							
Authorization	2	0	0	0	0	0	2
Estimated Outlays	*	2	0	0	0	0	2
Extreme Precipitation Estimates and Guidance							
Estimated Authorization	*	9	6	6	6	7	34
Estimated Outlays	*	6	5	6	6	6	29
Total Changes							
Estimated Authorization	2	9	6	6	6	7	36
Estimated Outlays	*	8	5	6	6	6	31

^{* =} between zero and \$500,000.

On April 27, 2022, CBO transmitted a cost estimate for H.R. 1437, the PRECIP Act, as ordered reported by the House Committee on Science, Space, and Technology on November 16, 2021. The two pieces of legislation are similar, but some provisions differ and each piece of legislation would authorize the appropriation of different amounts. CBO's estimates of both pieces of legislation reflect those differences.

The CBO staff contact for this estimate is Robert Reese. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.