[118H4913]

		(Original Signature of Member)
119TH CONGRESS 1ST SESSION	H.R.	

To establish in the National Oceanic and Atmospheric Administration a program to improve precipitation forecasts, and for other purposes.

## IN THE HOUSE OF REPRESENTATIVES

Ms.	Ross	introduce	ed the	following	bill;	which	was	referred	to	the	Committe	e
			on _									

## A BILL

To establish in the National Oceanic and Atmospheric Administration a program to improve precipitation forecasts, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. ESTABLISHMENT OF NOAA PRECIPITATION
- 4 FORECASTS PROGRAM.
- 5 (a) Establishment.—There is established in the
- 6 National Oceanic and Atmospheric Administration
- 7 (NOAA) a program to improve precipitation forecasts (in
- 8 this section referred to as the "program").

1	(b) GOAL.—The goal of the program shall be to im-
2	prove precipitation forecasts across all timescales through
3	the research, development, and operational implementa-
4	tion of fully coupled Earth System Models. The program
5	shall carry out the following:
6	(1) Improve the understanding and prediction
7	of precipitation extremes from a wide variety of
8	weather systems and climate patterns.
9	(2) Improve the development, production, man-
10	agement, assimilation, integration, availability, and
11	curation of datasets for precipitation prediction.
12	(3) Identify and improve observations and anal-
13	yses necessary for precipitation prediction, including
14	relating to water vapor, oceans, and boundary lay-
15	ers.
16	(4) Utilize high performance computing and
17	other technologies, as appropriate, to advance Earth
18	System Models predictions skill of precipitation ex-
19	treme phenomena, including atmospheric rivers,
20	tropical cyclones, and winter storms across weather,
21	subseasonal, and decadal timescales.
22	(5) Advance understanding and modeling of
23	precipitation processes key to improving models and
24	precipitation forecasts from weather to subseasonal-

1	to-seasonal (S2S) to seasonal-to-decadal (S2D)
2	timescales.
3	(6) Support research and development to im-
4	prove the accuracy, reliability, and timeliness of pre-
5	cipitation prediction, in collaboration with academic
6	and private sector partners to test and evaluate
7	emerging technologies, including the use of machine
8	learning and artificial intelligence.
9	(7) Improve weather, subseasonal, seasonal, and
10	decadal skill for precipitation forecasts through the
11	use of emerging techniques and technologies.
12	(8) Support research in social and behavioral
13	sciences to improve precipitation forecast products
14	and communication, in collaboration with the Direc-
15	tor of the National Weather Service.
16	(9) Lead the ongoing advancement of current
17	and next-generation precipitation forecasting models.
18	(10) Identify observational gaps, systematic er-
19	rors, and model limitations in precipitation pre-
20	diction systems.
21	(11) Improve, expand, and sustain operational
22	precipitation products and applications for decision
23	support.
24	(12) Coordinate across NOAA line offices to ad-
25	dress priorities of the program.

1	(13) Direct efforts to engage with Federal,
2	State, local, Tribal, and academic entities and stake-
3	holders, as appropriate, when conducting program
4	activities.
5	(14) Ensure adequate data management, ac-
6	cess, and archive processes are in place to ensure
7	data and metadata are findable, accessible, inter-
8	operable, and usable by the science community and
9	public.
10	(c) UPDATES.—The Administrator of NOAA shall re-
11	vise and update, as necessary, the goals of the program
12	at least once every two years. Such revisions and updates
13	shall be incorporated into relevant NOAA strategic imple-
14	mentation plans as determined appropriate by the Admin-
15	istrator.
16	(d) AUTHORIZATION OF APPROPRIATIONS.—There is
17	authorized to be appropriated to the National Oceanic and
18	Atmospheric Administration to carry out this section the
19	following:
20	(1) \$15,000,000 for fiscal year 2026.
21	(2) \$15,040,000 for fiscal year 2027.
22	(3) \$15,080,800 for fiscal year 2028.
23	(4) \$15,122,416 for fiscal year 2029.
24	(5) \$15,200,000 for fiscal year 2030.