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(Original Signature of Member)

118TH CONGRESS
1ST SESSION

H. R. _____

To establish cooperative agreements for wildland fire research, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Ms. BONAMICI introduced the following bill; which was referred to the Committee on _____

A BILL

To establish cooperative agreements for wildland fire research, 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. SHORT TITLE.**

4 This Act may be cited as the “Satellites Preventing
5 Agricultural Crises and Emergencies Act of 2023” or the
6 “SPACE Act of 2023”.

7 **SEC. 2. ESTABLISHING COOPERATIVE AGREEMENTS FOR**
8 **WILDLAND FIRE RESEARCH.**

9 (a) COOPERATIVE AGREEMENTS.—

1 (1) IN GENERAL.—The Secretary of Agriculture
2 shall enter into cooperative agreements with land-
3 grant colleges and universities with a demonstrable
4 capacity to collect data, interpret, report on, and
5 otherwise conduct research on wildland fire sciences
6 for the purpose of promoting and researching the
7 use of available satellite data in order to predict,
8 control, monitor, or otherwise mitigate wildland fire
9 risk, including relating to the following:

10 (A) Smoke detection, land temperature,
11 fire weather, fuel composition, soil moisture,
12 and other metrics.

13 (B) Advanced remote sensing technologies,
14 including light detection and ranging, forest
15 carbon monitoring, and use of geostationary
16 and geosynchronous remote sensing resources.

17 (C) Resource deployment, wildland fire
18 management, and area mapping.

19 (D) Wildland fire behavior and predictive
20 modeling from historic, real-time, and near real-
21 time acquired data.

22 (2) REQUIREMENTS.—In entering cooperative
23 agreements under paragraph (1), the Secretary of
24 Agriculture shall—

1 (A) make available to recipient institutions
2 satellite data acquired by the Agriculture Re-
3 search Service, the National Agriculture Im-
4 agery Program, the National Institute of Food
5 and Agriculture, and other research agencies
6 determined relevant by the Secretary, including
7 such data that—

8 (i) provide real or near-real time im-
9 ages of earth's landmass;

10 (ii) can be gathered in multiple spec-
11 tral bands, including infrared; and

12 (iii) provide historical data sets to
13 mode, forecast, and track wildland fires;
14 and

15 (B) require recipient institutions to share
16 scientific research and reports, including
17 wildland fire forecasts, models, smoke drift pat-
18 terns, gaps and deficits in available data, and
19 any other materials produced by resources pro-
20 vided by the Department of Agriculture deter-
21 mined necessary by the Secretary.

22 (b) REPORT.—Not later than one year after the date
23 of the enactment of this Act, the Secretary of Agriculture
24 shall submit to the Committee on Agriculture of the House
25 of Representatives and the Committee on Agriculture, Nu-

1 trition, and Forestry of the Senate a report regarding op-
2 portunities to expand wildland fire research cooperative
3 agreements, improve the distribution of remote sensing re-
4 sources, and expand cooperative agreements to include
5 interagency groups with access to remote sensing data rel-
6 evant to wildland fire research.

7 **SEC. 3. REPORT ON SATELLITE-DRIVEN WILDLAND FIRE**
8 **RESEARCH.**

9 Not later than 180 days after the date of the enact-
10 ment of this Act, the Secretary of Agriculture, in consulta-
11 tion with the heads of other Federal departments or agen-
12 cies the Secretary determines appropriate, shall submit to
13 Congress a report that contains information relating to
14 the following:

15 (1) The needed resources and possible timeline
16 for implementation for integrating satellite and re-
17 mote sensing technologies, including commercial
18 data acquisitions, as well as airspace management
19 technology and drones, to collect, interpret, and dis-
20 tribute data on wildland fire, for the following pur-
21 poses:

22 (A) Forecasting fire growth and fire behav-
23 ior modeling.

24 (B) Developing fire containment strategies.

1 (C) Improving operational resource deploy-
2 ment.

3 (D) Producing daily fire progression maps.

4 (2) The need and opportunities to deploy aerial
5 resources, including drones, to provide field observa-
6 tions in regions experiencing multiple wildland fires.

7 (3) The capacity for remote sensing instru-
8 ments, including infrared technology, to detect fine
9 vegetation stress and fuel moisture with increased
10 frequency.

11 (4) An estimate of the cost to carry out para-
12 graphs (1) through (3), including to collect, acquire,
13 and provide to the Agricultural Research Services,
14 the National Agriculture Imagery Program, the Na-
15 tional Institute of Food and Agriculture, the U.S.
16 Forest Service, the National Interagency Fire Cen-
17 ter, and federally funded research entities, including
18 land-grant colleges and universities, the information
19 relating thereto.