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118TH CONGRESS
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H. R. 4866

[Report No. 118-214]

To direct the Administrator of the National Oceanic and Atmospheric Administration to establish a program to improve fire weather and fire environment forecasting, detection, and local collaboration, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 25, 2023

Mr. MIKE GARCIA of California (for himself, Ms. CARAVEO, and Mrs. KIM of California) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

SEPTEMBER 22, 2023

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in *italie*]

[For text of introduced bill, see copy of bill as introduced on July 25, 2023]

A BILL

To direct the Administrator of the National Oceanic and Atmospheric Administration to establish a program to improve fire weather and fire environment forecasting, detection, and local collaboration, 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 “Fire Weather Develop-*
5 *ment Act of 2023”.*

6 **SEC. 2. FIRE WEATHER FORECASTING AND DETECTION.**

7 *(a) ESTABLISHMENT.—The Administrator of the Na-*
8 *tional Oceanic and Atmospheric Administration, shall es-*
9 *tablish a program (in this Act referred to as the “Pro-*
10 *gram”)* to improve fire weather and fire environment fore-
11 *casting, detection, and delivery of products or services*
12 *through collaboration with Federal and State agencies or*
13 *departments, local emergency managers, and relevant enti-*
14 *ties.*

15 *(b) GOALS.—The goals of the Program shall be to de-*
16 *velop and improve accurate fire weather and fire environ-*
17 *ment forecasts and warnings in order to reduce loss of life,*
18 *reduce injuries, protect property, and reduce damage to the*
19 *economy from wildfires. The Program shall seek to improve*
20 *the assessment of fire weather and fire environments, the*
21 *understanding and prediction of wildfires, and the commu-*
22 *nications regarding such assessments with State and local*
23 *emergency officials in a timely and streamlined fashion,*
24 *with a focus on improving the following:*

1 (1) *The prediction of ignition, intensification*
2 *and spread of wildfires.*

3 (2) *The observation and monitoring of fire*
4 *weather and fire environments.*

5 (3) *The forecast and communication of smoke*
6 *dispersion from wildfires.*

7 (4) *Information dissemination and risk commu-*
8 *nication to develop more effective watch and warning*
9 *products relating to wildfires.*

10 (5) *The early detection of wildfires, including*
11 *pre-ignition analysis and ground condition character-*
12 *izations.*

13 (6) *The development, testing, and deployment of*
14 *novel tools and techniques related to understanding,*
15 *monitoring, and predicting fire weather and fire en-*
16 *vironments.*

17 (7) *The understanding and association of cli-*
18 *mate change and its impacts on fire weather and fire*
19 *environments.*

20 (8) *The unique characteristics, including obser-*
21 *vation or modeling requirements, related to fires at*
22 *the wildland-urban interface.*

23 (9) *The forecasting and understanding of the im-*
24 *pacts of prescribed burns (as such term is defined in*

1 *section 2 of the Prescribed Burn Approval Act of 2016*
2 *(16 U.S.C. 551c–1 note)).*

3 *(c) COLLABORATION WITH STAKEHOLDERS.—In de-*
4 *veloping the Program required under this section, the Ad-*
5 *ministrator of the National Oceanic and Atmospheric Ad-*
6 *ministration shall solicit and take into consideration input*
7 *from the weather industry, such academic entities as the*
8 *Administrator considers appropriate, and other relevant*
9 *stakeholders.*

10 *(d) ACTIVITIES.—To achieve the goals specified in sub-*
11 *section (b), the Administrator of the National Oceanic and*
12 *Atmospheric Administration may conduct research, devel-*
13 *opment, testing, demonstration, and operational transition*
14 *activities related to fire weather and fire environments, in-*
15 *cluding regarding the following:*

16 *(1) Tools and services to inform, support, and*
17 *complement active land management, local emergency*
18 *personnel, the United States Forest Service, and*
19 *State, local, and Tribal entities during their response*
20 *and mitigation efforts.*

21 *(2) Sensing technologies, such as infrared, micro-*
22 *wave, and active sensors suitable for potential deploy-*
23 *ment on spacecraft, aircraft, and unmanned aircraft*
24 *systems, to improve the monitoring and forecasting of*
25 *fire fuel and active wildfires, wildfire behavior models*

1 *and forecasts, mapping efforts, and the prediction of*
2 *wildfires and the impacts of such.*

3 *(3) Grid-based assessments and outlooks of fuel*
4 *moisture and danger levels.*

5 *(4) Social and behavior sciences related to fire*
6 *weather and fire environment warning products.*

7 *(5) Advanced satellite detection products coupled*
8 *with atmosphere and fire weather modeling systems.*

9 *(6) Education and training to expand the num-*
10 *ber of students and researchers in areas of study and*
11 *research related to wildfires, fire weather, and fire en-*
12 *vironments.*

13 *(7) Modeling systems to link long-term climate*
14 *predictions to localized or general land management*
15 *decisions.*

16 *(8) Communication and outreach to commu-*
17 *nities, energy utilities, owners and operators of crit-*
18 *ical infrastructure, and other relevant stakeholders re-*
19 *garding fire weather and fire environment risk.*

20 *(9) Stewardship and dissemination, to the extent*
21 *practicable, of National Oceanic and Atmospheric Ad-*
22 *ministration scientific data and related products and*
23 *services in formats meeting shared standards to en-*
24 *hance the interoperability, usability, and accessibility*
25 *of such data in order to better meet the needs of the*

1 *National Oceanic and Atmospheric Administration,*
2 *other Federal agencies, and relevant stakeholders.*

3 (10) *Improvement of spatial and temporal reso-*
4 *lution observations.*

5 (11) *Any other topic or activity the Adminis-*
6 *trator determines relevant.*

7 (e) *NOVEL TOOLS FOR MONITORING AND PRE-*
8 *DICTION.—The Administrator of the National Oceanic and*
9 *Atmospheric Administration, in consultation with the*
10 *heads of the agencies specified in section 3, or other appro-*
11 *priate stakeholders, including commercial partners, shall*
12 *develop novel tools and technologies to support the activities*
13 *of the Program and which may be applied to broader*
14 *wildland fire research, monitoring, and mitigation activi-*
15 *ties, as practicable and appropriate.*

16 (f) *EXTRAMURAL RESEARCH.—The Administrator of*
17 *the National Oceanic and Atmospheric Administration*
18 *shall collaborate with and support the non-Federal wildland*
19 *fire research community, which includes institutions of*
20 *higher education, private sector entities, nongovernmental*
21 *organizations, and other relevant stakeholders, by making*
22 *funds available through competitive grants, contracts, and*
23 *cooperative agreements.*

24 (g) *COMMERCIAL DATA.—*

1 (1) *IN GENERAL.*—Not later than one year after
2 the date of the enactment of this Act, the Adminis-
3 trator of the National Oceanic and Atmospheric Ad-
4 ministration, in consultation with the heads of other
5 Federal agencies and relevant stakeholders, may enter
6 into contracts with one or more private sector entities
7 to obtain additional airborne and space-based data
8 and observations that may enhance or supplement the
9 understanding, monitoring, and prediction, of fire
10 weather and fire environments, and the relevant Pro-
11 gram activities under this section.

12 (2) *CONSULTATION.*—In carrying out activities
13 under paragraph (1), the Administrator of the Na-
14 tional Oceanic and Atmospheric Administration shall
15 consult with private sector entities through the Na-
16 tional Advisory Committee on Wildfires under section
17 4 to identify needed tools and data that can be best
18 provided by National Oceanic and Atmospheric Ad-
19 ministration satellites and are most beneficial to
20 wildfire and smoke detection and monitoring.

21 (h) *NONDUPLICATION.*—To the maximum extent prac-
22 ticable, the Administrator of the National Oceanic and At-
23 mospheric Administration shall consult with the National
24 Interagency Fire Center, including the Joint Fire Science
25 Program, to avoid duplication of activities under this sec-

1 *tion and ensure the Administration's focus on unique re-*
2 *search activities best suited for transition to operations.*

3 *(i) UNMANNED AIRCRAFT SYSTEMS.—*

4 *(1) IN GENERAL.—The Administrator of the Na-*
5 *tional Oceanic and Atmospheric Administration*
6 *shall—*

7 *(A) assess the role and potential benefits of*
8 *unmanned aircraft systems to improve data col-*
9 *lection in support of fire weather and fire envi-*
10 *ronment modeling, meteorological observations,*
11 *predictions, and forecasts;*

12 *(B) identify objectives for testing such sys-*
13 *tems' use for obtaining fire weather and fire en-*
14 *vironment observations, and other relevant ac-*
15 *tivities; and*

16 *(C) transition unmanned aircraft systems*
17 *technologies from research to operations as the*
18 *Administrator considers appropriate.*

19 *(2) BRIEFING.—Not later than 270 days after*
20 *the date of enactment of the Act, the Administrator of*
21 *the National Oceanic and Atmospheric Administra-*
22 *tion shall brief the appropriate committees of Con-*
23 *gress on the activities under paragraph (1).*

24 *(3) PILOT PROGRAMS.—Not later than 18*
25 *months after the date of the enactment of this Act, the*

1 *Administrator of the National Oceanic and Atmos-*
2 *pheric Administration may conduct pilot programs of*
3 *unmanned aircraft systems for fire weather and fire*
4 *environment observations, including relating to the*
5 *following:*

6 (A) *Testing of unmanned aircraft systems*
7 *in approximations of real-world scenarios.*

8 (B) *Assessment of the utility of meteorolog-*
9 *ical data collected from fire response and assess-*
10 *ment aircraft.*

11 (C) *Input into appropriate models of col-*
12 *lected data to predict fire behavior, including*
13 *coupled atmosphere and fire models.*

14 (D) *Collection of best management practices*
15 *for deployment of unmanned aircraft systems for*
16 *fire weather and fire environment observations.*

17 (4) *PROHIBITION.—*

18 (A) *IN GENERAL.—Except as provided*
19 *under subparagraphs (B) and (C), the Adminis-*
20 *trator of the National Oceanic and Atmospheric*
21 *Administration may not procure any unmanned*
22 *aircraft system that is manufactured or assem-*
23 *bled by an entity in a foreign country of con-*
24 *cern.*

1 (B) *EXEMPTION.*—*The prohibition under*
2 *subparagraph (A) shall not apply to the Admin-*
3 *istrator of the National Oceanic and Atmos-*
4 *spheric Administration if the Administrator de-*
5 *termines, in consultation with the Secretary of*
6 *Homeland Security, that the procurement of an*
7 *unmanned aircraft system is necessary for the*
8 *sole purpose of marine or atmospheric science or*
9 *management.*

10 (C) *WAIVER.*—*The Administrator of the Na-*
11 *tional Oceanic and Atmospheric Administration*
12 *may waive the prohibition under subparagraph*
13 *(A) on a case-by-case basis—*

14 (i) *with the approval of the Secretary*
15 *of Homeland Security; and*

16 (ii) *upon written or electronic notifica-*
17 *tion to appropriate committees of Congress*
18 *not later than 30 days after any such waiv-*
19 *er.*

20 (5) *AIRSPACE OPERATIONS SYSTEM.*—*The Ad-*
21 *ministrator of the National Oceanic and Atmospheric*
22 *Administration, in cooperation with the Adminis-*
23 *trator of the National Aeronautics and Space Admin-*
24 *istration, shall utilize the capabilities of unmanned*
25 *aircraft systems as appropriate for fire weather and*

1 *fire environment observations, and may use a wildfire*
2 *airspace operations system that accounts for piloted*
3 *aircraft, unmanned aircraft systems, and other new*
4 *and emerging capabilities after such airspace oper-*
5 *ations system is developed and determined ready for*
6 *operational use by the Administrator of the National*
7 *Aeronautics and Space Administration.*

8 (6) *AUTHORIZATION OF APPROPRIATIONS.—*
9 *From amounts made available for Procurement, Ac-*
10 *quisition, and Construction of the National Oceanic*
11 *and Atmospheric Administration, there is authorized*
12 *to be appropriated \$5,000,000 for fiscal year 2024 to*
13 *carry out this section.*

14 (j) *DEFINITIONS.—In this section:*

15 (1) *APPROPRIATE COMMITTEES OF CONGRESS.—*
16 *The term “appropriate committees of Congress”*
17 *means the Committee on Science, Space, and Tech-*
18 *nology and the Committee on Homeland Security of*
19 *the House of Representatives and the Committee on*
20 *Commerce, Science, and Transportation and the Com-*
21 *mittee on Homeland Security and Governmental Af-*
22 *airs of the Senate.*

23 (2) *CRITICAL INFRASTRUCTURE.—The term*
24 *“critical infrastructure” has the meaning given such*

1 *term in section 1016(e) of Public Law 107–56 (42*
2 *U.S.C. 5195c(e)).*

3 (3) *FOREIGN COUNTRY OF CONCERN.*—*The term*
4 *“foreign country of concern” has the meaning given*
5 *such term in section 9901 of the William M. (Mac)*
6 *Thornberry National Defense Authorization Act for*
7 *Fiscal Year 2021 (15 U.S.C. 4651).*

8 (4) *INSTITUTION OF HIGHER EDUCATION.*—*The*
9 *term “institution of higher education” has the mean-*
10 *ing given such term in section 101 of the Higher Edu-*
11 *cation Act of 1965 (20 U.S.C. 1001).*

12 (5) *UNMANNED AIRCRAFT SYSTEM.*—*The term*
13 *“unmanned aircraft system” has the meaning given*
14 *such term in section 44801 of title 49, United States*
15 *Code.*

16 (6) *WEATHER INDUSTRY.*—*The term “weather*
17 *industry” has the meaning given such term in section*
18 *2 of the Weather Research and Forecasting Innova-*
19 *tion Act of 2017 (15 U.S.C. 8501).*

20 **SEC. 3. INTERAGENCY COORDINATING COMMITTEE ON**
21 **WILDFIRES.**

22 (a) *ESTABLISHMENT.*—*Not later than 90 days after*
23 *the date of the enactment of this Act, the Director of the*
24 *Office of Science and Technology Policy shall establish an*
25 *interagency coordinating committee to be known as the*

1 *“Interagency Coordinating Committee on Wildfires” (in*
2 *this section referred to as the “Committee”). The chair of*
3 *the Committee shall be the Administrator of the National*
4 *Oceanic and Atmospheric Administration.*

5 (b) *PURPOSE.—The Committee shall coordinate the de-*
6 *velopment of accurate and timely wildfire forecasting, detec-*
7 *tion, monitoring, and delivery of related products or serv-*
8 *ices that best assist State and local emergency officials while*
9 *avoiding duplication of activities.*

10 (c) *MEMBERSHIP.—In addition to the chair, the Com-*
11 *mittee shall be composed of the heads or appropriate des-*
12 *ignees of the following program agencies:*

13 (1) *The Federal Emergency Management Agency.*

14 (2) *The United States Fire Administration.*

15 (3) *The United States Forest Service.*

16 (4) *The National Aeronautics and Space Admin-*
17 *istration.*

18 (5) *The Department of the Interior.*

19 (6) *The Department of Agriculture.*

20 (7) *The United States Geological Survey.*

21 (8) *The Office of Science and Technology Policy.*

22 (9) *Any other Federal department or agency the*
23 *Director of the Office of Science and Technology Pol-*
24 *icy considers appropriate.*

1 (d) *STRATEGIC PLAN.*—Not later than one year after
2 the date of the enactment of this Act, the Committee shall
3 submit to Congress a strategic plan for the Program that
4 includes the following:

5 (1) *A description of short-term, mid-term, and*
6 *long-term objectives to achieve the purpose specified in*
7 *subsection (b).*

8 (2) *A description of how agencies specified in*
9 *subsection (c) will collaborate with stakeholders and*
10 *take into account stakeholder needs and recommenda-*
11 *tions in developing such objectives.*

12 (3) *A description of existing and new observa-*
13 *tional and data infrastructure needed to accomplish*
14 *such objectives.*

15 (4) *A description of the role of each such agency*
16 *in achieving such objectives.*

17 (5) *Guidance regarding how the Committee’s rec-*
18 *ommendations are best used in climate adaptation*
19 *planning for Federal, State, local, Tribal, and terri-*
20 *torial entities.*

21 (e) *INTERAGENCY AGREEMENTS.*—The heads of agen-
22 *cies specified in subsection (c) may enter into one or more*
23 *interagency agreements providing for cooperation and col-*
24 *laboration in the development of wildfire forecasting, detec-*
25 *tion, and monitoring tools, instruments, technologies, and*

1 *research to accomplish the purpose described in subsection*
2 *(b).*

3 *(f) COLLABORATION.—The head of each agency speci-*
4 *fied in subsection (c) shall, to the extent practicable, in-*
5 *crease engagement and cooperation with international, aca-*
6 *demic, State, and local communities regarding the infra-*
7 *structure, data, and scientific research necessary to best ad-*
8 *vance the forecasting, detection, and monitoring of and*
9 *preparation for wildfires.*

10 **SEC. 4. NATIONAL ADVISORY COMMITTEE ON WILDFIRES.**

11 *(a) ESTABLISHMENT.—*

12 *(1) IN GENERAL.—Not later than 90 days after*
13 *the submission of the strategic plan required by sec-*
14 *tion 3(d), the Director of the Office of Science and*
15 *Technology Policy shall establish a national advisory*
16 *committee to be known as the “National Advisory*
17 *Committee on Wildfires” (in this section referred to*
18 *as the “Advisory Committee”). The Advisory Com-*
19 *mittee shall consist of not fewer than seven and not*
20 *more than 15 members who are qualified to provide*
21 *advice regarding wildfire forecasting, detection, moni-*
22 *toring, and delivery of related products or services,*
23 *including from the following entities:*

24 *(A) Research and academic institutions.*

1 (B) *Public communication or broadcast en-*
2 *tities.*

3 (C) *Emergency management agencies.*

4 (D) *State, local, or Tribal governments.*

5 (E) *The National Association of State For-*
6 *esters.*

7 (F) *Business communities.*

8 (G) *Other entities as designated by the Di-*
9 *rector of the Office of Science and Technology*
10 *Policy.*

11 (2) *PROHIBITION.—Members of the Advisory*
12 *Committee may not be employees of the Federal Gov-*
13 *ernment.*

14 (b) *ASSESSMENT.—The Advisory Committee shall offer*
15 *assessments and recommendations relating to the following:*

16 (1) *Tailored forecasting, detection, and moni-*
17 *toring products and tools.*

18 (2) *Communication and delivery methods of*
19 *wildfire forecasting, detection, and monitoring infor-*
20 *mation.*

21 (3) *Opportunities to streamline Federal fore-*
22 *casting, monitoring, and detection information to*
23 *local emergency personnel and communities.*

1 (4) *The management, coordination, implementa-*
2 *tion, and activities of the Interagency Coordinating*
3 *Committee on Wildfires under section 3.*

4 (5) *The effectiveness of the Interagency Coordi-*
5 *nating Committee on Wildfires in meeting its pur-*
6 *poses.*

7 (c) *COMPENSATION.—Members of the Advisory Com-*
8 *mittee shall serve without compensation.*

9 (d) *REPORTS.—Not less frequently than biennially, the*
10 *Advisory Committee shall report to the Director of the Office*
11 *of Science and Technology Policy on the assessments carried*
12 *out under subsection (b) and its recommendations for ways*
13 *to improve the coordination and dissemination of wildfire*
14 *forecasts, warnings, and detection and monitoring informa-*
15 *tion.*

16 (e) *CHARTER.—Notwithstanding section 1013(b)(2) of*
17 *title 5, United States Code, the Advisory Committee shall*
18 *not be required to file a charter subsequent to its initial*
19 *charter, filed under section 1008(c) of such title, before the*
20 *termination date specified in subsection (f) of this section.*

21 (f) *TERMINATION.—The Advisory Committee shall ter-*
22 *minate on September 30, 2028.*

23 (g) *CONFLICT OF INTEREST.—An Advisory Committee*
24 *member shall recuse himself or herself from any Advisory*

1 *Committee activity in which he or she has an actual pecu-*
2 *niary interest.*

3 **SEC. 5. ESTABLISHMENT OF FIRE WEATHER TESTBED.**

4 (a) *IN GENERAL.*—*The Administrator of the National*
5 *Oceanic and Atmospheric Administration shall establish a*
6 *fire weather testbed to enable engagement across the Federal*
7 *Government, State and local governments, academia, pri-*
8 *vate and federally funded research laboratories, the private*
9 *sector, and end-users in order to evaluate the accuracy and*
10 *usability of technology, models, fire weather products and*
11 *services, and other research to accelerate the implementa-*
12 *tion, transition to operations, and use of new capabilities*
13 *by the National Oceanic and Atmospheric Administration,*
14 *Federal and land management agencies, and other relevant*
15 *stakeholders.*

16 (b) *RESOURCES.*—*In carrying out this section, the Ad-*
17 *ministrator of the National Oceanic and Atmospheric Ad-*
18 *ministration may not transfer or reprogram any funds, de-*
19 *tail any personnel, or make use of any infrastructure from*
20 *cooperative institutes of the National Oceanic and Atmos-*
21 *pheric Administration in existence as of the date of the en-*
22 *actment of this Act for the fire weather testbed established*
23 *under subsection (a).*

24 (c) *AUTHORIZATION OF APPROPRIATIONS.*—*From*
25 *amounts made available for Procurement, Acquisition, and*

1 *Construction of the National Oceanic and Atmospheric Ad-*
2 *ministration, there is authorized to be appropriated*
3 *\$15,000,000 for fiscal year 2024 to carry out this section.*

4 **SEC. 6. INCIDENT METEOROLOGIST WORKFORCE.**

5 *(a) WORKFORCE AND TRAINING ASSESSMENT.—Not*
6 *later than six months after the date of the enactment of this*
7 *Act, the Administrator of the National Oceanic and Atmos-*
8 *pheric Administration shall submit to the Committee on*
9 *Science, Space, and Technology of the House of Representa-*
10 *tives and the Committee on Commerce, Science, and Trans-*
11 *portation of the Senate the results of an assessment of Na-*
12 *tional Weather Service workforce and training challenges*
13 *for Incident Meteorologists, and a roadmap for overcoming*
14 *such challenges. Such assessment shall take into consider-*
15 *ation information technology support, logistical and ad-*
16 *ministrative operations, anticipated weather and climate*
17 *conditions, and feedback from relevant stakeholders, and*
18 *shall include, to the maximum extent practicable, an identi-*
19 *fication by the National Weather Service of the following:*

20 *(1) The expected number of Incident Meteorolo-*
21 *gists needed over the next five years.*

22 *(2) Potential hiring authorities necessary to*
23 *overcome any identified workforce and training chal-*
24 *lenges.*

1 (3) *Alternative services or assistance options the*
2 *National Weather Service could provide to meet oper-*
3 *ational needs.*

4 (b) *OVERTIME PAY.—*

5 (1) *IN GENERAL.—Any premium pay for services*
6 *performed by Incident Meteorologists of the National*
7 *Weather Service that are determined by the Secretary*
8 *of Commerce to be primarily related to emergency*
9 *wildland fire suppression activities shall be dis-*
10 *regarded in calculating the aggregate of such employ-*
11 *ee’s basic pay and premium pay for purposes of a*
12 *limitation under section 5547 of title 5, United States*
13 *Code, or under any other provision of law.*

14 (2) *RATES.—Section 5542(a)(5) of title 5,*
15 *United States Code, is amended by inserting “, the*
16 *National Weather Service,” after “Interior”.*

17 **SEC. 7. RESEARCH ON WILDLAND FIRE COMMUNICATIONS**
18 **AND INFORMATION DISSEMINATION.**

19 (a) *IN GENERAL.—*

20 (1) *PUBLIC SAFETY RESEARCH.—Not later than*
21 *60 days after the date of the enactment of this Act,*
22 *the Director, acting through the head of the Public*
23 *Safety and Communications Research Division and*
24 *in consultation with the Fire Research Division and*

1 *technology manufacturers, shall carry out research on*
2 *the following:*

3 *(A) Public safety communication coordina-*
4 *tion standards among Federal, State, Tribal,*
5 *and local wildland firefighters, fire management*
6 *response officials, and member agencies.*

7 *(B) Improving and integrating existing*
8 *communications systems to transmit secure real-*
9 *time data, alerts, and advisories to and from fire*
10 *management response officials and wildland fire-*
11 *fighters.*

12 *(2) FIELD TESTING AND MEASUREMENT OF IN-*
13 *FORMATION DISSEMINATION AND TECHNOLOGY.—The*
14 *Public Safety and Communications Research Divi-*
15 *sion, in consultation with the Fire Research Division*
16 *and member agencies, shall conduct both live and vir-*
17 *tual field testing of equipment, software, and other*
18 *technologies to determine current times of information*
19 *dissemination and develop standards for the delivery*
20 *of useful and secure real-time data among member*
21 *agencies, fire management response officials, and*
22 *wildland firefighters, based on findings from research*
23 *under subsection (a).*

24 *(b) RECOMMENDATIONS.—*

1 (1) *IN GENERAL.*—*The Director shall develop*
2 *and publish recommendations to improve public safe-*
3 *ty communication coordination standards among*
4 *wildland first responders and fire management re-*
5 *sponse officials.*

6 (2) *TRANSMITTAL.*—*The Director shall transmit*
7 *the recommendations under paragraph (1) to the Of-*
8 *fice of Management and Budget and the Office of*
9 *Science and Technology Policy for member agencies to*
10 *implement.*

11 (3) *REPORTING REQUIREMENTS.*—

12 (A) *IN GENERAL.*—*The Director shall sub-*
13 *mit to the Committee on Science, Space, and*
14 *Technology of the House of Representatives and*
15 *the Committee on Commerce, Science, and*
16 *Transportation of the Senate a report containing*
17 *the recommendations published under paragraph*
18 *(1).*

19 (B) *IMPLEMENTATION.*—*Not later than 1*
20 *year after the date of the publication of the Di-*
21 *rector's recommendations under paragraph (1),*
22 *the Comptroller General of the United States*
23 *shall submit to the Committee on Science, Space,*
24 *and Technology of the House of Representatives*
25 *and the Committee on Commerce, Science, and*

1 *Transportation of the Senate a report on the ex-*
2 *tent to which member agencies have implemented*
3 *such recommendations.*

4 *(c) FUNDING.—From amounts made available to the*
5 *National Institute of Standards and Technology, the Direc-*
6 *tor shall allocate \$3,000,000 for each of fiscal years 2024*
7 *through 2028 to carry out this section.*

8 *(d) DEFINITIONS.—In this section:*

9 *(1) DIRECTOR.—The term “Director” means the*
10 *Director of the National Institute of Standards and*
11 *Technology.*

12 *(2) MEMBER AGENCY.—The term “member agen-*
13 *cy” means a member agency of the National Inter-*
14 *agency Fire Center, including the Bureau of Indian*
15 *Affairs, Bureau of Land Management, National Park*
16 *Service, National Oceanic and Atmospheric Adminis-*
17 *tration, U.S. Fish and Wildlife Service, Forest Serv-*
18 *ice, United States Fire Administration, and the De-*
19 *partment of Defense.*

20 *(3) WILDLAND FIREFIGHTER.—The term*
21 *“wildland firefighter” means any person who partici-*
22 *pates in wildland firefighting activities.*

23 *(4) FIRE MANAGEMENT RESPONSE OFFICIALS.—*
24 *The term “fire management response officials” means*
25 *regional fire directors, deputy regional fire directors,*

1 agency officials who directly oversee fire operations,
2 fire management officers, and individuals serving on
3 incident management teams.

4 (5) *TECHNOLOGY MANUFACTURERS.*—The term
5 “technology manufacturers” means private sector en-
6 tities that manufacture communications technologies
7 used by Federal, State, Tribal, or local wildland fire
8 authorities.

9 **SEC. 8. DEFINITIONS.**

10 *In this Act:*

11 (1) *FIRE ENVIRONMENT.*—The term “fire envi-
12 ronment” means—

13 (A) the environmental conditions, such as
14 soil moisture, vegetation, topography, snowpack,
15 atmospheric temperature, moisture, and wind,
16 that influence—

17 (i) fuel and fire behavior; and

18 (ii) smoke dispersion and transport;

19 and

20 (B) the associated environmental impacts
21 occurring during and after fire events.

22 (2) *FIRE WEATHER.*—The term “fire weather”
23 means the weather conditions that influence the start,
24 spread, character, or behavior of wildfires or fires at
25 the wildland-urban interface and relevant meteorolog-

1 *ical and chemical phenomena, including air quality,*
2 *smoke, and meteorological parameters such as relative*
3 *humidity, air temperature, wind speed and direction,*
4 *and atmospheric composition and chemistry, includ-*
5 *ing emissions and mixing heights.*

Union Calendar No. 174

118TH CONGRESS
1ST Session

H. R. 4866

[Report No. 118-214]

A BILL

To direct the Administrator of the National Oceanic and Atmospheric Administration to establish a program to improve fire weather and fire environment forecasting, detection, and local collaboration, and for other purposes.

SEPTEMBER 22, 2023

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed