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2D SESSION

S. 4343

To establish and maintain a coordinated program within the National Oceanic and Atmospheric Administration that improves wildfire, fire weather, fire risk, and smoke related forecasting, detection, modeling, observations, and service delivery, and to address growing needs in the wildland-urban interface, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 15, 2024

Ms. CANTWELL (for herself, Mr. CRUZ, Mr. LUJÁN, Mr. SULLIVAN, Ms. ROSEN, Ms. MURKOWSKI, Mr. SCHATZ, and Mr. PADILLA) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To establish and maintain a coordinated program within the National Oceanic and Atmospheric Administration that improves wildfire, fire weather, fire risk, and smoke related forecasting, detection, modeling, observations, and service delivery, and to address growing needs in the wildland-urban interface, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Fire Ready Nation Act of 2024”.

1 (b) TABLE OF CONTENTS.—The table of contents for
 2 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.
- Sec. 3. Establishment of fire weather services program.
- Sec. 4. Fire weather testbed.
- Sec. 5. Data management and technology modernization.
- Sec. 6. Surveys and assessments.
- Sec. 7. Incident Meteorologist Service.
- Sec. 8. Emergency response activities.
- Sec. 9. Submissions to Congress regarding the fire weather services program,
 incident meteorologist workforce needs, and National Weather
 Service workforce support.
- Sec. 10. Fire Science and Technology Working Group; strategic plan.
- Sec. 11. Fire weather rating system.
- Sec. 12. Government Accountability Office reports.
- Sec. 13. Cooperation and coordination.
- Sec. 14. General provisions.
- Sec. 15. Authorization of appropriations.

3 **SEC. 2. DEFINITIONS.**

4 In this Act:

5 (1) ADMINISTRATION.—The term “Administra-
 6 tion” means the National Oceanic and Atmospheric
 7 Administration.

8 (2) APPROPRIATE COMMITTEES OF CON-
 9 GRESS.—The term “appropriate committees of Con-
 10 gress” means—

11 (A) the Committee on Commerce, Science,
 12 and Transportation of the Senate; and

13 (B) the Committee on Science, Space, and
 14 Technology of the House of Representatives.

15 (3) EARTH SYSTEM MODEL.—The term “Earth
 16 system model” means a mathematical model con-
 17 taining all relevant components of the Earth, namely

1 the atmosphere, oceans, land, cryosphere, and bio-
2 sphere.

3 (4) FIRE ENVIRONMENT.—The term “fire envi-
4 ronment” means—

5 (A) the environmental conditions, such as
6 soil moisture, vegetation, topography, snowpack,
7 atmospheric temperature, moisture, and wind,
8 that influence—

9 (i) fuel and fire behavior; and

10 (ii) the emission, chemical evolution,
11 and transport of smoke from wildfires; and

12 (B) the associated environmental impacts
13 occurring during and after fire events.

14 (5) FIRE WEATHER.—The term “fire weather”
15 means the weather conditions that influence the
16 start, spread, character, or behavior of wildfires or
17 fires at the wildland-urban interface and relevant
18 meteorological and chemical phenomena, including
19 air quality, smoke, and meteorological parameters
20 such as relative humidity, air temperature, wind
21 speed and direction, and atmospheric composition
22 and chemistry, including emissions and mixing
23 heights.

24 (6) IMPACT-BASED DECISION SUPPORT SERV-
25 ICES.—The term “impact-based decision support

1 services” means scientific advice and interpretative
2 services the Administration provides to help core
3 partners, such as emergency personnel and public
4 safety officials, make decisions when the information
5 impacts the lives and livelihoods of the people of the
6 United States.

7 (7) INDIAN TRIBE.—The term “Indian tribe”
8 has the meaning given that term in section 4 of the
9 Indian Self-Determination and Education Assistance
10 Act (25 U.S.C. 5304).

11 (8) NATIVE HAWAIIAN COMMUNITY.—The term
12 “Native Hawaiian Community” means the distinct
13 Native Hawaiian indigenous political community
14 that Congress, exercising its plenary power over Na-
15 tive American affairs, has recognized and with which
16 Congress has implemented a special political and
17 trust relationship pursuant to the Constitution of
18 the United States.

19 (9) NATIVE HAWAIIAN ORGANIZATION.—The
20 term “Native Hawaiian organization” has the mean-
21 ing given that term in section 6207 of the Elemen-
22 tary and Secondary Education Act of 1965 (20
23 U.S.C. 7517), including the Department of Hawai-
24 ian Home Lands and the Office of Hawaiian Affairs.

1 (10) SEASONAL.—The term “seasonal” has the
2 meaning given that term in section 2 of the Weather
3 Research and Forecasting Innovation Act of 2017
4 (15 U.S.C. 8501).

5 (11) SMOKE.—The term “smoke” means emis-
6 sions, including the gases and particles released into
7 the air as a result of wildfire.

8 (12) STATE.—The term “State” means a State,
9 the District of Columbia, the Commonwealth of
10 Puerto Rico, Guam, American Samoa, the Common-
11 wealth of the Northern Mariana Islands, the United
12 State Virgin Islands, the Federated States of Micro-
13 nesia, the Republic of the Marshall Islands, or the
14 Republic of Palau.

15 (13) TRIBAL ORGANIZATION.—The term “Trib-
16 al organization” has the meaning given that term in
17 section 4 of the Indian Self-Determination and Edu-
18 cation Assistance Act (25 U.S.C. 5304).

19 (14) UNDER SECRETARY.—The term “Under
20 Secretary” means the Under Secretary of Commerce
21 for Oceans and Atmosphere.

22 (15) WILDFIRE.—The term “wildfire” means
23 any non-structure fire that occurs in vegetation or
24 natural fuels, originating from an unplanned igni-
25 tion.

1 (16) WILDLAND-URBAN INTERFACE.—The term
 2 “wildland-urban interface” means the area, zone, or
 3 region of transition between unoccupied or undevel-
 4 oped land and human development where structures
 5 and other human development meet or intermingle
 6 with undeveloped wildland or vegetative fuels.

7 **SEC. 3. ESTABLISHMENT OF FIRE WEATHER SERVICES**
 8 **PROGRAM.**

9 (a) IN GENERAL.—The Under Secretary shall estab-
 10 lish and maintain a coordinated fire weather services pro-
 11 gram among the offices of the Administration in existence
 12 as of the date of the enactment of this Act.

13 (b) PROGRAM FUNCTIONS.—The functions of the
 14 program established under subsection (a), consistent with
 15 the priorities described in section 101 of the Weather Re-
 16 search and Forecasting Innovation Act of 2017 (15 U.S.C.
 17 8511), shall be—

18 (1) to support readiness, responsiveness, under-
 19 standing, and resilience of the United States to
 20 wildfires, fire weather, smoke from wildfires, post-
 21 fire flooding and debris flows, and associated haz-
 22 ards and impacts in built and natural environments
 23 and at the wildland-urban interface;

24 (2) to collaboratively develop and disseminate
 25 accurate, precise, effective, and timely risk commu-

1 nications, forecasts, watches, and warnings relating
2 to wildfires, fire weather, smoke, post-fire flooding
3 and debris flows, and other associated conditions,
4 hazards, and impacts, as applicable, with Federal
5 land management agencies;

6 (3) to partner with and support the public,
7 Federal and State government entities, Indian
8 tribes, the Native Hawaiian Community, and aca-
9 demic and local partners through the development of
10 capabilities, impact-based decision support services,
11 and overall service delivery and utility related to fire
12 weather;

13 (4) to conduct and support research and devel-
14 opment of new and innovative models, technologies,
15 techniques, products, systems, processes, and proce-
16 dures to predict and improve understanding of
17 wildfires, fire weather, related air quality, post-fire
18 flooding and debris flows, and the fire environment;

19 (5) to develop strong research-to-operations and
20 operations-to-research transitions, in order to facili-
21 tate delivery of products, services, and tools to oper-
22 ational users and platforms related to fire weather;
23 and

24 (6) to develop, in coordination with Federal
25 land management agencies, impact-based decision

1 support services that operationalize and integrate
2 the functions described in paragraphs (1) through
3 (5) in order to provide comprehensive impact-based
4 decision support services that encompass the fire en-
5 vironment.

6 (c) PROGRAM PRIORITIES.—In developing and imple-
7 menting the program established under subsection (a), the
8 Under Secretary shall prioritize—

9 (1) development of a fire weather-enabled Earth
10 system model and data assimilation systems that—

11 (A) are capable of prediction and fore-
12 casting across relevant spatial and temporal
13 scales;

14 (B) include variables associated with fire
15 weather and the fire environment;

16 (C) improve understanding of the connec-
17 tions between fire weather and modes of climate
18 variability;

19 (D) incorporate emerging techniques such
20 as artificial intelligence, machine learning, and
21 cloud computing; and

22 (E) use a rapidly deployable network of
23 rain gauges for post-fire hazard monitoring;

24 (2) advancement of existing and new observa-
25 tional capabilities, including satellite-, airborne-, air-

1 , and ground-based systems and technologies, and
2 social networking and other public information-gath-
3 ering applications that—

4 (A) identify—

5 (i) high-risk pre-ignition conditions;

6 (ii) conditions that influence fire be-
7 havior and spread including those condi-
8 tions that suppress active fire events; and

9 (iii) fire risk values;

10 (B) support real-time notification and
11 monitoring of ignitions;

12 (C) support observations and data collec-
13 tion of fire weather and fire environment vari-
14 ables, including vegetation state and profiles of
15 smoke, winds, temperature, and humidity, for
16 development of the model and systems under
17 paragraph (1); and

18 (D) support forecasts and research that
19 mitigate the impacts of wildfires on human life,
20 health, and the economy; and

21 (3) development and implementation of ad-
22 vanced and user-oriented impact-based decision
23 tools, science, and technologies that—

24 (A) ensure real-time and retrospective
25 data, products, and services are findable, acces-

1 sible, interoperable, usable, inform further re-
2 search, and are analysis- and decision-ready;

3 (B) provide targeted information through-
4 out the fire lifecycle including pre-ignition, de-
5 tection, forecasting, post-fire, and monitoring
6 phases; and

7 (C) support early assessment of post-fire
8 hazards, such as air quality, debris flows,
9 mudslides, and flooding.

10 (d) PROGRAM ACTIVITIES.—In developing and imple-
11 menting the program established under subsection (a), the
12 Under Secretary may—

13 (1) conduct relevant physical and social science
14 research activities in support of the functions de-
15 scribed in subsection (b) and the priorities described
16 in subsection (c);

17 (2) conduct relevant activities, in coordination
18 with Federal land management agencies and Federal
19 science agencies, to assess fuel characteristics, in-
20 cluding moisture, loading, and other parameters
21 used to determine fire risk levels and outlooks;

22 (3) support and conduct research that assesses
23 impacts to marine, riverine, watershed, and other
24 relevant ecosystems, which may include forest and

1 rangeland ecosystems, resulting from activities asso-
2 ciated with mitigation of and response to wildfires;

3 (4) support and conduct attribution science re-
4 search relating to wildfires, fire weather, fire risk,
5 smoke, and associated conditions, risks, and im-
6 pacts;

7 (5) develop smoke and air quality forecasts,
8 forecast guidance, and prescribed burn weather fore-
9 casts, and conduct research on the impact of such
10 forecasts on response behavior that minimizes
11 health-related impacts from smoke exposure;

12 (6) use, in coordination with Federal land man-
13 agement agencies, wildland fuels information and
14 fire resource intelligence to inform fire environment
15 impact-based decision support services and products
16 for safety;

17 (7) work with Federal agencies to provide data,
18 tools, and services to support determinations by such
19 agencies for the implementation of mitigation meas-
20 ures;

21 (8) provide training and support to ensure ef-
22 fective media utilization of impact-based decision
23 support services and products to the public regard-
24 ing actions needing to be taken;

1 (9) provide comprehensive training to ensure
2 staff of the program established under subsection
3 (a) is properly equipped to deliver the impact-based
4 decision support services and products described in
5 paragraphs (1) through (6); and

6 (10) acquire, through contracted purchase, pri-
7 vate sector-produced observational data to fill identi-
8 fied gaps, as needed.

9 (e) COLLABORATION.—The Under Secretary shall, as
10 the Under Secretary considers appropriate, collaborate
11 with partners in the weather and climate enterprises, aca-
12 demic institutions, States, Indian tribes, Tribal organiza-
13 tions, the Native Hawaiian Community, Native Hawaiian
14 organizations, local partners, and Federal agencies, in-
15 cluding land and fire management agencies, in the devel-
16 opment and implementation of the program established
17 under subsection (a).

18 (f) AGREEMENTS.—In carrying out the activities
19 under this Act and the amendments made by this Act,
20 the Under Secretary may provide support to non-Federal
21 entities by making funds and resources available
22 through—

23 (1) competitive grants;

24 (2) contracts under the mobility program under
25 subchapter VI of chapter 33 of title 5, United States

1 Code (commonly referred to as the “Intergovern-
2 mental Personnel Act Mobility Program”);

3 (3) cooperative agreements; and

4 (4) co-location agreements as described in sec-
5 tion 502 of the National Oceanic and Atmospheric
6 Administration Commissioned Officer Corps Amend-
7 ments Act of 2020 (33 U.S.C. 851 note prec.).

8 (g) PROGRAM ADMINISTRATION PLAN.—

9 (1) IN GENERAL.—Not later than 180 days
10 after the date of the enactment of this Act, the
11 Under Secretary shall submit to the appropriate
12 committees of Congress a plan that details how the
13 program established under subsection (a) will be ad-
14 ministered and governed within the Administration.

15 (2) ELEMENTS.—The plan required by para-
16 graph (1) should include a description of—

17 (A) how the functions described in sub-
18 section (b), the priorities described in sub-
19 section (c), and the activities described in sub-
20 section (d) will be distributed among the line of-
21 fices of the Administration; and

22 (B) the mechanisms in place to ensure
23 seamless coordination among those offices.

1 **SEC. 4. FIRE WEATHER TESTBED.**

2 (a) ESTABLISHMENT OF FIRE WEATHER
3 TESTBED.—The Under Secretary shall establish a fire
4 weather testbed that enables engagement across the Fed-
5 eral Government, State and local governments, academia,
6 private and federally funded research laboratories, the pri-
7 vate sector, and end-users in order to evaluate the accu-
8 racy and usability of technology, models, fire weather
9 products and services, and other research to accelerate the
10 implementation, transition to operations, and use of new
11 capabilities by the Administration, Federal and land man-
12 agement agencies, and other relevant stakeholders.

13 (b) UNCREWED SYSTEMS.—

14 (1) IN GENERAL.—The Under Secretary shall—

15 (A) establish and carry out a research and
16 development program to support the application
17 of uncrewed systems technologies to improve
18 data collection in support of modeling, observa-
19 tions, predictions, forecasts, and impact-based
20 decision support services, and for other pur-
21 poses of the Administration;

22 (B) transition uncrewed systems tech-
23 nologies from research to operations as the
24 Under Secretary considers appropriate; and

25 (C) coordinate with other Federal agencies
26 that may be developing uncrewed systems and

1 related technologies to meet the challenges of
2 wildland fire management.

3 (2) PILOTS REQUIRED.—In carrying out para-
4 graph (1), the Under Secretary shall conduct pilots
5 of uncrewed systems for fire weather and fire envi-
6 ronment observations, including—

7 (A) testing of uncrewed systems in ap-
8 proximations of real-world scenarios;

9 (B) assessment of the utility of meteoro-
10 logical data collected from fire response and as-
11 sessment aircraft;

12 (C) input of the collected data into appro-
13 priate models to predict fire behavior, including
14 coupled atmosphere and fire models; and

15 (D) collection of best management prac-
16 tices for deployment of uncrewed systems and
17 other remote data technology, including for
18 communication and coordination between the
19 stakeholders described in subsection (a).

20 (3) SAVINGS CLAUSE.—

21 (A) IN GENERAL.—In carrying out activi-
22 ties under this subsection, the Under Secretary
23 shall ensure that any testing or deployment of
24 uncrewed systems follow procedures, restric-
25 tions, and protocols established by the heads of

1 the Federal agencies with statutory or regu-
2 latory jurisdiction over any airspace in which
3 wildfire response activities are conducted during
4 an active wildfire event.

5 (B) CONSULTATION AND COORDINA-
6 TION.—The Under Secretary shall consult and
7 coordinate with relevant Federal land manage-
8 ment agencies, Federal science agencies, and
9 the Federal Aviation Administration to develop
10 processes for the appropriate deployment of the
11 systems described in subparagraph (A).

12 (c) ADDITIONAL PILOT PROJECTS.—The Under Sec-
13 retary shall establish additional pilot projects relating to
14 the fire weather testbed that may include the following ele-
15 ments:

16 (1) Advanced products to detect fire from sat-
17 ellites.

18 (2) Procurement and use of commercial data.

19 (3) Investigation and evaluation of information
20 needs of users and decision makers.

21 (d) REPORT.—Section 108(a)(5) of the National Oce-
22 anic and Atmospheric Administration Authorization Act
23 of 1992 (15 U.S.C. 8520(a)(5)) is amended—

24 (1) in subparagraph (C), by adding “and” at
25 the end; and

1 (2) in subparagraph (D)—

2 (A) in clause (ii), by striking “and”;

3 (B) in clause (iii), by adding “and” at the
4 end; and

5 (C) by adding at the end the following:

6 “(iv) a description of the research
7 that has been transitioned into operations,
8 including research at the fire weather
9 testbed established under section 4(a) of
10 the Fire Ready Nation Act of 2024;”.

11 **SEC. 5. DATA MANAGEMENT AND TECHNOLOGY MOD-**
12 **ERNIZATION.**

13 (a) DATA AVAILABILITY AND MANAGEMENT.—Sec-
14 tion 301 of the Weather Research and Forecasting Inno-
15 vation Act of 2017 (15 U.S.C. 8531) is amended—

16 (1) by redesignating subsections (f) and (g) as
17 subsections (g) and (h), respectively; and

18 (2) by inserting after subsection (e) the fol-
19 lowing:

20 “(f) DATA AVAILABILITY AND MANAGEMENT.—

21 “(1) IN GENERAL.—The Under Secretary
22 shall—

23 “(A) make data and metadata generated
24 or collected by the National Oceanic and At-
25 mospheric Administration that the Under Sec-

1 retary has the legal right to redistribute fully
2 and openly available, in accordance with chap-
3 ter 35 of title 44, United States Code, and the
4 Foundations for Evidence-Based Policymaking
5 Act of 2018 (Public Law 115–435; 132 Stat.
6 5529) and the amendments made by that Act,
7 and preserve and curate such data and
8 metadata, in accordance with chapter 31 of title
9 44, United States Code (commonly known as
10 the ‘Federal Records Act of 1950’), in order to
11 maximize use of such data and metadata; and

12 “(B) manage and steward the access, ar-
13 chival, and retrieval activities for the data and
14 metadata described in subparagraph (A) by—

15 “(i) using—

16 “(I) enterprise-wide infrastruc-
17 ture, emerging technologies, commer-
18 cial partnerships, and the skilled
19 workforce needed to provide appro-
20 priate data management from collec-
21 tion to broad access; and

22 “(II) associated information serv-
23 ices; and

24 “(ii) pursuing the maximum inter-
25 operability of data and information by—

1 “(I) leveraging data, information,
2 knowledge, and tools from across the
3 Federal Government to support equi-
4 table access, cross-sectoral collabora-
5 tion and innovation, and local plan-
6 ning and decision-making; and

7 “(II) developing standards and
8 practices for the adoption and citation
9 of digital object identifiers for
10 datasets, models, and analytical tools.

11 “(2) COLLABORATION.—In carrying out this
12 subsection, the Under Secretary shall collaborate
13 with such Federal partners and stakeholders as the
14 Under Secretary considers relevant—

15 “(A) to develop standards to pursue max-
16 imum interoperability of data, information,
17 knowledge, and tools across the Federal Gov-
18 ernment, convert historical records into com-
19 mon digital formats, and improve access and
20 usability of data by partners and stakeholders;

21 “(B) to identify and solicit relevant data
22 from Federal and international partners and
23 other relevant stakeholders, as the Under Sec-
24 retary considers appropriate; and

1 “(C) to develop standards and practices for
2 the adoption and citation of digital object iden-
3 tifiers for datasets, models, and analytical
4 tools.”.

5 (b) WILDLAND FIRE COMMISSION.—The Infrastruc-
6 ture Investment and Jobs Act (Public Law 117–58; 135
7 Stat. 429) is amended—

8 (1) in section 70202—

9 (A) in paragraph (1)—

10 (i) in subparagraph (J), by striking “;
11 and” and inserting a semicolon;

12 (ii) in subparagraph (K), by striking
13 the period at the end and inserting a semi-
14 colon; and

15 (iii) by adding at the end the fol-
16 lowing:

17 “(L) the Committee on Commerce,
18 Science, and Transportation of the Senate; and

19 “(M) the Committee on Science, Space,
20 and Technology of the House of Representa-
21 tives.”; and

22 (B) in paragraph (6)—

23 (i) in subparagraph (B), by striking “;
24 and” and inserting a semicolon;

1 (ii) in subparagraph (C), by striking
2 the period at the end and inserting “;
3 and”; and

4 (iii) by adding at the end the fol-
5 lowing:

6 “(D) The Secretary of Commerce, acting
7 through the Under Secretary of Commerce for
8 Oceans and Atmosphere.”; and

9 (2) in section 70203(b)(1)(B)—

10 (A) in the matter preceding clause (i), by
11 striking “9” and inserting “not fewer than 10”;

12 (B) in clause (i)—

13 (i) in subclause (IV), by striking “;
14 and” and inserting a semicolon;

15 (ii) in subclause (V), by adding “and”
16 at the end; and

17 (iii) by adding at the end the fol-
18 lowing:

19 “(VI) the National Oceanic and
20 Atmospheric Administration;”;

21 (C) in clause (iv), by striking “; and” and
22 inserting a semicolon; and

23 (D) by adding at the end the following:

24 “(vi) if the Secretaries determine it to
25 be appropriate, 1 or more representatives

1 from the relevant line offices of the Na-
2 tional Oceanic and Atmospheric Adminis-
3 tration; and”.

4 (c) WILDFIRE TECHNOLOGY MODERNIZATION.—Sec-
5 tion 1114 of the John D. Dingell, Jr. Conservation, Man-
6 agement, and Recreation Act (43 U.S.C. 1748b-1) is
7 amended—

8 (1) in subsection (c)(3), by inserting “the Na-
9 tional Oceanic and Atmospheric Administration,”
10 after “Federal Aviation Administration,”;

11 (2) in subsection (e)(2)—

12 (A) by redesignating subparagraph (B) as
13 subparagraph (C); and

14 (B) by inserting after subparagraph (A)
15 the following:

16 “(B) CONSULTATION.—

17 “(i) IN GENERAL.—In carrying out
18 subparagraph (A), the Secretaries shall
19 consult with the Under Secretary of Com-
20 merce for Oceans and Atmosphere regard-
21 ing any development of impact-based deci-
22 sion support services that relate to wildlife-
23 related activities of the National Oceanic
24 and Atmospheric Administration.

1 “(ii) DEFINITION OF IMPACT-BASED
2 DECISION SUPPORT SERVICES.—In this
3 subparagraph, the term ‘impact-based deci-
4 sion support services’ means scientific ad-
5 vice and interpretative services the Na-
6 tional Oceanic and Atmospheric Adminis-
7 tration provides to help core partners, such
8 as emergency personnel and public safety
9 officials, make decisions when the informa-
10 tion impacts the lives and livelihoods of the
11 people of the United States.”; and

12 (3) in subsection (f)—

13 (A) by redesignating paragraphs (1) and
14 (2) as subparagraphs (A) and (B), respectively,
15 and moving such subparagraphs, as so redesign-
16 ated, 2 ems to the right;

17 (B) by striking “The Secretaries” and in-
18 serting the following:

19 “(1) IN GENERAL.—The Secretaries”; and

20 (C) by adding at the end the following:

21 “(2) COLLABORATION.—In carrying out para-
22 graph (1), the Secretaries shall collaborate with the
23 Under Secretary of Commerce for Oceans and At-
24 mosphere to improve coordination, utility of systems

1 and assets, and interoperability of data for smoke
2 prediction, forecasting, and modeling.”.

3 (d) DIGITAL PRESENCE.—

4 (1) IN GENERAL.—The Under Secretary shall
5 develop and maintain a comprehensive, centralized,
6 and publicly accessible digital presence designed to
7 promote findability, accessibility, interoperability,
8 usability, and utility of the services, tools, data, and
9 information produced by the program established
10 under section 3(a).

11 (2) DIGITAL PLATFORM AND TOOLS.—In car-
12 rying out paragraph (1), the Under Secretary shall
13 seek to ensure the digital platform and tools of the
14 Administration integrate geospatial data, decision
15 support tools, training, and best practices to provide
16 real-time fire weather forecasts and address fire-re-
17 lated issues and needs.

18 (e) HIGH-PERFORMANCE COMPUTING.—

19 (1) IN GENERAL.—The Under Secretary shall
20 seek to acquire sufficient high-performance com-
21 puting resources and capacity for research, oper-
22 ations, and data storage in support of the program
23 established under section 3(a).

24 (2) CONSIDERATIONS.—In acquiring high-per-
25 formance computing capacity under paragraph (1),

1 the Under Secretary shall consider requirements
2 needed for—

3 (A) conducting research, development, and
4 testbed experiments;

5 (B) the transition of research and testbed
6 developments into operations;

7 (C) sustaining capabilities in operations;

8 (D) capabilities existing in other Federal
9 agencies and the commercial sector; and

10 (E) skilled workforce development.

11 **SEC. 6. SURVEYS AND ASSESSMENTS.**

12 (a) **POST-FIRE SURVEYS AND ASSESSMENTS .—**

13 (1) **ANNUAL POST-FIRE-WEATHER-SEASON SUR-**
14 **VEY AND ASSESSMENT.—**

15 (A) **IN GENERAL.—**During the second win-
16 ter following the enactment of this Act, and
17 each year thereafter, the Under Secretary shall
18 conduct a post-fire-weather-season survey and
19 assessment.

20 (B) **ELEMENTS.—**After conducting a post-
21 fire-weather-season survey and assessment
22 under subparagraph (A), the Under Secretary
23 shall—

24 (i) investigate any gaps in data col-
25 lected during the assessment;

1 (ii) identify and implement strategies
2 and procedures to improve program serv-
3 ices and information dissemination;

4 (iii) update systems, processes, strate-
5 gies, and procedures to enhance the effi-
6 ciency and reliability of data obtained from
7 the assessment;

8 (iv) evaluate the accuracy and efficacy
9 of physical fire weather forecasting infor-
10 mation for each incident included in the
11 survey and assessment; and

12 (v) assess and refine performance
13 measures, as needed.

14 (2) SURVEYS AND ASSESSMENTS FOLLOWING
15 INDIVIDUAL WILDFIRE EVENTS.—The Under Sec-
16 retary may conduct surveys and assessments fol-
17 lowing individual wildfire events as the Under Sec-
18 retary determines necessary.

19 (3) GOAL.—In carrying out activities under this
20 subsection, the Under Secretary shall seek to in-
21 crease the number of post-wildfire community im-
22 pact studies, including by surveying individual and
23 collective responses and incorporating other applica-
24 ble topics of social science research.

1 (4) ANNUAL BRIEFING.—Not less frequently
2 than once each year, the Under Secretary shall pro-
3 vide a briefing to the appropriate committees of
4 Congress that provides—

5 (A) an overview of the fire season; and

6 (B) an outlook for the fire season for the
7 coming year.

8 (5) COORDINATION.—In conducting any survey
9 or assessment under this subsection, the Under Sec-
10 retary shall coordinate with Federal, State, and local
11 partners, Indian tribes, the Native Hawaiian Com-
12 munity, private entities, and such institutions of
13 higher education as the Under Secretary considers
14 relevant in order to—

15 (A) improve operations and collaboration;

16 and

17 (B) optimize data collection, sharing, inte-
18 gration, assimilation, and dissemination.

19 (6) DATA AVAILABILITY.—The Under Secretary
20 shall make the data and findings obtained from each
21 assessment conducted under this subsection available
22 to the public in an accessible digital format as soon
23 as practicable after conducting the assessment.

24 (7) SERVICE IMPROVEMENTS.—The Under Sec-
25 retary shall make best efforts to incorporate the re-

1 sults and recommendations of each assessment con-
2 ducted under this subsection into the research and
3 development plan and operations of the Administra-
4 tion.

5 (b) JOINT ASSESSMENT AND PLAN FOR AUTOMATED
6 SURFACE OBSERVING SYSTEM.—

7 (1) IN GENERAL.—The Under Secretary, in col-
8 laboration with the Administrator of the Federal
9 Aviation Administration and the Secretary of De-
10 fense, shall—

11 (A) conduct an assessment of resources,
12 personnel, procedures, and activities necessary
13 to maximize the functionality and utility of the
14 automated surface observing system of the
15 United States that identifies—

16 (i) key system upgrades needed to im-
17 prove observation quality and utility for
18 weather forecasting, aviation safety, and
19 other users;

20 (ii) improvements needed in observa-
21 tions within the planetary boundary layer,
22 including mixing height;

23 (iii) improvements needed in public
24 accessibility of observational data;

- 1 (iv) improvements needed to reduce
2 latency in reporting of observational data;
- 3 (v) relevant data to be collected for
4 the production of forecasts or forecast
5 guidance relating to atmospheric composi-
6 tion, including particulate and air quality
7 data related to wildfires, and aviation safe-
8 ty;
- 9 (vi) areas of concern regarding oper-
10 ational continuity and reliability of the sys-
11 tem, which may include needs for on-night
12 staff, particularly in remote and rural
13 areas and areas where system failure
14 would have the greatest negative impact to
15 the community;
- 16 (vii) stewardship, data handling, data
17 distribution, and product generation needs
18 arising from upgrading and changing the
19 automated surface observation systems;
- 20 (viii) possible solutions for areas of
21 concern identified under clause (vi), includ-
22 ing with respect to the potential use of
23 backup systems, power and communication
24 system reliability, staffing needs and per-
25 sonnel location, and the acquisition of crit-

1 ical component backups and proper storage
2 location to ensure rapid system repair nec-
3 essary to ensure system operational con-
4 tinuity; and

5 (ix) research, development, and transi-
6 tion to operations needed to develop ad-
7 vanced data collection, quality control, and
8 distribution so that the data are provided
9 to models, users, and decision support sys-
10 tems in a timely manner; and

11 (B) develop and implement a plan that ad-
12 dresses the findings of the assessment con-
13 ducted under subparagraph (A), including by
14 seeking and allocating resources necessary to
15 ensure that system upgrades are standardized
16 across the Administration, the Federal Aviation
17 Administration, and the Department of Defense
18 to the extent practicable.

19 (2) STANDARDIZATION.—Any system standard-
20 ization implemented under paragraph (1)(B) shall
21 not impede activities to upgrade or improve indi-
22 vidual units of the system.

23 (3) REMOTE AUTOMATIC WEATHER STATION
24 COORDINATION.—The Under Secretary, in collabora-
25 tion with relevant Federal agencies and the National

1 Interagency Fire Center, shall assess and develop co-
2 operative agreements to improve coordination, inter-
3 operability standards, operations, and placement of
4 remote automatic weather stations for the purpose
5 of improving utility and coverage of remote auto-
6 matic weather stations, automated surface observa-
7 tion systems, smoke monitoring platforms, and other
8 similar stations and systems for weather and climate
9 operations.

10 (4) REPORT TO CONGRESS.—

11 (A) IN GENERAL.—Not later than 2 years
12 after the date of the enactment of this Act, the
13 Under Secretary, in collaboration with the Ad-
14 ministrator of the Federal Aviation Administra-
15 tion and the Secretary of Defense, shall submit
16 to the appropriate committees of Congress a re-
17 port that—

18 (i) details the findings of the assess-
19 ment required by subparagraph (A) of
20 paragraph (1); and

21 (ii) the plan required by subparagraph
22 (B) of such paragraph.

23 (B) ELEMENTS.—The report required by
24 subparagraph (A) shall include a detailed as-
25 sessment of appropriations required—

1 (i) to address the findings of the as-
2 sessment required by subparagraph (A) of
3 paragraph (1); and

4 (ii) to implement the plan required by
5 subparagraph (B) of such paragraph.

6 **SEC. 7. INCIDENT METEOROLOGIST SERVICE.**

7 (a) ESTABLISHMENT.—The Under Secretary shall es-
8 tablish and maintain an Incident Meteorologist Service
9 within the National Weather Service (in this section re-
10 ferred to as the “Service”).

11 (b) INCLUSION OF EXISTING INCIDENT METEOROLO-
12 GISTS.—The Service shall include—

13 (1) the incident meteorologists of the Adminis-
14 tration as of the date of the enactment of this Act;
15 and

16 (2) such incident meteorologists of the Adminis-
17 tration as may be appointed after such date.

18 (c) FUNCTIONS.—The Service shall provide—

19 (1) on-site impact-based decision support serv-
20 ices to Federal, State, and local government emer-
21 gency response agencies, Indian tribes, and the Na-
22 tive Hawaiian Community preceding, during, and
23 following significant weather-related events, such as
24 wildland fires, that threaten human life, property, or
25 the economy; and

1 (2) support to Federal, State, and local govern-
2 ment decision makers, partners, and stakeholders,
3 Indian tribes, Tribal organizations, the Native Ha-
4 waiian Community, and Native Hawaiian organiza-
5 tions for seasonal planning and pre-fire mitigation
6 activities.

7 (d) DEPLOYMENT.—The Service shall be deployed—

8 (1) as determined by the Under Secretary; or

9 (2) at the request of the head of another Fed-
10 eral agency and with the approval of the Under Sec-
11 retary.

12 (e) STAFFING AND RESOURCES.—In establishing and
13 maintaining the Service, the Under Secretary shall iden-
14 tify, acquire, and maintain adequate levels of staffing and
15 resources to meet user needs.

16 (f) SUPPORT FOR INCIDENT METEOROLOGISTS.—

17 The Under Secretary shall provide resources, access to
18 real-time fire weather forecasts, training, administrative
19 and logistical support, and access to professional coun-
20 seling or other forms of support as the Under Secretary
21 considers appropriate for the betterment of the emotional
22 and mental health and well-being of incident meteorolo-
23 gists and other employees of the Administration so long
24 as the need for such resources, training, access, or support

1 is due to the response of such employees to high-impact
2 and extreme fire weather events.

3 **SEC. 8. EMERGENCY RESPONSE ACTIVITIES.**

4 (a) DEFINITIONS.—In this section:

5 (1) BASIC PAY.—The term “basic pay” includes
6 any applicable locality-based comparability payment
7 under section 5304 of title 5, United States Code,
8 any applicable special rate supplement under section
9 5305 of such title, or any equivalent payment under
10 a similar provision of law.

11 (2) COVERED EMPLOYEE.—The term “covered
12 employee” means an employee of the Department of
13 Commerce, the Department of Agriculture, or the
14 Department of the Interior.

15 (3) COVERED SERVICES.—The term “covered
16 services” means services that are performed by a
17 covered employee while serving—

18 (A) as a wildland firefighter or a fire man-
19 agement response official, including a regional
20 fire director, a deputy regional fire director,
21 and a fire management officer;

22 (B) as an incident meteorologist accom-
23 panying a wildland firefighter crew; or

24 (C) on an incident management team, at
25 the National Interagency Fire Center, at a Geo-

1 graphic Area Coordinating Center, or at an op-
2 erations center.

3 (4) PREMIUM PAY.—The term “premium pay”
4 means premium pay paid under a provision of law
5 described in the matter preceding paragraph (1) of
6 section 5547(a) of title 5, United States Code.

7 (5) RELEVANT CONGRESSIONAL COMMIT-
8 TEES.—The term “relevant congressional commit-
9 tees” means—

10 (A) the Committee on Commerce, Science,
11 and Transportation of the Senate;

12 (B) the Committee on Homeland Security
13 and Governmental Affairs of the Senate;

14 (C) the Committee on Agriculture, Nutri-
15 tion, and Forestry of the Senate;

16 (D) the Committee on Appropriations of
17 the Senate;

18 (E) the Committee on Energy and Natural
19 Resources of the Senate;

20 (F) the Committee on Oversight and Re-
21 form of the House of Representatives;

22 (G) the Committee on Natural Resources
23 of the House of Representatives;

24 (H) the Committee on Science, Space, and
25 Technology of the House of Representatives;

1 (I) the Committee on Agriculture of the
2 House of Representative; and

3 (J) the Committee on Appropriations of
4 the House of Representatives.

5 (6) SECRETARY CONCERNED.—The term “Sec-
6 retary concerned” means—

7 (A) the Secretary of Commerce, with re-
8 spect to an employee of the Department of
9 Commerce;

10 (B) the Secretary of Agriculture, with re-
11 spect to an employee of the Department of Ag-
12 riculture; and

13 (C) the Secretary of the Interior, with re-
14 spect to an employee of the Department of the
15 Interior.

16 (b) WAIVER.—

17 (1) IN GENERAL.—Any premium pay received
18 by a covered employee for covered services shall be
19 disregarded in calculating the aggregate of the basic
20 pay and premium pay for the covered employee for
21 purposes of applying the limitation on premium pay
22 under section 5547(a) of title 5, United States Code.

23 (2) CALCULATION OF AGGREGATE PAY.—Any
24 pay that is disregarded under paragraph (1) shall be
25 disregarded in calculating the aggregate pay of the

1 applicable covered employee for purposes of applying
2 the limitation under section 5307 of title 5, United
3 States Code, during calendar year 2025.

4 (3) LIMITATION.—A covered employee may not
5 be paid premium pay under this subsection if, or to
6 the extent that, the aggregate of the basic pay and
7 premium pay (including premium pay for covered
8 services) of the covered employee for a calendar year
9 would exceed the rate of basic pay payable for a po-
10 sition at level II of the Executive Schedule under
11 section 5313 of title 5, United States Code, as in ef-
12 fect at the end of that calendar year.

13 (4) TREATMENT OF ADDITIONAL PREMIUM
14 PAY.—If the application of this subsection results in
15 the payment of additional premium pay to a covered
16 employee of a type that is normally creditable as
17 basic pay for retirement or any other purpose, that
18 additional premium pay shall not be—

19 (A) considered to be basic pay of the cov-
20 ered employee for any purpose; or

21 (B) used in computing a lump-sum pay-
22 ment to the covered employee for accumulated
23 and accrued annual leave under section 5551 or
24 5552 of title 5, United States Code.

1 (5) EFFECTIVE PERIOD.—This subsection shall
2 be in effect during calendar year 2024 and apply to
3 premium pay payable during that year.

4 (c) AMENDMENT.—Section 5542(a)(5) of title 5,
5 United States Code, is amended by inserting “, the De-
6 partment of Commerce,” after “Interior”.

7 (d) PLAN TO ADDRESS NEEDS.—

8 (1) DEVELOPMENT AND IMPLEMENTATION.—
9 Not later than March 30, 2025, the Secretaries re-
10 ferred to in subsection (a)(6), in consultation with
11 the Director of the Office of Management and Budg-
12 et and the Director of the Office of Personnel Man-
13 agement, shall jointly develop and implement a plan
14 that addresses the needs of the Department of Com-
15 merce, the Department of Agriculture, and the De-
16 partment of the Interior, as applicable, to hire, ap-
17 point, promote, or train additional covered employees
18 who carry out covered services such that sufficient
19 covered employees are available throughout each fis-
20 cal year, beginning in fiscal year 2025, without the
21 need for waivers of premium pay limitations.

22 (2) SUBMITTAL.—Not later than 30 days before
23 the date on which the Secretaries implement the
24 plan developed under paragraph (1), the Secretaries

1 shall submit the plan to the relevant congressional
2 committees.

3 (3) LIMITATION.—The plan developed under
4 paragraph (1) shall not be contingent on any Sec-
5 retary receiving amounts appropriated for fiscal
6 years beginning in fiscal year 2025 in amounts
7 greater than amounts appropriated for fiscal year
8 2023.

9 (e) POLICIES AND PROCEDURES FOR HEALTH, SAFE-
10 TY, AND WELL-BEING.—The Secretary concerned shall
11 maintain policies and procedures to promote the health,
12 safety, and well-being of covered employees.

13 **SEC. 9. SUBMISSIONS TO CONGRESS REGARDING THE FIRE**
14 **WEATHER SERVICES PROGRAM, INCIDENT**
15 **METEOROLOGIST WORKFORCE NEEDS, AND**
16 **NATIONAL WEATHER SERVICE WORKFORCE**
17 **SUPPORT.**

18 (a) REPORT TO CONGRESS.—Not later than 18
19 months after the date of the enactment of this Act, the
20 Under Secretary shall submit to the appropriate commit-
21 tees of Congress—

22 (1) the plan described in subsection (b);

23 (2) the assessment described in subsection (c);

24 and

25 (3) the assessment described in subsection (d).

1 (b) FIRE WEATHER SERVICES PROGRAM PLAN.—

2 (1) ELEMENTS.—The plan submitted under
3 subsection (a)(1) shall detail—

4 (A) the observational data, modeling re-
5 quirements, ongoing computational needs, re-
6 search, development, and technology transfer
7 activities, data management, skilled-personnel
8 requirements, engagement with relevant Federal
9 emergency and land management agencies and
10 partners, and corresponding research, develop-
11 ment, and operational resources and timelines
12 necessary to achieve the functions described in
13 subsection (b) of section 3 and the priorities de-
14 scribed in subsection (c) of such section; and

15 (B) plans and needs for all other activities
16 and requirements under this Act and the
17 amendments made by this Act.

18 (2) SUBMITTAL OF ANNUAL BUDGET FOR
19 PLAN.—Following completion of the plan submitted
20 under subsection (a)(1), the Under Secretary shall,
21 not less frequently than once each year concurrent
22 with the submission of the budget by the President
23 to Congress under section 1105 of title 31, United
24 States Code, submit to Congress a proposed budget
25 corresponding with the elements detailed in the plan.

1 (c) INCIDENT METEOROLOGIST WORKFORCE NEEDS
2 ASSESSMENT.—

3 (1) IN GENERAL.—The Under Secretary shall
4 conduct a workforce needs assessment on the cur-
5 rent and future demand for additional incident me-
6 teorologists for wildfires and other high-impact fire
7 weather events.

8 (2) ELEMENTS.—The assessment required by
9 paragraph (1) shall include the following:

10 (A) A description of staffing levels as of
11 the date on which the assessment is submitted
12 under subsection (a)(2) and projected future
13 staffing levels.

14 (B) An assessment of the state of the re-
15 search, development, and operational infrastruc-
16 ture of the National Weather Service as of the
17 date on which the assessment is submitted and
18 future needs of such infrastructure in order to
19 meet current and future demands, including
20 with respect to information technology support
21 and logistical and administrative operations.

22 (3) CONSIDERATIONS.—In conducting the as-
23 sessment required by paragraph (1), the Under Sec-
24 retary shall consider user needs and feedback from
25 relevant stakeholders.

1 (d) SUPPORT SERVICES ASSESSMENT.—

2 (1) IN GENERAL.—The Under Secretary shall
3 conduct a workforce support services assessment
4 with respect to employees of the National Weather
5 Service engaged in emergency response.

6 (2) ELEMENTS.—The assessment required by
7 paragraph (1) shall include the following:

8 (A) An assessment of need for further sup-
9 port of employees of the National Weather
10 Service engaged in emergency response through
11 services provided by the Public Health Service.

12 (B) A detailed assessment of appropria-
13 tions required to secure the level of support
14 services needed as identified in the assessment
15 described in subparagraph (A).

16 (3) ADDITIONAL SUPPORT SERVICES.—Fol-
17 lowing the completion of the assessment required by
18 paragraph (1), the Under Secretary shall seek to ac-
19 quire additional support services to meet the needs
20 identified in the assessment.

21 **SEC. 10. FIRE SCIENCE AND TECHNOLOGY WORKING**
22 **GROUP; STRATEGIC PLAN.**

23 (a) FIRE SCIENCE AND TECHNOLOGY WORKING
24 GROUP.—

1 (1) ESTABLISHMENT.—Not later than 90 days
2 after the date of the enactment of this Act, the Ex-
3 ecutive Director of the Interagency Committee for
4 Advancing Weather Services established under sec-
5 tion 402 of the Weather Research and Forecasting
6 Innovation Act of 2017 (15 U.S.C. 8542) (in this
7 section referred to as the “Interagency Committee”)
8 shall establish a working group, to be known as the
9 “Fire Science and Technology Working Group” (in
10 this section referred to as the “Working Group”).

11 (2) CHAIR.—The Working Group shall be
12 chaired by the Under Secretary, or designee.

13 (3) GENERAL DUTIES.—

14 (A) IN GENERAL.—The Working Group
15 shall seek to build efficiencies among the agen-
16 cies listed under section 12(e)(1) and coordinate
17 the planning and management of science, re-
18 search, technology, and operations related to
19 science and support services for wildland fire
20 prediction, detection, forecasting, modeling, re-
21 siliance, response, management, and assess-
22 ments.

23 (B) INPUT.—The Working Group shall so-
24 licit input from non-Federal stakeholders.

25 (b) STRATEGIC PLAN.—

1 (1) IN GENERAL.—Not later than 18 months
2 after the date of the enactment of this Act, the
3 Interagency Committee shall prepare and submit to
4 Congress a strategic plan for interagency coordina-
5 tion, research, and development that will improve
6 the assessment of fire environments and the under-
7 standing and prediction of wildland fires, associated
8 smoke, and the impacts of such fires and smoke, in-
9 cluding—

10 (A) at the wildland-urban interface;

11 (B) on communities, buildings, and other
12 infrastructure;

13 (C) on ecosystem services and watersheds;

14 (D) social and economic impacts;

15 (E) by developing and encouraging the
16 adoption of science-based and cost-effective
17 measures—

18 (i) to enhance community resilience to
19 wildland fires;

20 (ii) to address and mitigate the im-
21 pacts of wildland fires and associated
22 smoke; and

23 (iii) to restore natural fire regimes in
24 fire-dependent ecosystems;

1 (F) by improving the understanding and
2 mitigation of the effects of weather and long-
3 term drought on wildland fire risk, frequency,
4 and severity;

5 (G) through integrations of social and be-
6 havioral sciences in public safety fire commu-
7 nication;

8 (H) by improving the forecasting and un-
9 derstanding of prescribed fires and the impacts
10 of such fires, and how those impacts may differ
11 from impacts of wildland fires that originate
12 from an unplanned ignition; and

13 (I) consideration and adoption of any rec-
14 ommendations included in the report required
15 by section 12(c).

16 (2) PLAN ELEMENTS.—The strategic plan re-
17 quired by paragraph (1) shall include the following:

18 (A) A description of the priorities and
19 needs of vulnerable populations.

20 (B) A description of high-performance
21 computing, visualization, and dissemination
22 needs.

23 (C) A timeline and guidance for implemen-
24 tation of—

1 (i) an interagency data sharing sys-
2 tem for data relevant to performing fire
3 assessments and modeling fire risk and fire
4 behavior;

5 (ii) a system for ensuring that the fire
6 prediction models of relevant agencies can
7 be interconnected; and

8 (iii) to the maximum extent prac-
9 ticable, any recommendations included in
10 the report required by section 12(c).

11 (D) A plan for incorporating and coordi-
12 nating research and operational observations,
13 including from infrared technologies, micro-
14 wave, radars, satellites, mobile weather stations,
15 and uncrewed aerial systems.

16 (E) A flexible framework to communicate
17 clear and simple fire event information to the
18 public.

19 (F) Integration of social, behavioral, risk,
20 and communication research to improve the fire
21 operational environment and societal informa-
22 tion reception and response.

23 **SEC. 11. FIRE WEATHER RATING SYSTEM.**

24 (a) IN GENERAL.—The Under Secretary shall, in col-
25 laboration with the Chief of the United States Forest

1 Service, the Director of the United States Geological Sur-
2 vey, the Director of the National Park Service, the Admin-
3 istrator of the Federal Emergency Management Agency,
4 and such stakeholders as the Under Secretary considers
5 appropriate—

6 (1) evaluate the system used as of the date of
7 the enactment of this Act to rate the risk of wildfire;
8 and

9 (2) determine whether updates to that system
10 are required to ensure that the ratings accurately re-
11 flect the severity of fire risk.

12 (b) UPDATE REQUIRED.—If the Under Secretary de-
13 termines under subsection (a) that updates to the system
14 described in paragraph (1) of such subsection are nec-
15 essary, the Under Secretary shall update that system.

16 **SEC. 12. GOVERNMENT ACCOUNTABILITY OFFICE RE-**
17 **PORTS.**

18 (a) REPORT ON FIRE WEATHER SERVICES PRO-
19 GRAM.—

20 (1) IN GENERAL.—Not later than 3 years after
21 the date of the enactment of this Act, the Comp-
22 troller General of the United States shall submit to
23 Congress a report on the program established under
24 section 3(a).

1 (2) ELEMENTS.—The report required by para-
2 graph (1) shall—

3 (A) evaluate the performance of the pro-
4 gram by establishing initial baseline capabilities
5 and tracking progress made toward fully
6 operationalizing the functions described in sec-
7 tion 3(b); and

8 (B) include such other recommendations as
9 the Comptroller General determines are appro-
10 priate to improve the program.

11 (b) REPORT ON INTERAGENCY BODIES FOR WILD-
12 FIRE FORECASTING, PREVENTION, PLANNING, AND MAN-
13 AGEMENT.—Not later than 1 year after the date of the
14 enactment of this Act, the Comptroller General of the
15 United States shall submit to Congress a report that—

16 (1) identifies all Federal interagency bodies es-
17 tablished for the purpose of wildfire forecasting, pre-
18 vention, planning, and management (such as wildfire
19 councils, commissions, and workgroups), including—

20 (A) the Wildland Fire Leadership Council;

21 (B) the White House Wildfire Resilience
22 Interagency Group;

23 (C) the Wildland Fire Management Policy
24 Committee;

- 1 (D) the Wildland Fire Mitigation and
2 Management Commission;
- 3 (E) the Joint Science Fire Program;
- 4 (F) the National Interagency Coordination
5 Center;
- 6 (G) the National Predictive Services Over-
7 sight Group;
- 8 (H) the Interagency Council for Advancing
9 Meteorological Services;
- 10 (I) the National Wildfire Coordinating
11 Group;
- 12 (J) the National Multi-Agency Coordi-
13 nating Group; and
- 14 (K) the Mitigation Framework Leadership
15 Group;
- 16 (2) evaluates the roles, functionality, and utility
17 of such interagency bodies;
- 18 (3) evaluates the progress, performance, and
19 implementation of such interagency bodies;
- 20 (4) assesses efficacy and identifies potential
21 overlap and duplication of such interagency bodies in
22 carrying out interagency collaboration with respect
23 to wildfire prevention, planning, and management;
24 and

1 (5) includes such other recommendations as the
2 Comptroller General determines are appropriate to
3 streamline and improve wildfire forecasting, preven-
4 tion, planning, and management, including rec-
5 ommendations regarding the interagency bodies for
6 which the addition of the Administration is nec-
7 essary to improve wildfire forecasting, prevention,
8 planning, and management.

9 (c) REPORT ON INTERAGENCY COORDINATION.—Not
10 later than 1 year after the date of the enactment of this
11 Act, the Comptroller General of the United States shall
12 submit to Congress a report that identifies—

13 (1) the authorities, roles, and science and sup-
14 port services relating to wildland fire prediction, de-
15 tection, forecasting, modeling, resilience, response,
16 management, and assessment provided by—

17 (A) the Department of Commerce, includ-
18 ing the Administration and the National Insti-
19 tute of Standards and Technology;

20 (B) the National Aeronautics and Space
21 Administration;

22 (C) the Department of the Interior;

23 (D) the Department of Agriculture;

24 (E) the National Science Foundation;

25 (F) the Department of Energy;

1 (G) the Federal Emergency Management
2 Agency;

3 (H) the Department of Transportation;

4 (I) the Environmental Protection Agency;

5 and

6 (J) the Department of Defense; and

7 (2) recommended areas in and mechanisms by
8 which the agencies listed under paragraph (1) could
9 support and improve—

10 (A) coordination between Federal agencies,
11 State and local governments, Indian tribes,
12 Tribal organizations, the Native Hawaiian Com-
13 munity, Native Hawaiian organizations, and
14 other relevant stakeholders, including through
15 examination of possible public-private partner-
16 ships;

17 (B) research and development, including
18 interdisciplinary research, related to fire envi-
19 ronments, wildland fires, associated smoke, and
20 the impacts of such environments, fires, and
21 smoke, in furtherance of a coordinated inter-
22 agency effort to address wildland fire risk re-
23 duction;

24 (C) data management and stewardship, the
25 development and coordination of data systems

1 and computational tools, and the creation of a
2 centralized, integrated data collaboration envi-
3 ronment for agency data, including historical
4 data, relating to weather, fire environments,
5 wildland fires, associated smoke, and the im-
6 pacts of such environments, fires, and smoke,
7 and the assessment of wildland fire risk mitiga-
8 tion measures;

9 (D) interoperability, usability, and accessi-
10 bility of the scientific data, data systems, and
11 computational and information tools of the
12 agencies listed under paragraph (1);

13 (E) coordinated public safety communica-
14 tions relating to fire weather events, fire haz-
15 ards, and wildland fire and smoke risk reduc-
16 tion strategies; and

17 (F) secure and accurate real-time data,
18 alerts, and advisories to wildland firefighters
19 and other decision support tools for wildland
20 fire incident command posts.

21 (d) REPORT ON AUTOMATED SURFACE OBSERVING
22 SYSTEM.—Not later than 4 years after the date of the
23 enactment of this Act, the Comptroller General of the
24 United States shall submit to Congress a report that—

1 (1) evaluates the functionality, utility, reli-
2 ability, and operational status of the automated sur-
3 face observing system across the Administration, the
4 Federal Aviation Administration, and the Depart-
5 ment of Defense;

6 (2) evaluates the progress, performance, and
7 implementation of the plan required by section
8 6(b)(1)(B);

9 (3) assesses the efficacy of cross-agency collabo-
10 ration and stakeholder engagement in carrying out
11 the plan and provides recommendations to improve
12 such activities;

13 (4) evaluates the operational continuity and re-
14 liability of the system, particularly in remote and
15 rural areas and areas where system failure would
16 have the greatest negative impact to the community,
17 and provides recommendations to improve such con-
18 tinuity and reliability;

19 (5) assesses Federal coordination regarding the
20 remote automatic weather station network, air re-
21 source advisors, and other Federal observing assets
22 used for weather and climate modeling and response
23 activities, and provides recommendations for im-
24 provements; and

1 (6) includes such other recommendations as the
2 Comptroller General determines are appropriate to
3 improve the system.

4 **SEC. 13. COOPERATION AND COORDINATION.**

5 (a) COOPERATION.—Each Federal agency shall co-
6 operate and coordinate with the Under Secretary, as ap-
7 propriate, in carrying out this Act and the amendments
8 made by this Act.

9 (b) COORDINATION.—

10 (1) IN GENERAL.—In meeting the requirements
11 under this Act and the amendments made by this
12 Act, the Under Secretary shall coordinate, and as
13 appropriate, establish agreements with Federal and
14 external partners to fully use and leverage existing
15 assets, systems, networks, technologies, and sources
16 of data.

17 (2) INCLUSIONS.—Coordination carried out
18 under paragraph (1) shall include coordination
19 with—

20 (A) the agencies represented at the Na-
21 tional Interagency Fire Center;

22 (B) the Predictive Services Program of the
23 National Interagency Coordination Center;

24 (C) the National Wildfire Coordinating
25 Group; and

1 (D) relevant interagency bodies identified
2 in the report required by section 12(b).

3 (3) CONSULTATION.—In carrying out this sub-
4 section, the Under Secretary shall consult with Fed-
5 eral partners including—

6 (A) the National Aeronautics and Space
7 Administration;

8 (B) the Department of the Interior;

9 (C) the Federal Emergency Management
10 Agency;

11 (D) the National Science Foundation;

12 (E) the United States Geological Survey;

13 (F) the Department of Agriculture;

14 (G) the Environmental Protection Agency;

15 (H) the Department of Energy;

16 (I) the Department of Defense;

17 (J) the National Institute of Standards
18 and Technology; and

19 (K) such other departments and agencies
20 as the Under Secretary considers relevant.

21 (c) PROCESS FOR ANNUAL COORDINATION WITH
22 NON-FEDERAL ENTITIES.—Not later than 18 months
23 after the date of the enactment of this Act, the Under
24 Secretary shall develop and submit to the appropriate
25 committees of Congress a process for annual coordination

1 with State and local governments, Indian tribes, Tribal or-
2 ganizations, and the Native Hawaiian Community to as-
3 sist the development of improved fire weather products
4 and services.

5 (d) INTERNATIONAL COORDINATION.—

6 (1) IN GENERAL.—The Under Secretary may
7 develop collaborative relationships and agreements
8 with foreign partners and counterparts to address
9 transboundary issues pertaining to wildfires, fire
10 weather, smoke, air quality, and associated condi-
11 tions and hazards or other relevant meteorological
12 phenomena, as appropriate, to facilitate full and
13 open exchange of data and information.

14 (2) CONSULTATION.—In carrying out activities
15 under this subsection, the Under Secretary shall
16 consult with the Department of State and such other
17 Federal partners as the Under Secretary considers
18 relevant.

19 **SEC. 14. GENERAL PROVISIONS.**

20 (a) AVOIDANCE OF DUPLICATION.—

21 (1) IN GENERAL.—The Under Secretary shall
22 ensure, to the greatest extent practicable, that ac-
23 tivities carried out under this Act and the amend-
24 ments made by this Act are not duplicative of activi-

1 ties supported by other parts of the Administration
2 or other relevant Federal agencies.

3 (2) COORDINATION.—In carrying out activities
4 under this Act and the amendments made by this
5 Act, the Under Secretary shall coordinate with the
6 Administration and heads of other Federal research
7 agencies—

8 (A) to ensure those activities enhance and
9 complement, but do not constitute unnecessary
10 duplication of, efforts; and

11 (B) to ensure the responsible stewardship
12 of funds.

13 (b) RULE OF CONSTRUCTION.—Nothing in this Act
14 may be construed—

15 (1) to satisfy any requirement for government-
16 to-government consultation with Indian tribes; or

17 (2) to affect or modify any treaty or other right
18 of any Indian tribe.

19 **SEC. 15. AUTHORIZATION OF APPROPRIATIONS.**

20 (a) IN GENERAL.—There are authorized to be appro-
21 priated to the Administration to carry out this Act and
22 the amendments made by this Act—

23 (1) \$15,000,000 for fiscal year 2025;

24 (2) \$20,000,000 for fiscal year 2026;

25 (3) \$27,000,000 for fiscal year 2027;

1 (4) \$36,000,000 for fiscal year 2028; and

2 (5) \$50,000,000 for fiscal year 2029.

3 (b) PROHIBITION.—None of the amounts authorized
4 to be appropriated by subsection (a) may be used to un-
5 necessarily duplicate activities funded under title VIII of
6 division D of the Infrastructure Investment and Jobs Act
7 (Public Law 117–58; 135 Stat. 1094).

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