

AMENDMENT NO. _____ Calendar No. _____

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—118th Cong., 2d Sess.

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.

Referred to the Committee on _____ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by _____

Viz:

1 Strike all after the enacting clause and insert the following:
2

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”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 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.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

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

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

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

11 (B) the Committee on Science, Space, and
12 Technology of the House of Representatives.

13 (3) EARTH SYSTEM MODEL.—The term “Earth
14 system model” means a mathematical model con-
15 taining all relevant components of the Earth, namely
16 the atmosphere, oceans, land, cryosphere, and bio-
17 sphere.

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

1 (A) the environmental conditions, such as
2 soil moisture, vegetation, topography, snowpack,
3 atmospheric temperature, moisture, and wind,
4 that influence—

5 (i) fuel and fire behavior; and

6 (ii) the emission, chemical evolution,
7 and transport of smoke from wildfires; and

8 (B) the associated environmental impacts
9 occurring during and after fire events.

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

20 (6) IMPACT-BASED DECISION SUPPORT SERV-
21 ICES.—The term “impact-based decision support
22 services” means scientific advice and interpretative
23 services the Administration provides to help core
24 partners, such as emergency personnel and public
25 safety officials, make decisions when the information

1 impacts the lives and livelihoods of the people of the
2 United States.

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

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

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

21 (10) SEASONAL.—The term “seasonal” has the
22 meaning given that term in section 2 of the Weather
23 Research and Forecasting Innovation Act of 2017
24 (15 U.S.C. 8501).

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

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

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

15 (14) UNDER SECRETARY.—The term “Under
16 Secretary” means the Under Secretary of Commerce
17 for Oceans and Atmosphere.

18 (15) WILDFIRE.—The term “wildfire” means
19 any non-structure fire that occurs in vegetation or
20 natural fuels, originating from an unplanned igni-
21 tion.

22 (16) WILDLAND-URBAN INTERFACE.—The term
23 “wildland-urban interface” means the area, zone, or
24 region of transition between unoccupied or undevel-
25 oped land and human development where structures

1 and other human development meet or intermingle
2 with undeveloped wildland or vegetative fuels.

3 **SEC. 3. ESTABLISHMENT OF FIRE WEATHER SERVICES**
4 **PROGRAM.**

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

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

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

20 (2) to collaboratively develop and disseminate
21 accurate, precise, effective, and timely risk commu-
22 nications, forecasts, watches, and warnings relating
23 to wildfires, fire weather, smoke, post-fire flooding
24 and debris flows, and other associated conditions,

1 hazards, and impacts, as applicable, with Federal
2 land management agencies;

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

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

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

21 (6) to develop, in coordination with Federal
22 land management agencies, impact-based decision
23 support services that operationalize and integrate
24 the functions described in paragraphs (1) through
25 (5) in order to provide comprehensive impact-based

1 decision support services that encompass the fire en-
2 vironment.

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

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

8 (A) are capable of prediction and fore-
9 casting across relevant spatial and temporal
10 scales;

11 (B) include variables associated with fire
12 weather and the fire environment;

13 (C) improve understanding of the connec-
14 tions between fire weather and modes of climate
15 variability;

16 (D) incorporate emerging techniques such
17 as artificial intelligence, machine learning, and
18 cloud computing; and

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

21 (2) advancement of existing and new observa-
22 tional capabilities, including satellite-, airborne-, air-
23 , and ground-based systems and technologies, and
24 social networking and other public information-gath-
25 ering applications that—

- 1 (A) identify—
- 2 (i) high-risk pre-ignition conditions;
- 3 (ii) conditions that influence fire be-
- 4 havior and spread including those condi-
- 5 tions that suppress active fire events; and
- 6 (iii) fire risk values;
- 7 (B) support real-time notification and
- 8 monitoring of ignitions;
- 9 (C) support observations and data collec-
- 10 tion of fire weather and fire environment vari-
- 11 ables, including vegetation state and profiles of
- 12 smoke, winds, temperature, and humidity, for
- 13 development of the model and systems under
- 14 paragraph (1); and
- 15 (D) support forecasts and research that
- 16 mitigate the impacts of wildfires on human life,
- 17 health, and the economy; and
- 18 (3) development and implementation of ad-
- 19 vanced and user-oriented impact-based decision
- 20 tools, science, and technologies that—
- 21 (A) ensure real-time and retrospective
- 22 data, products, and services are findable, acces-
- 23 sible, interoperable, usable, inform further re-
- 24 search, and are analysis- and decision-ready;

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

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

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

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

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

20 (3) support and conduct research that assesses
21 impacts to marine, riverine, watershed, and other
22 relevant ecosystems, which may include forest and
23 rangeland ecosystems, resulting from activities asso-
24 ciated with mitigation of and response to wildfires;

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

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

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

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

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

23 (9) provide comprehensive training to ensure
24 staff of the program established under subsection
25 (a) is properly equipped to deliver the impact-based

1 decision support services and products described in
2 paragraphs (1) through (6); and

3 (10) acquire, through contracted purchase, pri-
4 vate sector-produced observational data to fill identi-
5 fied gaps, as needed.

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

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

20 (1) competitive grants;

21 (2) contracts under the mobility program under
22 subchapter VI of chapter 33 of title 5, United States
23 Code (commonly referred to as the “Intergovern-
24 mental Personnel Act Mobility Program”);

25 (3) cooperative agreements; and

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

5 (g) PROGRAM ADMINISTRATION PLAN.—

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

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

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

19 (B) the mechanisms in place to ensure
20 seamless coordination among those offices.

21 **SEC. 4. FIRE WEATHER TESTBED.**

22 (a) ESTABLISHMENT OF FIRE WEATHER
23 TESTBED.—The Under Secretary shall establish a fire
24 weather testbed that enables engagement across the Fed-
25 eral Government, State and local governments, academia,

1 private and federally funded research laboratories, the pri-
2 vate sector, and end-users in order to evaluate the accu-
3 racy and usability of technology, models, fire weather
4 products and services, and other research to accelerate the
5 implementation, transition to operations, and use of new
6 capabilities by the Administration, Federal and land man-
7 agement agencies, and other relevant stakeholders.

8 (b) UNCREWED SYSTEMS.—

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

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

17 (B) transition uncrewed systems tech-
18 nologies from research to operations as the
19 Under Secretary considers appropriate; and

20 (C) coordinate with other Federal agencies
21 that may be developing uncrewed systems and
22 related technologies to meet the challenges of
23 wildland fire management.

24 (2) PILOTS REQUIRED.—In carrying out para-
25 graph (1), the Under Secretary shall conduct pilots

1 of uncrewed systems for fire weather and fire envi-
2 ronment observations, including—

3 (A) testing of uncrewed systems in ap-
4 proximations of real-world scenarios;

5 (B) assessment of the utility of meteoro-
6 logical data collected from fire response and as-
7 sessment aircraft;

8 (C) input of the collected data into appro-
9 priate models to predict fire behavior, including
10 coupled atmosphere and fire models; and

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

16 (3) SAVINGS CLAUSE.—

17 (A) IN GENERAL.—In carrying out activi-
18 ties under this subsection, the Under Secretary
19 shall ensure that any testing or deployment of
20 uncrewed systems follow procedures, restric-
21 tions, and protocols established by the heads of
22 the Federal agencies with statutory or regu-
23 latory jurisdiction over any airspace in which
24 wildfire response activities are conducted during
25 an active wildfire event.

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

8 (c) ADDITIONAL PILOT PROJECTS.—The Under Sec-
9 retary shall establish additional pilot projects relating to
10 the fire weather testbed that may include the following ele-
11 ments:

12 (1) Advanced products to detect fire from sat-
13 ellites.

14 (2) Procurement and use of commercial data.

15 (3) Investigation and evaluation of information
16 needs of users and decision makers.

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

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

22 (2) in subparagraph (D)—

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

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

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

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

7 **SEC. 5. DATA MANAGEMENT AND TECHNOLOGY MOD-**
8 **ERNIZATION.**

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

12 (1) by redesignating subsections (f) and (g) as
13 subsections (g) and (h), respectively; and

14 (2) by inserting after subsection (e) the fol-
15 lowing:

16 “(f) DATA AVAILABILITY AND MANAGEMENT.—

17 “(1) IN GENERAL.—The Under Secretary
18 shall—

19 “(A) make data and metadata generated
20 or collected by the National Oceanic and At-
21 mospheric Administration that the Under Sec-
22 retary has the legal right to redistribute fully
23 and openly available, in accordance with chap-
24 ter 35 of title 44, United States Code, and the
25 Foundations for Evidence-Based Policymaking

1 Act of 2018 (Public Law 115–435; 132 Stat.
2 5529) and the amendments made by that Act,
3 and preserve and curate such data and
4 metadata, in accordance with chapter 31 of title
5 44, United States Code (commonly known as
6 the ‘Federal Records Act of 1950’), in order to
7 maximize use of such data and metadata; and

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

11 “(i) using—

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

18 “(II) associated information serv-
19 ices; and

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

22 “(I) leveraging data, information,
23 knowledge, and tools from across the
24 Federal Government to support equi-
25 table access, cross-sectoral collabora-

1 tion and innovation, and local plan-
2 ning and decision-making; and

3 “(II) developing standards and
4 practices for the adoption and citation
5 of digital object identifiers for
6 datasets, models, and analytical tools.

7 “(2) COLLABORATION.—In carrying out this
8 subsection, the Under Secretary shall collaborate
9 with such Federal partners and stakeholders as the
10 Under Secretary considers relevant—

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

17 “(B) to identify and solicit relevant data
18 from Federal and international partners and
19 other relevant stakeholders, as the Under Sec-
20 retary considers appropriate; and

21 “(C) to develop standards and practices for
22 the adoption and citation of digital object iden-
23 tifiers for datasets, models, and analytical
24 tools.”.

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

4 (1) in section 70202—

5 (A) in paragraph (1)—

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

8 (ii) in subparagraph (K), by striking
9 the period at the end and inserting a semi-
10 colon; and

11 (iii) by adding at the end the fol-
12 lowing:

13 “(L) the Committee on Commerce,
14 Science, and Transportation of the Senate; and

15 “(M) the Committee on Science, Space,
16 and Technology of the House of Representa-
17 tives.”; and

18 (B) in paragraph (6)—

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

21 (ii) in subparagraph (C), by striking
22 the period at the end and inserting “;
23 and”; and

24 (iii) by adding at the end the fol-
25 lowing:

1 “(D) The Secretary of Commerce, acting
2 through the Under Secretary of Commerce for
3 Oceans and Atmosphere.”; and

4 (2) in section 70203(b)(1)(B)—

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

7 (B) in clause (i)—

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

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

12 (iii) by adding at the end the fol-
13 lowing:

14 “(VI) the National Oceanic and
15 Atmospheric Administration;”;

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

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

19 “(vi) if the Secretaries determine it to
20 be appropriate, 1 or more representatives
21 from the relevant line offices of the Na-
22 tional Oceanic and Atmospheric Adminis-
23 tration; and”.

24 (c) WILDFIRE TECHNOLOGY MODERNIZATION.—Sec-
25 tion 1114 of the John D. Dingell, Jr. Conservation, Man-

1 agement, and Recreation Act (43 U.S.C. 1748b–1) is
2 amended—

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

6 (2) in subsection (e)(2)—

7 (A) by redesignating subparagraph (B) as
8 subparagraph (C); and

9 (B) by inserting after subparagraph (A)
10 the following:

11 “(B) CONSULTATION.—

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

20 “(ii) DEFINITION OF IMPACT-BASED
21 DECISION SUPPORT SERVICES.—In this
22 subparagraph, the term ‘impact-based deci-
23 sion support services’ means scientific ad-
24 vice and interpretative services the Na-
25 tional Oceanic and Atmospheric Adminis-

1 tration provides to help core partners, such
2 as emergency personnel and public safety
3 officials, make decisions when the informa-
4 tion impacts the lives and livelihoods of the
5 people of the United States.”; and

6 (3) in subsection (f)—

7 (A) by redesignating paragraphs (1) and
8 (2) as subparagraphs (A) and (B), respectively,
9 and moving such subparagraphs, as so redesign-
10 ated, 2 ems to the right;

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

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

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

15 “(2) COLLABORATION.—In carrying out para-
16 graph (1), the Secretaries shall collaborate with the
17 Under Secretary of Commerce for Oceans and At-
18 mosphere to improve coordination, utility of systems
19 and assets, and interoperability of data for smoke
20 prediction, forecasting, and modeling.”.

21 (d) DIGITAL PRESENCE.—

22 (1) IN GENERAL.—The Under Secretary shall
23 develop and maintain a comprehensive, centralized,
24 and publicly accessible digital presence designed to
25 promote findability, accessibility, interoperability,

1 usability, and utility of the services, tools, data, and
2 information produced by the program established
3 under section 3(a).

4 (2) DIGITAL PLATFORM AND TOOLS.—In car-
5 rying out paragraph (1), the Under Secretary shall
6 seek to ensure the digital platform and tools of the
7 Administration integrate geospatial data, decision
8 support tools, training, and best practices to provide
9 real-time fire weather forecasts and address fire-re-
10 lated issues and needs.

11 (e) HIGH-PERFORMANCE COMPUTING.—

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

17 (2) CONSIDERATIONS.—In acquiring high-per-
18 formance computing capacity under paragraph (1),
19 the Under Secretary shall consider requirements
20 needed for—

21 (A) conducting research, development, and
22 testbed experiments;

23 (B) the transition of research and testbed
24 developments into operations;

25 (C) sustaining capabilities in operations;

1 (D) capabilities existing in other Federal
2 agencies and the commercial sector; and

3 (E) skilled workforce development.

4 **SEC. 6. SURVEYS AND ASSESSMENTS.**

5 (a) POST-FIRE SURVEYS AND ASSESSMENTS .—

6 (1) ANNUAL POST-FIRE-WEATHER-SEASON SUR-
7 VEY AND ASSESSMENT.—

8 (A) IN GENERAL.—During the second win-
9 ter following the enactment of this Act, and
10 each year thereafter, the Under Secretary shall
11 conduct a post-fire-weather-season survey and
12 assessment.

13 (B) ELEMENTS.—After conducting a post-
14 fire-weather-season survey and assessment
15 under subparagraph (A), the Under Secretary
16 shall—

17 (i) investigate any gaps in data col-
18 lected during the assessment;

19 (ii) identify and implement strategies
20 and procedures to improve program serv-
21 ices and information dissemination;

22 (iii) update systems, processes, strate-
23 gies, and procedures to enhance the effi-
24 ciency and reliability of data obtained from
25 the assessment;

- 1 (iv) evaluate the accuracy and efficacy
2 of physical fire weather forecasting infor-
3 mation for each incident included in the
4 survey and assessment; and
5 (v) assess and refine performance
6 measures, as needed.

7 (2) SURVEYS AND ASSESSMENTS FOLLOWING
8 INDIVIDUAL WILDFIRE EVENTS.—The Under Sec-
9 retary may conduct surveys and assessments fol-
10 lowing individual wildfire events as the Under Sec-
11 retary determines necessary.

12 (3) GOAL.—In carrying out activities under this
13 subsection, the Under Secretary shall seek to in-
14 crease the number of post-wildfire community im-
15 pact studies, including by surveying individual and
16 collective responses and incorporating other applica-
17 ble topics of social science research.

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

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

23 (B) an outlook for the fire season for the
24 coming year.

1 (5) COORDINATION.—In conducting any survey
2 or assessment under this subsection, the Under Sec-
3 retary shall coordinate with Federal, State, and local
4 partners, Indian tribes, the Native Hawaiian Com-
5 munity, private entities, and such institutions of
6 higher education as the Under Secretary considers
7 relevant in order to—

8 (A) improve operations and collaboration;
9 and

10 (B) optimize data collection, sharing, inte-
11 gration, assimilation, and dissemination.

12 (6) DATA AVAILABILITY.—The Under Secretary
13 shall make the data and findings obtained from each
14 assessment conducted under this subsection available
15 to the public in an accessible digital format as soon
16 as practicable after conducting the assessment.

17 (7) SERVICE IMPROVEMENTS.—The Under Sec-
18 retary shall make best efforts to incorporate the re-
19 sults and recommendations of each assessment con-
20 ducted under this subsection into the research and
21 development plan and operations of the Administra-
22 tion.

23 (b) JOINT ASSESSMENT AND PLAN FOR AUTOMATED
24 SURFACE OBSERVING SYSTEM.—

1 (1) IN GENERAL.—The Under Secretary, in col-
2 laboration with the Administrator of the Federal
3 Aviation Administration and the Secretary of De-
4 fense, shall—

5 (A) conduct an assessment of resources,
6 personnel, procedures, and activities necessary
7 to maximize the functionality and utility of the
8 automated surface observing system of the
9 United States that identifies—

10 (i) key system upgrades needed to im-
11 prove observation quality and utility for
12 weather forecasting, aviation safety, and
13 other users;

14 (ii) improvements needed in observa-
15 tions within the planetary boundary layer,
16 including mixing height;

17 (iii) improvements needed in public
18 accessibility of observational data;

19 (iv) improvements needed to reduce
20 latency in reporting of observational data;

21 (v) relevant data to be collected for
22 the production of forecasts or forecast
23 guidance relating to atmospheric composi-
24 tion, including particulate and air quality

1 data related to wildfires, and aviation safe-
2 ty;

3 (vi) areas of concern regarding oper-
4 ational continuity and reliability of the sys-
5 tem, which may include needs for on-night
6 staff, particularly in remote and rural
7 areas and areas where system failure
8 would have the greatest negative impact to
9 the community;

10 (vii) stewardship, data handling, data
11 distribution, and product generation needs
12 arising from upgrading and changing the
13 automated surface observation systems;

14 (viii) possible solutions for areas of
15 concern identified under clause (vi), includ-
16 ing with respect to the potential use of
17 backup systems, power and communication
18 system reliability, staffing needs and per-
19 sonnel location, and the acquisition of crit-
20 ical component backups and proper storage
21 location to ensure rapid system repair nec-
22 essary to ensure system operational con-
23 tinuity; and

24 (ix) research, development, and transi-
25 tion to operations needed to develop ad-

1 vanced data collection, quality control, and
2 distribution so that the data are provided
3 to models, users, and decision support sys-
4 tems in a timely manner; and

5 (B) develop and implement a plan that ad-
6 dresses the findings of the assessment con-
7 ducted under subparagraph (A), including by
8 seeking and allocating resources necessary to
9 ensure that system upgrades are standardized
10 across the Administration, the Federal Aviation
11 Administration, and the Department of Defense
12 to the extent practicable.

13 (2) STANDARDIZATION.—Any system standard-
14 ization implemented under paragraph (1)(B) shall
15 not impede activities to upgrade or improve indi-
16 vidual units of the system.

17 (3) REMOTE AUTOMATIC WEATHER STATION
18 COORDINATION.—The Under Secretary, in collabora-
19 tion with relevant Federal agencies and the National
20 Interagency Fire Center, shall assess and develop co-
21 operative agreements to improve coordination, inter-
22 operability standards, operations, and placement of
23 remote automatic weather stations for the purpose
24 of improving utility and coverage of remote auto-
25 matic weather stations, automated surface observa-

1 tion systems, smoke monitoring platforms, and other
2 similar stations and systems for weather and climate
3 operations.

4 (4) REPORT TO CONGRESS.—

5 (A) IN GENERAL.—Not later than 2 years
6 after the date of the enactment of this Act, the
7 Under Secretary, in collaboration with the Ad-
8 ministrators of the Federal Aviation Administra-
9 tion and the Secretary of Defense, shall submit
10 to the appropriate committees of Congress a re-
11 port that—

12 (i) details the findings of the assess-
13 ment required by subparagraph (A) of
14 paragraph (1); and

15 (ii) the plan required by subparagraph
16 (B) of such paragraph.

17 (B) ELEMENTS.—The report required by
18 subparagraph (A) shall include a detailed as-
19 sessment of appropriations required—

20 (i) to address the findings of the as-
21 sessment required by subparagraph (A) of
22 paragraph (1); and

23 (ii) to implement the plan required by
24 subparagraph (B) of such paragraph.

1 **SEC. 7. INCIDENT METEOROLOGIST SERVICE.**

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

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

8 (1) the incident meteorologists of the Adminis-
9 tration as of the date of the enactment of this Act;
10 and

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

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

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

21 (2) support to Federal, State, and local govern-
22 ment decision makers, partners, and stakeholders,
23 Indian tribes, Tribal organizations, the Native Ha-
24 waiian Community, and Native Hawaiian organiza-
25 tions for seasonal planning and pre-fire mitigation
26 activities.

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

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

3 (2) at the request of the head of another Fed-
4 eral agency and with the approval of the Under Sec-
5 retary.

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

10 (f) SUPPORT FOR INCIDENT METEOROLOGISTS.—

11 The Under Secretary shall provide resources, access to
12 real-time fire weather forecasts, training, administrative
13 and logistical support, and access to professional coun-
14 seling or other forms of support as the Under Secretary
15 considers appropriate for the betterment of the emotional
16 and mental health and well-being of incident meteorolo-
17 gists and other employees of the Administration so long
18 as the need for such resources, training, access, or support
19 is due to the response of such employees to high-impact
20 and extreme fire weather events.

21 **SEC. 8. EMERGENCY RESPONSE ACTIVITIES.**

22 (a) DEFINITIONS.—In this section:

23 (1) BASIC PAY.—The term “basic pay” includes
24 any applicable locality-based comparability payment
25 under section 5304 of title 5, United States Code,

1 any applicable special rate supplement under section
2 5305 of such title, or any equivalent payment under
3 a similar provision of law.

4 (2) COVERED EMPLOYEE.—The term “covered
5 employee” means an employee of the Department of
6 Commerce, the Department of Agriculture, or the
7 Department of the Interior.

8 (3) COVERED SERVICES.—The term “covered
9 services” means services that are performed by a
10 covered employee while serving—

11 (A) as a wildland firefighter or a fire man-
12 agement response official, including a regional
13 fire director, a deputy regional fire director,
14 and a fire management officer;

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

17 (C) on an incident management team, at
18 the National Interagency Fire Center, at a Geo-
19 graphic Area Coordinating Center, or at an op-
20 erations center.

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

1 (5) RELEVANT CONGRESSIONAL COMMIT-
2 TEES.—The term “relevant congressional commit-
3 tees” means—

4 (A) the Committee on Commerce, Science,
5 and Transportation of the Senate;

6 (B) the Committee on Homeland Security
7 and Governmental Affairs of the Senate;

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

10 (D) the Committee on Appropriations of
11 the Senate;

12 (E) the Committee on Energy and Natural
13 Resources of the Senate;

14 (F) the Committee on Oversight and Re-
15 form of the House of Representatives;

16 (G) the Committee on Natural Resources
17 of the House of Representatives;

18 (H) the Committee on Science, Space, and
19 Technology of the House of Representatives;

20 (I) the Committee on Agriculture of the
21 House of Representative; and

22 (J) the Committee on Appropriations of
23 the House of Representatives.

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

1 (A) the Secretary of Commerce, with re-
2 spect to an employee of the Department of
3 Commerce;

4 (B) the Secretary of Agriculture, with re-
5 spect to an employee of the Department of Ag-
6 riculture; and

7 (C) the Secretary of the Interior, with re-
8 spect to an employee of the Department of the
9 Interior.

10 (b) WAIVER.—

11 (1) IN GENERAL.—Any premium pay received
12 by a covered employee for covered services shall be
13 disregarded in calculating the aggregate of the basic
14 pay and premium pay for the covered employee for
15 purposes of applying the limitation on premium pay
16 under section 5547(a) of title 5, United States Code.

17 (2) CALCULATION OF AGGREGATE PAY.—Any
18 pay that is disregarded under paragraph (1) shall be
19 disregarded in calculating the aggregate pay of the
20 applicable covered employee for purposes of applying
21 the limitation under section 5307 of title 5, United
22 States Code, during calendar year 2025.

23 (3) LIMITATION.—A covered employee may not
24 be paid premium pay under this subsection if, or to
25 the extent that, the aggregate of the basic pay and

1 premium pay (including premium pay for covered
2 services) of the covered employee for a calendar year
3 would exceed the rate of basic pay payable for a po-
4 sition at level II of the Executive Schedule under
5 section 5313 of title 5, United States Code, as in ef-
6 fect at the end of that calendar year.

7 (4) TREATMENT OF ADDITIONAL PREMIUM
8 PAY.—If the application of this subsection results in
9 the payment of additional premium pay to a covered
10 employee of a type that is normally creditable as
11 basic pay for retirement or any other purpose, that
12 additional premium pay shall not be—

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

15 (B) used in computing a lump-sum pay-
16 ment to the covered employee for accumulated
17 and accrued annual leave under section 5551 or
18 5552 of title 5, United States Code.

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

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

25 (d) PLAN TO ADDRESS NEEDS.—

1 (1) DEVELOPMENT AND IMPLEMENTATION.—

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

15 (2) SUBMITTAL.—Not later than 30 days before
16 the date on which the Secretaries implement the
17 plan developed under paragraph (1), the Secretaries
18 shall submit the plan to the relevant congressional
19 committees.

20 (3) LIMITATION.—The plan developed under
21 paragraph (1) shall not be contingent on any Sec-
22 retary receiving amounts appropriated for fiscal
23 years beginning in fiscal year 2025 in amounts
24 greater than amounts appropriated for fiscal year
25 2023.

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

5 **SEC. 9. SUBMISSIONS TO CONGRESS REGARDING THE FIRE**
6 **WEATHER SERVICES PROGRAM, INCIDENT**
7 **METEOROLOGIST WORKFORCE NEEDS, AND**
8 **NATIONAL WEATHER SERVICE WORKFORCE**
9 **SUPPORT.**

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

- 14 (1) the plan described in subsection (b);
15 (2) the assessment described in subsection (c);
16 and
17 (3) the assessment described in subsection (d).

18 (b) FIRE WEATHER SERVICES PROGRAM PLAN.—

19 (1) ELEMENTS.—The plan submitted under
20 subsection (a)(1) shall detail—

- 21 (A) the observational data, modeling re-
22 quirements, ongoing computational needs, re-
23 search, development, and technology transfer
24 activities, data management, skilled-personnel
25 requirements, engagement with relevant Federal

1 emergency and land management agencies and
2 partners, and corresponding research, develop-
3 ment, and operational resources and timelines
4 necessary to achieve the functions described in
5 subsection (b) of section 3 and the priorities de-
6 scribed in subsection (c) of such section; and

7 (B) plans and needs for all other activities
8 and requirements under this Act and the
9 amendments made by this Act.

10 (2) SUBMITTAL OF ANNUAL BUDGET FOR
11 PLAN.—Following completion of the plan submitted
12 under subsection (a)(1), the Under Secretary shall,
13 not less frequently than once each year concurrent
14 with the submission of the budget by the President
15 to Congress under section 1105 of title 31, United
16 States Code, submit to Congress a proposed budget
17 corresponding with the elements detailed in the plan.

18 (c) INCIDENT METEOROLOGIST WORKFORCE NEEDS
19 ASSESSMENT.—

20 (1) IN GENERAL.—The Under Secretary shall
21 conduct a workforce needs assessment on the cur-
22 rent and future demand for additional incident me-
23 teorologists for wildfires and other high-impact fire
24 weather events.

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

3 (A) A description of staffing levels as of
4 the date on which the assessment is submitted
5 under subsection (a)(2) and projected future
6 staffing levels.

7 (B) An assessment of the state of the re-
8 search, development, and operational infrastruc-
9 ture of the National Weather Service as of the
10 date on which the assessment is submitted and
11 future needs of such infrastructure in order to
12 meet current and future demands, including
13 with respect to information technology support
14 and logistical and administrative operations.

15 (3) CONSIDERATIONS.—In conducting the as-
16 sessment required by paragraph (1), the Under Sec-
17 retary shall consider user needs and feedback from
18 relevant stakeholders.

19 (d) SUPPORT SERVICES ASSESSMENT.—

20 (1) IN GENERAL.—The Under Secretary shall
21 conduct a workforce support services assessment
22 with respect to employees of the National Weather
23 Service engaged in emergency response.

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

1 (A) An assessment of need for further sup-
2 port of employees of the National Weather
3 Service engaged in emergency response through
4 services provided by the Public Health Service.

5 (B) A detailed assessment of appropria-
6 tions required to secure the level of support
7 services needed as identified in the assessment
8 described in subparagraph (A).

9 (3) **ADDITIONAL SUPPORT SERVICES.**—Fol-
10 lowing the completion of the assessment required by
11 paragraph (1), the Under Secretary shall seek to ac-
12 quire additional support services to meet the needs
13 identified in the assessment.

14 **SEC. 10. FIRE SCIENCE AND TECHNOLOGY WORKING**
15 **GROUP; STRATEGIC PLAN.**

16 (a) **FIRE SCIENCE AND TECHNOLOGY WORKING**
17 **GROUP.**—

18 (1) **ESTABLISHMENT.**—Not later than 90 days
19 after the date of the enactment of this Act, the Ex-
20 ecutive Director of the Interagency Committee for
21 Advancing Weather Services established under sec-
22 tion 402 of the Weather Research and Forecasting
23 Innovation Act of 2017 (15 U.S.C. 8542) (in this
24 section referred to as the “Interagency Committee”)
25 shall establish a working group, to be known as the

1 “Fire Science and Technology Working Group” (in
2 this section referred to as the “Working Group”).

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

5 (3) GENERAL DUTIES.—

6 (A) IN GENERAL.—The Working Group
7 shall seek to build efficiencies among the agen-
8 cies listed under section 12(e)(1) and coordinate
9 the planning and management of science, re-
10 search, technology, and operations related to
11 science and support services for wildland fire
12 prediction, detection, forecasting, modeling, re-
13 siliance, response, management, and assess-
14 ments.

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

17 (b) STRATEGIC PLAN.—

18 (1) IN GENERAL.—Not later than 18 months
19 after the date of the enactment of this Act, the
20 Interagency Committee shall prepare and submit to
21 Congress a strategic plan for interagency coordina-
22 tion, research, and development that will improve
23 the assessment of fire environments and the under-
24 standing and prediction of wildland fires, associated

1 smoke, and the impacts of such fires and smoke, in-
2 cluding—

3 (A) at the wildland-urban interface;

4 (B) on communities, buildings, and other
5 infrastructure;

6 (C) on ecosystem services and watersheds;

7 (D) social and economic impacts;

8 (E) by developing and encouraging the
9 adoption of science-based and cost-effective
10 measures—

11 (i) to enhance community resilience to
12 wildland fires;

13 (ii) to address and mitigate the im-
14 pacts of wildland fires and associated
15 smoke; and

16 (iii) to restore natural fire regimes in
17 fire-dependent ecosystems;

18 (F) by improving the understanding and
19 mitigation of the effects of weather and long-
20 term drought on wildland fire risk, frequency,
21 and severity;

22 (G) through integrations of social and be-
23 havioral sciences in public safety fire commu-
24 nication;

1 (H) by improving the forecasting and un-
2 derstanding of prescribed fires and the impacts
3 of such fires, and how those impacts may differ
4 from impacts of wildland fires that originate
5 from an unplanned ignition; and

6 (I) consideration and adoption of any rec-
7 ommendations included in the report required
8 by section 12(c).

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

11 (A) A description of the priorities and
12 needs of vulnerable populations.

13 (B) A description of high-performance
14 computing, visualization, and dissemination
15 needs.

16 (C) A timeline and guidance for implemen-
17 tation of—

18 (i) an interagency data sharing sys-
19 tem for data relevant to performing fire
20 assessments and modeling fire risk and fire
21 behavior;

22 (ii) a system for ensuring that the fire
23 prediction models of relevant agencies can
24 be interconnected; and

1 (iii) to the maximum extent prac-
2 ticable, any recommendations included in
3 the report required by section 12(c).

4 (D) A plan for incorporating and coordi-
5 nating research and operational observations,
6 including from infrared technologies, micro-
7 wave, radars, satellites, mobile weather stations,
8 and uncrewed aerial systems.

9 (E) A flexible framework to communicate
10 clear and simple fire event information to the
11 public.

12 (F) Integration of social, behavioral, risk,
13 and communication research to improve the fire
14 operational environment and societal informa-
15 tion reception and response.

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

17 (a) IN GENERAL.—The Under Secretary shall, in col-
18 laboration with the Chief of the United States Forest
19 Service, the Director of the United States Geological Sur-
20 vey, the Director of the National Park Service, the Admin-
21 istrator of the Federal Emergency Management Agency,
22 and such stakeholders as the Under Secretary considers
23 appropriate—

1 (1) evaluate the system used as of the date of
2 the enactment of this Act to rate the risk of wildfire;
3 and

4 (2) determine whether updates to that system
5 are required to ensure that the ratings accurately re-
6 flect the severity of fire risk.

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

11 **SEC. 12. GOVERNMENT ACCOUNTABILITY OFFICE RE-**
12 **PORTS.**

13 (a) REPORT ON FIRE WEATHER SERVICES PRO-
14 GRAM.—

15 (1) IN GENERAL.—Not later than 3 years after
16 the date of the enactment of this Act, the Comp-
17 troller General of the United States shall submit to
18 Congress a report on the program established under
19 section 3(a).

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

22 (A) evaluate the performance of the pro-
23 gram by establishing initial baseline capabilities
24 and tracking progress made toward fully

1 operationalizing the functions described in sec-
2 tion 3(b); and

3 (B) include such other recommendations as
4 the Comptroller General determines are appro-
5 priate to improve the program.

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

11 (1) identifies all Federal interagency bodies es-
12 tablished for the purpose of wildfire forecasting, pre-
13 vention, planning, and management (such as wildfire
14 councils, commissions, and workgroups), including—

15 (A) the Wildland Fire Leadership Council;

16 (B) the White House Wildfire Resilience
17 Interagency Group;

18 (C) the Wildland Fire Management Policy
19 Committee;

20 (D) the Wildland Fire Mitigation and
21 Management Commission;

22 (E) the Joint Science Fire Program;

23 (F) the National Interagency Coordination
24 Center;

1 (G) the National Predictive Services Over-
2 sight Group;

3 (H) the Interagency Council for Advancing
4 Meteorological Services;

5 (I) the National Wildfire Coordinating
6 Group;

7 (J) the National Multi-Agency Coordi-
8 nating Group; and

9 (K) the Mitigation Framework Leadership
10 Group;

11 (2) evaluates the roles, functionality, and utility
12 of such interagency bodies;

13 (3) evaluates the progress, performance, and
14 implementation of such interagency bodies;

15 (4) assesses efficacy and identifies potential
16 overlap and duplication of such interagency bodies in
17 carrying out interagency collaboration with respect
18 to wildfire prevention, planning, and management;
19 and

20 (5) includes such other recommendations as the
21 Comptroller General determines are appropriate to
22 streamline and improve wildfire forecasting, preven-
23 tion, planning, and management, including rec-
24 ommendations regarding the interagency bodies for
25 which the addition of the Administration is nec-

1 essary to improve wildfire forecasting, prevention,
2 planning, and management.

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

7 (1) the authorities, roles, and science and sup-
8 port services relating to wildland fire prediction, de-
9 tection, forecasting, modeling, resilience, response,
10 management, and assessment provided by—

11 (A) the Department of Commerce, includ-
12 ing the Administration and the National Insti-
13 tute of Standards and Technology;

14 (B) the National Aeronautics and Space
15 Administration;

16 (C) the Department of the Interior;

17 (D) the Department of Agriculture;

18 (E) the National Science Foundation;

19 (F) the Department of Energy;

20 (G) the Federal Emergency Management
21 Agency;

22 (H) the Department of Transportation;

23 (I) the Environmental Protection Agency;

24 and

25 (J) the Department of Defense; and

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

4 (A) coordination between Federal agencies,
5 State and local governments, Indian tribes,
6 Tribal organizations, the Native Hawaiian Com-
7 munity, Native Hawaiian organizations, and
8 other relevant stakeholders, including through
9 examination of possible public-private partner-
10 ships;

11 (B) research and development, including
12 interdisciplinary research, related to fire envi-
13 ronments, wildland fires, associated smoke, and
14 the impacts of such environments, fires, and
15 smoke, in furtherance of a coordinated inter-
16 agency effort to address wildland fire risk re-
17 duction;

18 (C) data management and stewardship, the
19 development and coordination of data systems
20 and computational tools, and the creation of a
21 centralized, integrated data collaboration envi-
22 ronment for agency data, including historical
23 data, relating to weather, fire environments,
24 wildland fires, associated smoke, and the im-
25 pacts of such environments, fires, and smoke,

1 and the assessment of wildland fire risk mitiga-
2 tion measures;

3 (D) interoperability, usability, and accessi-
4 bility of the scientific data, data systems, and
5 computational and information tools of the
6 agencies listed under paragraph (1);

7 (E) coordinated public safety communica-
8 tions relating to fire weather events, fire haz-
9 ards, and wildland fire and smoke risk reduc-
10 tion strategies; and

11 (F) secure and accurate real-time data,
12 alerts, and advisories to wildland firefighters
13 and other decision support tools for wildland
14 fire incident command posts.

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

19 (1) evaluates the functionality, utility, reli-
20 ability, and operational status of the automated sur-
21 face observing system across the Administration, the
22 Federal Aviation Administration, and the Depart-
23 ment of Defense;

1 (2) evaluates the progress, performance, and
2 implementation of the plan required by section
3 6(b)(1)(B);

4 (3) assesses the efficacy of cross-agency collabo-
5 ration and stakeholder engagement in carrying out
6 the plan and provides recommendations to improve
7 such activities;

8 (4) evaluates the operational continuity and re-
9 liability of the system, particularly in remote and
10 rural areas and areas where system failure would
11 have the greatest negative impact to the community,
12 and provides recommendations to improve such con-
13 tinuity and reliability;

14 (5) assesses Federal coordination regarding the
15 remote automatic weather station network, air re-
16 source advisors, and other Federal observing assets
17 used for weather and climate modeling and response
18 activities, and provides recommendations for im-
19 provements; and

20 (6) includes such other recommendations as the
21 Comptroller General determines are appropriate to
22 improve the system.

23 **SEC. 13. COOPERATION AND COORDINATION.**

24 (a) COOPERATION.—Each Federal agency shall co-
25 operate and coordinate with the Under Secretary, as ap-

1 appropriate, in carrying out this Act and the amendments
2 made by this Act.

3 (b) COORDINATION.—

4 (1) IN GENERAL.—In meeting the requirements
5 under this Act and the amendments made by this
6 Act, the Under Secretary shall coordinate, and as
7 appropriate, establish agreements with Federal and
8 external partners to fully use and leverage existing
9 assets, systems, networks, technologies, and sources
10 of data.

11 (2) INCLUSIONS.—Coordination carried out
12 under paragraph (1) shall include coordination
13 with—

14 (A) the agencies represented at the Na-
15 tional Interagency Fire Center;

16 (B) the Predictive Services Program of the
17 National Interagency Coordination Center;

18 (C) the National Wildfire Coordinating
19 Group; and

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

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

- 1 (A) the National Aeronautics and Space
2 Administration;
- 3 (B) the Department of the Interior;
- 4 (C) the Federal Emergency Management
5 Agency;
- 6 (D) the National Science Foundation;
- 7 (E) the United States Geological Survey;
- 8 (F) the Department of Agriculture;
- 9 (G) the Environmental Protection Agency;
- 10 (H) the Department of Energy;
- 11 (I) the Department of Defense;
- 12 (J) the National Institute of Standards
13 and Technology; and
- 14 (K) such other departments and agencies
15 as the Under Secretary considers relevant.

16 (c) PROCESS FOR ANNUAL COORDINATION WITH
17 NON-FEDERAL ENTITIES.—Not later than 18 months
18 after the date of the enactment of this Act, the Under
19 Secretary shall develop and submit to the appropriate
20 committees of Congress a process for annual coordination
21 with State and local governments, Indian tribes, Tribal or-
22 ganizations, and the Native Hawaiian Community to as-
23 sist the development of improved fire weather products
24 and services.

25 (d) INTERNATIONAL COORDINATION.—

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

9 (2) CONSULTATION.—In carrying out activities
10 under this subsection, the Under Secretary shall
11 consult with the Department of State and such other
12 Federal partners as the Under Secretary considers
13 relevant.

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

15 (a) AVOIDANCE OF DUPLICATION.—

16 (1) IN GENERAL.—The Under Secretary shall
17 ensure, to the greatest extent practicable, that ac-
18 tivities carried out under this Act and the amend-
19 ments made by this Act are not duplicative of activi-
20 ties supported by other parts of the Administration
21 or other relevant Federal agencies.

22 (2) COORDINATION.—In carrying out activities
23 under this Act and the amendments made by this
24 Act, the Under Secretary shall coordinate with the

1 Administration and heads of other Federal research
2 agencies—

3 (A) to ensure those activities enhance and
4 complement, but do not constitute unnecessary
5 duplication of, efforts; and

6 (B) to ensure the responsible stewardship
7 of funds.

8 (b) **RULE OF CONSTRUCTION.**—Nothing in this Act
9 may be construed—

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

12 (2) to affect or modify any treaty or other right
13 of any Indian tribe.

14 **SEC. 15. AUTHORIZATION OF APPROPRIATIONS.**

15 (a) **IN GENERAL.**—There are authorized to be appro-
16 priated to the Administration to carry out this Act and
17 the amendments made by this Act—

18 (1) \$15,000,000 for fiscal year 2025;

19 (2) \$20,000,000 for fiscal year 2026;

20 (3) \$27,000,000 for fiscal year 2027;

21 (4) \$36,000,000 for fiscal year 2028; and

22 (5) \$50,000,000 for fiscal year 2029.

23 (b) **PROHIBITION.**—None of the amounts authorized
24 to be appropriated by subsection (a) may be used to un-
25 necessarily duplicate activities funded under title VIII of

- 1 division D of the Infrastructure Investment and Jobs Act
- 2 (Public Law 117–58; 135 Stat. 1094).