

- (A) \$91,758,000 is authorized for weather laboratories and cooperative institutes;
- (B) \$42,396,000 is authorized for weather and air chemistry research programs; and
- (C) \$20,000,000 is authorized for the joint technology transfer initiative described in section 8512(b)(4) of this title.

**(b) Limitation**

No additional funds are authorized to carry out this subchapter and the amendments made by this title.<sup>1</sup>

(Pub. L. 115–25, title I, §110, Apr. 18, 2017, 131 Stat. 98; Pub. L. 115–423, §3(b), Jan. 7, 2019, 132 Stat. 5455.)

**Editorial Notes**

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original “this title”, meaning title I of Pub. L. 115–25, which enacted this subchapter and amended provisions formerly set out as a note under section 313 of this title, which is now classified to section 8520 of this title. For complete classification of title I to the Code, see Tables.

The amendments made by this title, referred to in subsec. (b), mean the amendments made by title I of Pub. L. 115–25, which amended provisions formerly set out as a note under section 313 of this title and which is now classified to section 8520 of this title.

AMENDMENTS

2019—Pub. L. 115–423 amended section generally. Prior to amendment, section related to authorization of appropriations for fiscal years 2017 and 2018.

**§ 8520. United States Weather Research Program**

**(a) Establishment**

The Secretary of Commerce, in cooperation with the Federal Coordinating Council for Science, Engineering, and Technology through the Committee on Earth and Environmental Sciences, shall establish a United States Weather Research Program to—

- (1) increase benefits to the Nation from the substantial investment in modernizing the public weather warning and forecast system in the United States;
- (2) improve local and regional weather forecasts and warnings;
- (3) address critical weather-related scientific issues;
- (4) coordinate governmental, university, and private-sector efforts;
- (5) submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives, not less frequently than once each year, a report, including—
  - (A) a list of ongoing research projects;
  - (B) project goals and a point of contact for each project;
  - (C) the five projects related to weather observations, short-term weather, or subseasonal forecasts within Office of Oceanic and Atmospheric Research that are closest to operationalization;
  - (D) for each project referred to in subparagraph (C)—

- (i) the potential benefit;
- (ii) any barrier to operationalization; and
- (iii) the plan for operationalization, including which line office will financially support the project and how much the line office intends to spend;

(6) establish teams with staff from the Office of Oceanic and Atmospheric Research and the National Weather Service to oversee the operationalization of research products developed by the Office of Oceanic and Atmospheric Research;

(7) develop mechanisms for research priorities of the Office of Oceanic and Atmospheric Research to be informed by the relevant line offices within the National Oceanic and Atmospheric Administration, the relevant user community, and the weather enterprise;

(8) develop an internal mechanism to track the progress of each research project within the Office of Oceanic and Atmospheric Research and mechanisms to terminate a project that is not adequately progressing;

(9) develop and implement a system to track whether extramural research grant goals were accomplished;

(10) provide facilities for products developed by the Office of Oceanic and Atmospheric Research to be tested in operational simulations, such as test beds;

(11) encourage academic collaboration with the Office of Oceanic and Atmospheric Research and the National Weather Service by facilitating visiting scholars; and

(12) carry out the activities of the Earth Prediction Innovation Center as described in section 8512(b)(2) of this title.

**(b) Implementation plan**

The Secretary of Commerce, in cooperation with the Committee on Earth and Environmental Sciences, shall prepare and submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a plan for implementation of the United States Weather Research Program which shall—

(1) establish, for the 10-year period beginning in the year the plan is submitted, the goals and priorities for Federal weather research which most effectively advance the scientific understanding of weather processes and provide information to improve weather warning and forecast systems in the United States;

(2) describe specific activities, including research activities, data collection and data analysis requirements, predictive modeling, participation in international research efforts, demonstration of potential operational forecast applications, and education and training required to achieve such goals and priorities; and

(3) set forth the role of each Federal agency and department to be involved in the United States Weather Research Program, identifying and addressing, as appropriate, relevant programs and activities of the Federal agencies and departments that would contribute to such Program.

<sup>1</sup> See References in Text note below.

**(c) Subseasonal defined**

In this section, the term “subseasonal” means the time range between 2 weeks and 3 months.

(Pub. L. 102-567, title I, §108, Oct. 29, 1992, 106 Stat. 4276; Pub. L. 115-25, title I, §109, Apr. 18, 2017, 131 Stat. 97; Pub. L. 115-423, §4(b), Jan. 7, 2019, 132 Stat. 5457.)

**Editorial Notes****CODIFICATION**

Pub. L. 115-25, which directed amendment of section 108 of the “Oceanic and Atmospheric Administration Authorization Act of 1992”, was executed to this section, which is section 108 of the National Oceanic and Atmospheric Administration Authorization Act of 1992, to reflect the probable intent of Congress.

Section was formerly set out as a note under section 313 of this title.

Section was enacted as part of the National Oceanic and Atmospheric Administration Authorization Act of 1992, and not as part of the Weather Research and Forecasting Innovation Act of 2017 which comprises this chapter.

**AMENDMENTS**

2019—Subsec. (a)(12). Pub. L. 115-423 added par. (12).

2017—Subsec. (a)(5) to (11). Pub. L. 115-25, §109(1), added pars. (5) to (11). See Codification note above.

Subsec. (b). Pub. L. 115-25, §109(2), substituted “The” for “Not later than 90 days after October 29, 1992, the” in introductory provisions. See Codification note above.

Subsec. (c). Pub. L. 115-25, §109(3), added subsec. (c). See Codification note above.

**§ 8521. Weather and climate information in agriculture****(a) Findings**

Congress finds that—

(1) agricultural and silvicultural operations are vulnerable to damage from atmospheric conditions that accurate and timely reporting of weather information can help prevent;

(2) the maintenance of current weather and climate analysis and information dissemination systems, and Federal, State, and private efforts to improve these systems, is essential if agriculture and silviculture are to mitigate damage from atmospheric conditions;

(3) agricultural and silvicultural weather services at the Federal level should be maintained with joint planning between the National Oceanic and Atmospheric Administration and the Department of Agriculture; and

(4) efforts should be made, involving user groups, weather and climate information providers, and Federal and State governments, to expand the use of weather and climate information in agriculture and silviculture.

**(b) Policy**

It, therefore, is declared to be the policy of Congress that it is in the public interest to maintain an active Federal involvement in providing agricultural and silvicultural weather and climate information and that efforts should be made, among users of this information and among private providers of this information, to improve use of this information.

**(c) Functions**

The Under Secretary, acting through the Director of the National Weather Service and the

heads of such other programs of the National Oceanic and Atmospheric Administration as the Under Secretary considers appropriate, shall—

(1) collect and utilize information in order to make usable, reliable, and timely foundational forecasts of subseasonal and seasonal temperature and precipitation;

(2) leverage existing research and models from the weather enterprise to improve the forecasts under paragraph (1);

(3) determine and provide information on how the forecasted conditions under paragraph (1) may impact—

(A) the number and severity of droughts, fires, tornadoes, hurricanes, floods, heat waves, coastal inundation, winter storms, high impact weather, or other relevant natural disasters;

(B) snowpack; and

(C) sea ice conditions; and

(4) develop an Internet clearinghouse to provide the forecasts under paragraph (1) and the information under paragraphs (1) and (3) on both national and regional levels.

**(d) Communication**

The Director of the National Weather Service shall provide the forecasts under paragraph (1) of subsection (c) and the information on their impacts under paragraph (3) of such subsection to the public, including public and private entities engaged in planning and preparedness, such as National Weather Service Core partners at the Federal, regional, State, tribal, and local levels of government.

**(e) Cooperation**

The Under Secretary shall build upon existing forecasting and assessment programs and partnerships, including—

(1) by designating research and monitoring activities related to subseasonal and seasonal forecasts as a priority in one or more solicitations of the Cooperative Institutes of the Office of Oceanic and Atmospheric Research;

(2) by contributing to the interagency Earth System Prediction Capability; and

(3) by consulting with the Secretary of Defense and the Secretary of Homeland Security to determine the highest priority subseasonal and seasonal forecast needs to enhance national security.

**(f) Forecast communication coordinators****(1) In general**

The Under Secretary shall foster effective communication, understanding, and use of the forecasts by the intended users of the information described in subsection (d). This may include assistance to States for forecast communication coordinators to enable local interpretation and planning based on the information.

**(2) Requirements**

For each State that requests assistance under this subsection, the Under Secretary may—

(A) provide funds to support an individual in that State—

(i) to serve as a liaison among the National Oceanic and Atmospheric Administration, other Federal departments and