

Editorial Notes

REFERENCES IN TEXT

Section 409 of the Weather Research and Forecasting Innovation Act of 2017, referred to in subsec. (c)(1), is section 409 of Pub. L. 115-25, title IV, Apr. 18, 2017, 131 Stat. 112, which is not classified to the Code.

§ 9705. Improving National Oceanic and Atmospheric Administration communication of future flood risks and hazardous flash flood events

(a) Assessment of flash flood watches and warnings

(1) In general

Not later than 2 years after December 27, 2022, the Administrator shall—

(A) conduct an assessment of—

(i) the flash flood watches and warnings of the National Weather Service; and

(ii) the information delivery to support preparation and responses to floods; and

(B) submit to Congress a report on the findings of the Administrator with respect to the assessment required by subparagraph (A).

(2) Elements

The assessment required by paragraph (1)(A) shall include the following:

(A) An evaluation of whether the watches, warnings, and information described in paragraph (1)(A) effectively—

(i) communicate risk to the general public;

(ii) inform action to prevent loss of life and property;

(iii) inform action to support flood preparation and response; and

(iv) deliver information in a manner designed to lead to appropriate action.

(B) Subject to subsection (b)(2), such recommendations as the Administrator may have for—

(i) legislative and administrative action to improve the watches and warnings described in paragraph (1)(A)(i); and

(ii) such research as the Administrator considers necessary to address the focus areas described in paragraph (3).

(3) Focus areas

The assessment required by paragraph (1)(A) shall focus on the following areas:

(A) Ways to communicate the risks posed by hazardous flash flood events to the public that are most likely to result in informed decision making regarding the mitigation of those risks.

(B) Ways to provide actionable geographic information to the recipient of a watch or warning for a flash flood, including partnering with emergency response agencies, as appropriate.

(C) Evaluation of information delivery to support the preparation for and response to floods.

(4) Consultation

In conducting the assessment required by paragraph (1)(A), the Administrator shall consult with—

(A) individuals in the academic sector, including individuals in the field of social and behavioral sciences;

(B) other weather services;

(C) media outlets and other entities that distribute the watches and warnings described in paragraph (1)(A)(i);

(D) floodplain managers and emergency planners and responders, including State, local, and Tribal emergency management agencies;

(E) other government users of the watches and warnings described in paragraph (1)(A)(i), including the Federal Highway Administration; and

(F) such other Federal agencies as the Administrator determines rely on watches and warnings regarding flash floods for operational decisions.

(5) National Academy of Sciences

The Administrator shall engage with the National Academy of Sciences, as the Administrator considers necessary and practicable, including by contracting with the National Research Council to review the scientific and technical soundness of the assessment required by paragraph (1)(A), including the recommendations under paragraph (2)(B).

(6) Methodologies

In conducting the assessment required by paragraph (1)(A), the Administrator shall use such methodologies as the Administrator considers are generally accepted by the weather enterprise, including social and behavioral sciences.

(b) Improvements to flash flood watches and warnings

(1) In general

Based on the assessment required by subsection (a)(1)(A), the Administrator shall make such improvements to the watches and warnings described in that subsection as the Administrator considers necessary—

(A) to improve the communication of the risks posed by hazardous flash flood events; and

(B) to provide actionable geographic information to the recipient of a watch or warning for a flash flood.

(2) Requirements regarding recommendations

In conducting the assessment required by subsection (a)(1)(A), the Administrator shall ensure that any recommendation under subsection (a)(2)(B) that the Administrator considers a major change—

(A) is validated by social and behavioral science using a generalizable sample;

(B) accounts for the needs of various demographics, vulnerable populations, and geographic regions;

(C) responds to the needs of Federal, State, local, and Tribal government partners and media partners; and

(D) accounts for necessary changes to federally operated watch and warning propagation and dissemination infrastructure and protocols.

(c) Definitions

In this section:

(1) Watch; warning**(A) In general**

Except as provided in subparagraph (B), the terms “watch” and “warning”, with respect to a hazardous flash flood event, mean products issued by the National Oceanic and Atmospheric Administration, intended for use by the general public—

- (i) to alert the general public to the potential for or presence of the event; and
- (ii) to inform action to prevent loss of life and property.

(B) Exclusion

The terms “watch” and “warning” do not include technical or specialized meteorological and hydrological forecasts, outlooks, or model guidance products.

(2) Weather enterprise

The term “weather enterprise” has the meaning given that term in section 8501 of this title.

(Pub. L. 117-316, § 6, Dec. 27, 2022, 136 Stat. 4410.)

§ 9706. Freshwater monitoring along the coast**(a) Data availability assessment**

The Administrator shall assess the availability of short- and long-term data on large-scale freshwater flooding into oceans, bays, and estuaries, including data on—

- (1) flow rate, including discharge;
- (2) conductivity;
- (3) oxygen concentration;
- (4) nutrient load;
- (5) water temperature; and
- (6) sediment load.

(b) Data needs assessment

The Administrator shall assess the need for additional data to assess and predict the effect of the flooding and freshwater discharge described in subsection (a).

(c) Inventory of data needs

Based on the assessments required by subsections (a) and (b), the Administrator shall create an inventory of data needs with respect to the flooding and freshwater discharge described in subsections (a) and (b).

(d) Planning

In planning for the collection of additional data necessary for ecosystem-based modeling of the effect of the flooding and freshwater discharge described in subsections (a) and (b), the Administrator shall use the inventory created under subsection (c).

(Pub. L. 117-316, § 7, Dec. 27, 2022, 136 Stat. 4412.)

§ 9707. Estimates of precipitation frequency in the United States**(a) Definitions**

In this section:

(1) Freely Associated States

The term “Freely Associated States” means the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia, which have each entered into a

Compact of Free Association with the United States.

(2) United States

The term “United States” means the 50 States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Freely Associated States.

(b) In general

The Administrator shall establish a program, to be known as the “NOAA Precipitation Frequency Atlas of the United States”, to compile, estimate, analyze, and communicate the frequency of precipitation in the United States.

(c) Functions

The NOAA Precipitation Frequency Atlas of the United States—

(1) shall better inform the public and provide information on—

- (A) temporal and spatial distribution of heavy precipitation;
- (B) analyses of seasonality in precipitation; and
- (C) trends in annual maximum series data; and

(2) may serve as the official source of the Federal Government on estimates of precipitation frequency and associated information with respect to the United States.

(d) Requirements**(1) Coverage**

The NOAA Precipitation Frequency Atlas of the United States shall include such estimates of the frequency of precipitation in the United States as the Administrator determines appropriate.

(2) Frequency

Such estimates—

- (A) shall be conducted not less frequently than once every 10 years; and
- (B) may be conducted more frequently if determined appropriate by the Administrator.

(3) Publication

Such estimates and methodologies used to conduct such estimates shall be—

- (A) subject to an appropriate, scientific process, as determined by the Administrator; and
- (B) published on a publicly accessible website of the National Oceanic and Atmospheric Administration.

(e) Partnerships

The Administrator may partner with other Federal agencies, members of the private sector, academic cooperative partnerships, or non-government associations to assist in carrying out the functions described in subsection (c).

(f) Consultation

In carrying out this section, the Administrator may consult with relevant Federal, State, local, Tribal, and Territorial government agencies, research institutions, and the private sector, as the Administrator determines necessary.