

(Pub. L. 117-316, § 3, Dec. 27, 2022, 136 Stat. 4406.)

§ 9703. Observations and modeling for total water prediction

(a) Partnerships

(1) In general

The Administrator shall establish partnerships with 1 or more institutions of higher education (as defined in section 1001 of title 20) to evaluate observations that would improve total water prediction.

(2) Priority observations

In establishing partnerships under paragraph (1), the Administrator shall prioritize partnerships to evaluate observations from uncrewed aerial systems.

(b) Maintained observations

If the Administrator determines that incorporating additional observations improves total water prediction, the Administrator shall, to the extent practicable, continue incorporating those observations.

(c) Modeling improvements

The Administrator shall advance geographic coverage, resolution, skill, and efficiency of coastal oceanographic modeling, including efforts that improve the coupling of and interoperability between hydrological models and coastal ocean models.

(Pub. L. 117-316, § 4, Dec. 27, 2022, 136 Stat. 4408.)

§ 9704. Service coordination hydrologists at River Forecast Centers of the National Weather Service

(a) Designation of service coordination hydrologists

(1) In general

The Director of the National Weather Service (in this section referred to as the “Director”) shall designate at least 1 service coordination hydrologist at each River Forecast Center of the National Weather Service.

(2) Performance by other employees

Performance of the responsibilities outlined in this section is not limited to the service coordination hydrologist position.

(b) Primary role of service coordination hydrologists

The primary role of the service coordination hydrologist shall be to carry out the responsibilities required by this section.

(c) Responsibilities

(1) In general

Subject to paragraph (2), consistent with the analysis described in section 409 of the Weather Research and Forecasting Innovation Act of 2017 (Public Law 115-25; 131 Stat. 112), and in order to increase impact-based decision support services, each service coordination hydrologist designated under subsection (a) shall, with respect to hydrology—

(A) be responsible for providing service to the geographic area of responsibility covered by the River Forecast Center at which the

service coordination hydrologist is employed to help ensure that users of products and services of the National Weather Service can respond effectively to improve outcomes from flood events;

(B) liaise with users of products and services of the National Weather Service, such as the public, academia, media outlets, users in the hydropower, transportation, recreation, and agricultural communities, and forestry, land, fisheries, and water management interests, to evaluate the adequacy and usefulness of the products and services of the National Weather Service;

(C) collaborate with such River Forecast Centers and Weather Forecast Offices and Federal, State, local, and Tribal government agencies as the Director considers appropriate in developing, proposing, and implementing plans to develop, modify, or tailor products and services of the National Weather Service to improve the usefulness of such products and services;

(D) engage in interagency partnerships with Federal, State, local, and Tribal government agencies to explore the use of forecast-informed reservoir operations to reduce flood risk;

(E) ensure the maintenance and accuracy of flooding call lists, appropriate office flooding policy or procedures, and other flooding information or dissemination methodologies or strategies; and

(F) work closely with Federal, State, local, and Tribal emergency and floodplain management agencies, and other agencies relating to disaster management, to ensure a planned, coordinated, and effective preparedness and response effort.

(2) Other staff

The Director may assign a responsibility set forth in paragraph (1) to such other staff as the Director considers appropriate to carry out such responsibility.

(d) Additional responsibilities

(1) In general

Subject to paragraph (2), a service coordination hydrologist designated under subsection (a) may, with respect to hydrology—

(A) work with a State agency to develop plans for promoting more effective use of products and services of the National Weather Service throughout the State;

(B) identify priority community preparedness objectives;

(C) develop plans to meet the objectives identified under subparagraph (B); and

(D) conduct flooding event preparedness planning and citizen education efforts with and through various State, local, and Tribal government agencies and other disaster management-related organizations.

(2) Other staff

The Director may assign a responsibility set forth in paragraph (1) to such other staff as the Director considers appropriate to carry out such responsibility.

(Pub. L. 117-316, § 5, Dec. 27, 2022, 136 Stat. 4408.)

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: