

through 2013 such sums as are necessary to fulfill the purposes of this chapter and support activities identified in the annual coordinated System budget developed by the Interagency Ocean Observation Committee and submitted to the Congress.

(Pub. L. 111-11, title XII, §12311, Mar. 30, 2009, 123 Stat. 1436.)

**§ 3611. Assessing and modeling named storms over coastal States**

**(a) Definitions**

In this section:

**(1) COASTAL Formula**

The term “COASTAL Formula” has the meaning given the term in section 4057(a) of title 42.

**(2) Coastal State**

The term “coastal State” has the meaning given the term “coastal state” in section 1453 of title 16.

**(3) Coastal waters**

The term “coastal waters” has the meaning given the term in such section.

**(4) Covered data**

The term “covered data” means, with respect to a named storm identified by the Administrator under subsection (b)(2)(A), empirical data that are—

(A) collected before, during, or after such storm; and

(B) necessary to determine magnitude and timing of wind speeds, rainfall, the barometric pressure, river flows, the extent, height, and timing of storm surge, topographic and bathymetric data, and other measures required to accurately model and assess damage from such storm.

**(5) Indeterminate loss**

The term “indeterminate loss” has the meaning given the term in section 4057(a) of title 42.

**(6) Named storm**

The term “named storm” means any organized weather system with a defined surface circulation and maximum winds of at least 39 miles per hour which the National Hurricane Center of the United States National Weather Service names as a tropical storm or a hurricane.

**(7) Named Storm Event Model**

The term “Named Storm Event Model” means the official meteorological and oceanographic computerized model, developed by the Administrator under subsection (b)(1)(A), which utilizes covered data to replicate the magnitude, timing, and spatial variations of winds, rainfall, and storm surges associated with named storms that threaten any portion of a coastal State.

**(8) Participant**

The term “participant” means a Federal, State, or private entity that chooses to cooperate with the Administrator in carrying out the provisions of this section by collect-

ing, contributing, and maintaining covered data.

**(9) Post-storm assessment**

The term “post-storm assessment” means a scientific assessment produced and certified by the Administrator to determine the magnitude, timing, and spatial variations of winds, rainfall, and storm surges associated with a specific named storm to be used in the COASTAL Formula.

**(10) State**

The term “State” means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and any other territory or possession of the United States.

**(b) Named Storm Event Model and post-storm assessment**

**(1) Establishment of Named Storm Event Model**

**(A) In general**

Not later than 540 days after July 6, 2012, the Administrator shall develop by regulation the Named Storm Event Model.

**(B) Accuracy**

The Named Storm Event Model shall be designed to generate post-storm assessments, as provided in paragraph (2), that have a degree of accuracy of not less than 90 percent for every indeterminate loss for which a post-storm assessment is utilized.

**(2) Post-storm assessment**

**(A) Identification of named storms threatening coastal States**

After the establishment of the COASTAL Formula, the Administrator shall, in consultation with the Secretary of Homeland Security, identify named storms that may reasonably constitute a threat to any portion of a coastal State.

**(B) Post-storm assessment required**

Upon identification of a named storm under subparagraph (A), the Administrator shall develop a post-storm assessment for such named storm using the Named Storm Event Model and covered data collected for such named storm pursuant to the protocol established under subsection (c)(1).

**(C) Submittal of post-storm assessment**

Not later than 90 days after an identification of a named storm is made under subparagraph (A), the Administrator shall submit to the Secretary of Homeland Security the post-storm assessment developed for such storm under subparagraph (B).

**(3) Accuracy**

The Administrator shall ensure, to the greatest extent practicable, that each post-storm assessment developed under paragraph (2) has a degree of accuracy of not less than 90 percent.

**(4) Certification**

For each post-storm assessment carried out under paragraph (2), the Administrator shall—

(A) certify the degree of accuracy for such assessment, including specific reference to

any segments or geographic areas for which the assessment is less than 90 percent accurate; and

(B) report such certification to the Secretary of Homeland Security for the purposes of use with indeterminate loss claims under section 4057 of title 42.

**(5) Finality of determinations**

A certification of the degree of accuracy of a post-storm assessment under this subsection by the Administrator shall be final and shall not be subject to judicial review.

**(6) Availability**

The Administrator shall make available to the public the Named Storm Event Model and any post-storm assessment developed under this subsection.

**(c) Establishment of a protocol for post-storm assessment**

**(1) In general**

Not later than 540 days after July 6, 2012, the Administrator shall establish a protocol, based on the plan submitted under subsection (d)(3), to collect and assemble all covered data required by the Administrator to produce post-storm assessments required by subsection (b), including assembling data collected by participants and stored in the database established under subsection (f) and from such other sources as the Administrator considers appropriate.

**(2) Acquisition of sensors and structures**

If the Administrator is unable to use a public or private asset to obtain covered data as part of the protocol established under paragraph (1), the Administrator may acquire such sensors and structures for the placement of sensors as may be necessary to obtain such data.

**(3) Use of Federal assets**

If the protocol requires placement of a sensor to develop assessments pursuant to subsection (b), the Administrator shall, to the extent practicable, use Federal assets for the placement of such sensors.

**(4) Use of acquired structures**

**(A) In general**

If the Administrator acquires a structure for the placement of a sensor for purposes of such protocol, the Administrator shall to the extent practical permit other public and private entities to place sensors on such structure to collect—

- (i) meteorological data;
- (ii) national security-related data;
- (iii) navigation-related data;
- (iv) hydrographic data; or
- (v) such other data as the Administrator considers appropriate.

**(B) Receipt of consideration**

The Administrator may receive consideration for the placement of a sensor on a structure under subparagraph (A).

**(C) In-kind consideration**

Consideration received under subparagraph (B) may be received in-kind.

**(D) Use of consideration**

To the extent practicable, consideration received under subparagraph (B) shall be used for the maintenance of sensors used to collect covered data.

**(5) Coordinated deployments and data collection practices**

The Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology, coordinate the deployment of sensors as part of the protocol established under paragraph (1) and related data collection carried out by Federal, State, academic, and private entities who choose to cooperate with the Administrator in carrying out this subsection.

**(6) Priority acquisition and deployment**

The Administrator shall give priority in the acquisition for and deployment of sensors under the protocol required by paragraph (1) to areas of coastal States that have the highest risk of being harmed by named storms.

**(d) Assessment of systems and efforts to collect covered data**

**(1) Identification of systems and efforts to collect covered data**

Not later than 180 days after July 6, 2012, the Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology—

(A) carry out a survey to identify all Federal and State efforts and systems that are capable of collecting covered data; and

(B) consult with private and academic sector entities to identify domestic private and academic systems that are capable of collecting covered data.

**(2) Identification of gaps**

The Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology and individuals and entities consulted under subsection (e)(3), assess the systems identified under paragraph (1) and identify which systems meet the needs of the National Oceanic and Atmospheric Administration for the collection of covered data, including with respect to the accuracy requirement for post-storm assessment under subsection (b)(3).

**(3) Plan**

Not later than 270 days after July 6, 2012, the Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology, submit to Congress a plan for the collection of covered data necessary to develop the Named Storm Event Model and post-storm assessment required by subsection (b) that addresses any gaps identified in paragraph (2).

**(e) Coordination of covered data collection and maintenance by participants**

**(1) In general**

The Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology, coordinate the collection and maintenance of covered data by participants under this section—

(A) to streamline the process of collecting covered data in accordance with the protocol established under subsection (c)(1); and

(B) to maintain transparency of such process and the database established under subsection (f).

**(2) Sharing information**

The Administrator shall establish a process for sharing among participants information relevant to collecting and using covered data for—

- (A) academic research;
- (B) private sector use;
- (C) public outreach; and
- (D) such other purposes as the Administrator considers appropriate.

**(3) Consultation**

In carrying out paragraphs (1) and (2), the Administrator shall consult with the following:

- (A) The Commanding General of the Corps of Engineers.
- (B) The Administrator of the Federal Emergency Management Agency.
- (C) The Commandant of the Coast Guard.
- (D) The Director of the United States Geological Survey.
- (E) The Office of the Federal Coordinator for Meteorology.
- (F) The Director of the National Science Foundation.
- (G) The Administrator of the National Aeronautics and Space Administration.
- (H) Such public, private, and academic sector entities as the Administrator considers appropriate for purposes of carrying out the provisions of this section.

**(f) Establishment of Coastal Wind and Water Event Database**

**(1) In general**

Not later than 1 year after July 6, 2012, the Administrator shall establish a database for the collection and compilation of covered data—

- (A) to support the protocol established under subsection (c)(1); and
- (B) for the purposes listed in subsection (e)(2).

**(2) Designation**

The database established under paragraph (1) shall be known as the “Coastal Wind and Water Event Database”.

**(g) Comptroller General study**

Not later than 1 year after July 6, 2012, the Comptroller General of the United States shall—

- (1) complete an audit of Federal efforts to collect covered data for purposes of the Consumer Option for an Alternative System to Allocate Losses Act of 2012, which audit shall—
  - (A) examine duplicated Federal efforts to collect covered data; and
  - (B) determine the cost effectiveness of such efforts; and
- (2) submit to the Committee on Banking, Housing, and Urban Affairs and the<sup>1</sup> Com-

merce, Science, and Transportation of the Senate and the Committee on Financial Services and the Committee on Science, Space, and Technology of the House of Representatives a report on the findings of the Comptroller General with respect to the audit completed under paragraph (1).

(Pub. L. 111–11, title XII, §12312, as added Pub. L. 112–141, div. F, title II, §100252, July 6, 2012, 126 Stat. 969.)

REFERENCES IN TEXT

The Consumer Option for an Alternative System to Allocate Losses Act of 2012, referred to in subsec. (g)(1), is subtitle B (§§100251–100253) of title II of div. F of Pub. L. 112–141, which enacted this section, section 4057 of Title 42, the Public Health and Welfare, and provisions set out as a note under section 4001 of Title 42. For complete classification of this Act to the Code, see Short Title of 2012 Amendment note set out under section 4001 of Title 42 and Tables.

**CHAPTER 50—FEDERAL OCEAN ACIDIFICATION RESEARCH AND MONITORING**

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**§ 3701. Purposes**

**(a) Purposes**

The purposes of this chapter are to provide for—

- (1) development and coordination of a comprehensive interagency plan to—
  - (A) monitor and conduct research on the processes and consequences of ocean acidification on marine organisms and ecosystems; and
  - (B) establish an interagency research and monitoring program on ocean acidification;
- (2) establishment of an ocean acidification program within the National Oceanic and Atmospheric Administration;
- (3) assessment and consideration of regional and national ecosystem and socioeconomic impacts of increased ocean acidification; and
- (4) research adaptation strategies and techniques for effectively conserving marine ecosystems as they cope with increased ocean acidification.

(Pub. L. 111–11, title XII, §12402, Mar. 30, 2009, 123 Stat. 1436.)

SHORT TITLE

Pub. L. 111–11, title XII, §12401, Mar. 30, 2009, 123 Stat. 1436, provided that: “This subtitle [subtitle D (§§12401–12409) of title XII of Pub. L. 111–11, enacting this chapter] may be cited as the ‘Federal Ocean Acidification Research And Monitoring Act of 2009’ or the ‘FOARAM Act’.”

**§ 3702. Definitions**

In this chapter:

**(1) Ocean acidification**

The term “ocean acidification” means the decrease in pH of the Earth’s oceans and

<sup>1</sup>So in original. Probably should be followed by “Committee on”.