- (D) Evaluations of the size of populations that will require evacuation, including populations with special evacuation needs.
- (E) Evaluations and technical assistance for vertical evacuation structure planning for communities where models indicate limited or no ability for timely evacuation, especially in areas at risk of near shore generated tsunami.
- (F) Evaluation of at-risk ports and harbors
- (G) Evaluation of the effect of tsunami currents on the foundations of closely-spaced, coastal high-rise structures.
- (6) Activities to promote preparedness in atrisk ports and harbors, including the following:
- (A) Evaluation and recommendation of procedures for ports and harbors in the event of a distant or near-field tsunami.
- (B) A review of readiness, response, and communication strategies to ensure coordination and data sharing with the Coast Guard.
- (7) Activities to support the development of community-based outreach and education programs to ensure community readiness and resilience, including the following:
  - (A) The development, implementation, and assessment of technical training and public education programs, including education programs that address unique characteristics of distant and near-field tsunami.
  - (B) The development of decision support tools.
  - (C) The incorporation of social science research into community readiness and resilience efforts.
  - (D) The development of evidence-based education guidelines.
- (8) Dissemination of guidelines and standards for community planning, education, and training products, programs, and tools, including—
  - (A) standards for—
    - (i) mapping products;
    - (ii) inundation models; and
    - (iii) effective emergency exercises; and
  - (B) recommended guidance for at-risk port and harbor tsunami warning, evacuation, and response procedures in coordination with the Coast Guard and the Federal Emergency Management Agency.

## (d) Authorized activities

In addition to activities conducted under subsection (c), the program conducted under subsection (a) may include the following:

- (1) Multidisciplinary vulnerability assessment research, education, and training to help integrate risk management and resilience objectives with community development planning and policies.
- (2) Risk management training for local officials and community organizations to enhance understanding and preparedness.
- (3) In coordination with the Federal Emergency Management Agency, interagency, Federal, State, tribal, and territorial intergovernmental tsunami response exercise planning and implementation in high risk areas.

- (4) Development of practical applications for existing or emerging technologies, such as modeling, remote sensing, geospatial technology, engineering, and observing systems, including the integration of tsunami sensors into Federal and commercial submarine telecommunication cables if practicable.
- (5) Risk management, risk assessment, and resilience data and information services, including—
  - (A) access to data and products derived from observing and detection systems; and
  - (B) development and maintenance of new integrated data products to support risk management, risk assessment, and resilience programs.
- (6) Risk notification systems that coordinate with and build upon existing systems and actively engage decisionmakers, State, local, tribal, and territorial governments and agencies, business communities, nongovernmental organizations, and the media.

# (e) No preemption with respect to designation of at-risk areas

The establishment of national standards for inundation models under this section shall not prevent States, territories, tribes, and local governments from designating additional areas as being at risk based on knowledge of local conditions

## (f) No new regulatory authority

Nothing in this chapter may be construed as establishing new regulatory authority for any Federal agency.

(Pub. L. 109–424, §5, Dec. 20, 2006, 120 Stat. 2906; Pub. L. 109–479, title VIII, §805, Jan. 12, 2007, 120 Stat. 3657; Pub. L. 115–25, title V, §§505(a), (b), 512(a), Apr. 18, 2017, 131 Stat. 121, 128.)

## **Editorial Notes**

## CODIFICATION

Pub. L. 109-424 and title VIII of Pub. L. 109-479 enacted substantially identical sections. Pub. L. 109-424 was repealed by section 512(a) of Pub. L. 115-25.

## AMENDMENTS

2017—Subsec. (a). Pub. L. 115–25, §505(a), amended subsec. (a) generally. Prior to amendment, text read as follows: "The Administrator, through the National Weather Service and in consultation with other relevant Administration offices, shall conduct a community-based tsunami hazard mitigation program to improve tsunami preparedness of at-risk areas in the United States and its territories."

Subsecs. (c) to (f). Pub. L. 115–25, §505(b), added subsecs. (c) to (f) and struck out former subsecs. (c) and (d) which related to program components and provided a savings clause, respectively.

## § 3205. Tsunami research program

## (a) In general

The Administrator shall, in consultation with such other Federal agencies, State, tribal, and territorial governments, and academic institutions as the Administrator considers appropriate, the coordinating committee under section 3204(d)<sup>1</sup> of this title, and the panel under

<sup>&</sup>lt;sup>1</sup>So in original. Probably should read "section 3204(b)".

section 3206a(a) of this title, support or maintain a tsunami research program to develop detection, forecast, communication, and mitigation science and technology, including advanced sensing techniques, information and communication technology, data collection, analysis, assessment for tsunami tracking and numerical forecast modeling, and standards development.

#### (b) Responsibilities

The research program supported or maintained under subsection (a) shall—

- (1) consider other appropriate and cost effective solutions to mitigate the impact of tsunami, including the improvement of near-field and distant tsunami detection and forecasting capabilities, which may include use of a new generation of the Deep-ocean Assessment and Reporting of Tsunamis array, integration of tsunami sensors into commercial and Federal telecommunications cables, and other real-time tsunami monitoring systems and super-computer capacity of the Administration to develop a rapid tsunami forecast for all United States coastlines;
- (2) coordinate with the National Weather Service on technology to be transferred to operations:
- (3) conduct social science research to develop and assess community warning, education, and evacuation materials;
- (4) develop the technical basis for validation of tsunami maps, numerical tsunami models, digital elevation models, and forecasts; and
- (5) ensure that research and findings are available to the public and the scientific community.

(Pub. L. 109–424, §6, Dec. 20, 2006, 120 Stat. 2907; Pub. L. 109–479, title VIII, §806, Jan. 12, 2007, 120 Stat. 3658; Pub. L. 115–25, title V, §§506, 512(a), Apr. 18, 2017, 131 Stat. 123, 128.)

## **Editorial Notes**

## CODIFICATION

Pub. L. 109-424 and title VIII of Pub. L. 109-479 enacted substantially identical sections. Pub. L. 109-424 was repealed by section 512(a) of Pub. L. 115-25.

## AMENDMENTS

2017—Pub. L. 115–25, \$506(1), (2), designated first and second sentences of existing provisions as subsecs. (a) and (b), respectively, and inserted headings.

Subsec. (a). Pub. L. 115–25, §506(1), (2), substituted "The Administrator shall, in consultation with such other Federal agencies, State, tribal, and territorial governments, and academic institutions as the Administrator considers appropriate, the coordinating committee under section 3204(d) of this title, and the panel under section 3206a(a) of this title, support or maintain" for "The Administrator shall, in consultation with other agencies and academic institutions, and with the coordinating committee established under section 3204(b) of this title, establish or maintain" and "assessment for tsunami tracking and numerical forecast modeling, and standards development." for "and assessment for tsunami tracking and numerical forecast modeling."

Subsec. (b). Pub. L. 115-25, §506(2), substituted "The research program supported or maintained under subsection (a) shall—" for "Such research program shall—

Subsec. (b)(1). Pub. L. 115–25,  $\S506(3)(A)$ , amended par. (1) generally. Prior to amendment, par. (1) read as fol-

lows: "consider other appropriate research to mitigate the impact of tsunami;".

Subsec. (b)(3). Pub. L. 115–25, §506(3)(B), substituted "conduct" for "include" and struck out "and" at end. Subsec. (b)(4). Pub. L. 115–25, §506(3)(D), added par. (4). Former par. (4) redesignated (5).

Subsec. (b)(5). Pub. L. 115-25, \$506(3)(C), (E), redesignated par. (4) as (5) and substituted "to the public and the scientific community" for "to the scientific community".

## § 3206. Global tsunami warning and mitigation network

## (a) Support for development of an international tsunami warning system

The Administrator shall, in coordination with the Secretary of State and in consultation with such other agencies as the Administrator considers relevant, provide technical assistance, operational support, and training to the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization, the World Meteorological Organization of the United Nations, and such other international entities as the Administrator considers appropriate, as part of the international efforts to develop a fully functional global tsunami forecast and warning system comprised of regional tsunami warning networks.

## (b) International Tsunami Information Center

The Administrator, through the National Weather Service and in consultation with other relevant Administration offices, in cooperation with the Intergovernmental Oceanographic Commission, may operate an International Tsunami Information Center to improve tsunami preparedness for all Pacific Ocean nations participating in the International Tsunami Warning System of the Pacific, and may also provide such assistance to other nations participating in a global tsunami warning system established through the Intergovernmental Oceanographic Commission. As part of its responsibilities around the world, the Center may—

- (1) monitor international tsunami warning activities around the world;
- (2) assist member states in establishing national warning systems, and make information available on current technologies for tsunami warning systems;
- (3) maintain a library of materials to promulgate knowledge about tsunami in general and for use by the scientific community; and
- (4) disseminate information, including educational materials and research reports.

# (c) Detection equipment; technical advice and training

In carrying out this section, the National Weather Service—

- (1) shall give priority to assisting nations in identifying vulnerable coastal areas, creating inundation maps, obtaining or designing real-time detection and reporting equipment, and supporting communication and warning networks and contact points in each vulnerable nation;
- (2) may support a process for transfer of detection and communication technology to affected nations for the purposes of supporting