

fiscal years 1999 through 2001. Of these amounts \$4,500,000 is authorized for each fiscal year to implement and operate a national quality control system for real-time tide and current and maintain the national tide network, and \$7,000,000 is authorized for each fiscal year to design and install real-time tide and current data measurement systems under section 892a(b)(4) of this title.”

1998—Pub. L. 105-383 amended section generally, substituting present provisions for substantially identical provisions.

#### EFFECTIVE DATE OF 1998 AMENDMENT

Amendment by Pub. L. 105-383 effective immediately after enactment of Pub. L. 105-384, Nov. 13, 1998, see section 432(a) of Pub. L. 105-383, set out as a note under section 892c of this title.

#### SUBCHAPTER V—RESEARCH, DEVELOPMENT, EDUCATION, AND INNOVATION

### § 893. Ocean and atmospheric research and development program

#### (a) In general

The Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Director of the National Science Foundation and the Administrator of the National Aeronautics and Space Administration, shall establish a coordinated program of ocean, coastal, Great Lakes, and atmospheric research and development, in collaboration with academic institutions and other nongovernmental entities, that shall focus on the development of advanced technologies and analytical methods that will promote United States leadership in ocean and atmospheric science and competitiveness in the applied uses of such knowledge.

#### (b) Oceanic and atmospheric research and development program

The Administrator shall implement programs and activities—

(1) to identify emerging and innovative research and development priorities to enhance United States competitiveness, support development of new economic opportunities based on NOAA research, observations, monitoring modeling, and predictions that sustain ecosystem services;

(2) to promote United States leadership in oceanic and atmospheric science and competitiveness in the applied uses of such knowledge, including for the development and expansion of economic opportunities; and

(3) to advance ocean, coastal, Great Lakes, and atmospheric research and development, including potentially transformational research, in collaboration with other relevant Federal agencies, academic institutions, the private sector, and nongovernmental programs, consistent with NOAA’s mission to understand, observe, and model the Earth’s atmosphere and biosphere, including the oceans, in an integrated manner.

#### (c) Report

No later than 12 months after January 4, 2011, the Administrator, in consultation with the National Science Foundation or other such agencies with mature transformational research portfolios, shall develop and submit a report to the Senate Committee on Commerce, Science,

and Transportation and the House of Representatives Committee on Science and Technology that describes NOAA’s strategy for enhancing transformational research in its research and development portfolio to increase United States competitiveness in oceanic and atmospheric science and technology. The report shall—

(1) define “transformational research”;

(2) identify emerging and innovative areas of research and development where transformational research has the potential to make significant and revolutionary <sup>-1</sup> advancements in both understanding and U.S. science leadership;

(3) describe how transformational research priorities are identified and appropriately <sup>-1</sup> balanced in the context of NOAA’s broader research portfolio;

(4) describe NOAA’s plan for developing a competitive peer review and priority-setting <sup>-1</sup> process, funding mechanisms, performance and evaluation measures, and transition-to-operation guidelines for transformational research; and

(5) describe partnerships with other agencies involved in transformational research.

(Pub. L. 110-69, title IV, §4001, Aug. 9, 2007, 121 Stat. 599; Pub. L. 111-358, title III, §301, Jan. 4, 2011, 124 Stat. 3996.)

#### AMENDMENTS

2011—Pub. L. 111-358 designated existing provisions as subsec. (a), inserted heading, and added subsecs. (b) and (c).

#### CHANGE OF NAME

Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

### § 893a. NOAA ocean and atmospheric science education programs

#### (a) In general

The Administrator of the National Oceanic and Atmospheric Administration shall conduct, develop, support, promote, and coordinate formal and informal educational activities at all levels to enhance public awareness and understanding of ocean, coastal, Great Lakes, and atmospheric science and stewardship by the general public and other coastal stakeholders, including underrepresented groups in ocean and atmospheric science and policy careers. In conducting those activities, the Administrator shall build upon the educational programs and activities of agency,<sup>1</sup> with consideration given to the goal of promoting the participation of individuals from underrepresented groups in STEM fields and in promoting the acquisition and retention of highly qualified and motivated young scientists to complement and supplement workforce needs.

#### (b) Educational program goals

The education programs developed by NOAA shall, to the extent applicable—

<sup>1</sup> So in original.

<sup>1</sup> So in original. Probably should be “the agency.”