

Calendar No. 272

111TH CONGRESS }
2d Session }

SENATE

{ REPORT
111-126 }

THE CHESAPEAKE BAY SCIENCE, EDU-
CATION, AND ECOSYSTEM ENHANCEMENT
ACT OF 2009

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION

ON

S. 1224



FEBRUARY 23, 2010.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

89-010

WASHINGTON : 2010

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

JOHN D. ROCKEFELLER IV, West Virginia, *Chairman*

DANIEL K. INOUE, Hawaii	KAY BAILEY HUTCHISON, Texas
JOHN F. KERRY, Massachusetts	OLYMPIA J. SNOWE, Maine
BYRON L. DORGAN, North Dakota	JOHN ENSIGN, Nevada
BARBARA BOXER, California	JIM DEMINT, South Carolina
BILL NELSON, Florida	JOHN THUNE, South Dakota
MARIA CANTWELL, Washington	ROGER F. WICKER, Mississippi
FRANK R. LAUTENBERG, New Jersey	GEORGE S. LEMIEUX, Florida
MARK PRYOR, Arkansas	JOHNNY ISAKSON, Georgia
CLAIRE MCCASKILL, Missouri	DAVID VITTER, Louisiana
AMY KLOBUCHAR, Minnesota	SAM BROWNBACK, Kansas
TOM UDALL, New Mexico	MIKE JOHANNIS, Nebraska
MARK WARNER, Virginia	
MARK BEGICH, Alaska	

ELLEN DONESKI, *Chief of Staff*

JAMES REID, *Deputy Chief of Staff*

BRUCE ANDREWS, *General Counsel*

ANN BEGEMAN, *Acting Republican Staff Director*

BRIAN HENDRICKS, *Republican General Counsel*

TODD BERTOSON, *Republican Senior Counsel*

Calendar No. 272

111TH CONGRESS }
2d Session }

SENATE

{ REPORT
{ 111-126

THE CHESAPEAKE BAY SCIENCE, EDUCATION, AND ECOSYSTEM ENHANCEMENT ACT OF 2009

FEBRUARY 23, 2010.—Ordered to be printed

Mr. ROCKEFELLER, from the Committee on Commerce, Science, and
Transportation, submitted the following

REPORT

[To accompany S. 1224]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1224) to reauthorize the Chesapeake Bay Office of the National Oceanic and Atmospheric Administration, and for other purposes, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

The purpose of S. 1224, the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009, is to reauthorize the National Oceanic and Atmospheric Administration (NOAA) Chesapeake Bay Office; to improve Chesapeake Bay monitoring; to strengthen the Chesapeake Bay Watershed education support; and to encourage public/private partnerships to restore finfish and shellfish populations, submerged aquatic vegetation, and other critical coastal habitat.

BACKGROUND AND NEEDS

The Chesapeake Bay is the largest estuary in the United States. Its watershed stretches across more than 64,000 square miles and includes parts of six states—Delaware, Maryland, New York, Pennsylvania, Virginia and West Virginia—and the entire District of Columbia. The Bay and its rivers, wetlands, and forests provide habitat, food, and protection for more than 3,600 species of plants, fish and animals, including 348 species of finfish, 173 species of shell-

fish and over 2,700 plant species. The Chesapeake is a commercial and recreational resource for the more than 16 million people who live in its watershed. The Bay produces about 500 million pounds of seafood per year.

In 1983, the states of Maryland, Virginia, and Pennsylvania, the District of Columbia, and the Environmental Protection Agency (EPA) signed the Chesapeake Bay Agreement and formed the Chesapeake Executive Council, which meets annually to assess Federal/State efforts to restore the environmental health of the Bay. In 1984, NOAA signed a memorandum of agreement with the EPA establishing NOAA as a Federal partner of the Chesapeake Bay Program (CBP). In 1992, Congress formally authorized the Chesapeake Bay Estuarine Resource Office within NOAA (P.L. 98-210). In 2002, to provide focus for NOAA's multiple programmatic capabilities and activities that support Chesapeake Bay restoration, Congress reauthorized section 307 of the National Oceanic and Atmospheric Administration Authorization Act of 1992 and created the NOAA Chesapeake Bay Office (NCBO) as part of Public Law 107-372. That authority expired in 2006.

The NCBO operates under a broad mission of understanding, predicting and explaining changes in the Chesapeake Bay's environment and conserving and managing coastal and estuarine resources to meet the region's economic, social and environmental needs. Its mission is focusing NOAA capabilities in science, service, and stewardship to protect and restore the Chesapeake Bay. NCBO represents all NOAA line offices, including the National Marine Fisheries Service (NMFS), the Office of Oceanic and Atmospheric Research (OAR), the National Ocean Service (NOS), the National Weather Service (NWS), and the National Environmental Satellite, Data, and Information Service (NESDIS). It provides a focal point within NOAA for Chesapeake Bay initiatives, involves all relevant NOAA entities in Bay restoration efforts, manages peer-reviewed NCBO-funded research, and strengthens NOAA's interactions with Chesapeake Bay partners that comprise the Chesapeake Bay Program. NCBO has offices within Maryland and Virginia to better coordinate with constituents and partners.

Over the years, NOAA's work in the Chesapeake Bay has focused on three critical and interrelated areas: ecosystem science, coastal and living resources management, and environmental education. The agency's science and research programs, conducted in collaboration with major academic institutions, help decision-makers survey and assess trends in living resources, understand and evaluate the responses of these resources to changes in their environment, and establish management goals and progress indicators. Through the Chesapeake Bay Observing System and the next-generation Chesapeake Bay Integrated Buoy System, NOAA is providing monitoring data on environmental conditions and water quality in the Bay necessary to track Bay restoration progress. The NCBO's fish, shellfish and habitat restoration programs are helping to restore native oysters, blue crabs, and bay grasses throughout the watershed. NOAA's Bay Watershed Education and Training (B-WET) program is making hands-on watershed education and training available to students and teachers throughout the watershed, bringing marine and weather sciences into the classroom and helping to foster stewardship of the Bay.

SUMMARY OF PROVISIONS

The bill's major provisions would: (1) increase collaboration between the various programs and activities at NOAA to further the agency's coastal and marine resource stewardship mission; (2) improve Bay monitoring capabilities through support of an integrated observations system and the Chesapeake Bay Interpretative Buoy System; (3) strengthen the B-WET program; (4) support and encourage public/private partnerships to restore finfish and shellfish populations, submerged aquatic vegetation and other critical coastal habitat through aquaculture, stock enhancements, propagation, and other programs; and (5) ensure that Federal funds are spent on projects that have scientific and technical merit and are peer reviewed.

LEGISLATIVE HISTORY

On June 10, 2009, the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009 was introduced by Senator Warner. Senators Mikulski, Cardin, and Webb are cosponsors of the legislation. The Senate Committee on Commerce, Science, and Transportation reported favorably the bill with a substitute amendment on November 19, 2009.

Staff assigned to this legislation are Kristen Sarri, Democratic Professional Staff, and Todd Bertosen, Republican Senior Counsel.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

NOVEMBER 30, 2009.

Hon. JOHN D. ROCKEFELLER IV,
Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1224, the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jeff LaFave.

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

S. 1224—Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009

Summary: S. 1224 would reauthorize the Chesapeake Bay Office of the National Oceanic and Atmospheric Administration (NOAA). The bill would authorize appropriations totaling \$79 million over the 2011–2014 period to support certain activities carried out by the Chesapeake Bay Office. The bill also would authorize that office to accept donations of funds, property, and services for use in implementing its programs.

Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 1224 would cost \$68 million over the 2011–2014 period and \$11 million after 2014. Enacting the legislation would have no net impact on revenues or direct spending.

S. 1224 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 1224 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By fiscal year, in millions of dollars—					
	2010	2011	2012	2013	2014	2010–2014
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Level ¹	0	17	19	21	23	79
Estimated Outlays	0	11	16	19	22	68

¹ Numbers in table do not sum to totals because of rounding.

Basis of estimate: For this estimate, CBO assumes the bill will be enacted early in calendar year 2010 and that the authorized amounts will be appropriated each year. Estimated outlays are based on historical spending patterns for NOAA's Chesapeake Bay Office.

S. 1224 would authorize appropriations totaling \$79 million over the 2011–2014 period for the Chesapeake Bay Office of NOAA. The bill would authorize that office to expand grant programs that promote the protection and restoration of the Chesapeake Bay watershed. The bill also would authorize the director of the office to carry out certain activities that would enhance watershed monitoring. Finally, the bill would require the office to prepare a biennial report for the Congress that identifies progress made in protecting and restoring the Bay.

Additionally, S. 1224 would authorize the Chesapeake Bay Office to accept donations of funds, property, and services for use in implementing its programs. Based on information from NOAA, CBO expects that most of those donations would be in-kind support from other federal agencies. CBO estimates that monetary donations received by the office would not exceed \$500,000 per year.

Authorization for the Chesapeake Bay Office expired in 2006. In fiscal years 2007 through 2009, the office received appropriations ranging from \$12 million to \$19 million annually, including \$15 million in fiscal year 2009. It has not yet received a full-year appropriation for 2010.

Intergovernmental and private-sector impact: S. 1224 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

Previous CBO estimate: On August 20, 2009, CBO transmitted a cost estimate for H.R. 1771, the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009, as ordered reported by the House Committee on Natural Resources on July 29, 2009. The two bills are similar, and the CBO cost estimates are the same.

Estimate prepared by: Federal costs: Jeff LaFave; Impact on state, local, and tribal governments: Ryan Miller; Impact on the private sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

The reported bill would not authorize any new regulations and therefore will not subject any individuals or businesses to new regulations.

ECONOMIC IMPACT

The bill, as reported, is expected to have a positive impact on the nation's economy by improving stewardship of the Chesapeake Bay and increasing economic productivity.

PRIVACY

The reported bill would not have any adverse impact on the personal privacy of individuals.

PAPERWORK

The reported bill would not increase paperwork requirements for the private sector.

CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This section would title the bill the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009.

Section 2. Reauthorization of Chesapeake Bay Office of National Oceanic and Atmospheric Administration

Section 2 would amend section 307 of the National Oceanic and Atmospheric Administration Authorization Act of 1992 to reauthorize the NOAA Chesapeake Bay Office, and designate specific program activities. The authorized program activities would include Integrated Coastal Observations, which incorporates the Chesapeake Bay Interpretive Buoy System; a Chesapeake Bay Watershed Education and Training Program; and a Coastal and Living Resources Management and Habitat Program. These newly authorized program activities would replace the previous Chesapeake Bay fishery and habitat restoration small watershed grants program

and more accurately reflect the ongoing priorities and future activities of the NOAA Chesapeake Bay Office.

This section would also direct the NOAA Administrator to submit a biennial report to Congress and allow the Administrator to enter into cooperative agreements, contracts, leases and grants. Finally, this section would authorize appropriations for fiscal year 2011 through fiscal year 2014.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AUTHORIZATION ACT OF 1992.

SEC. 307. CHESAPEAKE BAY OFFICE.

[15 U.S.C. 1511d]

(a) ESTABLISHMENT.—

[(1) The Secretary] (1) *IN GENERAL.*—*The Secretary of Commerce shall establish, within the National Oceanic and Atmospheric Administration, an office to be known as the Chesapeake Bay Office [(in this section referred to as the “Office”).].*

[(2) The Office shall be headed by a Director who shall be appointed by the Secretary of Commerce, in consultation with the Chesapeake Executive Council. Any individual appointed as Director shall have knowledge and experience in research or resource management efforts in the Chesapeake Bay.]

(2) *DIRECTOR.*—

(A) *IN GENERAL.*—*The Office shall be headed by a Director who shall be selected by the Secretary of Commerce from among individuals who have knowledge and experience in research or resource management efforts in the Chesapeake Bay.*

(B) *DUTIES.*—*The duties of the Director are as follows:*

(i) *Administration and operation of the Office.*

(ii) *Carrying out the provisions of this section.*

[(3) The Director may appoint such additional personnel for the Office as the Director determines necessary to carry out this section.]

[(b) *FUNCTIONS.*—The Office, in consultation with the Chesapeake Executive Council, shall—]

(b) *PURPOSE.*—*The purpose of this section is to focus the relevant science, research, and resource management capabilities of the National Oceanic and Atmospheric Administration as they apply to the Chesapeake Bay and to utilize the Office to—*

(1) provide technical assistance to the Administrator, to other Federal departments and agencies, and to State and local government agencies in—

(A) assessing the processes that shape the Chesapeake Bay system and affect its living resources;

(B) identifying technical and management alternatives for the restoration and protection of living resources and the habitats they depend upon; and

(C) monitoring the implementation and effectiveness of management plans;

(2) develop and implement a strategy for the National Oceanic and Atmospheric Administration that integrates the science, research, monitoring, data collection, regulatory, and management responsibilities of the **【Secretary of Commerce Administrator** in such a manner as to assist the cooperative, intergovernmental Chesapeake Bay Program to meet the commitments of the Chesapeake Bay Agreement;

【(3) coordinate the programs and activities of the various organizations within the National Oceanic and Atmospheric Administration, the Chesapeake Bay Regional Sea Grant Programs, and the Chesapeake Bay units of the National Estuarine Research Reserve System, including—】

(3) coordinate with the programs and activities of the National Oceanic and Atmospheric Administration in furtherance of its coastal and ocean resource stewardship mission, including—

(A) programs and activities in—

(i) coastal and estuarine research, monitoring, and assessment;

(ii) fisheries research and stock assessments;

(iii) data management;

(iv) remote sensing;

(v) coastal management;

(vi) habitat conservation and restoration; **【and】**

(vii) atmospheric deposition; **【and】**

(viii) coastal hazards, resilient coastal communities, and climate change; and

(ix) research, scientific assessment, and adaptation to climate change; and

(B) programs and activities of the Cooperative Oxford Laboratory of the National Ocean Service with respect to—

(i) nonindigenous species;

(ii) estuarine and marine species pathology;

(iii) human pathogens in estuarine and marine environments **【; and】**;

(iv) ecosystem health; *and*

(v) integrated ecosystem assessments;

(4) coordinate the activities of the National Oceanic and Atmospheric Administration with the activities of the Environmental Protection Agency and other Federal, State, and local agencies *as appropriate to further the purposes of this section;*

【(5) establish an effective mechanism which shall ensure that projects have undergone appropriate peer review and provide other appropriate means to determine that projects have acceptable scientific and technical merit for the purpose of achieving maximum utilization of available funds and resources to benefit the Chesapeake Bay area;】

【(6)】 (5) remain cognizant of ongoing research, monitoring, and management projects and assist in the dissemination of the results and findings of those projects; and

(6) *perform such functions as may be necessary to support the programs referred to in paragraph (3).*

[(7) submit a biennial report to the Congress and the Secretary of Commerce with respect to the activities of the Office and on the progress made in protecting and restoring the living resources and habitat of the Chesapeake Bay, which report shall include an action plan consisting of—

[(A) a list of recommended research, monitoring, and data collection activities necessary to continue implementation of the strategy described in paragraph (2); and

[(B) proposals for—

[(i) continuing any new National Oceanic and Atmospheric Administration activities in the Chesapeake Bay; and

[(ii) the integration of those activities with the activities of the partners in the Chesapeake Bay Program to meet the commitments of the Chesapeake 2000 agreement and subsequent agreements.

[(c) CHESAPEAKE BAY FISHERY AND HABITAT RESTORATION SMALL WATERSHED GRANTS PROGRAM.—

[(1) IN GENERAL.—The Director of the Chesapeake Bay Office of the National Oceanic and Atmospheric Administration (in this section referred to as the Director”), in cooperation with the Chesapeake Executive Council, shall carry out a community-based fishery and habitat restoration small grants and technical assistance program in the Chesapeake Bay watershed.

[(2) PROJECTS.—

[(A) SUPPORT.—The Director shall make grants under this subsection to pay the Federal share of the cost of projects that are carried out by entities eligible under paragraph (3) for the restoration of fisheries and habitats in the Chesapeake Bay.

[(B) FEDERAL SHARE.—The Federal share under subparagraph (A) shall not exceed 75 percent.

[(C) TYPES OF PROJECTS.—Projects for which grants may be made under this subsection include—

[(i) the improvement of fish passageways;

[(ii) the creation of natural or artificial reefs or substrata for habitats;

[(iii) the restoration of wetland or sea grass;

[(iv) the production of oysters for restoration projects; and

[(v) the prevention, identification, and control of nonindigenous species.

[(3) ELIGIBLE ENTITIES.—The following entities are eligible to receive grants under this subsection:

[(A) The government of a political subdivision of a State in the Chesapeake Bay watershed, and the government of the District of Columbia.

[(B) An organization in the Chesapeake Bay watershed (such as an educational institution or a community organization)—

[(i) that is described in section 501(c) of the Internal Revenue Code of 1986 and is exempt from taxation under section 501(a) of that Code; and

[(ii) that will administer such grants in coordination with a government referred to in subparagraph (A).

[(4) ADDITIONAL REQUIREMENTS.—The Director may prescribe any additional requirements, including procedures, that the Director considers necessary to carry out the program under this subsection.

[(d) CHESAPEAKE EXECUTIVE COUNCIL.—For purposes of this section, Chesapeake Executive Council” means the representatives from the Commonwealth of Virginia, the State of Maryland, the Commonwealth of Pennsylvania, the Environmental Protection Agency, the District of Columbia, and the Chesapeake Bay Commission, who are signatories to the Chesapeake Bay Agreement, and any future signatories to that Agreement.

[(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Department of Commerce for the Chesapeake Bay Office \$6,000,000 for each of fiscal years 2002 through 2006.]

(c) PROGRAM ACTIVITIES.—

(1) IN GENERAL.—*The Director shall implement the program activities required by this subsection to support the activity of the Chesapeake Executive Council and to further the purposes of this section.*

(2) ENSURING SCIENTIFIC AND TECHNICAL MERIT.—*The Director shall—*

(A) *establish and utilize an effective and transparent mechanism to ensure that projects funded under this section have undergone appropriate peer review, using, to the extent practicable, the capabilities of the Maryland and Virginia Sea Grant Program;*

(B) *provide other appropriate means to determine that such projects have acceptable scientific and technical merit for the purpose of achieving maximum utilization of available funds and resources to benefit the Chesapeake Bay area; and*

(C) *ensure that all data and other products generated by any project funded under this section be provided to the Director.*

(3) CONSULTATION WITH CHESAPEAKE EXECUTIVE COUNCIL.—*The Director shall, in the implementation of the program activities authorized under this section, consult with the Chesapeake Executive Council to ensure that the activities of the Office are consistent with the purposes and priorities of the Chesapeake Bay Agreement and plans developed pursuant to the Agreement.*

(4) INTEGRATED COASTAL OBSERVATIONS AND MAPPING.—

(A) IN GENERAL.—*The Director shall collaborate with scientific and academic institutions, State and Federal agencies, nongovernmental organizations, and other constituents in the Chesapeake Bay watershed, to incorporate Chesapeake Bay observations into the U.S. integrated Ocean Observation System, and to coordinate coastal mapping requirements and projects.*

(B) *SPECIFIC REQUIREMENTS.*—To support the actions described in subparagraph (A) and provide a complete set of environmental information for the Chesapeake Bay, the Director shall—

- (i) coordinate existing monitoring, observing, and mapping activities in the Chesapeake Bay;
- (ii) identify new data collection needs and deploy new technologies, as appropriate;
- (iii) facilitate the collection and analysis of the scientific information necessary for the management of living marine resources and the marine habitat associated with such resources;
- (iv) coordinate with regional partners to manage and interpret the information described in clause (iii); and
- (v) support regional partners to ensure the information described in clause (iii) is organized into products that are useful to policy makers, resource managers, scientists, and the public.

(C) *CHESAPEAKE BAY INTERPRETIVE BUOY SYSTEM.*—To further the development and implementation of the Chesapeake Bay Interpretive Buoy System, the Director shall—

- (i) support the establishment and implementation of the Captain John Smith Chesapeake National Historic Trail;
- (ii) delineate key waypoints along the trail and provide appropriate real-time data and information for trail users;
- (iii) interpret data and information for use by educators and students to inspire stewardship of Chesapeake Bay; and
- (iv) incorporate the Chesapeake Bay Interpretive Buoy System into the Integrated Ocean Observing System regional network of observatories, in keeping with the purposes of the Integrated Coastal and Ocean Observation System Act of 2009 (33 U.S.C. 3601 et seq.).

(5) *CHESAPEAKE BAY WATERSHED EDUCATION AND TRAINING PROGRAM.*—

(A) *IN GENERAL.*—The Director shall establish a Chesapeake Bay watershed education and training program. The program shall—

- (i) continue and expand the Chesapeake Bay watershed education programs offered by the Office on the day before the date of the enactment of the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act of 2009;
- (ii) improve the understanding of elementary and secondary school students and teachers of the living resources of the ecosystem of the Chesapeake Bay;
- (iii) provide community education to improve watershed protection; and
- (iv) meet the educational goals of the most recent Chesapeake Bay Agreement.

(B) *GRANT PROGRAM.*—The Director shall, subject to the availability of appropriations, award grants to support education and training projects that enhance under-

standing and assessment of a specific environmental problem in the Chesapeake Bay watershed or a goal of the Chesapeake Bay Program, or protect or restore living resources of the Chesapeake Bay watershed, including projects that—

(i) provide classroom education, including the development and use of distance learning and other innovative technologies, related to the Chesapeake Bay watershed;

(ii) provide watershed educational experiences in the Chesapeake Bay watershed;

(iii) provide professional development for teachers related to the Chesapeake Bay watershed and the dissemination of pertinent education materials oriented to varying grade levels;

(iv) demonstrate or disseminate environmental educational tools and materials related to the Chesapeake Bay watershed;

(v) demonstrate field methods, practices, and techniques including assessment of environmental and ecological conditions and analysis of environmental problems;

(vi) build the capacity of organizations to deliver high quality environmental education programs; and

(vii) educate local land use officials and decision makers on the relationship of land use to natural resource and watershed protection.

(C) COLLABORATION.—The Director shall provide technical assistance to support the education and training program established under subparagraph (A) in collaboration with the heads of other relevant Federal agencies.

(6) COASTAL AND LIVING RESOURCES MANAGEMENT AND HABITAT PROGRAM.—

(A) IN GENERAL.—The Director shall establish a Chesapeake Bay coastal living resources management and habitat program to support coordinated management, protection, characterization, and restoration of priority Chesapeake Bay habitats and living resources, including oysters, blue crabs, and submerged aquatic vegetation.

(B) ACTIVITIES.—Under the program required by subparagraph (A), the Director may, subject to the availability of appropriations, carry out or enter into grants, contracts, and cooperative agreements and provide technical assistance to support—

(i) native oyster restoration;

(ii) fish and shellfish aquaculture;

(iii) establishment of submerged aquatic vegetation propagation programs;

(iv) the development of programs that protect and restore critical coastal habitats;

(v) habitat mapping, characterization, and assessment techniques necessary to identify, assess, and monitor restoration actions;

(vi) application and transfer of applied scientific research and ecosystem management tools to fisheries and habitat managers;

(vii) collection, synthesis, and sharing of information to inform and influence coastal and living resource management issues; and

(viii) such other activities as the Director considers appropriate to carry out the program established under subparagraph (A).

(d) *REPORTS.*—

(1) *IN GENERAL.*—The Director shall, not less frequently than once every 2 years, submit to Congress a report on—

(A) the activities of the Office; and

(B) progress made in protecting and restoring the living resources and habitat of the Chesapeake Bay.

(2) *ACTION PLAN.*—Each report submitted under paragraph (1) shall include an action plan for the 2-year period following submission of the report, consisting of—

(A) a list of recommended research, monitoring, and data collection activities necessary to continue implementation of the strategy under subsection (b)(2); and

(B) recommendations to integrate the activities of the National Oceanic and Atmospheric Administration with the activities of the partners in the Chesapeake Bay Program in order to meet the commitments of the Chesapeake Bay Agreement.

(e) *AGREEMENTS.*—

(1) *IN GENERAL.*—The Director may, subject to the availability of appropriations, enter into and perform such contracts, leases, grants, or cooperative agreements as may be necessary to carry out the provisions of this section.

(2) *USE OF OTHER RESOURCES.*—For purposes of understanding, protecting, and restoring the Chesapeake Bay, the Director may use, with or without reimbursement, the land, services, equipment, personnel, and facilities of any Department, agency, or instrumentality of the United States, or of any State, local government, Indian tribal government, or of any political subdivision thereof if the Director receives consent from the Department, agency, instrumentality, State, government, or political subdivision concerned for such use.

(3) *DONATIONS.*—The Director may accept donations of funds, other property, and services for use in understanding, protecting, and restoring the Chesapeake Bay. Donations accepted under this section shall be considered as a gift or bequest to or for the use of the United States.

(f) *DEFINITIONS.*—In this section:

(1) *ADMINISTRATOR.*—The term “Administrator” means the Administrator of the National Oceanic and Atmospheric Administration.

(2) *CHESAPEAKE BAY AGREEMENT.*—The term “Chesapeake Bay Agreement” means the formal, voluntary agreements executed to achieve the goal of restoring and protecting the Chesapeake Bay ecosystem and the living resources of the Chesapeake Bay ecosystem and are signed by the Chesapeake Executive Council.

(3) *CHESAPEAKE BAY PROGRAM.*—The term “Chesapeake Bay Program” means the regional Chesapeake Bay restoration partnership that includes Maryland, Pennsylvania, Virginia, the District of Columbia, the Chesapeake Bay Commission, the Environmental Protection Agency, other appropriate Federal agencies, and participating citizen and local elected official advisory groups.

(4) *CHESAPEAKE EXECUTIVE COUNCIL.*—The term “Chesapeake Executive Council” means the representatives from the Commonwealth of Virginia, the State of Maryland, the Commonwealth of Pennsylvania, the Environmental Protection Agency, the District of Columbia, and the Chesapeake Bay Commission, who are signatories to the Chesapeake Bay Agreement, and any future signatories to that agreement.

(5) *DIRECTOR.*—The term “Director” means the Director of the Chesapeake Bay Office.

(6) *OFFICE.*—The term “Office” means the Chesapeake Bay Office established under subsection (a).

(g) *AUTHORIZATION OF APPROPRIATIONS.*—There is authorized to be appropriated to the Secretary to carry out this section—

- (1) \$17,000,000 for fiscal year 2011;
- (2) \$18,700,000 for fiscal year 2012;
- (3) \$20,570,000 for fiscal year 2013; and
- (4) \$22,627,000 for fiscal year 2014.