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SENATE

Report 105–273

ESTUARY HABITAT RESTORATION PARTNERSHIP ACT OF 1998

JULY 29, 1998.—Ordered to be printed

Mr. CHAFEE, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 1222]

The Committee on Environment and Public Works, to which was referred the bill (S. 1222) to catalyze restoration of estuary habitat through more efficient financing of projects and enhanced coordination of Federal and non-Federal restoration programs, and for other purposes, having considered the same, reports favorably thereon with an amendment, and recommends that the bill, as amended, do pass.

GENERAL STATEMENT

BACKGROUND

Estuaries

Estuaries are those bays, gulfs, sounds, and inlets where fresh water meets and mixes with salt water from the ocean. They provide some of the most economically and ecologically productive habitat for an extensive variety of species of plants, fish, wildlife, and waterfowl. According to the U.S. Department of Commerce, more than 75 percent of the commercial fish and shellfish catch and 80 to 90 percent of the recreational fish catch in the United States depend on estuaries at some stage in their lifecycles. The commercial fishing industry alone contributes \$111 billion per year to the national economy.

Estuary habitat is the complex of physical and hydrologic features and living organisms within estuaries and their associated ecosystems. The various kinds of estuary habitats—river deltas, sea grass meadows, forested wetlands, shellfish beds, marshes and beaches—support a flourishing range of wildlife and plants. Estuaries are home to a large percentage of endangered and threatened species and half of the neotropical migratory birds in the United States. Because fish and birds migrate, the health of these habitats is intertwined with the health of other ecosystems thousands of miles away.

Estuaries also are essential to the nation's quality of life. Over half the population of the United States lives near a coastal area. In 1993, 180 million Americans, 70 percent of the nation's population, visited estuaries to fish, swim, hunt, dive, view wildlife, bike and learn. Estuaries also serve to protect landowners from flood waters and provide important buffers that protect water quality by filtering polluted runoff.

Regrettably, estuaries are in danger. From colonial times until 1990, over 55 million acres of wetlands in coastal mainland States were degraded or destroyed. This accounts for more than 50 percent of the total wetlands losses throughout the nation. Recent population growth in coastal watersheds; dredging, draining, bulldozing and paving; pollution; dams; sewage discharges and other activities have led to extensive loss and continuing destruction of estuary habitat, which has reached more than 90 percent over the last 100 years in certain areas of the United States. For instance, since 1900, San Francisco Bay has lost 95 percent of its original wetlands, and Galveston Bay has lost 85 percent of its sea grass meadows.

The latest Environmental Protection Agency (EPA) National Water Quality Inventory Report to Congress shows that as of 1996, almost 40 percent of the nation's surveyed estuarine waters were too polluted for basic uses, such as fishing and swimming. Fish catches are at extremely low levels, many shellfish beds have been closed, and the economic livelihood and quality of life of our coastal communities is threatened.

In addition to preventing the pollution that flows into estuaries, it is critical to protect and restore the unique estuary habitat for fish, birds, shellfish and plants. Estuary habitat can be restored by a variety of efforts. However, many estuarine communities have found it difficult to move restoration projects forward.

National Estuary Program

The National Estuary Program (NEP) was established by the 1987 amendments to the Federal Water Pollution Control Act. The primary purpose of the NEP is to protect and restore the health of estuaries and their living resources. To that end, section 320 of the Clean Water Act authorizes the EPA to develop comprehensive conservation and management plans (CCMPs) for estuaries of national significance.

Since the establishment of the NEP, 28 estuaries of national significance have been designated to use NEP funds. EPA has approved CCMPS for 17 of the 28 designated areas. These estuaries include: Puget Sound, Washington; Buzzard's Bay, Massachusetts; Narragansett Bay, Rhode Island; San Francisco Bay, California; Albermarle-Pamlico Sounds, North Carolina; Long Island Sound, Connecticut and New York; Galveston Bay, Texas; Santa Monica Bay, California; Delaware Inland Bays, Delaware; Sarasota Bay, Florida; Delaware Estuary, Delaware, New Jersey and Pennsylvania; Massachusetts Bay, Massachusetts; Casco Bay, Maine; Indian River Lagoon, Florida; Barataria-Terrebone Estuaries, Louisiana; Tampa Bay, Florida; and New York/New Jersey Harbor, New York and New Jersey. The remaining 11 estuaries in the NEP are expected to submit their CCMPs for EPA approval by the end of 1999. They are: Peconic Estuary, New York; Tillamook Bay, Oregon; Corpus Christi Bay, Texas; San Juan Bay, Puerto Rico; Morro Bay, California; Barnegat Bay, New Jersey; Lower Columbia River, Oregon and Washington; Maryland Coastal Bays, Maryland; New Hampshire Estuaries, New Hampshire; Charlotte Harbor, Florida; and Mobile Bay, Alabama. Although 17 CCMPs have been approved, section 320 as currently written does not allow EPA to provide grants for implementing the plans.

Chesapeake Bay

The Chesapeake Bay Program (CBP) was established in 1983 with the signing of the 1983 Chesapeake Bay Agreement, which formally bound the Federal government and the States of Maryland, Virginia, Pennsylvania, and the District of Columbia, to work together to protect and restore the Bay. It is the oldest geographic program in the Clean Water Act and the first estuary in the nation to be targeted for restoration as a single ecosystem.

The EPA's participation in the CBP was authorized formally in the 1987 amendments to the Federal Water Pollution Control Act, which created section 117 of the Clean Water Act. Section 117 authorizes \$3,000,000 annually to support the activities of the CBP office, which coordinates Federal and State efforts to restore and protect the Bay, and \$10,000,000 annually for matching Interstate development grants.

The 1987 Chesapeake Bay Agreement expanded initial restoration efforts by targeting nutrient overenrichment as the Bay's major problem and by establishing a goal to reduce by 40 percent nutrients flowing into the Bay by the year 2000. The Agreement included 28 other specific commitments to address key issues in habitat, water quality, population growth, public information and public access. The 1992 amendments to the Agreement moved the program upriver and committed the 40 percent nutrient reduction goal to the ten major tributaries of the Bay beyond the year 2000.

Pfiesteria Piscicida

Pfiesteria piscicida is a naturally occurring water-borne microbe that has been linked to serious health and environmental effects. *Pfiesteria* is one of 4,000 species of phytoplankton, organisms that convert the sun's energy into food. A relative of the single-celled organisms that cause red tides, *Pfiesteria* can assume more than 24 different life forms, from a cyst that settles into river sediment to a fierce predator that injects poison into its prey.

The first *Pfiesteria* outbreak occurred in North Carolina estuaries during the late 1980s. The most recent outbreak of *Pfiesteria* has occurred in the tributaries leading into the Chesapeake Bay. Since late July 1997, thousands of fish have died in tributaries of the Chesapeake Bay. In addition to *Pfiesteria*'s harmful effects on fish and estuary habitat, there also is great concern over the potential effects of the microbe on human health. Medical researchers have linked the toxin to memory loss, other neurological problems, and skin rashes in persons exposed to *Pfiesteria*-afflicted waters.

Although *Pfiesteria* is not a new organism, changed conditions may have caused it to emerge in its predatory form. The cause of *Pfiesteria* outbreaks remains uncertain. Many researchers have linked the parasite to excessive levels of nutrients, such as nitrogen and phosphorous, in water.

SUMMARY OF S. 1222

As amended and approved by the Committee on Environment and Public Works, the bill includes two titles. Title I includes a new program to help non-Federal entities carry out estuary habitat restoration projects. It also expands EPA's authority to provide grants for the implementation of comprehensive conservation and management plans (CCMPs) under the National Estuary Program. Title II includes measures to protect and restore the Chesapeake Bay and the Long Island Sound, and to control *Pfiesteria piscicida*.

Title I—Estuary Habitat Restoration

Title I protects and restores estuaries in the nation's coastal communities. It provides new initiatives to achieve the goal of restoring one million acres of estuary habitat by the year 2010. Specifically, Title I includes the following new measures:

Estuary habitat restoration strategy.—Title I establishes a Federal interagency Council, which is responsible for developing a national estuary habitat restoration strategy within one year of enactment of this legislation. The strategy, which will be subject to public notice and comment, brings together existing Federal, State, and local estuary restoration plans, programs and studies.

Selection of restoration projects.—The Council also is responsible for selecting the projects that will receive funding under S. 1222. Projects are to be sponsored by non-Federal entities, which are required to pay at least 35 percent of the total project cost. Title I sets forth a number of factors for determining criteria by which projects are selected.

Monitoring and research.—Title I requires the monitoring of habitat restoration projects. It also directs the Undersecretary for Oceans and Atmosphere (NOAA) to maintain a database of restoration projects carried out under this bill and requires the Council to publish a biennial report to Congress on the habitat restoration program.

National Estuary Program.—Title I expands EPA's authority to provide grants for estuaries of national significance. Under current law, EPA is authorized to provide grants for the development of CCMPs for estuaries of national significance. Title I allows EPA to provide grants for developing and implementing CCMPs. It also reauthorizes the National Estuary Program at \$25,000,000 per year through fiscal year 2000.

Title II—Chesapeake Bay and Other Regional Initiatives

Title II includes measures to restore estuaries in specific regions of the United States and to control *Pfiesteria* and other aquatic toxins.

Chesapeake Bay.—Title II amends section 117 of the Clean Water Act to strengthen efforts to restore and protect the Chesapeake Bay. It also reauthorizes the Chesapeake Bay Program through fiscal year 2003 at \$30,000,000 per year and provides \$3,000,000 per year through fiscal year 2003 for the development of gateways and watertrails in the Chesapeake Bay.

Pfiesteria.—Title II authorizes EPA and other Federal agencies to establish a research program for the eradication or control of *Pfiesteria piscicida*, which has caused recurring problems in the Chesapeake Bay and along the North Carolina coast.

Long Island Sound.—Title II authorizes the Long Island Sound program through fiscal year 2003. Funds authorized in the bill will be used to implement the Long Island Sound CCMP, and for the operation of the Long Island Sound Office.

SECTION-BY-SECTION ANALYSIS

TITLE I—ESTUARY HABITAT RESTORATION

Section 101. Findings

This section cites Congress' findings on the economic and ecological value of estuaries.

Section 102. Purposes

The bill establishes a program to restore one million acres of estuary habitat by the year 2010. The bill requires the coordination of existing Federal, State and local plans, programs, and studies. It authorizes partnerships among public agencies at all levels of government and between the public and private sectors. The bill authorizes estuary habitat restoration activities, and it requires monitoring and research capabilities to assure that restoration efforts are based on sound scientific understanding.

This measure will give a real incentive to existing State and local efforts to restore and protect estuary habitat. Although there are numerous estuary restoration programs already in existence, non-Federal entities have had trouble sifting through the often small, overlapping and fragmented habitat restoration programs. The bill will coordinate these programs and restoration plans, combine State, local and Federal resources and supplement needed additional funding to restore estuaries. –

Section 103. Definitions

This section defines terms used throughout the Act. Among the most important definitions:

"Estuary" is defined as a body of water and its associated physical, biological, and chemical elements, in which fresh water from a river or stream meets and mixes with salt water from the ocean.

"Habitat" is defined as the complex of physical and hydrologic features within estuaries and their associated ecosystems, including salt and fresh water coastal marshes, coastal forested wetlands and other coastal wetlands, tidal flats, natural shoreline areas, sea grass meadows, kelp beds, river deltas, and river and stream banks under tidal influence.

"Restoration" is defined as an activity that results in improving an estuary's habitat, including both physical and functional restoration, with a goal toward a self-sustaining ecologically-based system that is integrated with its surrounding landscape. Examples of restoration activities include: the control of non-native and invasive species, such as phragmites; the reestablishment of physical features and biological and hydrologic functions; the cleanup of contamination; and the reintroduction of native species, such as the planting of eel grass.

Section 104. Establishment of the Collaborative Council

This section establishes an interagency Collaborative Council chaired by the Secretary of the Army, with the participation of the Under Secretary for Oceans and Atmosphere, Department of Commerce; the Administrator of the Environmental Protection Agency; and the Secretary of the Interior, through the Fish and Wildlife Service. The two principal functions of the Council are: (1) to develop a national strategy to restore estuary habitat; and (2) to select habitat restoration projects that will receive the funds provided in the bill.

The Army Corps of Engineers is to chair the Council. Of the four agencies, the Corps has the greatest expertise in engineering and project management, skills critical to the purpose of this legislation, which is to carry out estuary habitat restoration projects on the ground. The Corps is to work cooperatively with the other members of the Council.

Section 105. Duties of the Collaborative Council

This section establishes a process to coordinate existing Federal, State and local resources and activities directed toward estuary habitat restoration. It also sets forth the process by which projects are to be selected by the Council for funding under this Title.

Habitat Restoration Strategy.—This section requires the Council to draft a strategy that will serve as a national framework for restoring estuaries. The strategy should coordinate Federal, State, and local estuary plans programs and studies.

In developing the strategy, the Council should consult with State, local and tribal governments and other non-Federal entities, including representatives from coastal States representing the Atlantic, Pacific, and the Gulf of Mexico; local governments from coastal communities; and nonprofit organizations that are actively participating in carrying out estuary habitat restoration projects.

Selection of Projects.—This section also requires the Council to establish application criteria for restoration projects. The Council is required to consider a number of factors in developing criteria. In addition to the factors mentioned in the legislation, the Council is to consider both the quantity and quality of habitat restored in relation to the overall cost of a project. The consideration of these factors will provide the information required to evaluate performance, at both the project and program levels, and facilitate the production of biennial reports in the strategy. Subsection (b) of section 105 requires the project applicant to obtain the approval of State or local agencies, where such approval is appropriate. In States such as Oregon, where coastal beaches and estuaries are publicly owned and managed, proposals for estuary habitat restoration projects require the approval of the State before being submitted to the Council.

Priority Projects.—Among the projects that meet the criteria listed above, the Council shall give priority for funding to those projects that meet any of the factors cited in subsection(b)(4) of this section.

One of the priority factors is that the project be part of an approved estuary management or restoration plan. It is envisioned that funding provided through this legislation would assist all local communities in meeting the goals and objectives of estuary restoration, with priority given to those areas that have approved estuary management plans. For example, the Sarasota Bay area in Florida is presently implementing its Comprehensive Conservation and Management Plan (CCMP), which focuses on restoring lost habitat. This is being accomplished by: reducing nitrogen pollution to increase sea grass coverage; constructing salt water wetlands; and building artificial reefs for juvenile fish habitat. Narragansett Bay in Rhode Island also is in the process of implementing its CCMP. Current efforts to improve the Bay's water quality and restore its habitat address the uniqueness of the Narraganset Bay watershed.

Section 106. Cost Sharing of Estuary Habitat Restoration Projects

This section strengthens local and private sector participation in estuary restoration efforts by building public-private restoration partnerships. This section establishes a Federal cost-share requirement of no more than 65 percent of the cost of a project. The non-Federal share is required to be at least 35 percent of the cost of a project. Lands, easements, services, or other in-kind contributions may be used to meet non-Federal match requirement.

Section 107. Monitoring and Maintenance

This section assures that available information will be used to improve the methods for assuring successful long-term habitat restoration. The Under Secretary for Oceans and Atmosphere (NOAA) shall maintain a database of restoration projects carried out under this Act, including information on project techniques, project completion, monitoring data, and other relevant information.

The Council shall publish a biennial report to Congress that includes program activities, including the number of acres restored; the percent of restored habitat monitored under a plan; the types of restoration methods employed; the activities of governmental and non-governmental entities with respect to habitat restoration; and the effectiveness of the restoration

Section 108. Memoranda of Understanding

This section authorizes the Council to enter into cooperative agreements and execute memoranda of understanding with Federal and State agencies, private institutions, and tribal entities, as is necessary to carry out the requirements of the bill.

Section 109. Distribution of Appropriations for Estuary Habitat Restoration Activities

This section authorizes the Secretary to disburse funds to the other agencies responsible for carrying out the requirements of this Act. The Council members are to work together to develop an appropriate mechanism for the disbursement of funds between Council members. For instance, section 107 of the bill requires the Under Secretary to maintain a data base of restoration projects carried out under this legislation. NOAA shall utilize funds disbursed from the Secretary to maintain the data base.

Section 110. Authorization of Appropriations

The total of \$315,000,000 for fiscal years 1999 through 2003 is authorized to carry out estuary habitat restoration projects under this section. The \$315,000,000 would be distributed as follows: \$40,000,000 for fiscal year 1999; \$50,000,000 for fiscal year 2000, and \$75,000,000 for each of fiscal years 2001 through 2003.

Section 111. National Estuary Program

This section amends section 320(g)(2) of the Federal Water Pollution Control Act to provide explicit authority for the Administrator of the Environmental Protection Agency to issue grants not only for assisting activities necessary for the development of comprehensive conservation and management plans (CCMPs) but also for the implementation of CCMPs. Implementation for purposes of this section includes managing and overseeing the implementation of CCMPs consistent with section 320(b)(6) of the Act, which provides that management conferences, among other things, are to "monitor the effectiveness of actions taken pursuant to the [CCMP]." Examples of implementation activities include: enhanced monitoring activities; habitat mapping; habitat acquisition; best management practices to reduce urban and rural polluted runoff; and the organization of workshops for local elected officials and professional water quality managers about habitat and water quality issues.

The National Estuary Program is an important partnership among Federal, State, and local governments to protect estuaries of national significance threatened by pollution. A major goal of the program has been to prepare CCMPs for the 28 nationally designated estuaries. To facilitate preparation of the plans, the Federal Government has provided grant funds, while State and local governments have developed the plans. The partnership has been a success in that 17 of 28 nationally designated estuaries have completed plans.

In order to continue and strengthen this partnership, grant funds should be eligible for use in the implementation of the completed plans as well as for their development. Appropriations for grants for CCMPs are authorized at \$25,000,000 for each of fiscal years 1999 and 2000. This increase reflects the growth in the National Estuary Program since the program was last authorized in 1987. In 1991 when the authorization expired, 17 local estuary programs existed; now there are 28 programs. The cost of implementing the 28 estuary programs will require significant resources. However, State and local governments should take primary responsibility for implementing CCMPs.

Section 112. General Provisions

This section provides the Secretary of the Army with the authority to carry out responsibilities under this Act, and it clarifies that habitat restoration is one of the Corps' missions.

TITLE II—CHESAPEAKE BAY AND OTHER REGIONAL INITIATIVES

Section 201. Chesapeake Bay

The Chesapeake Bay Program has evolved considerably since 1983 and has become a model for other estuary restoration and protection programs around the world. Two new Chesapeake Bay Agreements were signed in 1987 and 1992, and other amendments and initiatives were agreed to, which have committed the States in the Bay and the Federal government to: (1) a 40 percent nutrient reduction goal in the mainstream and tributaries of the Bay by the year 2000; and (2) addressing other key issues in natural resources, water quality, population growth, and public access.

In order to ensure effective implementation of these commitments, this section amends section 117 of the Federal Water Pollution Control Act to reauthorize and strengthen the Chesapeake Bay Program. It directs the Administrator of the Environmental Protection Agency to continue the Chesapeake Bay Program Office in Annapolis. The Chesapeake Bay Program is to continue its leadership and technology transfer to other groups participating in the National Estuary Program, particularly in the following areas: (1) nutrient reduction through new technologies, such as biological nutrient removal; (2) air deposition of nitrogen to estuarine and coastal waters; (3) computer modeling; and (4) environmental indicators with an emphasis on measuring improvements to living resources.

This section specifically enables the Administrator: (1) to enter into interagency agreements with other Federal agencies; (2) to continue to give technical assistance grants to nonprofit private organizations and individuals, State and local governments, colleges, universities and interstate agencies; and (3) to continue to give implementation grants to signatory jurisdictions.

Subsection (f) provides new authority to ensure that Federal facilities in the Chesapeake Bay Watershed participate in the CBP and in local efforts to restore and protect the Bay and its tributaries. Each Federal facility adjacent to the Chesapeake Bay or its tributaries should ensure that the public has access to the shoreline and water to the maximum extent feasible, considering public safety and national security. This subsection also directs the Federal Agencies Committee of the Chesapeake Bay Program to assure strengthened stormwater management in urban watersheds.

Subsection (g) directs the Administrator to ensure that signatory jurisdictions update, expand, and begin implementing their tributary-specific management strategies within one year of the date of enactment of the bill. The strategies should include nutrient reduction targets as well as water quality requirements necessary for living resources, toxics reduction and prevention components, and habitat restoration and protection components. This subsection also establishes the Small Watershed Grants program as a permanent part of the Chesapeake Bay Program. Subsection (h) directs the Administrator and the Chesapeake Executive Council to complete a study of and comprehensive report on the Chesapeake Bay Program. The Administrator should work in cooperation with the Chesapeake Bay Program's Citizen's Advisory Committee and the Alliance for the Chesapeake Bay in conducting the study.

Section 202. Chesapeake Bay Gateways

Section 202 establishes a Chesapeake Bay Gateways and Watertrails network and provides funding and support to communities for conserving important natural, cultural, historical and recreational resources within the Chesapeake Bay watershed. \$3,000,000 is authorized for each of fiscal years 1999 through 2003 for matching grants to State and local governments, nonprofit organizations and others for conserving and restoring important resources in the Bay.

The 64,000 square mile Chesapeake Bay watershed contains many outstanding natural and cultural resources that combine to form a nationally distinctive ecosystem. They serve as habitat for fish and wildlife and provide places for recreation and tourism. Protecting, conserving and restoring these resources is vital to the overall health of the Chesapeake Bay. As a formal partner in the Chesapeake Bay Program and as a signator to the 1994 Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay, the Department of Interior, acting through the U.S. Fish and Wildlife Service, the U.S. Geological Survey and the National Park Service, plays an important role in assisting local, State and regional governments with Bay conservation, restoration and education efforts. To further these efforts, this section authorizes the Secretary of Interior, or a designee, in cooperation with the EPA Administrator, to identify ecologically or culturally significant areas of the Bay and its tributaries; to designate important resources as Chesapeake Bay Gateway sites; and to link them in a manner which will help enhance public education and access to the Bay. It also authorizes the Secretary to establish Chesapeake Bay Watertrails and to connect them with Gateway sites.

Section 203. Pfiesteria Research

This section authorizes the EPA, the National Marine Fisheries Service, the National Institute of Environmental Health Sciences, the Centers for Disease Control and Prevention, and the Department of Agriculture, to establish a research program for the eradication or control of *Pfiesteria* and other aquatic toxins. In carrying out this research program, the agencies are directed to make grants to colleges and other entities in affected States for the elimination or control of *Pfiesteria*. \$5,000,000 is authorized for each of fiscal years 1999 and 2000 for this program.

Section 204. Long Island Sound

The purpose of this section is to provide additional Federal resources to help protect and restore the Long Island Sound. This section authorizes \$10,000,000 for each of fiscal years 1999 through 2003 for the implementation of the Long Island Sound Comprehensive Conservation and Management Plan (CCMP) and authorizes such sums as are necessary for the Long Island Sound Office during this period. The funds provided in this section will be used to implement the Long Island CCMP, including habitat restoration work and projects to help reduce the amount of nitrogen reaching the Sound.

The CCMP calls for a reduction in the amount of nitrogen reaching the waters of the Long Island Sound of nearly 60 percent over the next 15 years and a goal of restoring at least 2,000 acres of coastal habitat and 100 miles of river used by migratory fish over the next 10 years. Toward this goal, 450 critical habitat sites already have been nominated for restoration work.

LEGISLATIVE HISTORY

On April 17, 1997, Senator Sarbanes introduced S. 618, the Chesapeake Bay Restoration Act of 1997, and S. 619, the Chesapeake Bay Gateways and Watertrails Act of 1997. On September 25, 1997, Senator Faircloth introduced the Pfiesteria Research Act of 1997. The committee ordered reported S. 1219 on November 4, 1997 (Report 105–132). On September 25, 1997, Senator Chafee, chairman of the committee, introduced S. 1222, the Estuary Habitat Restoration Partnership Act of 1997. On October 28, 1997, Senator Torricelli introduced S. 1321, the National Estuary Conservation Act of 1997.

Hearings

The Committee on Environment and Public Works held a legislative hearing on estuaries on July 9, 1998 in Washington, DC. The purpose of the hearing was to consider S. 1222, the Estuary Habitat Restoration Partnership Act, S. 1321, the National Estuary Conservation Act, and H.R. 2207, the Coastal Pollution Reduction Act. Testimony on estuaries was given by: The Honorable Lauch Faircloth, North Carolina; the Honorable Robert G. Torricelli, New Jersey; the Honorable John B. Breaux, Louisiana; Mr. Robert H. Wayland III, Director, Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency; Mr. Michael L. Davis, Deputy Assistant Secretary for Civil Works, U.S. Department of the Army; Mr. H. Curtis Spalding, Executive Director, Save the Bay, Providence, Rhode Island; Dr. Joann R. Burkholder, Research Coordinator, Botany Department, North Carolina State University, Ra-leigh, North Carolina; Dr. J. Walter Milon, Professor, Food and Resource Economic Department, University of Florida, Gainesville, Florida; and Mr. Ted Morton, Coastal Protection Program Counsel, American Oceans Campaign.

ROLLCALL VOTES

On July 22, 1998, the committee considered the chairman's amendment in the to S. 1222 in the nature of the substitute, which included provisions from s. 618, S. 619, S. 1219, and S. 1321. During the consideration of the bill, an amendment offered by Senator Lieberman to extend the authorization of and increase the authorization for the Long Island Sound Program was agreed to by voice vote. The committee voted to report the bill, as amended, by voice vote. No rollcall votes were taken on the bill.

REGULATORY IMPACT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes the following evaluation of the regulatory impact of the reported bill. The reported bill will have no regulatory impact. This bill will not have any effect on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the committee makes the following evaluation of the Federal mandates contained in the reported bill.

S. 1222 imposes no Federal intergovernmental unfunded mandates on State, local, or tribal governments. All of its governmental directives are imposed on Federal agencies.

The bill does not impose any Federal mandates on the private sector.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

> U.S. CONGRESS, CONGRESSIONAL BUDGET OFFICE, Washington, DC, July 28, 1998.

Hon. JOHN H. CHAFEE, Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1222, the Estuary Habitat Restoration Partnership Act of 1998.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Gary Brown (for Federal costs), who can be reached at 226–2860, and Pepper Santalucia (for the State and local impact), who can be reached at 225–3220.

Sincerely,

JUNE E. O'NEILL, Director.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

S. 1222, Estuary Habitat Restoration and Partnership Act of 1998, As ordered reported by the Senate Committee on Environment and Public Works on July 22, 1998

Summary

S. 1222 would authorize the appropriation of about \$615 million over the 1999–2003 period for:

• a Collaborative Council, consisting of representatives from multiple Federal agencies, that would develop a strategy for restoring estuary habitats and provide financial assistance to nonfederal entities for restoration projects,

• the National Estuary Program,

• the Chesapeake Bay Program,

• identifying significant natural, historical, and other resources in the Chesapeake Bay and linking them with a network of trails and water routes,

• a Pfiesteria research program, and

• conservation and management activities for the Long island Sound.

Of the authorized amounts, CBO estimates that \$12 million is already authorized under current law (for fiscal years 1999 through 2001).

CBO estimates the implementing S. 1222 would result in additions outlays of \$480 million over the 1999–2003 period, assuming the appropriation of the amounts authorized by the bill. The remaining amounts authorized by the bill would be spent after 2003. Enacting the bill would not affect direct spending; or receipts, therefore, pay-as-you-go procedures would not apply. The bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). Much of the funding afforded by the bill would be for grants for which State and local governments would be eligible.

Estimated Cost to the Federal Government

CBO estimates that implementing the bill would result in additional outlays of \$40 million in 1999, \$83 million in 2000, \$114 million in 2001, \$121 million in 2002, and \$122 million in 2003, assuming appropriation of the authorized amounts. New spending would total \$123 million after 2003. The estimated budgetary impact of S. 1222 is shown in the following table. In 1998, about \$34 million was appropriated for the activities that would be authorized by the bill. The costs of this legislation fall within budget function 300 (natural resources and environment).

	1998	1999	2000	2001	2002	2003
Spending Subject to Appropriation						
Spending Under Current Law:						
Budget Authority/Authorization Level ¹	34	4	4	4	0	0
Estimated Outlays	34	24	13	6	3	1
Proposed Changes:						
Estimated Authorization Level	0	114	124	119	123	123
Estimated Outlays	0	40	83	114	121	122
Spending Under S. 1222:						
Budget Authority/Authorization Level ¹	34	118	128	123	123	123
Estimated Outlays	34	64	96	120	124	123

by Fiscal Year, in Millions of Dollars

¹The 1998 level is the amount appropriated for that year. In addition, current law includes the authorization of \$3 million a year for 1999 through 2001 for conservation and management of the Long Island Sound and such sums as necessary over the same period for the Long Island Sound Office. CBO estimates an aggregate authorization level of \$4 million a year for these activities.

Basis of Estimate

For purposes of this estimate, CBO assumes that the bill will be enacted by the beginning of fiscal year 1999 and that the amounts authorized will be appropriated each year. Outlays are estimated based on historical rates of spending for the types of activities that would be authorized.

The bill would authorize the appropriation of \$4 million annually over the 1999–2003 period to the Army Corps of Engineers for administering the Collaborative Council and an additional \$40 million in 1999, \$50 million in 2000, and \$75 million annually over the 2001–2003 period for restoration projects. No amounts were appropriated for these purposes in 1998 The bill would authorize \$25 million in each of fiscal years 1999 and 2000 to the Environmental Protection Agency (EPA) for the National Estuary Program. The 1998 appropriation for that program is \$13 million.

In addition, S. 1222 would authorize the appropriation of \$30 million a year over the 1999–2003 period to EPA for the Chesapeake Bay Program and \$3 million a year over the same period to the U.S. Fish and Wildlife Service (USFWS) for identifying significant natural, historical and other resources. In the Chesapeake Bay and linking them with a network of trails and water routes. In 1998, the Chesapeake Bay Program received an appropriation of \$20 million. The USFWS work would be a new effort; no funds were appropriated for that purpose in 1998.

The bill would authorize the appropriation of \$5 million in each of fiscal years 1999 and 2000 to EPA, the National Oceanic and Atmospheric Administration, the Department of Health and Human Services, and the Department of Agriculture for establishing a joint research program on Pfiesteria piscicida and other aquatic toxins. No amounts were appropriated in 1998 for this purpose.

Finally, the bill would authorize the appropriation of \$10 million a year over the 1999–9003 period for projects to conserve and manage the Long Island Sound, and an estimated \$1 million a year over the same period for the Long Island Sound Office. Collectively these activities have existing authorizations estimated at about \$4 million per year through 2001. The 1998 appropriation was about \$1 million.

Pay-as-you-go considerations: None.

Estimated impact on State, local, and tribal governments: S. 1222 contains no intergovernmental no dates as defined in UMRA. Much of Me Finding authorized by The hill would be for grants for which State and local governments would be eligible. These Rants would help pay the COSTS of studying, restoring, and managing estuaries. Grant recipients would be responsible for paying Morn 5 percent TO 50 percent of the COST of these activities, depending on the activity and the program that is providing the grant finding.

Estimated impact on the private sector: This bill would impose no new private-sector mandates as defined in UMRA.

Estimate prepared by: Federal Costs: Gary Brown (226–2860); Impact on State, Local, and Tribal Governments: Pepper Santalucia (225–3220)

Estimate approved by: Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

In compliance with section 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 matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

FEDERAL WATER POLLUTION CONTROL ACT

(33 UNITED STATES CODE, 1251 ET SEQ.) *

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Sec. 117. CHESAPEAKE BAY.—

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*

(a) OFFICE.—The Administrator shall continue the Chesapeake Bay Program and shall establish and maintain in the Environmental Protection Agency an office, division, or branch of Chesapeake Bay Programs to-

[(1) collect and make available, through publications and other appropriate means, information pertaining to the envi-ronmental quality of the Chesapeake Bay (hereinafter in this subsection referred to as the "Bay");

[(2) coordinate Federal and State efforts to improve the water quality of the Bay;

(3) determine the impact of sediment deposition in the Bay and identify the sources, rates, routes, and distribution patterns of such sediment deposition; and

[(4) determine the impact of natural and man-induced environmental changes on the living resources of the Bay and the relationships among such changes, with particular emphasis placed on the impact of pollutant loadings of nutrients, chlo-rine, acid precipitation, dissolved oxygen, and toxic pollutants, including organic chemicals and heavy metals, and with special attention given to the impact of such changes on striped bass. (b) INTERSTATE DEVELOPMENT PLAN GRANTS.-

[(1) AUTHORITY.—The Administrator shall, at the request of the Governor of a State affected by the interstate management plan developed pursuant to the Chesapeake Bay Program (hereinafter in this section referred to as the "plan"), make a grant for the purpose of implementing the management mecha-nisms contained in the plan if such State has, within 1 year after February 4, 1987, approved and committed to implement all or substantially all aspects of the plan. Such grants shall be made subject to such terms and conditions as the Administrator considers appropriate.

[(2) SUBMISSION OF PROPOSAL.—A State or combination of States may elect to avail itself of the benefits of this subsection by submitting to the Administrator a comprehensive proposal to implement management mechanisms contained in the plan which shall include (A) a description of proposed abatement actions which the State or combination of States commits to take within a specified time period to reduce pollution in the Bay and to meet applicable water quality standards, and (B) the estimated cost of the abatement actions proposed to be taken during the next fiscal year. If the Administrator finds that

such proposal is consistent with the national policies set forth in section 1251(a) of this title and will contribute to the achievement of the national goals set forth in such section, the Administrator shall approve such proposal and shall finance the costs of implementing segments of such proposal.

[(3) FEDERAL SHARE.—Grants under this subsection shall not exceed 50 percent of the costs of implementing the management mechanisms contained in the plan in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the cost of implementing the management mechanisms contained in the plan during such fiscal year.

[(4) ADMINISTRATIVE COSTS.—Administrative costs in the form of salaries, overhead, or indirect costs for services provided and charged against programs or projects supported by funds made available under this subsection shall not exceed in any one fiscal year 10 percent of the annual Federal grant made to a State under this subsection.

[(c) REPORTS.—Any State or combination of States that receives a grant under subsection (b) of this section shall, within 18 months after the date of receipt of such grant and biennially thereafter, report to the Administrator on the progress made in implementing the interstate management plan developed pursuant to the Chesapeake Bay Program. The Administrator shall transmit each such report along with the comments of the Administrator on such report to Congress.

[(d) AUTHORIZATION OF APPROPRIATIONS.—There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section: [(1) \$3,000,000 per fiscal year for each of the fiscal years

[(1) \$3,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, to carry out subsection (a) of this section; and

[(2) \$10,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, for grants to States under subsection (b) of this section.]

(a) DEFINITIONS.—In this section:

(1) CHESAPEAKE BAY AGREEMENT.—The term 'Chesapeake Bay Agreement' means the formal, voluntary agreements, amendments, directives, and adoption statements executed to achieve the goal of restoring and protecting the Chesapeake Bay ecosystem and the living resources of the ecosystem and signed by the Chesapeake Executive Council.

(2) CHESAPEAKE BAY PROGRAM.—The term 'Chesapeake Bay Program' means the program directed by the Chesapeake Executive Council in accordance with the Chesapeake Bay Agreement.

(3) CHESAPEAKE BAY WATERSHED.—The term 'Chesapeake Bay watershed' shall have the meaning determined by the Administrator.

(4) CHESAPEAKE EXECUTIVE COUNCIL.—The term 'Chesapeake Executive Council' means the signatories to the Chesapeake Bay Agreement.

(5) SIGNATORY JURISDICTION.—The term 'signatory jurisdiction' means a jurisdiction of a signatory to the Chesapeake Bay Agreement. (b) CONTINUATION OF CHESAPEAKE BAY PROGRAM.—

(1) IN GENERAL.—In cooperation with the Chesapeake Executive Council (and as a member of the Council), the Administrator shall continue the Chesapeake Bay Program.

(2) PROGRAM OFFICE.—The Administrator shall maintain in the Environmental Protection Agency a Chesapeake Bay Program Office. The Chesapeake Bay Program Office shall provide support to the Chesapeake Executive Council by—

(A) implementing and coordinating science, research, modeling, support services, monitoring, data collection, and other activities that support the Chesapeake Bay Program;

(B) developing and making available, through publications, technical assistance, and other appropriate means, information pertaining to the environmental quality and living resources of the Chesapeake Bay;

(C) assisting the signatories to the Chesapeake Bay Agreement, in cooperation with appropriate Federal, State, and local authorities, in developing and implementing specific action plans to carry out the responsibilities of the signatories to the Chesapeake Bay Agreement;

(D) coordinating the actions of the Environmental Protection Agency with the actions of the appropriate officials of other Federal agencies and State and local authorities in developing strategies to—

(i) improve the water quality and living resources of the Chesapeake Bay; and

(ii) obtain the support of the appropriate officials of the agencies and authorities in achieving the objectives of the Chesapeake Bay Agreement; and

(E) implementing outreach programs for public information, education, and participation to foster stewardship of the resources of the Chesapeake Bay.

(c) INTERAGENCY AGREEMENTS.—The Administrator may enter into an interagency agreement with a Federal agency to carry out this section.

(d) TECHNICAL ASSISTANCE AND ASSISTANCE GRANTS.—

(1) IN GENERAL.—In consultation with other members of the Chesapeake Executive Council, the Administrator may provide technical assistance, and assistance grants, to nonprofit private organizations and individuals, State and local governments, colleges, universities, and interstate agencies to carry out this section, subject to such terms and conditions as the Administrator considers appropriate.

(2) Federal Share.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the Federal share of an assistance grant provided under paragraph (1) shall be determined by the Administrator in accordance with Environmental Protection Agency guidance.

(B) SMALL WATERSHED GRANTS PROGRAM.—The Federal share of an assistance grant provided under paragraph (1) to carry out an implementing activity under subsection (g)(2) shall not exceed 75 percent of eligible project costs, as determined by the Administrator.

(3) NON-FEDERAL SHARE.—An assistance grant under paragraph (1) shall be provided on the condition that non-Federal sources provide the remainder of eligible project costs, as determined by the Administrator.

(4) ADMINISTRATIVE COSTS.—Administrative costs (including salaries, overhead, and indirect costs for services provided and charged against projects supported by funds made available under this subsection) incurred by a person described in paragraph (1) in carrying out a project under this subsection during a fiscal year shall not exceed 10 percent of the grant made to the person under this subsection for the fiscal year. (e) IMPLEMENTATION GRANTS.—

(1) IN GENERAL.—If a signatory jurisdiction has approved and committed to implement all or substantially all aspects of the Chesapeake Bay Agreement, on the request of the chief executive of the jurisdiction, the Administrator shall make a grant to the jurisdiction for the purpose of implementing the management mechanisms established under the Chesapeake Bay Agreement, subject to such terms and conditions as the Administrator considers appropriate.

(2) PROPOSALS.—A signatory jurisdiction described in paragraph (1) may apply for a grant under this subsection for a fiscal year by submitting to the Administrator a comprehensive proposal to implement management mechanisms established under the Chesapeake Bay Agreement. The proposal shall include-

(A) a description of proposed management mechanisms that the jurisdiction commits to take within a specified time period, such as reducing or preventing pollution in the Chesapeake Bay and to meet applicable water quality standards; and

(B) the estimated cost of the actions proposed to be taken during the fiscal year.

(3) APPROVAL.—If the Administrator finds that the proposal is consistent with the Chesapeake Bay Agreement and the national goals established under section 101(a), the Administrator may approve the proposal for a fiscal year.

(4) FEDERAL SHARE.—The Federal share of an implementation grant provided under this subsection shall not exceed 50 percent of the costs of implementing the management mechanisms during the fiscal year.

(5) NON-FEDERAL SHARE.—An implementation grant under this subsection shall be made on the condition that non-Federal sources provide the remainder of the costs of implementing the management mechanisms during the fiscal year.

(6) ADMINISTRATIVE COSTS.—Administrative costs (including salaries, overhead, and indirect costs for services provided and charged against projects supported by funds made available under this subsection) incurred by a signatory jurisdiction in carrying out a project under this subsection during a fiscal year shall not exceed 10 percent of the grant made to the jurisdiction under this subsection for the fiscal year.

(f) COMPLIANCE OF FEDERAL FACILITIES.—

(1) SUBWATERSHED PLANNING AND RESTORATION.—A Federal agency that owns or operates a facility (as defined by the Administrator) within the Chesapeake Bay watershed shall participate in regional and subwatershed planning and restoration programs.

(2) COMPLIANCE WITH AGREEMENT.—The head of each Federal agency that owns or occupies real property in the Chesapeake Bay watershed shall ensure that the property, and actions taken by the agency with respect to the property, comply with the Chesapeake Bay Agreement.

(g) CHESAPEAKE BAY WATERSHED, TRIBUTARY, AND RIVER BASIN PROGRAM.—

(1) NUTRIENT AND WATER QUALITY MANAGEMENT STRATE-GIES.—Not later than 1 year after the date of enactment of this subsection, the Administrator, in consultation with other members of the Chesapeake Executive Council, shall ensure that management plans are developed and implementation is begun by signatories to the Chesapeake Bay Agreement for the tributaries of the Chesapeake Bay to achieve and maintain—

(A) the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the main stem Chesapeake Bay;

(B) the water quality requirements necessary to restore living resources in both the tributaries and the main stem of the Chesapeake Bay;

(C) the Chesapeake Bay basinwide toxics reduction and prevention strategy goal of reducing or eliminating the input of chemical contaminants from all controllable sources to levels that result in no toxic or bioaccumulative impact on the living resources that inhabit the Bay or on human health; and

(D) habitat restoration, protection, and enhancement goals established by Chesapeake Bay Agreement signatories for wetlands, forest riparian zones, and other types of habitat associated with the Chesapeake Bay and the tributaries of the Chesapeake Bay.

(2) SMALL WATERSHED GRANTS PROGRAM.—The Administrator, in consultation with other members of the Chesapeake Executive Council, may offer the technical assistance and assistance grants authorized under subsection (d) to local governments and nonprofit private organizations and individuals in the Chesapeake Bay watershed to implement—

(A) cooperative tributary basin strategies that address the Chesapeake Bay's water quality and living resource needs; or

(B) locally based protection and restoration programs or projects within a watershed that complement the tributary basin strategies.

(h) STUDY OF CHESAPEAKE BAY PROGRAM.—Not later than December 31, 2000, and every 3 years thereafter, the Administrator, in cooperation with other members of the Chesapeake Executive Council, shall complete a study and submit a comprehensive report to Congress on the results of the study. The study and report shall, at a minimum(1) assess the commitments and goals of the management strategies established under the Chesapeake Bay Agreement and the extent to which the commitments and goals are being met;

(2) assess the priority needs required by the management strategies and the extent to which the priority needs are being met;

(3) assess the effects of air pollution deposition on water quality of the Chesapeake Bay;

(4) assess the state of the Chesapeake Bay and its tributaries and related actions of the Chesapeake Bay Program;

(5) make recommendations for the improved management of the Chesapeake Bay Program; and

(6) provide the report in a format transferable to and usable by other watershed restoration programs.

(i) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$30,000,000 for each of fiscal years 1999 through 2003.

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Sec. 119. LONG ISLAND SOUND.—

(a) The Administrator shall continue the Management Conference of the Long Island Sound Study (hereinafter referred to as the "Conference") as established pursuant to section 1330 of this title, and shall establish an office (hereinafter referred to as the "Office") to be located on or near Long Island Sound.

(b) ADMINISTRATION AND STAFFING OF OFFICE.—The Office shall be headed by a Director, who shall be detailed by the Administrator, following consultation with the Administrators of EPA regions I and II, from among the employees of the Agency who are in civil service. The Administrator shall delegate to the Director such authority and detail such additional staff as may be necessary to carry out the duties of the Director under this section.

(c) DUTIES OF OFFICE.—The Office shall assist the Management Conference of the Long Island Sound Study in carrying out its goals. Specifically, the Office shall—

(1) assist and support the implementation of the Comprehensive Conservation and Management Plan for Long Island Sound developed pursuant to section 320 of this Act;

(2) conduct or commission studies deemed necessary for strengthened implementation of the Comprehensive Conservation and Management Plan including, but not limited to—

(A) population growth and the adequacy of wastewater treatment facilities,

(B) the use of biological methods for nutrient removal in sewage treatment plants,

(C) contaminated sediments, and dredging activities,

(D) nonpoint source pollution abatement and land use activities in the Long Island Sound watershed,

(E) wetland protection and restoration,

(F) atmospheric deposition of acidic and other pollutants into Long Island Sound,

(G) water quality requirements to sustain fish, shellfish, and wildlife populations, and the use of indicator species to assess environmental quality, (H) State water quality programs, for their adequacy pursuant to implementation of the Comprehensive Conservation and Management Plan, and

(I) options for long-term financing of wastewater treatment projects and water pollution control programs.

(3) coordinate the grant, research and planning programs authorized under this section;

(4) coordinate activities and implementation responsibilities with other Federal agencies which have jurisdiction over Long Island Sound and with national and regional marine monitoring and research programs established pursuant to the Marine Protection, Research, and Sanctuaries Act;

(5) provide administrative and technical support to the conference;

(6) collect and make available to the public publications, and other forms of information the conference determines to be appropriate, relating to the environmental quality of Long Island Sound;

(7) not more than two years after the date of the issuance of the final Comprehensive Conservation and Management Plan for Long Island Sound under section 1330 of this title, and biennially thereafter, issue a report to the Congress which—

(A) summarizes the progress made by the States in implementing the Comprehensive Conservation and Management Plan;

(B) summarizes any modifications to the Comprehensive Conservation and Management Plan in the twelvemonth period immediately preceding such report; and

(C) incorporates specific recommendations concerning the implementation of the Comprehensive Conservation and Management Plan; and

(8) convene conferences and meetings for legislators from State governments and political subdivisions thereof for the purpose of making recommendations for coordinating legislative efforts to facilitate the environmental restoration of Long Island Sound and the implementation of the Comprehensive Conservation and Management Plan.

(d) GRANTS.—(1) The Administrator is authorized to make grants for projects and studies which will help implement the Long Island Sound Comprehensive Conservation and Management Plan. Special emphasis shall be given to implementation, research and planning, enforcement, and citizen involvement and education.

(2) State, interstate, and regional water pollution control agencies, and other public or nonprofit private agencies, institutions, and organizations held to be eligible for grants pursuant to this subsection.

(3) Citizen involvement and citizen education grants under this subsection shall not exceed 95 per centum of the costs of such work. All other grants under this subsection shall not exceed 50 per centum of the research, studies, or work. All grants shall be made on the condition that the non-Federal share of such costs are provided from non-Federal sources.

(e) AUTHORIZATIONS.—(1) There is authorized to be appropriated to the Administrator for the implementation of this section, other than subsection (d) of this section, such sums as may be nec-essary for each of the fiscal years [1991 through 2001.] 1999 through 2003. (2) There is authorized to be appropriated to the Administrator for the implementation of subsection (d) of this section not to ex-

ceed [\$3,000,000 for each of the fiscal years 1991 through 2001]. \$10,000,000 for each of fiscal years 1999 through 2003.