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# THE FIRST BIENNIAL PROGRESS REPORT

OF THE

Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay



**Chesapeake Bay Program** 

The Chesapeake Bay Program's Federal Agencies Committee

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APRIL 1995

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Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay

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The Chesapeake Bay Program's Federal Agencies Committee
APRIL 1995

## CONTENTS

PROLOGUE: The Role of the Federal Government in the Chesapeake Bay Program
The Chesapeake Bay Program
The Federal Agencies Committee
The "Agreement"
Federal Agencies Involvement
This Report
COMMITMENT PROGRESS REPORT
PARTNERSHIPS
Commitment 1
RESEARCH
Commitment 2
DATA COORDINATION
Commitment 3
ANACOSTIA RIVER
Commitment 4
HABITAT RESTORATION
Commitment 5
Commitment 6
Commitment 7
Commitment 8
NUTRIENT REDUCTION
Commitment 9
Commitment 10
Commitment 11
Commitment 12
Commitment 13
Commitment 14
TOXIC REDUCTIONS
Commitment 15
Commitment 16
FEDERAL FACILITIES  Commitment 18
NATIONAL SERVICE  Commitment 1918
REPORTING  Commitment 20
Commence 2020
APPENDIX A: Agreement of Federal Agencies on
Ecosystem Management in the Chesapeake Bay
APPENDIX B: Federal Landholdings in the Chesapeake Bay Watershed

### PROLOGUE

## THE ROLE OF THE FEDERAL GOVERNMENT IN THE CHESAPEAKE BAY PROGRAM

#### THE CHESAPEAKE BAY PROGRAM

The Chesapeake Bay Program (CBP), established in 1983 by the signing of the Chesapeake Bay Agreement, is a unique voluntary partnership between Pennsylvania, Maryland, Virginia, the District of Columbia, the tri-state legislative Chesapeake Bay Commission, and the U.S. Environmental Protection Agency (EPA), representing the Federal government. One of the nation's premier ecosystem restoration and management efforts, the Chesapeake Bay Program focuses on North America's largest estuary and the estuary's watershed.

The Chesapeake Bay's main stem is approximately 200 miles long and varies in width between five and twenty-five miles. Its watershed comprises 64,000 square miles and stretches from Cooperstown, NY, in the north, to Norfolk, VA, in the south, where the Bay meets the Atlantic Ocean. It includes some of America's most scenic and historic rivers, including the Susquehanna, Potomac, James, York, and Rappahannock. The estuary, whose name derives from a Native American word meaning "great shellfish waters," is well known for its rich and historically significant production of fish and shellfish and for its beauty and recreational pleasures.

The Chesapeake Bay Program relies on wide public support of its goals in carrying out its multifaceted missions; it employs methods that go beyond environmental laws and regulations by stressing voluntary compliance, strong commitments, and measurable goals. The Program addresses:

- the prevention and abatement of pollution;
- the conservation and restoration of habitat, fish and wildlife;
- the enhancement of public access to the Bay and its tributaries;
- public education; and
- the overall health of the Bay.

Federal agencies play a major role as partners in the Bay Program. As the lead Federal representative to the Program and a signatory to the Chesapeake Bay Agreement, the EPA

Administrator represents all Federal agencies and serves on the Chesapeake Executive Council along with the other five signatories—the governors of Maryland, Pennsylvania, and Virginia; the mayor of the District of Columbia; and the chair of the Chesapeake Bay Commission. The Executive Council meets annually to assess progress, set new goals, and reaffirm existing goals and commitments of the CBP. In the past, implementation of most of the goals and commitments of the Program has been carried out by the States and the District of Columbia on non-Federal lands in the Bay's watershed.

#### THE FEDERAL AGENCIES COMMITTEE

The Bay Program's Federal Agencies Committee (FAC) was formed in 1984 to share information among the participating agencies, provide advice to the Program, and assist with the implementation of the goals and commitments of the Program. The Committee meets on a regular basis. In 1993, it created two work groups—the Nutrient Reduction Work Group and the Habitat Restoration Work Group—for the primary purpose of implementing the Bay Program's commitments on the nearly 1.6 million acres of Federally-owned lands within the watershed.

#### THE "AGREEMENT"

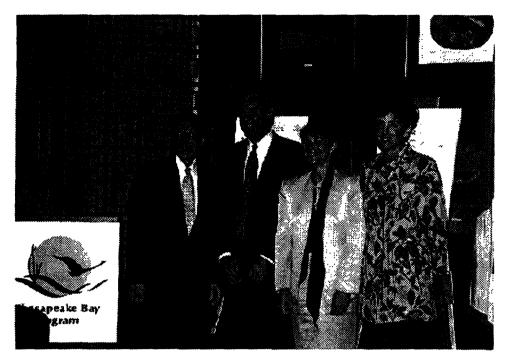
On July 14, 1994, culminating months of interagency cooperation, the FAC convened the Chesapeake Bay Federal Summit Meeting at the Department of the Interior in Washington, D.C. Thirty high-level Federal officials representing twenty-nine agencies and departments assembled to discuss the Federal role in the Bay Program and to sign the Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay.

The Agreement was endorsed and signed by all of the Federal participants and by representatives of the states of Virginia, Maryland, and Pennsylvania; the District of Columbia; the Chesapeake Bay Commission; the Smithsonian Institution; and Senator Paul Sarbanes (D-MD), all of whom were in attendance as "observers." (See Appendix A.)

The Agreement formalized the increasing role of Federal agencies in the Bay Program. There always have been many and varied Federal programs that support Bay Program goals, but they are not all necessarily part of the Agreement. Consequently, the commitments enunciated in the Agreement do not summarize the total Federal involvement in the CBP.

Motivated in part by the Administration's call for "reinventing government" and in part by a desire to improve interagency ecosystem management and planning in general, the Agreement solidified the commitments of each agency to those tasks in the Chesapeake Bay region. It provided a coordinated and cooperative framework for action with specific commitments for nutrient and toxic-pollution reduction, habitat restoration, coordination of research and ecological management tools, and the use of national-service opportunities for work on Federal lands.

The Agreement set a precedent by establishing certain Federal policies for the Chesapeake Bay watershed that apply nowhere else in the nation. For example, the Federal government adopted a policy to favor "the creation of forested buffers along streams, in order to help achieve both nutrient reduction and habitat restoration goals of the Chesapeake Bay



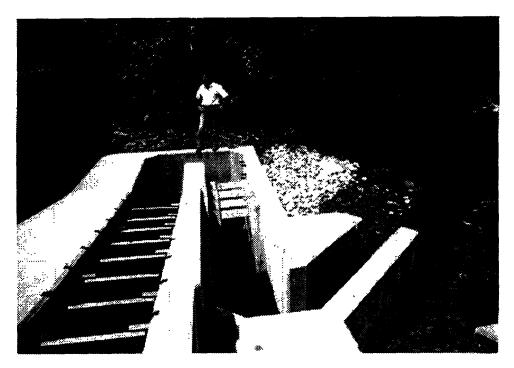
D. James Baker, NOAA Administrator, Bruce Babbitt, Secretary of the Interior, Sherri Wasserman Goodman, Deputy Under Secretary of Defense for Environmental Security, and Carol M. Browner, EPA Administrator, at the July 14, 1994, Chesapeake Bay Federal Summit Meeting.

Program." This commitment was strengthened three months later when the States, through the Chesapeake Executive Council, adopted a similar goal.

Because of the increasing number of military base closures and disposals of other Federal lands, the *Agreement* sought to "assure that the ecological value of any Federal facilities proposed for closure within the Chesapeake Bay watershed is addressed in the decision-making process for future land uses." In addition, the *Agreement* formalized the work of the two new FAC work groups by directing Federal agencies to cooperate with interagency teams doing pollution-prevention and habitat restoration site assessments on Federally-owned lands. The Nutrient Reduction Work Group, in fact, was charged with doing a minimum of five Pollution Prevention Assessments annually on Federal facilities throughout the watershed.

#### FEDERAL AGENCY INVOLVEMENT

Federal agencies are involved in the Bay Program because they own land in the watershed, carry out natural resource management or environmental protection programs in the watershed, or provide technical assistance for research, monitoring, and other pertinent activities. Each Federal agency has a different role and mission, but they all provide varying degrees of financial and technical assistance to the States, private individuals, and organizations throughout the Chesapeake Bay watershed.



Denil-type fish passage ladder at the U.S. Army's Aberdeen Proving Ground, Maryland. The first fish passage completed under the 1987 Chesapeake Bay Agreement. Counts during the spring run reach an estimated 30,000 fish.

Both within and outside their roles in the Bay Program, Federal agencies conduct many activities that have long-term benefits for the Bay. As landholders, they are stewards with a significant role in preserving, restoring, and managing habitat and natural areas, as well as in managing developed areas. Federal property includes many miles of the shoreline of the Bay and its tributaries as well as extensive park lands, forest lands, and other facilities throughout the entire watershed (see Appendix B). Although the majority of those nearly 1.6 million acres are inland and owned by the U.S. Forest Service, they have significant impact on the Bay and possess major economic, recreational, historic, and wildlife resources that are of immense public benefit.

Federal agencies provide financial and technical assistance in many diverse areas. For example, the Natural Resources Conservation Service (formerly the Soil Conservation Service) and the Consolidated Farm Service Agency (formerly the Agricultural Conservation and Stabilization Service) provide the grants, loans, and technical assistance by which farmers conserve soil and control polluting runoff. The U.S. Fish and Wildlife Service manages important and sensitive habitat, carries out restoration work, provides public access to wildlife areas, and organizes education opportunities. The National Oceanic and Atmospheric Administration provides grants and technical assistance for researching and monitoring air and water pollutants, for monitoring and managing coastal development, and for monitoring, researching, restoring, and managing Bay fisheries and their habitats.

The U.S. Environmental Protection Agency helps to provide the overall funding and technical, computer, and data-management assistance for the Bay Program, and coordi-

nates many Bay Program activities. It provides assistance to State and local governments in their efforts to improve sewage treatment plants and enforces the Clean Water Act and other Federal laws and regulations. The Forest Service manages vast areas of land and provides assistance for urban and state forestry activities. The National Park Service manages natural and historic properties for conservation, education, and interpretation, and provides assistance in those areas to public and private groups. The National Biological Service conducts research on living resources and provides technical assistance to other Federal and State agencies involved in the Bay Program. The U.S. Geological Survey collects and interprets data from the Bay's tributaries about nutrients, sediment, and toxics that impact water quality. This information is used by the Bay Program to set goals and measure progress.

Through these actions and, perhaps most important, through the coordination of these actions within the Chesapeake Bay Program, Federal agencies are helping to restore the Chesapeake Bay and make the Bay Program a national model for ecosystem management.

#### THIS REPORT

This is the first biennial report—as prescribed by the *Agreement*—on the progress made in implementing the *Agreement*. It is presented on an item-by-item basis according to the twenty specific "commitments" subscribed to by the signatories.

#### **COMMITMENT PROGRESS REPORT**

#### **PARTNERSHIP**

#### **Commitment 1**

♦ Work to bring all our programs into the partnership for Chesapeake Bay ecosystem management, and to urge other Federal agencies to become participants with us, where appropriate.

In the year leading up to the signing of the Agreement, both the U.S. Coast Guard, an agency of the Department of Transportation, and the National Park Service, an agency of the Department of the Interior, formally joined the Chesapeake Bay Program through the signing of Memoranda of Agreement. Both agencies became active partners in the Bay Program, playing various roles within its committee structure.

In October 1994, the Mid-Atlantic Regional Office of the National Park Service completed a comprehensive Action Agenda detailing various commitments for integrating with the Bay Program. In February 1995, the superintendents and interpretive and natural resource specialists from nineteen Park Units in the watershed, several Chiefs from the Washington Office, and an Associate Regional Director met with the EPA's Bay Program Director and staff to outline further involvement of the Park Service, including establishing a Bay Program contact official at each of its thirty-five Park Units and creating a multidisciplinary Park Service Work Group. The Park Service has contributed its expertise to Bay Program subcommittees in several areas including natural resources management and public education. It is already undertaking various educational and interpretive activities with a Chesapeake Bay theme in conjunction with the Bay Program at Fort McHenry National Monument and Thomas Stone National Historic Site in Maryland and at George Washington Birthplace National Monument and Prince William Forest Park in Virginia. It intends to expand to other sites. Gettysburg National Military Park was the site of the second Federal Facilities Site Assessment in 1994 (see Agreement Commitment 13), and the Park Service has committed to hosting at least one more such assessment annually until the year 2000. The Park Service also co-sponsored the 1994 International Countryside Stewardship Exchange in the Chesapeake Bay Region.

The Coast Guard has been involved in the Bay Program through its Fifth District (Portsmouth, VA), and through its headquarters staff. The Coast Guard has played an important role in the Bay Program's development of a policy designed to prevent the introduction of nonindigenous species to the Bay via ballast water from ships. The Coast Guard

is working with the Bay Program to enhance interagency cooperation in education, pollution prevention, data coordination, and marine-vessel discharges. As a result of the Agreement, the Coast Guard is currently studying habitat concerns and endangered species at its ten facilities along the Bay and its tributaries; its Stillpond search and rescue facility is on the FAC's priority list for habitat restoration projects (see Agreement Commitment 5).

After the signing of the Department of Defense (DoD) and EPA Action Agenda for the Chesapeake Bay Program in September 1993 and then the July 1994 Agreement, the Navy was designated as the lead Service for the DoD in the Bay Program. The Navy, through the Commander of Naval Base Norfolk, coordinates the DoD activities of the Program. In November 1994, the Navy adopted a worldwide policy for managing ballast water to reduce the potential of introducing nonindigenous species and pathogens. A two-year study was awarded to the Smithsonian Environmental Research Center in Edgewater, Maryland, to evaluate policy implementation and efficacy. The Navy is also a major participant in the Elizabeth River Project, a local grass-roots river restoration initiative, in the Norfolk, Virginia, area. In March 1995, the Navy sponsored a major conference for the commanding officers, executive officers, and natural resource managers of all sixty-six DoD installations in the watershed. Those personnel were briefed in detail on the goals of the Bay Program and on the high level of commitment to those goals.

The National Biological Service, a new agency within the Department of the Interior, has taken an increasingly active role in several Bay Program committees. The Service's Director, who signed the Agreement, has committed to formally joining the Bay Program through the development of a Memorandum of Agreement with the EPA. The Service has also committed to developing an action agenda to address its potential role and is advising the Bay Program on coordinating a Federal research agenda. In addition, the Service has also created a partnership with the State of Maryland to study trends in amphibian species populations.

The Bay Program has invited the National Aeronautics and Space Administration (NASA), the Agricultural Research Service, the Federal Highway Administration, and the Cooperative State Research, Education and Extension Service to join its partnership. NASA has been funding remote-sensing studies that are potentially useful for the Bay Program and is working with other FAC members to integrate those data. The Agricultural Research Service is playing a significant role in the Bay Program through its National Arboretum, a research and educational facility in Washington, D.C. The director of the Arboretum is leading the development of the special tributary strategy for Federal lands in Washington, D.C. (see Agreement Commitment 10). The Arboretum hosted the first Federal Facilities Site Assessment in May 1994 (see Agreement Commitment 13).

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The U.S. Forest Service added a second full-time Bay liaison to work out of the Bay Program Office in Annapolis. Liaisons play a key role in the development of the goals and commitments of the Bay Program. The Forest Service is responsible for the commitment in the *Agreement* to develop a Riparian Forest Buffer Policy. The Forest Service effort, in part, led directly to the Executive Council Directive on this subject in October 1994. The Natural Resources Conservation Service has two full-time employees serving the Bay Program Office and is fully integrated into the Program's committee structure. A recently selected full-time coordinator for USDA programs is developing a plan for agency involvement.

The FAC continues to expand and enhance the relationships between the Federal partners. It arranges visits to Federal facilities to promote understanding of the issues and challenges confronting facilities; it introduces agencies and officials to the Bay Program. In April 1995, the FAC will bring State partners to the Marine Corps Base at Quantico, VA, to observe major upgrades at the base sewage treatment plant, to review the installation's natural resource management and public access opportunities, and to review plans for further Federal plant upgrades.

For the first time, FAC members are sharing information about their budgets and programs within the committee itself and with other Bay Program partners. The use of a standardized reporting format will help to integrate, leverage, and match resources in the Bay Program's budget process and thereby address unmet funding needs and priorities.

#### RESEARCH

#### **Commitment 2**

◆ Coordinate our research agendas in consultation with the Bay Program's Scientific and Technical Advisory Committee, to address priority management needs for restoration of the Chesapeake Bay; initially including the role of atmospheric deposition in nutrient and toxic pollution of the Bay and the impact on the natural system (NOAA lead)

A Federal Research Agenda Group has been established by the National Oceanic and Atmospheric Administration (NOAA), with representatives from Federal agencies and the Scientific and Technical Advisory Committee. That Committee recently released a summary of a workshop on atmospheric deposition to coastal areas. The document included recommendations for information needs, which are being used by the Agenda Group.

The Federal Research Agenda Group has begun to investigate ways to link Bay management needs with collective Federal research capabilities. The Group will produce a general overview of research facilities in the Bay watershed and individual Federal agency research agendas that relate to the Bay. The Group will integrate its efforts with the activities of the Data Coordination Work Group (see Agreement Commitment 3). Rather than developing a list of research priorities for the Bay, this effort will focus on improving the ability of existing Federal research projects to address the management needs of the Bay Program.

#### **DATA COORDINATION**

#### **Commitment 3**

◆ Establish a Work Group under the Federal Agencies Committee to assess and evaluate existing ecological resource inventories used by Federal agencies, and to make recommendations to improve coordination, compatibility, standardization, GIS-based data layers and interagency transfer of information by December 31, 1995 (EPA lead)

In December 1994, the Bay Program created and filled a new position entitled Data Center Director. Key FAC members are assessing agency data resources and needs and are drafting an integration plan. The Data Center Director will assign a staff member to oversee Geographic Information Systems (GIS) and lead the Work Group. A Bay Program-wide conference on data coordination is planned for late 1995; it will include review and adoption of the Work Group's recommendations and plan.

#### **ANACOSTIA RIVER**

#### **Commitment 4**

◆ Provide full support to the Anacostia River Demonstration Project as an opportunity to apply ecosystem management concepts in an urban environment, through a coordinated biennial Federal workplan beginning in FY 1995, in concert with the Anacostia Watershed Restoration Committee (Corps of Engineers lead)

A workshop was held in mid-1994. The Corps of Engineers is developing a workplan to encourage increased Federal participation in the Anacostia Watershed Restoration Committee. A funding request to support the development and implementation of the workplan is pending at Corps headquarters. The EPA has advertised for a full-time Anacostia liaison and has hired an intern who reports to the Bay Program. The U.S. Forest Service has an Anacostia liaison at the District of Columbia Extension Office; the Natural Resources Conservation Service has a District Conservationist, a Watershed Planning Specialist, and an Americorps Team supporting Anacostia Restoration activities; and the National Biological Service and the National Park Service also are involved. The development of the special District of Columbia tributary strategy for Federal lands (see Agreement Commitment 10) is addressing specific Anacostia concerns through its strategy development team. The U.S. Navy and U.S. Fish and Wildlife Service are working cooperatively to restore habitat in the Anacostia watershed.

#### **HABITAT RESTORATION**

♦ Support full implementation of the Bay Program's Habitat Restoration Strategy and related plans by:

#### **Commitment 5**

(1) Including innovative use of public and private funding sources, restoration of habitat at Federal facilities, and development annually of a list of priority projects for habitat restoration on Federal lands in the watershed (FWS lead)

The Federal Agencies Habitat Restoration Work Group compiled the first annual list of priority habitat restoration projects on Federal lands for 1995. Although all Federally-owned facilities were involved, the Work Group focused its attention on military installa-

tions in 1995. The list is not meant to be static, and additional projects may be added through the year. However, a new list will be issued every year. Not all projects on the list will be completed during 1995, and some may not even begin in 1995. But they are all supported by the Federal agencies, and all will receive various types of assistance when they do begin. The 1995 Priority List includes:

- 1. Revegetation of a 5-7 acre mine tailings riparian site in Prince William Forest Park, VA (National Park Service property)
- 2. Design and implementation of a wetland restoration project on Boush Creek at Naval Base Norfolk, VA (U.S. Navy property)
- 3. Dune restoration project at Naval Amphibious Base, Little Creek (U.S. Navy property)
- 4. Erosion control and wetland restoration with geotubes and dredged material on Watts Island, VA (U.S. Fish and Wildlife Service property)
- 5. Erosion control and possible wetland restoration with geotubes and dredged material at Presquile National Wildlife Refuge, VA (U.S. Fish and Wildlife Service property)
- 6. Implementation of habitat restoration projects contained in new Resources Management Plan at Fort Lee, VA (U.S Army property)
- 7. Technical assistance to conduct maintenance dredging and wetland restoration project at Stillpond Station, MD (U.S. Coast Guard property)
- 8. Shoreline erosion/riparian planting project at Aberdeen Proving Ground, MD (U.S. Army property)
- 9. Incorporating habitat restoration projects as part of ongoing Resources Management Plan at Aberdeen Proving Ground, MD (U.S. Army property)
- 10. Replacement of heron nesting platforms on Bloodsworth Island, MD (U.S. Navy property)
- 11. Modification of inlet to allow greater tidal flow between Harpers Creek and Patuxent River at Naval Air Station, Patuxent River, MD (U.S. Navy property)
- 12. Phragmites eradication on 40 acres at Greenbury Point, MD (U.S. Navy property)
- 13. Subject to an environmental assessment by the Navy, disassembly of transmitter towers at Greenbury Point, MD, and moving them to designated site for creation of aquatic reef (U.S. Navy property)
- 14. Design and construction of two small landscaped habitats (BayScapes) on U.S. Naval Academy Golf Course, MD (U.S. Navy property)
- 15. Restoration of 14-acre woodland by installing cattle fences along 1863 lines and planting native tree seedlings and saplings at Gettysburg National Battlefield Park, PA (National Park Service property).

#### **Commitment 6**

(2) Fully implementing all habitat restoration authorities to improve the condition of aquatic, riparian and upland fish and wildlife habitat and assuring beneficial use of clean dredged material to support fish, migratory waterfowl, and other wildlife habitat in the Bay (Corps of Engineers lead)

A process similar to the Anacostia activities is underway. A workshop will be held in the spring of 1995 to generate a list of options and suggestions for implementation. The Baltimore District Engineer, the Norfolk District Engineer, and the EPA Bay Program



Once a large single island, erosion has reduced and reshaped Poplar Island into six smaller units. Restoration efforts include the placement of ten sunken barges to create a breakwater to reduce wave action and to stem erosion. Poplar Island will soon be the recipient of ten million cubic yards of clean dredge material, which will provide substrate for wetland and upland creation.

Director met in March 1995 to discuss coordination and expansion of this activity and to ensure attention to this commitment on a Bay-wide basis.

Four projects on the FAC Habitat Restoration List (see Agreement Commitment 5) involve beneficial use of dredged material. The massive restoration of Poplar Island and its colonial bird and fishery habitats in the mid-Bay through the use of clean dredged materials from Baltimore shipping channels is already underway. The severely eroded island has been stabilized with an offshore breakwater, and the dredged material will be used over the next decade to restore over 1,000 acres of island and wetland habitat. The cooperative project involves the Corps of Engineers, EPA, NOAA, the U.S. Fish and Wildlife Service, the National Biological Service, the State of Maryland, and the Port of Baltimore.

As part of an interagency Federal Facilities Site Assessment (see *Agreement* Commitment 13) at the Army's Fort Eustis on the James River, disposal and beneficial use of dredge materials was studied and recommendations were made. The Army is folding the recommendations into its integrated shoreline management plan. Restoration and island construction work at Hart-Miller Island near Baltimore through the use of dredged material will reap significant habitat benefits. The Baltimore District of the Corps of Engineers is supporting the State of Maryland in developing a long-term management plan for the island.

#### **Commitment 7**

(3) Supporting development in the Bay watershed of a policy favoring the creation of forested buffers along streams, in order to help achieve both nutrient reduction and habitat restoration goals of the Chesapeake Bay Program (U.S. Forest Service lead).

The leadership shown by the Forest Service and the other Federal agencies through this commitment led to the adoption of a Riparian Forest Buffer Directive by the Bay Program's Executive Council in October 1994. In conjunction with the Bay Program, the Forest Service helped to organize and convene a two-day conference on Riparian Forest Buffers in the Chesapeake Bay watershed in October 1994. Through the efforts of the Forest Service liaisons in the Bay Program Office, the Riparian Forest Buffer Policy process was approved by the Program's Implementation Committee in March 1995. A Directive Panel has been assembled to create specific policy and management plans; the panel includes Federal representatives from the Forest Service, Natural Resources Conservation Service and U.S. Fish and Wildlife Service. Membership of this Panel was presented for approval in March and a complete study and management plan will be in place in early 1996.

The Forest Service also has taken a lead in coordinating a scientific consensus of water quality functions of forest buffers (to be published in April 1995), a basinwide GIS inventory of riparian forests, as well as a handbook, demonstration projects, and training for local and State personnel

#### **Commitment 8**

(4) Providing technical assistance in fish passage design, providing stock for restoring newly opened spawning habitat, and determining needs for restoring upstream spawning habitat (NOAA lead)

Federal agencies have been cooperating on several projects concerning fish passages. An interagency agreement between NOAA and EPA has enabled NOAA to distribute over \$800,000 of seed money from EPA to the states for fish passage, stocking and survey projects. The U.S. Fish and Wildlife Service, working with NOAA, the Corps of Engineers, EPA, and the National Biological Service has evaluated design options for the Little Falls Dam project on the Potomac River in Maryland.

Under Section 18 of the Federal Power Act, NOAA and U.S. Fish and Wildlife Service have the authority to prescribe fishways at hydropower projects licensed (or relicensed) by the Federal Energy Regulatory Commission. The agencies are seeking a final Section 18 rule that will codify existing practices on construction, operation, and maintenance to ensure safe fish passage over the life of a license.

#### **NUTRIENT REDUCTION**

◆ Commit to do our share to meet the goal to reduce by 40% reduction the loadings of nutrients to the Bay by 2000 through:

#### **Commitment 9**

(1) Supporting the goals and action items of the tributary strategies as they are affected by Federal lands and programs.

The Bay Program is working to ensure communication and coordination between the States and the Federal landholders as the State tributary strategies move from the planning to the implementation stages. The Bay Program and the FAC coordinated meetings in the

State capitals and the District of Columbia specifically to help Federal agencies and facilities contribute to the development of each State's strategy. Representatives from various Federal agencies are involved with the strategies through their participation in Bay Program subcommittees and work groups. The regular and consistent involvement of the Natural Resources Conservation Service, Consolidated Farm Services Agency, EPA, NOAA, and the U.S. Forest Service is ensuring the appropriate level of coordination with Federal agencies. In addition, the U.S. Fish and Wildlife Service chairs the Bay Program's Urban Work Group, part of the Nutrient Subcommittee, which continues to be involved with the development and implementation of the strategies.

#### **Commitment 10**

(2) Developing by December 31, 1995, a Special Tributary Strategy for Federal lands in the District of Columbia, where the Federal Government is a major land-holder (EPA lead)

The National Arboretum, a unit of the Agricultural Research Service, has agreed to take the lead on this project along with the EPA. An organizational meeting of nine Federal agencies (including six landholding agencies), and the District of Columbia and regional government officials, held in February 1995, laid out the strategic goals and objectives. As a result, the District of Columbia and the Federal landholders created a strategy development team to review nutrient loadings and sources and to draft a strategy to address load reductions from Federal lands.

A strategy review team has been formed and charged with providing higher level policy input for refining the draft. Formal contact and information sharing has been established between the District of Columbia's Environmental Regulation Administration and Federal landholders, especially the National Park Service (largest Federal landholder in the District), the Department of Defense, and the National Zoo (Smithsonian Institution). Other agencies, including the U.S. Fish and Wildlife Service, U.S. Geological Survey, National Capital Planning Commission, EPA, Army Corps of Engineers, and the Natural Resources Conservation Service are formally participating to provide technical and program assistance.

#### **Commitment 11**

(3) Delivery of Federal assistance by integrated resources planning on a watershed basis to deal with nonpoint sources of pollution, consistent with the 1993 Agreement between the USDA and the Bay Program (Natural Resources Conservation Service lead)

Since 1985, the Natural Resources Conservation Service, with conservation partners that include soil conservation districts, State agencies, the Cooperative Extension Service and the Consolidated Farm Services Agency, is aggressively developing conservation plans that address many of the concerns identified in Ecosystem Based Assistance (EBA). In Virginia, Pennsylvania, and Maryland, 40% of the 10 million acres of agricultural land have up-to-date conservation plans. Through the cooperative efforts of the conservation part-

nership that includes the private sector, farmers have accelerated their efforts to reduce nitrogen and phosphorous nonpoint source pollution.

The Service and its partners are aligning EBA with the tributary strategies of Virginia, Pennsylvania, and Maryland. This will help to implement total resource management planning and support Bay Program goals. Because this requires a significant shift in management focus, the various Natural Resources Conservation Service offices have developed staffing plans that improve technical assistance from the field offices. To further provide management tools for EBA, the Service will develop innovative methodologies for natural resource protection, such as the establishment of the Wetlands Institute. An EBA approach is being developed to address modifications and extensions of the existing Conservation Reserve Program.

In Maryland, a pilot State in the development and implementation of EBA, all field office empoloyees, including partnership employees, will receive intensive training in EBA subjects in 1995. Similar efforts are underway in other Bay States.

#### **Commitment 12**

(4) Completing upgrades of wastewater treatment facilities to remove nutrients at Federal facilities, with priority on facilities in excess of 0.5m gallons per day being upgraded by January 31, 2000, to levels consistent with the applicable tributary strategy (DoD lead)

The FAC completed an inventory of Federal facilities in the watershed that fall under this commitment; the only ones that this provision now applies to are on military installations. In conjunction with the Department of Defense, the FAC is identifying those treatment plants that must have nutrient reduction upgrades. The Marine Corps Base at Quantico, VA, falls under this provision and is already acting, having completed the design phase of what will be a \$19.1 million upgrade of its plant for Biological Nutrient Removal. This upgrade will make significant contributions to the State's tributary strategy for nutrient reduction for the Potomac River. Construction is expected to begin in late 1995. In April 1995, the FAC, in conjunction with State officials, will conduct an on-site review of the technical design and upgrade of the Quantico facility and assess its applicability to other military facilities.

#### **Commitment 13**

(5) Completing demonstration site assessments for nutrient management using interagency teams on at least one Federal facility in each of the four jurisdictions (DC, MD, PA, VA) by December 31, 1994 (EPA lead)

The first four assessments have been completed at sites in each of the jurisdictions—the National Arboretum in Washington, D.C. (Agricultural Research Service), Gettysburg National Military Park in Pennsylvania (National Park Service), Fort Eustis in Virginia (U.S. Army), and the Naval Academy in Maryland (U.S. Navy). The report on the assessment at the National Arboretum is final and is being reviewed as part of a long-range plan for that facility. The other three reports are in draft and nearing completion. Follow-up activities are underway at each facility.

Each of the four assessments demonstrated the enormous potential of leveraging expertise and resources through use of interagency teams. In all cases, State and local gov-

ernment participation brought further technical assistance opportunities to the attention of the agencies and facilities. Bay Program goals and objectives were demonstrated to all agencies involved, further promoting the partnership and enhancing cooperation. Specific ideas and suggestions were provided to the facilities to enhance natural resource management, but at the same time, many positive and beneficial activities at the facilities were brought to the attention of the Bay Program and the State and local governments.

- 1. At the National Arboretum, team members were impressed with the general landscaping and land management activities and expressed their approval of current nutrient management techniques. Specific suggestions on stormwater management and erosion control were provided to facility managers.
- 2. Team members at Gettysburg were impressed with the overall agricultural and land management methods, especially under the added burden of maintaining the historic landscape and land uses. Team members encouraged Park managers to improve and enhance cooperation with the nearby local government in the area of stormwater management.
- 3. Fort Eustis managers were pleased with the wide variety of suggestions and ideas they received about shoreline erosion management and implementing their new stormwater management plan. Team members were impressed with the vast forested and wetland areas being managed and protected by the Army.
- 4. A team of Federal, State, university and private agronomists and turf specialists gave high marks to the quality management of the Naval Academy's parade and athletic grounds and golf course, but made a number of specific suggestions to help the facility fine-tune its operation.

In all of the above four assessments, team members and the facilities learned more about the Bay Program and each other's management challenges. Contacts made as a result of these assessments continue to reap benefits for both the Program and the facilities. At the Department of Defense's March 1995 Conference on the Chesapeake Bay Program, a series of presentations on these assessments provided a high level of visibility to base commanders and natural resource managers for opportunities at the sixty-six military installations in the Bay watershed.

#### **Commitment 14**

(6) Development of an assessment protocol based upon these demonstration projects for use in completing at least five additional assessments annually at Federal facilities in the Basin until September 30, 2000 (EPA lead)

The FAC's Nutrient Reduction Work Group is currently revising a draft protocol that was used to guide the initial four assessments. The goal now is to expand from a focus exclusively on nutrient reduction to one that encompasses wider Bay Program goals and pollution prevention opportunities.

The U.S. Navy, U.S. Marine Corps, National Park Service, U.S. Coast Guard, and Natural Resources Conservation Service have all presented candidate sites or agreed to undertake assessments on specific facilities. The Work Group is reviewing these candidate sites, and others are being considered for visits in 1995, specifically for their potential con-

tributions to the Special D.C. Tributary Strategy (see Agreement Commitment 10). Although a five-year plan for assessments will not be completed until late in 1995, the five sites for 1995 will be chosen by May, and the FAC will use the period of June through December to conduct the assessments.

#### **TOXIC REDUCTIONS**

♦ Aid in the reduction of toxic loadings to the Chesapeake and its tributaries by:

#### **Commitment 15**

(1) Significantly increasing the adoption of Integrated Pest Management in the watershed consistent with the Administration's commitment to having Integrated Pest Management implemented on 75% of the country's agricultural lands by the year 2000 (USDA lead)

This commitment helped to lead the Chesapeake Executive Council to adopt a more comprehensive and specific Chesapeake Bay Basinwide Toxics Reduction and Prevention Strategy in October 1994. That Strategy commits voluntary Integrated Pest Management practices on 75 percent of all agricultural, recreational, and public lands within the Chesapeake Bay basin. The USDA's Extension Service, through representatives to the Bay Program and the individual States, will help to implement these commitments on Federal, State and private lands throughout the watershed. The Department of Defense has already implemented pest management practices on many of its installations in the watershed and will continue to track implementation of the plans, pesticide use reduction and training, and certification through measures of merit.

#### **Commitment 16**

(2) Using the existing "BayScapes" and other successful programs to expedite compliance with the President's directive on environmentally and economically beneficial landscaping practices on Federal facilities in the Bay watershed (FWS lead)

BayScapes are environmentally sound landscapes and practices benefiting people, wild-life, and the Chesapeake Bay. Several BayScapes projects are being planned or are in the implementation phases for Federal facilities. Exhibits at Eastern Neck National Wildlife Refuge and the new Visitor's Center at the Patuxent National Wildlife Center are underway. One of the priority habitat restoration projects (see Agreement Commitment 5) is a BayScapes project at the U.S. Naval Academy Golf Course.

#### **Commitment 17**

(3) Highlighting releases of the Bay's priority "Toxics of Concern" from Federal facilities in reports under Executive Order #12856 (EPA lead)

The first Federal facilities reports are due under the Emergency Planning and Community Right-to-Know Act Executive Order 12856 on July 1, 1995. In November

1994, the list of reportable chemicals was expanded by 286 and now includes twelve out of the fourteen Bay Toxics of Concern. A report on expansion chemicals is due in July 1996. The Federal agencies on the FAC have been working with the Bay Program to ensure compliance from their facilities.

#### **FEDERAL FACILITIES**

#### **Commitment 18**

◆ Assure that the ecological value of any Federal facilities proposed for closure within the Chesapeake Bay watershed is addressed in the decision-making process for future land uses (DoD lead)

Base Realignment and Closure (BRAC) officials maintain contact with the Bay Program through the Department of Defense representatives. When the March 1995 BRAC List was released, Bay Program and Department of Defense officials immediately reviewed potential implications. They continue to monitor the situation carefully as it relates to those installations listed for either closure or realignment, especially Fort Ritchie and the Naval Surface Warfare Center at White Oak.

The transfer of the Naval Radio Transmitter Facility at Greenbury Point near Annapolis to the Naval Academy has led the Program to work with local and Federal agencies to develop habitat restoration, nutrient reduction, and public access activities as part of the Naval Academy's long-range plans.

#### NATIONAL SERVICE

#### **Commitment 19**

◆ Provide mutual benefits to the Bay and to national service through environmental improvement training and project proposals and other opportunities to work with the 250 Corps members and 45 staff being located in Aberdeen as part of the National Civilian Community Corps, as well as with other initiatives of the Corporation for National and Community Service (NCCC lead)

The Bay Program has worked to increase participation and involvement with the National Civilian Community Corps (NCCC) and to introduce and encourage Corps partnerships with Federal, State, local, and private entities that are working on various projects in the Bay watershed. Bay Program representatives have participated in training Corps members about Bay Program goals, ecology, and technical issues. The Bay Program has also provided the NCCC with specific project proposals and assisted in forming partnerships between the NCCC and other groups. The NCCC has worked closely with the Alliance for the Chesapeake Bay on a number of restoration projects throughout the Bay watershed, and the two groups are in the final stages of negotiating a formal partnership in a Statement of Understanding.



NCCC Corps Members working on a habitat restoration and erosion control project on Hart-Miller Island in Chesapeake Bay.

The NCCC began its first year by concentrating on projects within a one-hour drive of their location at Aberdeen. The second year will consist of projects throughout the Bay watershed. The following are among the environmental and conservation activities undertaken by the NCCC in the Chesapeake Bay watershed which further the goals and commitments of the Bay Program:

- 1. Cleanup of 1.5 miles of Bay shoreline at Perry Point Medical Center, VA
- 2. Shoreline erosion and streambank stabilization projects on Swan Creek, MD
- 3. Phragmites eradication, shoreline stabilization, and upland tree and shrub plantings on Hart-Miller Island, MD
- 4. Trail cleanup at the Otter Point Creek National Estuarine Sanctuary, MD
- 5. Stream restoration at Aberdeen Proving Ground, MD
- 6. Trail improvement for public access at Harford Glen Environmental Education Center, MD
- 7. Construction of handicapped-accessible outdoor classroom; creation of topographic map of Chesapeake Bay for educational purposes; and improvement of canoe launch trail at Days Cove, MD
- 8. Extensive maintenance and public access enhancement projects at Gwynns Falls/ Leakin Park, MD
- 9. Stream and watershed surveys at St. Benedict's Housing Authority, MD
- 10. Assistance in the creation and development of park, clearing of pastures, and trail creation at Rockfield Park Garden, Town of Bel Air and Harford County, MD

- 11. Planting of 1,500 native wetland plant species, native dune species, and native trees and shrubs to demonstrate habitat restoration as part of 1994 Chesapeake Executive Council meeting at Jefferson Paterson Park, MD
- 12. Tree planting at Maryland Environmental Services, Baltimore Facility, MD
- 13. Trail maintenance and tree planting at Maryland Environmental Services, Western Facility, MD
- 14. Planting of sixteen trees, construction of community garden beds, and surveying community members on urban forestry as part of the Revitalizing Baltimore Community Forestry and Watershed Improvement Project, MD
- 15. Removal of fish blockage to open 2.3 miles of upstream spawning habitat on Dorsey Run, Little Patuxent River, MD
- 16 Removal of fish blockage to open 4 miles of upstream spawning habitat on the Western Branch of the Patuxent River, MD
- 17. Installation of a plywood baffle on Bloede Dam to improve the efficiency of a fish ladder and allow more fish to reach spawning grounds, Patapsco State Park, MD
- 18. Planting of 600 trees to improve habitat near Perry Test Course, MD
- 19. Tree planting education through *Growing Together* for 2,480 elementary school children in Baltimore County, MD
- 20. Construction of wetland from storm drain pond, planting trees, and giving educational programs to students, construction of handicapped-accessible trail, and building and placing birdhouses on trail at Seven Oaks Elementary School, MD
- 21. Stream survey and mapping of Herring Run (3 miles) and development of classroom activities for students at local school, MD
- 22. Tree, shrub and flower planting at Children's Home of Virginia Baptist, Richmond, VA

#### **REPORTING**

◆ Finally, we agree to report biennially on progress in the implementation of this agreement, beginning April 1, 1995 (EPA lead)

This document is the first of the biennial progress reports.

#### APPENDIX A



### AGREEMENT OF FEDERAL AGENCIES ON ECOSYSTEM MANAGEMENT IN THE CHESAPEAKE BAY



July 14, 1994

HEREAS, the National Performance Review under the direction of the Vice President has called upon Federal agencies to develop crossagency ecosystem planning and management; and

WHEREAS, the restoration of the Chesapeake Bay is a readily accessible example of ecosystem management carried out by a partnership of State and Federal agencies engaged in the integrated management of the waters, the air, the living resources, and human dimensions of the landscapes of the Bay Region, all with the common goal of restoring the Chesapeake watershed to a healthy ecosystem; and

WHEREAS, this partnership is embodied in the 1987 Chesapeake Bay Agreement, signed by the States of Maryland, Pennsylvania and Virginia, the District of Columbia, the Chesapeake Bay Commission, and the Federal Government, which reaffirms the commitments of all parties "to restore and protect the ecological integrity, productivity and beneficial uses of the Chesapeake Bay system;" and

WHEREAS, the thirteen Federal agencies which have signed formal agreements to be part of the Chesapeake Bay Program manage public lands, support state implementation through cooperative programs, and bring a broad range of expertise in land, water, air, and living resource management to the restoration effort, and believe the Bay partnership can provide even greater opportunities to achieve ecosystem-based planning and management; and

WHEREAS, the Chesapeake Bay Program is a national leader in the use of sound science to set clear goals and to measure progress in such areas as reductions in nutrient and toxic loadings to the Bay and its tributaries, the recovery of underwater grasses, and the removal of blockages to migratory fish; and

WHEREAS, the Federal Agencies Committee of the Chesapeake Bay Program has supported these efforts through, among other actions, the establishment of Work Groups on Nutrient Reduction and Habitat Restoration, which have initiated a program of nutrient and habitat assessments of major Federal facilities in the Bay watershed; and

WHEREAS, the President, in a Memorandum of April 26, 1994, for the Heads of Executive Departments and Agencies, has directed agencies to adopt environmentally and economically beneficial practices on Federal landscaped grounds, which practices are in many cases similar to those already being proposed in the facility assessments being undertaken by the Chesapeake Bay Federal Agencies Committee; and

WHEREAS, toxic emissions and releases from private industry to the Chesapeake Bay have been reduced by over 50% in five years, and the President, in Executive Order #12856 has recently called for a similar 50% reduction in toxic releases from Federal facilities by 1999, along with progress reporting to begin July 1, 1995; and

WHEREAS, the President with the support of Congress, has established the Corporation for National and Community Service under the National and Community Service Trust Act, under which the National Civilian Community Corps has established its first Operations and Training Center at Aberdeen Proving Ground, on the Chesapeake.

ow, therefore, we, the undersigned representatives of the participating Federal agencies, commit ourselves to managing the Chesapeake Bay watershed as a cohesive ecosystem, and recommit to working together and with the states and other parties to achieve the goals of the Chesapeake Bay Agreement. Specifically, we agree to:

partnership

 work to bring all our programs into the partnership for Chesapeake Bay ecosystem management, and to urge other Federal agencies to become participants with us, where appropriate;

research

 coordinate our research agendas in consultation with the Bay Program's Scientific and Technical Advisory Committee, to address priority management needs for restoration of the Chesapeake Bay; initially including the role of atmospheric deposition in nutrient and toxic pollution of the Bay and the impact on the natural system (NOAA lead);

data coordination • establish a Work Group under the Federal Agencies Committee to assess and evaluate existing ecological resource inventories used by Federal agencies, and to make recommendations to improve coordination, compatibility, standardization, GIS-based data layers and interagency transfer of information by December 31. 1995 (EPA lead);

Anacostia River

 provide full support to the Anacostia River Demonstration Project as an opportunity to apply ecosystem man agement concepts in an urban environment, through a coordinated biennial Federal workplan beginning in F 1995, in concert with the Anacostia Watershed Restoration Committee (Corps of Engineers lead);

- habitat restoration support full implementation of the Bay Program's Habitat Restoration Strategy and related plans by:
  - (1) including innovative use of public and private funding sources, restoration of habitat at Federal facilities and development annually of a list of priority projects for habitat restoration on Federal lands in the watershed (FWS lead):
  - (2) fully implementing all habitat restoration authorities to improve the condition of aquatic, riparian and upland fish and wildlife habitat and assuring beneficial use of clean dredged material to support fish, migratory waterfowl, and other wildlife habitat in the Bay (Corps of Engineers lead);
  - (3) supporting development in the Bay watershed of a policy favoring the creation of forested buffers alon streams, in order to help achieve both nutrient reduction and habitat restoration goals of the Chesaneale Bay Program (USFS lead); and
  - (4) providing technical assistance in fish passage design, providing stock for restoring newly opened spawning habitat, and determining needs for restoring upstream spawning habitat (NOAA lead);

- nutrient reduction commit to do our share to meet the goal to reduce by 40% the loadings of nutrients to the Bay by 2000 through (1) supporting the goals and action items of the tributary strategies as they are affected by Federal lands and programs;
  - (2) developing by December 31, 1995, a Special Tributary Strategy for Federal lands in the District of Columbia where the Federal Government is a major landholder (EPA lead);
  - (3) delivery of Federal assistance by integrated resources planning on a watershed basis to deal with nonpoint sources of pollution, consistent with the 1993 Agreement between the USDA and the Bay Program (SCS
  - (4) completing upgrades of wastewater treatment facilities to remove nutrients at Federal facilities, with priority on facilities in excess of 0.5m gallons per day being upgraded by January 31, 2000, to levels consistent with the applicable tributary strategy (DOD lead);
  - (5) completing demonstration site assessments for nutrient management using interagency teams on at least one Federal facility in each of the four jurisdictions (DC, MD, PA, VA) by December 31, 1994 (EPA lead);
  - (6) development of an assessment protocol based upon these demonstration projects for use in completing at least five additional assessments annually at Federal facilities in the Basin until September 30, 2000 (EPA lead):

toxic reductions

- aid in the reduction of toxic loadings to the Chesapeake and its tributaries by:
  - (1) significantly increasing the adoption of Integrated Pest Management in the watershed consistent with the Administration's commitment to having Integrated Pest Management implemented on 75% of the country's agricultural lands by the year 2000 (USDA lead);
- (2) using the existing "BayScapes" and other successful programs to expedite compliance with the President's directive on environmentally and economically beneficial landscaping practices on Federal facilities in the Bay watershed (FWS lead); and
- (3) highlighting releases of the Bay's priority Toxics of Concern from Federal facilities in reports under Executive Order #12856 (EPA lead);

federal facilities

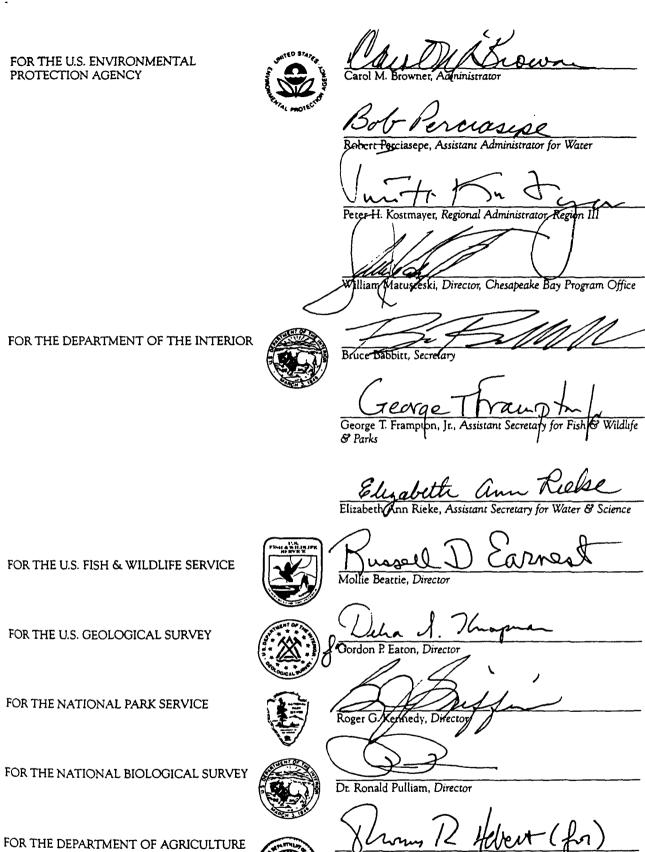
assure that the ecological value of any Federal facilities proposed for closure within the Chesapeake Bay watershed is addressed in the decision-making process for future land uses (DOD lead);

national service

 provide mutual benefits to the Bay and to national service through environmental improvement training and project proposals and other opportunities to work with the 250 Corps members and 45 staff being located in Aberdeen as part of the National Civilian Community Corps, as well as with other initiatives of the Corporation for National and Community Service (NCCC lead).

inally, we agree to report biennially on progress in the implementation of this agreement, beginning April 1, 1995 (EPA lead).

#### FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY



FOR THE U.S. FISH & WILDLIFE SERVICE

FOR THE U.S. GEOLOGICAL SURVEY

FOR THE NATIONAL PARK SERVICE



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Richard E. Rominger, Deputy Secretary

Environment

FOR THE U.S. FOREST SERVICE Jack Ward Thomas, Chie FOR THE SOIL CONSERVATION SERVICE FOR THE EXTENSION SERVICE Dr. Leodrey Williams, Acting Administrator FOR THE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE AS CS Grant Buntyock, Administrator FOR THE DEPARTMENT OF DEFENSE Sherri Wasserman Goodman, Deputy Under Secretary of Defense (Environmental Security) FOR THE DEPARTMENT OF THE NAVY Robert Pirie, Jr., Assistant Secretary for Installations and Environment FOR THE DEPARTMENT OF THE ARMY Robert M. Walker, Assistant Secretary for Installations, Logistics and Environment FOR THE DEPARTMENT OF THE ARMY Acting Assistant Secretary for Civil Works FOR THE DEPARTMENT OF THE Rodney A. Coleman, Assistant Secretury for Manpower, Reserve AIR FORCE Affairs, Installations, and Environment FOR THE DEFENSE LOGISTICS AGENCY Vice Admiral Edward M. Straw, Director FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Administrator

D. James Baker, Under Secretary for Oceans and Atmosphere and

FOR THE FEDERAL HIGHWAY ADMINISTRATION

Jane Garvey Deputy Administrator

FOR THE CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Eli Segal, President and Executive Officer

FOR THE NATIONAL CIVILIAN COMMUNITY CORPS

Brigadier General Donald L. Scott, Director

FOR THE SUSQUEHANNA RIVER BASIN COMMISSION

Kerr Cole, Federal Me

Kerr Cole, Federal Member, U.S. Commissioner

Observers: FOR THE SMITHSONIAN INSTITUTION



Robert McC Adams, The Secretary

FOR THE COMMONWEALTH OF PENNSYLVANIA

Them D. Tirse

FOR THE COMMONWEALTH OF VIRGINIA



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FOR THE STATE OF MARYLAND



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FOR THE DISTRICT OF COLUMBIA



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FOR THE CHESAPEAKE BAY COMMISSION



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U.S. SENATOR PAUL SARBANES

# APPENDIX B Federal Landholdings in the Chesapeake Bay Watershed<sup>1</sup>

Department	Agency	Number of Facilities	Total Acreage
AGRICULTURE	Agricultural Research Service Animal Plant Health Inspection Service Natural Resources Conservation Service US Forest Service		7,998 128 803 824,720
Total Agriculture		13	833,649
COMMERCE	National Oceanic and Atmospheric Administration	3	435
DEFENSE	Corps of Engineers Air Force Army Navy <sup>2</sup> Defense Logistics Agency	18 3 21 40 2	80,296 10,880 205,643 129,019 1,485
Total Defense		84	427,323
INTERIOR	US Fish and Wildlife Service National Park Service	16 26	45,370 279,601
Total Interior		42	324,971
TRANSPORTATION	Coast Guard	10	506
INDEPENDENT AGENCIES	National Aeronautics and Space Admin. Smithsonian Institution	2 1	1,927 2,600
Total, Independent Agencies		3	4,527
GRAND TOTAL		154	1,591,411

<sup>&</sup>lt;sup>1</sup>Does not represent total Federal landholdings as not all agencies with property in the area are represented in the CBP.

<sup>&</sup>lt;sup>2</sup>Includes the Marine Corps Base, Quantico, VA

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