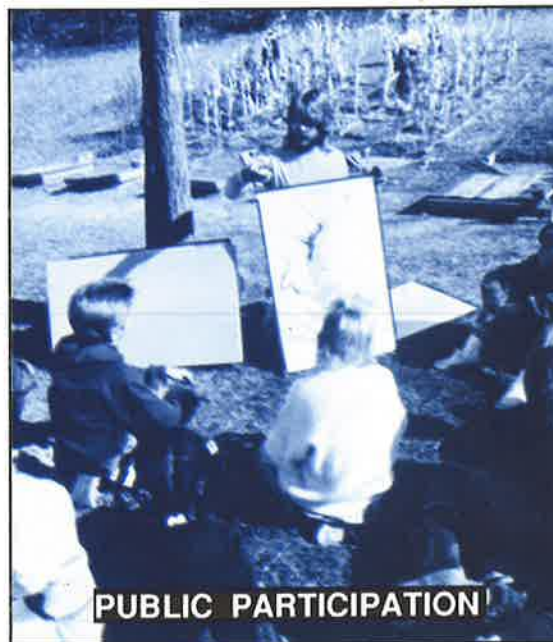
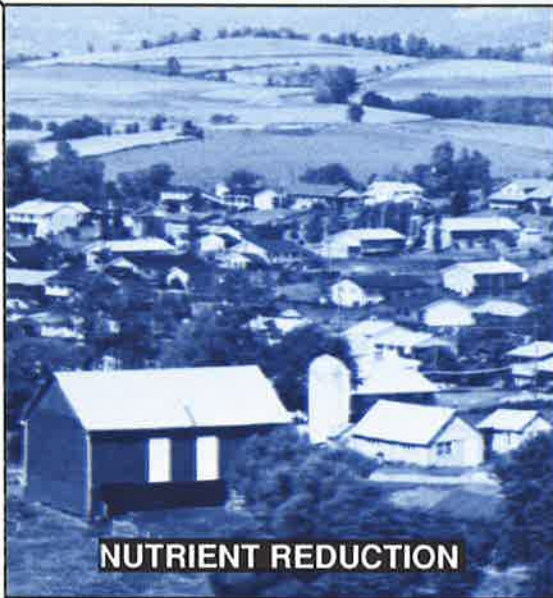


THE CHESAPEAKE BAY PROGRAM ...AN ACTION AGENDA

Envisioning Success



The Chesapeake Bay Program Action Agenda

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The Chesapeake Bay Program Action Agenda

Introduction

We have scored significant gains in our common effort to sustain the productivity and safeguard the future of the Chesapeake Bay. Under the 1987 Chesapeake Bay Agreement, literally hundreds of tasks have been initiated to fulfill its bold promise to restore and protect this treasured estuary.

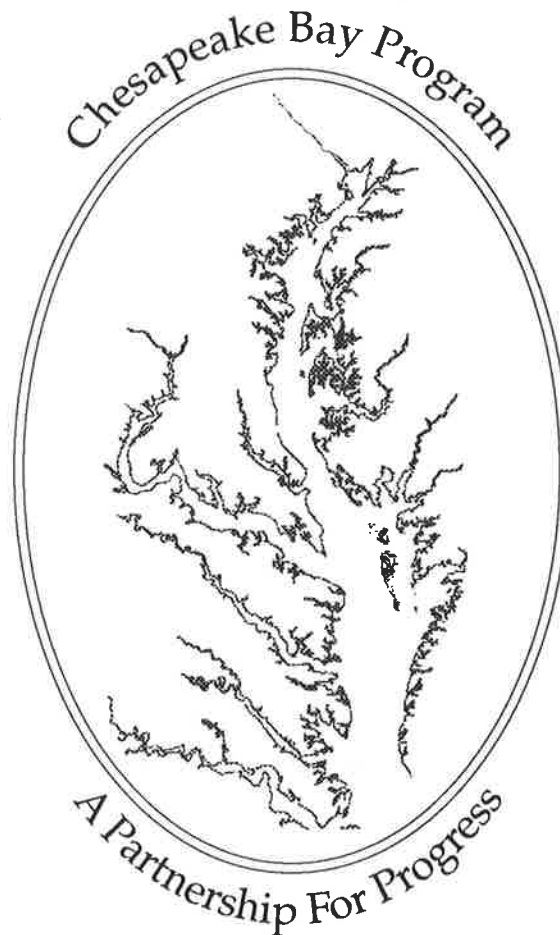
As a result of these efforts, we have witnessed many achievements in each of the major areas established by the Agreement:

- Living Resources
- Water Quality
- Population Growth and Development
- Public Information, Participation and Education
- Public Access
- Governance

Many of the initial cooperative strategies envisioned by the Bay Agreement have in fact been developed. Our main challenge today is to focus our collective energies on the implementation of those strategies and on the elements critical to our future success.

These essential steps have carried us to a new threshold in our mutual endeavor to save a major ecosystem through cooperative action. Our challenge now is to maintain, and even increase, the momentum achieved over the months and years since the creation of the Chesapeake Bay Program. We must look anew at the still formidable challenges ahead and bring into sharp focus the specific objectives that merit priority now and in the months ahead.

The Chesapeake Executive Council has identified four action steps that define the future thrust and direction of the Chesapeake Bay Program:



I. Accelerate nutrient reduction

The scheduled reevaluation of the 40 percent nutrient reduction goal will be the starting point for expanded efforts to control nitrogen and phosphorus. The measurable progress in reducing phosphorus must be extended to nitrogen. We are concluding a phase of the Nutrient Reduction Strategy and are reevaluating the 40 percent reduction goal. The next phase of this strategy requires a heightened commitment and sense of urgency to continue our efforts to control excess nitrogen and phosphorus levels. The findings of the reevaluation will help us to focus our accelerated efforts.

II. Adopt pollution prevention

Coordinated programs to “turn off the tap” at the sources of pollution will achieve the largest gains in environmental protection at the least cost. Industry, agriculture, communities, and individual citizens all have roles to play in this effort. These pollution prevention programs must complement our expanding efforts to reduce the impacts of environmental pollution.

III. Restore and enhance living resources and their habitat

The encouraging signs of striped bass recovery and increasing acreage of vital aquatic vegetation underscore the potential of effective living resources management. Oysters, waterfowl, and other important Bay species—as well as their habitat—merit special management attention. Additionally, we must improve our ability to measure our progress in restoring living resources.

IV. Broaden participation in the Bay Program

We must not forget that people are part of an ecosystem, too. Every citizen of the Bay basin has a stake in the future of the Chesapeake; every citizen can contribute to the success of restoration efforts. We must reach out especially to those who have not participated in the Program previously.

Specific actions to support these four broad initiatives are described in the following pages. Every level of government—federal, state, and local—must be a partner in this effort together with business and industry, agriculture, academic and scientific institutions, civic and community groups, and individuals.

Accelerate Nutrient Reduction

BACKGROUND

The 1988 Nutrient Reduction Strategy specified three phases of actions necessary to achieve a 40 percent reduction of nitrogen and phosphorus to the Bay by the year 2000. The third, and most ambitious phase of that strategy, begins at the end of 1991.

Substantial progress in nutrient reduction has been documented in the Bay during Phases I and II as the result of improved wastewater treatment, a ban on phosphate detergents, and refinements to the nonpoint source control programs. Together these controls have reduced the phosphorus in the Bay by 20 percent since 1985. Yet despite this progress, there is mounting evidence that we must sharpen our focus on the removal of nitrogen. We need to ensure that the pace and extent of future reductions continue for phosphorus and greatly expand for nitrogen in order to achieve our year 2000 goal. Additional actions have also contributed to reductions in nutrients. Compliance with permit conditions has been dramatically improved, now 72 percent better than it was in 1988. Modifications have been made to the operating procedures at several municipal treatment plants to enhance the ability of existing equipment to achieve greater levels of nutrient removal.

In 1990, an Independent Panel was established by the Environmental Protection Agency (EPA) Administrator, William K. Reilly, to evaluate the implementation of nonpoint source control programs in the Bay jurisdictions. The Panel issued a report containing many useful recommendations for improvement of these programs. The Implementation Committee, upon the advice of its Nonpoint Source Subcommittee, responded to this report by developing a plan for future action.

The first steps indicated in this plan are outlined in the following action plan, which includes program refinements, new elements of the program to control neglected sources of nutrients, and the development of basin-wide standards for nutrient management plans. A balance of measures is now needed to accelerate point source controls and to refine and augment existing nonpoint source control programs. These measures would ensure that we meet — or even exceed — the nutrient reduction goals made under the Chesapeake Bay Agreement.

GOAL

To achieve a greater rate of nutrient reduction in the Chesapeake Bay watershed.

ACTION AGENDA

I-(A) Reevaluate the Nutrient Reduction Strategy

The Chesapeake Bay Agreement calls for a reevaluation of the 40 percent nutrient reduction goal to be undertaken. That reevaluation, currently underway, involves a careful review of the success of the program to date as well as ways to make more specific recommendations on protecting valuable Bay and tributary resources. The adoption of consensus recommendations from this review in a timely fashion will provide the fundamental goals for further control and prevention efforts.

I-(B) Expand Nonpoint Source Management Programs

Phase III of the Nutrient Reduction Strategy focuses most heavily on nitrogen. Nutrient management, a method of pollution prevention developed for use in agriculture, is recognized as the most effective means of controlling nitrogen. The Bay Program's emphasis has been on the responsibility of state and federal government and various academic and advisory agencies to promote nutrient management. Greater participation in nutrient management efforts will be encouraged, and involvement of the private sector will be facilitated through development of consistent minimum technical specifications, expansion of educational programs, and development of model certification programs.

I-(C) Accelerate Point Source Controls & Operational Changes

The signatories of the Chesapeake Bay Agreement committed to achieve a 40 percent nitrogen and phosphorus reduction goal through a combination of point and nonpoint source reductions. Some states are using point source controls to achieve their goal. While significant progress, particularly with regard to phosphorus, has been documented in the last five years, an accelerated pace will expedite the improvement of the Bay's water quality. The preliminary results of a pilot study conducted by Virginia Polytechnic Institute and State University indicate that in certain types of sewage treatment plants dramatic nutrient removal can be achieved through operational modifications coupled with minor capital improvements. Based on the promise that this research holds, the states should continue their support, using this engineering approach at other sewage treatment plants, where appropriate.

I-(D) Ensure Point Source Compliance

National Pollutant Discharge Elimination System (NPDES) permits set very specific limits on the quantities of pollutants that may be discharged into the Bay's receiving

waters. Operational difficulties in the treatment process may result in discharges that are not in full compliance for all parameters. However, increased operational efficiency and enhanced compliance monitoring will aid in achieving compliance. In order to achieve improved point source compliance, the states and EPA will implement the Chesapeake Bay Long-Term Compliance Strategy adopted in April 1991.

I-(E) Enhance Educational Efforts

The efforts to control nutrients rely on a combination of incentives, regulations, and educational programs. It is widely recognized that incentives and regulations alone can be costly approaches to attack the entire universe of nonpoint source problems. Educational efforts, on the other hand, can contribute to major life style and work method changes that will help reduce pollutant releases. Consequently, new emphasis will be placed on education with particular attention paid to refining the messages to sectors most important to reach.

I-(F) Control Additional Nutrient Sources

Additional nutrient sources must be carefully assessed to determine how they can contribute to the massive reductions necessary to reach the Program's goals. Atmospheric sources, groundwater and stormwater runoff from urban areas are leading candidates for this assessment.

I-(G) Expand Research

The control of nonpoint sources of pollution is both uncertain because of the diversity of sources, and less understood because of the relative newness of the discipline. Most controls in use today are adaptations of soil erosion control techniques and many have not been carefully assessed for their impacts on water quality. Better information is needed about the water quality impacts of various Best Management Practices and more attention must be devoted to atmospheric deposition and groundwater concerns.

I-(H) Prepare a Continuing Action Agenda

Following the completion of the Reevaluation of the Nutrient Reduction Strategy, a continuing Action Agenda will be prepared to improve other elements of the program in such diverse areas as monitoring, targeting, regulatory development and cooperation with other governmental and private interests. Regulatory controls such as those planned through new stormwater permits in urban areas and strengthened controls in other nonpoint source programs will be pursued.

Adopt Pollution Prevention

BACKGROUND

Pollution prevention is source reduction. It eliminates or reduces the amount of a hazardous substance, pollutant, or contaminant released to the environment at its source. It complements other environmental protection practices as the preferred first step in a hierarchy of risk reduction measures.

Adoption of this concept within the Chesapeake Bay Program broadens the work on pollution control or mitigation to include anticipating and avoiding the generation of pollution before it takes place. While a number of highly successful pollution prevention actions have been employed in the Bay Program to date, the goal serves to enhance and extend this concept to as many components and activities of the program as are feasible. This need is driven by the changing nature of our remaining environmental challenges, such as toxic releases from disparate sources, nonpoint source problems, and the collective impact of individual actions that comprise our major concern with land use and development.

Some examples of pollution prevention in the Bay program include:

- ***Phosphorus Reductions:*** Phosphorus levels in the mid-Bay have decreased 20 percent from 1984 levels. Phosphorus reductions are attributed to: improved municipal treatment, phosphate detergent bans, and soil erosion controls (the latter two represent prevention techniques).
- ***Nutrient Management Plans Reducing Fertilizer Use:*** Farmers have reduced the amount of chemical fertilizers applied to the land, thereby assisting in meeting the nutrient reduction goal of reducing specific nutrients (nitrogen and phosphorus) by 40 percent using a 1985 base to the year 2000. Nitrogen fertilizer use in the watershed has decreased 25 percent from 1980 levels. Bay Program reporting has documented reduced runoff of excess nutrients as evidenced by more than 115,000 acres with Nutrient Management Plans, 1,500 animal waste storage systems, and over 12,000 Best Management Practices (BMPs) completed.
- ***Protecting Water Quality Through Land Use Management:*** Maryland's Critical Areas Program protects water quality through controls over a 1000 foot coastal management zone. Virginia's Chesapeake Bay Preservation Act protects water quality through a two-tiered, land-use management approach to the management of lands affecting the Bay and its tributaries.
- ***Toxics Reductions:*** Overall, toxics releases are being reduced in the Bay watershed. In 1987, EPA Toxics Release Inventory (TRI) reported that toxics releases for all industries in all Bay watershed states were 321.2 million pounds. In 1988, toxic releases decreased 9 percent to 292 million pounds, a 29.2 million pound difference.

- **Pesticide Management:** Maryland and Virginia and federal legislation limit or restrict the sale and use of tributyltin (TBT) boat paint which is toxic to shellfish and other aquatic organisms. Carbofuran has been banned from agricultural use in Virginia to help protect the Bay's water quality and living resources. The EPA and a national manufacturer agreed in May 1991 to eliminate the use of carbofuran under a multi-year phase down. All uses in Maryland will terminate in September 1991. Use of integrated pest management is gaining increased support in the Bay watershed, with specific programs conducted in the three states and the District of Columbia.
- **Waste Minimization:** Waste minimization programs are the beginnings of a major shift in the basic regional approach to waste. All Region III states possess approved capacity assurance plans (under Subtitle C of the Resource Conservation and Recovery Act) which include the development of waste minimization programs.

Building on these successful examples of pollution prevention, the Bay Program plans to strengthen its focus and the use of this approach. Consequently, the following Action Agenda identifies a framework for future implementation efforts. The highest priority areas for implementation are activities in the following categories or sectors: Growth Management & Land Consumption, Energy Efficiency, Agriculture and Pesticides, Industrial Toxics, Oil Spill Prevention, Transportation, and Education/Participation.

GOAL

To adopt pollution prevention as the preferred approach for reducing ecological and human health risks in the Chesapeake Bay region.

ACTION AGENDA

II-(A) Growth Management & Land Consumption

- Develop and implement, where appropriate, state-specific Growth Management Plans in response to the 2020 Report to promote sustainable development.
- Provide a greater level of information on the environmental and resource costs of uncontrolled growth to the general public and decision-makers at all governmental levels.
- Provide local government decision-makers with localized land use and environmental impact information using geographic information systems (GIS) to assist them with development decisions affecting the health of the Bay.
- Encourage stream protection through forested and vegetated buffer zones surrounding stream banks to reduce nutrient runoff.

II-(B) Energy Efficiency

- Promote the adoption of "Green Lights" programs by governments, business and industry in the Bay region to conserve energy in facilities. The Green Lights program encourages the use of energy-efficient lighting technology which reduces energy consumption while delivering the same or better illumination.

- Encourage utility rate restructuring to facilitate energy conservation and least cost utility planning.
- Encourage government and the private sector to incorporate stronger energy conservation/efficiency elements into their energy plans.

II-(C) Agriculture and Pesticides

- Support strong state programs to encourage the implementation of Nutrient Management Programs for agriculture to reduce fertilizer use and runoff.
- Encourage states to establish and enforce animal waste regulatory programs that include special provisions for operations that have a high concentration of animal units.
- Support development and implementation of effective state integrated pest management (IPM) programs and state pesticide regulatory programs. Initiate or expand urban IPM programs in selected states through demonstration projects.
- Develop and implement the Bay Pesticides Management Index and Registry to promote the use of alternative environmentally preferable pesticides and pest control practices in the basin.

II-(D) Industrial Toxics

- Encourage companies in the Bay watershed to participate in the national "33/50 Program" to voluntarily reduce releases and off-site transfers of a targeted set of 17 select chemicals. The project calls for a 33 percent reduction in the discharge of these chemicals by the end of 1992 and a 50 percent reduction by 1995. Companies participating in this program are encouraged to use pollution prevention practices to achieve the desired reductions. Federal facilities (DoD among others) will be requested to participate in this program in the Bay region. Industry also will be encouraged to achieve voluntary reductions of the 14 chemicals on the Bay Program's Toxics of Concern List.
- Develop prototypes for a region-wide waste exchange network for industrial wastes so that discarded materials from one industry might be reused effectively by another.
- Ensure regular, wide-spread distribution of the Bay's Toxics Loading Inventory, a computerized database, as a means for full public awareness of the source of loadings in the Region.
- Encourage state pollution prevention initiatives with emphasis on maximizing the useful lives of Publicly Owned Treatment Works (POTWs) through industrial wastewater pretreatment, multi-media source reduction, water conservation measures and technical assistance.
- Encourage development and refinement of state programs to regulate toxic air pollutants not now regulated by EPA under the Clean Air Act.

II-(E) Oil Spill Prevention

- Secure a Memorandum of Understanding between the EPA and the United States Coast Guard to help ensure a close working relationship in the implementation of additional safeguards to prevent and mitigate oil spills under the Oil Pollution Act of 1990. Seek the designation of the Bay as a critical or sensitive planning area for enhanced preparedness under the Act.

- Evaluate regional or national options which can be employed to manage and/or limit oil exploration and development activities in the Atlantic Ocean in any area where an oil spill could result in oil reaching the mouth of the Bay and cause irreparable damage to living resources.
- Continue support for existing state efforts to prepare for and prevent oil spills in the Bay and its tributaries.

II-(F) Transportation

- Support transportation control measures regarding emission reductions under Section 108 (f) of the Clean Air Act of 1990. Measures which must be evaluated include car pooling, mass transportation, and employee subsidies for those who take mass transit. Coordinate efforts with regional transportation authorities and state and regional planning agencies to reduce vehicle miles traveled and single occupancy vehicles in the Bay region.
- Support legislative efforts to fund alternatives to road construction, such as: mass transit, parking facilities and high occupancy vehicle lanes.
- Promote Transportation Management Associations (TMAs), a membership-sponsored service, to work with local governments, developers, and businesses on improving efficiency of travel by organizing ride-sharing programs in suburban/urban congested areas.

II-(G) Education/Participation

- Challenge Bay committees and subcommittees to identify and implement pollution prevention efforts in their planning activities.
- Initiate workshops for the public, industry and scientists to help each sector increase its awareness of the pollution prevention concept and provide answers to the question: "What can I do to practice pollution prevention?" Challenge research scientists to explore additional pollution prevention source reduction techniques.
- Promote the Department of Defense's Tidewater Interagency Pollution Prevention Program (TIPPP) in the Bay region. A joint DoD/EPA program, TIPPP seeks to demonstrate pollution prevention techniques on a community-wide basis. Designate the Chesapeake Bay region as a "Geographic Demonstration Area" for testing of new pollution prevention strategies and projects.
- Conduct a major Ground Water Protection forum to assess the adequacy of protection programs and policies in the region and to obtain public comment on national policy changes. The national Ground Water Task Force recommendations can provide a framework for these discussions.
- Support local efforts to develop household hazardous waste management programs. Coordinate training programs and workshops with the Local Government Advisory Committee.
- Establish a separate Chesapeake Bay Pollution Prevention computerized database in the national Pollution Prevention Information Clearinghouse as a means of transferring information on Bay-related prevention projects, initiatives, meetings, etc.

Restore and Enhance Living Resources and Their Habitat

BACKGROUND

"The productivity, diversity and abundance of living resources are the best ultimate measures of the Chesapeake Bay's health" (Chesapeake Bay Agreement). Therefore, it is critical that the Bay Program set forth benchmarks for success—measures that can be used to evaluate the health of the Bay.

We are beginning to see signs that living resources are recovering. The response of the striped bass to coordinated and cooperative management efforts is a national success story. Submerged aquatic vegetation (SAV or underwater grass) acreage is increasing in the Potomac and the upper Bay. Benthic or bottom dwelling organisms are increasing in type and abundance in the outer harbor of Baltimore and in the upper portions of the Patuxent, Potomac, and York Rivers. Approximately, 90 miles of spawning and nursery habitat have been restored by removal of fish passage impediments. However, many species, including oysters, flounder and waterfowl, have not yet shown signs of recovery.

GOAL

- A) To continue to take strong steps to protect and restore Bay fish, shellfish, and waterfowl.
- B) To accelerate efforts to provide necessary habitat.
- C) To set measurable goals or targets for living resources and their habitats to enable us to assess progress.

ACTION AGENDA

III-(A) Provide for Species Restoration and Enhancement of Fish and Shellfish

1. Development of New Plans:

Appropriate harvest management is one of the most critical elements affecting our ability to maintain healthy populations of fish and waterfowl and to restore those in a state of decline.

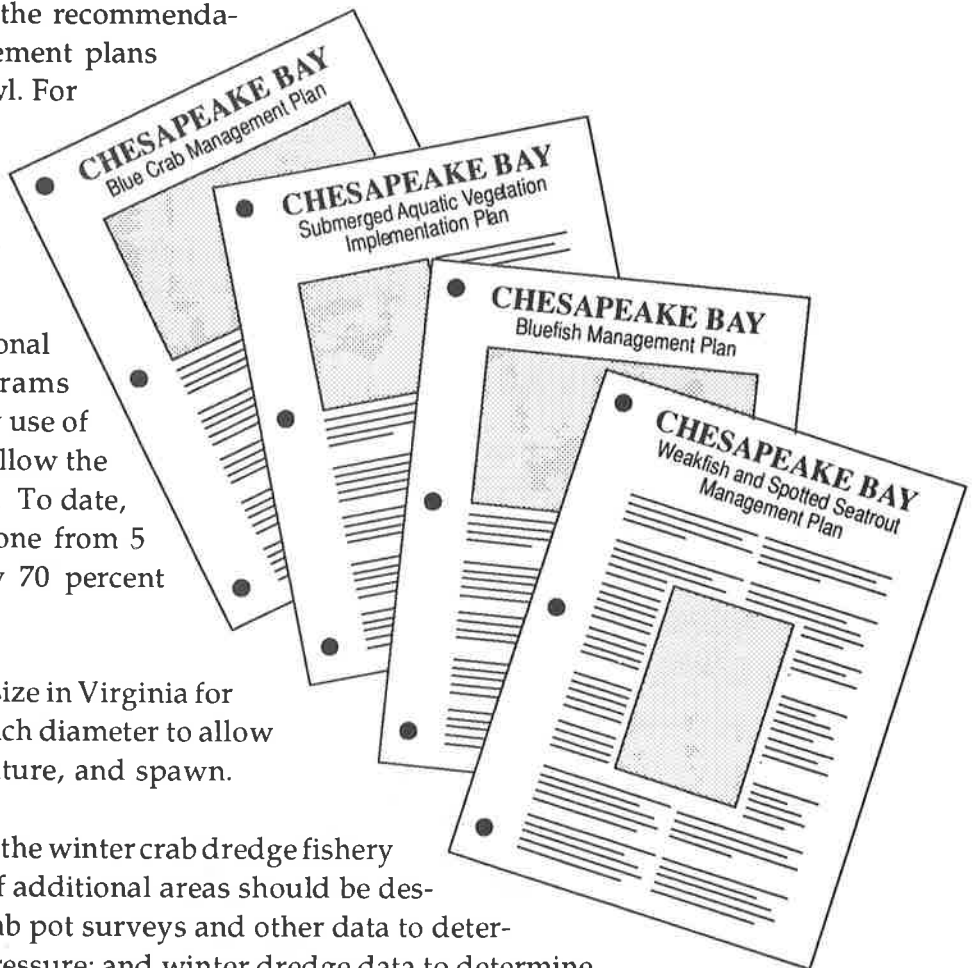
The Bay Program has endorsed Management Plans for alosids (shad), blue crab, bluefish, oyster, striped bass, weakfish and spotted seatrout and waterfowl. Plans for summer flounder, American eel and spot/croaker will be finalized by December 1991. Plans will be prepared for red drum and black drum in 1992.

- Develop new plans for the management of black sea bass, tautog, Spanish mackerel, and king mackerel and catfish by 1993.

2. Implementation of Existing Plans:

We must follow through on the recommendations of our existing management plans for fish, shellfish and waterfowl. For example, Virginia and Maryland have recently taken action to implement the Blue Crab Management Plan. Measures include:

- Conducting major educational and promotional programs which advocate voluntary use of cull rings in crab pots to allow the escape of undersize crabs. To date, Virginia crabbers have gone from 5 percent to approximately 70 percent voluntary compliance.
- Setting a minimum mesh size in Virginia for peeler pound heads at 1 inch diameter to allow small crabs to escape, mature, and spawn.
- Analyzing information on the winter crab dredge fishery in Virginia to determine if additional areas should be designated as sanctuaries; crab pot surveys and other data to determine amount of fishing pressure; and winter dredge data to determine over-wintering populations and the effects of the previous summer's (1990) recreational and commercial harvest to develop estimators of future harvest levels.



To ensure that the blue crab remains at a healthy level we will work with the appropriate organizations and legislative bodies to resolve the following issues, among others:

- Promote pending legislation in Virginia to have a maximum 6 foot dredge used in the winter fishery. Less area would be covered leaving crabs for spawning and for the summer fishery.
- Investigate the licensing of crab shedding operations to minimize peeler loss.
- Discuss daily time limits in Virginia, Maryland, and by the Potomac River Fisheries Commission to stabilize harvest.
- Review consistent soft crab size limits to increase the meat yield per crab and improve enforcement efforts.

Appropriate priority issues will be addressed for additional species.

- Investigate efforts to enhance wild stocks of oysters, and restore the public fishery through broad-based federal/state/private partnership to promote aquaculture.

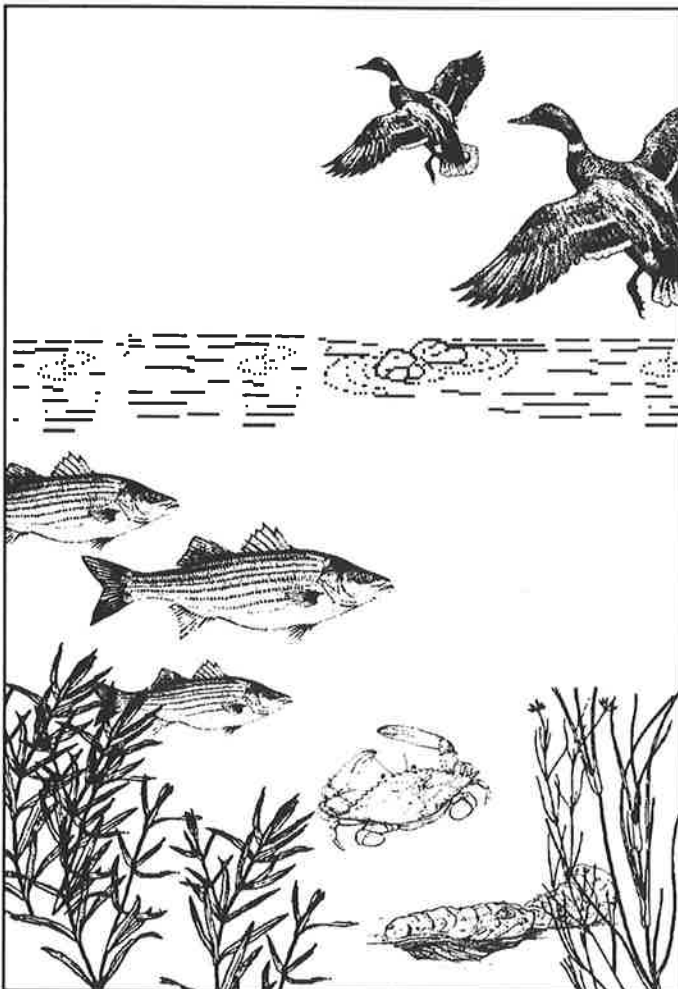
III-(B) Encourage the Restoration and Enhancement of Habitat

The Bay region has lost a significant amount of wetlands, submerged aquatic vegetation, and aquatic reef substrate. In response, the Bay Program has adopted strong policies for the protection and enhancement of SAV and wetlands.

1. Oysters:

Further policy actions need to be taken to restore aquatic reefs as foundation for oysters to restore the oysters' role as primary water filtering organisms and to provide safe resting and feeding areas for fish.

- Develop an aquatic reef habitat plan for oysters by December 1992.
- Develop joint plans under the Coastal America program involving the EPA, the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, and the Army Corps of Engineers in partnership with the states to provide funding, expertise and equipment in a Bay-wide effort to rebuild oyster reefs in historic oyster growing areas.
- Explore other funding options from public and private sources for the reconstruction of oyster reefs and to address the problems of oyster disease.



2. Migratory Fish:

Another initiative designed to restore habitat is the Bay-wide fish passage program. Efforts to remove barriers to allow fish to reclaim traditional spawning and nursery areas have been successful through effective cooperation among jurisdictions, the Federal government, and the private sector.

Since completion of the Fish Passage Strategy in December 1988 and its subsequent Implementation Plan in December 1989, 90 miles of historic habitat have been opened. This has occurred through a combination of opening blockages (James River, Stoney Run, Morgan, Deep and Beaverdam Creeks), ladder construction (Winters Run, Patuxent and Chickahominy Rivers), and a fish lift on the Susquehanna River. In addition, significant effort has been expended to maintain, create or expand on the trap/transport and hatchery components of reintroduction programs.

- Create additional nursery and spawning areas:
 - Maryland: to focus on completing passage in the Patapsco, and target areas on the Patuxent, Tuckahoe and Anacostia Rivers.
 - Pennsylvania: to work with project owners to provide passage over the dams on the Susquehanna upstream of the Conowingo Dam.
 - Virginia: priority passage projects will involve the James and Rappahannock Rivers along with a shad restoration program being planned for the James River.
 - District of Columbia: to provide passage in Rock Creek.
- Develop a Habitat Resource Assessment to ascertain the amount of additional habitat that could be provided under various funding options. The Bay Program will also give priority to coordinated efforts to seek additional funding, public and/or private, to accomplish priority fish passage projects.

III-(C) Establish Measurable Living Resources and Habitat Restoration Goals

Restoration targets for shad in the upper Bay and for waterfowl are contained in the Implementation Plans adopted for alosids and waterfowl. The mechanism for measuring success in restoring wetlands will be determined based on the accountability built into the Policy's goal of "No Net Loss/Long-Term Gain."

1. Fish and Shellfish:

An initial basis for measuring progress for other fish species is being developed pursuant to the following schedule:

- Establish restoration targets for weakfish and summer flounder (by December 1991) and bluefish, alosids, and striped bass (by July 1992).
- Provide the Executive Council by December 1991 with a schedule for developing similar targets for oysters and blue crabs.

2. Submerged Aquatic Vegetation:

The SAV is one of the main indicators of the Bay Program's success or failure to achieve adequate water quality.

The amount of light and nutrients necessary for the survival of SAV are being defined. This will allow the program to take the significant step of specifically linking water quality and living resources survival.

- Set SAV acreage goals for each tidal tributary and the mainstem to provide a measure of progress directly related to living resources. A three-tiered set of SAV distribution restoration goals will be phased in, representing increases in SAV distribution which can be achieved with improvements in water quality over time.

Broaden Participation in the Bay Program

BACKGROUND

Much of the Bay Program's success can be attributed to the open participation and interaction of citizens, scientists, and policy makers. Nevertheless, there still is the need for us to continually expand citizen awareness and involvement. The 1990 census shows significant increases over the past decade in the numbers of individuals in each ethnic group in each of the Bay states. This underscores the need to enhance the representation of under-represented groups in the public participation process and their access to the scientific, technical and policy positions of the Bay Program.

Many groups in the urban areas of the Bay region, as well as the rural poor, have not been typically represented among the citizen network that has made the Bay restoration successful. Consequently, this initiative seeks to solicit the talents of citizens of African, Hispanic, Asian, and Middle-eastern descent, among others. Additionally, the initiative seeks greater involvement of rural poor for whom the productivity of the Bay is of economic importance.

Several efforts toward increasing public participation in the Bay are already underway:

- The Anacostia Public Education & Participation Program of the Interstate Commission on the Potomac River Basin has reached over 40,000 people since it began in 1988. A prime objective of this program is to get every foot of every stream within the Anacostia watershed "adopted" by local residents and businesses.
- The Scientific and Technical Advisory Committee (STAC) has formed a workgroup on Human Resources to develop strategies for involving more women and ethnic minorities. They are conducting a survey of current minority and female employment by public environmental agencies in the Bay region.
- The Alliance for the Chesapeake Bay, the Chesapeake Bay Foundation, and other citizen groups are initiating efforts to increase the involvement of inner city and multi-cultural groups.
- State and federal agencies are expanding efforts to recruit minority groups and women for administrative and technical positions. For example, the U.S. Forest Service's role in broadening minority participation in the Bay is as follows: 1) a Forest Service liaison has been leading an ad hoc committee of Bay Program participants to review ways to broaden multi-cultural participation within the Bay Program; 2) a Forest Service representative has

been coordinating efforts with the Bay Program and HBCUs (historically black colleges and universities) in the Bay area; and 3) the Forest Service recently awarded a research grant of \$47,000 to an HBCU to investigate the effects of a pesticide used in forest management on crabs. Another example includes the Soil Conservation Service (SCS) where a representative is carrying out an outreach effort aimed at educating minority landowners on water quality issues. SCS programs are being developed which will direct technical and financial assistance to limited resource farmers. EPA Special Emphasis Groups have participated in articulating the action agenda which follows.

GOAL

To foster continued success of the Bay Program by broadening the participation and involvement of groups not previously active on Bay issues.

ACTION AGENDA

- IV-(A)** Challenge Bay Program participants and citizen groups to increase multi-cultural participation in their activities and recruitment efforts. Bay committees and subcommittees will be requested to undertake activities to incorporate multi-cultural participation in the Bay program.
- IV-(B)** Assign the Public Information and Education Subcommittee the responsibility of ensuring that future reprints and development of Bay Program public information materials and education programs have a broad appeal and reflect the goal of cultivating broader participation. The Subcommittee will be responsible for developing or reviewing all public information documents and releases to ensure that information has broad appeal.
- IV-(C)** Survey multi-cultural interests to help focus and to evaluate the impact of activities undertaken under this initiative. The Communications Steering Committee is proposing to conduct a general public opinion survey regarding Bay awareness and interests which could be used as a vehicle to define the interests and concerns of the various ethnic groups. The Committee should ensure that this survey identifies and samples representatives of ethnic and socio-economic groups in order to help focus and evaluate the impact of activities undertaken under this initiative.
- IV-(D)** Expand the Bay community's outreach network to include groups and agencies working on urban environmental and multi-cultural issues. Coordinate Bay Program efforts with these groups, such as EPA Region III's Urban Environmental Risk Initiative, so as to multiply the coverage of measures taken.

- IV-(E)** Encourage local officials and citizen groups to increase participation in environmental issues among ethnic groups through such activities as sponsoring workshops in inner city or rural areas. Both the Local Government Advisory Committee and the Citizens Advisory Committee should be consulted for the most effective means to accomplish these tasks.
- IV-(F)** Ask each Bay state to sponsor events and/or activities in an urban area(s) and communities; for example: sponsor boat trips or fishing events to promote awareness of natural resources.
- IV-(G)** Step up environmental education efforts in urban and rural elementary and secondary schools to cultivate an early awareness and interest in environmental science and management. For example, support the sponsorship of Environmental Explorer groups to assist young teens to explore careers in the environmental arena.
- IV-(H)** Seek the support of multi-cultural institutional groups such as historically black colleges and universities and other non-governmental organizations for recruiting and educational purposes. Initiate internship and research programs as stated in the Environmental Education Act. Establish a Bay Program clearinghouse for sharing resumes that may offer a pool of qualified individuals from a range of ethnic or minority groups..
- IV-(I)** Direct the Communications Steering Committee to ensure that Bay Program committees and subcommittees consider new "forums" for discussing environmental issues, such as minority professional societies and rural development organizations. For example, seek out speaking engagements at key conferences and events, and publish editorials in targeted publications.
- IV-(J)** Require the Communications Steering Committee and the chairman of the Implementation Committee to report to the Principals' Staff Committee at each of its meetings on progress in achieving this goal and each of the foregoing actions.

Looking to the Future

Just as the Chesapeake Bay is the core of a dynamic, ever-changing ecosystem, so must the restoration program retain the flexibility to adapt to needs and opportunities as they emerge in the future. The themes set forth here will be regularly reviewed and modified as necessary to maintain our progress toward the ultimate objective of a healthy, productive Chesapeake Bay.

There must be no change, however, in the commitment to see the job through. The challenges will not diminish, but will grow more difficult as we seek to move beyond traditional environmental measures to create and construct innovative mechanisms necessary to protect natural resources in the face of rapid growth and development.

Only continued public interest, support and participation can sustain the long-term strategies essential to the success of the Chesapeake Bay Program. Each generation must renew the commitment to protect this national treasure.



ACKNOWLEDGMENTS

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