



Chesapeake Bay Program in 2001: Creating Better Policy for a Better Bay

On June 28, 2000, the Chesapeake Executive Council signed *Chesapeake 2000 (C2K)* – a new and far-reaching agreement that will guide Maryland, Pennsylvania, Virginia, the District of Columbia, the Chesapeake Bay Commission, and the U.S. Environmental Protection Agency (EPA) in their combined efforts to restore and protect the Chesapeake Bay.

Chesapeake 2000 outlines 93 commitments detailing protection and restoration goals critical to the health of the Bay watershed. From pledges to increase riparian forest buffers, preserve additional tracts of land, restore oyster populations and protect wetlands, *Chesapeake 2000* strives toward improving water quality, the most critical element in the overall protection and restoration of the Bay and its tributaries.

Over the past seventeen months, the Bay Program has taken significant strides toward achieving goals set in *Chesapeake 2000*. Following are a few highlights.

Bay Program Adopts New Toxics Reduction Strategy

In December 2000, Bay Program partners adopted a new action plan that set comprehensive goals for preventing the release of chemical contaminants into the Chesapeake Bay and its tributaries. The *Toxics 2000 Strategy* marked the fulfillment of the first major commitment of *Chesapeake 2000*, and committed Bay Program partners to surpassing current regulatory requirements and striving to achieve “zero release” of chemical contaminants into the Bay. Through improved pollution prevention and other measures, the strategy calls for the voluntary phase out of chemical mixing zones and the adoption of new measures to ensure that finfish and shellfish are safe to eat. For the first time, the Bay Program set specific numerical goals to reduce toxics from nonpoint sources such as agricultural and storm water runoff. These goals are further expanded in the Storm Water Directive signed at today’s Executive Council Meeting.

By focusing on areas most impacted by chemical contaminants, including the three major *Regions of Concern* – the Anacostia River, the Elizabeth River and Baltimore Harbor – the strategy calls for implementing plans to clean up existing contaminated sediments and accelerating cooperative efforts to prevent future contamination.

Bay Program Announces New Water Quality Restoration Approach

In August 2001, Bay Program partners unveiled a new process for setting and achieving nutrient and sediment load reductions necessary to restore Bay water quality. This new process, called for in *Chesapeake 2000*, requires Bay Program partners to continue to build on previous nitrogen and phosphorus reduction goals, but instead of measuring improvements against broad percentage reduction goals, success will be measured by the response of the Bay’s living resources.

This new process incorporates elements traditionally found in the regulatory TMDL process, such as criteria, standards and load allocations, but also will be developed and applied through a cooperative process involving six

Visit the Chesapeake Bay Program website:
<http://www.chesapeakebay.net>

states, the District of Columbia, local governments and involved citizens. For the first time, Delaware, New York and West Virginia are joining with EPA, the other Bay watershed states and the District to improve water quality throughout the watershed.

Chesapeake Bay Small Watershed Grants Raise Awareness on Local Level

At an August Bayside ceremony in Annapolis, Bay Program partners presented more than \$ 1.5 million in Chesapeake Bay Small Watershed Grants to 59 community-led organizations and local governments from across the Bay watershed.

The Small Watershed Grants Program, administered by the National Fish and Wildlife Foundation, supports communities in developing and implementing watershed management plans and encourages innovative, local programs that improve water quality and restore important habitats within the Chesapeake Bay basin. By promoting community-based stewardship of local lands, the program provides citizens a greater understanding of the relationship between the condition of their local watersheds and the health of the Bay.

Funded projects parallel commitments set forth in *Chesapeake 2000* and highlight the need for federal and state governments to work with watershed organizations to restore local water quality. Small watershed projects assist local groups in gaining experience and technical expertise needed to improve watershed protection in their communities.

Projects range from citizen water quality monitoring and riparian buffer restoration to oyster gardening, and will take place over the next year in Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia.

Bay Program Unveils New Storm Water Management Plan

At today's annual meeting of the Chesapeake Executive Council, Bay restoration leaders will unveil an innovative plan to improve water quality by controlling storm water's contribution of chemical contaminants, nutrients and sediment to the Bay and its tributaries from federal, state and District-owned lands.

Bay Program partners have set an example for private landowners and local governments by committing to develop new technologies to reduce storm water pollution and enhance existing storm water management practices on government lands.

Given projected increases in urban and suburban growth, managing storm water is one of the most important priorities Bay Program partners will undertake to improve water quality and sustain progress in restoring the Bay's living resources. This directive focusing on government lands is an important step in that process.

Bay Program Partners to Continue to Lead the Restoration in 2002

In the upcoming year, Bay Program partners plan to expand efforts to include new approaches key to the revitalization of the Bay and its tributaries. In 2002, *Chesapeake 2000* calls on the Bay Program to:

- develop and implement a strategy to achieve a tenfold increase in native oyster populations by 2010;
- implement a strategy to accelerate protection and restoration of Bay grasses;
- set new goals and schedules for additional passages for migratory and resident fish; and,
- develop and implement a ballast water plan for the Bay and its tributaries.

Visit the Chesapeake Bay Program website:
<http://www.chesapeakebay.net>

Chesapeake Bay Program in 2001: Measuring Success through Living Resources

As the Bay Program has always focused on resource-oriented measures of success, the health of the Bay's plants and animals is crucial for gauging restoration progress. Below are highlights concerning key Bay living resources.

Chesapeake Bay Bald Eagle Continues Resurgence

Bald eagle populations have reached a twenty-three-year high in the Chesapeake Bay watershed, with 2000 counts showing 533 active nests fledging 813 eaglets – nearly a 10 percent increase from the previous year. In addition, an active nest with a fledgling has been recorded in the District of Columbia for the first time since the 1940s.

Increases are the result of the bald eagle population resurgence in the Maryland and Virginia portions of the watershed. In Virginia, 259 active nests produced 394 young, while in Maryland, 256 active nests produced 395 young. In the District of Columbia an active nest with a fledgling was found near Bolling Air Force Base, downstream from the confluence of the Anacostia and Potomac Rivers. Due to the absence of large, open waters, Pennsylvania is home to only 17 active nests and 23 young.

Increased bald eagle populations have benefitted from numerous state efforts and Baywide restoration programs aimed at improving the overall quality of local waters and the Bay. Land preservation and forest restoration will continue to improve important eagle habitat, while water quality improvements increase the eagle's available food supply.



Because of extensive habitat protection and restoration efforts, improved water quality and the banning of the pesticide DDT, Chesapeake Bay bald eagle populations have greatly increased over the past two decades.

Bay Program Meets 2000 Waterfowl Goals for Fourteen Species

In May 2001, the Bay Program announced increases in several species of waterfowl living in the Bay watershed, with twelve of twenty-one monitored species meeting year 2000 population goals set in 1990 by the Chesapeake Executive Council.



The Chesapeake Bay is located along the Atlantic Flyway and is a favored winter residence or stopover for many species of waterfowl on their way south from summer breeding grounds.

Bay scientists attribute increased numbers of waterfowl to current restoration efforts in the Chesapeake Bay, the Atlantic Flyway and other areas that provide habitat to many species. Through the combined efforts of citizens, landowners, conservation groups and government entities, improved conditions on the breeding grounds and migratory routes have led to more waterfowl in the Chesapeake region.

Nine species of waterfowl did not reach population goals in 2001. Increased competition with non-native and invasive species for limited resources, poor weather in the arctic breeding grounds and degradation of habitat have hampered the recovery of these waterfowl.

Visit the Chesapeake Bay Program website:
<http://www.chesapeakebay.net>

Bay Grasses Increase in Upper and Lower Bay Regions; Middle Bay Loses Ground

In May, the Bay Program announced that the distribution of Chesapeake Bay submerged aquatic vegetation (SAV) slightly increased to 69,126 acres Baywide. Acreage increases in the upper and lower portions of the Bay were mostly offset by the loss of Bay grasses in middle portion of the Bay, resulting in a one percent Baywide increase over previous measurements.

Aerial surveys revealed that total Bay grass acreage in the upper Chesapeake increased by 36 percent to 14,814 total acres and by 5 percent to 20,847 total acres in the lower Bay. Middle Bay data show a net loss of 9 percent to 33,465 total acres.

Scientists believe that middle Bay losses are likely due in part to a large-scale algae bloom known as "mahogany tide" that occurred in the spring of 2000 blocking light from reaching newly sprouting grasses. Bay grasses are important to the overall health of the Chesapeake Bay because they produce oxygen, provide food for a variety of animals, provide shelter and nursery areas for a variety of fish and shellfish including juvenile rockfish and crabs, reduce wave action and shoreline erosion, absorb nutrients such as phosphorus and nitrogen and trap sediments. Recent improvements in water quality are a contributing factor in Bay grass resurgence.



Chesapeake Bay is home to sixteen different types of underwater grasses which serve as vital nursery habitat to many species of Bay fish and shellfish.

2000 Oyster Harvests Down, but Oyster Restoration Programs Expand

Recent declines resulting from overharvest, disease, pollution and loss of oyster reef habitat showed signs of reversing between 1997 and 1999 as harvests increased. However, 2000 harvests were below 1999 levels primarily due to disease-driven high mortality in the lower Bay. In addition, oyster spat set was very poor last year in both Maryland and Virginia portions of the Bay due to low salinities during much of the summer.

To help reverse this trend and meet the *Chesapeake 2000* goal of a tenfold increase in native oysters by 2010, Congress funded more than \$4.1 million for oyster restoration activities in FY2001, which will also leverage addition funds from state and private sources.



Oyster sanctuaries are only one of the innovative management techniques underway to increase the population of native oysters in Chesapeake Bay.

Managers and scientists believe that the creation of oyster sanctuaries is key to their recovery. These sanctuaries, placed in areas of varying salinity where recruitment of young oysters is high, are off-limits to commercial and private oyster harvesters. More than 28,000 acres of sanctuary were designated between 1996 and 1999. Within those designated areas, more than 260 acres of oyster habitat have already been constructed.

In 2002, Bay Program partners plan to unveil a new strategy for returning significant oyster populations to the Bay.

Visit the Chesapeake Bay Program website:
<http://www.chesapeakebay.net>

Shad Populations Reach Highest Levels since 1980s

Recent stocking efforts, a Baywide moratorium on shad fishing and the development of fish passages on the Susquehanna River have helped to increase the number of shad returning through Conowingo Dam from several hundred a year the early 1980s to 194,000 in 2001 – still far short of the target of 1.89 million.

Stocking efforts in 2001 continued to exceed goals, with 31 million American shad fry and fingerlings reared in hatcheries and released into Bay tributaries, bringing the total number stocked by the Bay states, the U.S. Fish and Wildlife Service and tribal governments up to 320 million between 1986 and 2001.

In addition to American shad, Maryland cultured and released nearly 5.3 million hickory shad fry and fingerlings into Bay tributaries in 2001.



The construction of fish passages has greatly expanded the number of river miles available for annual spawning runs throughout Chesapeake Bay tributaries. Bay Program partners committed to reopening 1,357 miles of river habitat by 2003.



Due largely to fishing moratoria in the 1980s, Chesapeake Bay rockfish populations have reached levels not seen for generations.

Chesapeake Bay Rockfish Populations Continue to Thrive

Striped bass, or rockfish, is one of the most important fisheries on the Atlantic coast. On January 1, 1995, the Atlantic States Marine Fisheries Commission declared the stock restored. The Striped Bass Juvenile Index recorded an increase from 2000 to 2001 and achieved its restoration goal for the seventh year in a row.

Major factors in the past decline of striped bass were overharvesting and the loss of habitat. Habitat restoration and fishing moratoria in Maryland and Delaware from 1985-1990, and in Virginia from 1989-1990, are credited for the historic restoration of the striped bass stock.

Blue Crab Advisory Committee Calls for Reductions in Harvests

Chesapeake 2000 calls on Bay Program partners to establish harvest targets for the blue crab fishery. In December 2000, the Bi-State Blue Crab Advisory Committee finished its review of the fishery and agreed to set new limits on annual blue crab harvests in Maryland and Virginia.

The committee recommended that at least 20 percent of the blue crab breeding stock be left each year to help restore the blue crab population. The committee also identified 10 percent of the breeding stock as the minimum threshold by which the blue crab population could survive and recommended a 5 percent reduction in harvests in each of the next three years.



The 2000 Chesapeake Bay blue crab harvest of 51 million pounds was well below the average of about 75 million pounds.

Visit the Chesapeake Bay Program website:
<http://www.chesapeakebay.net>