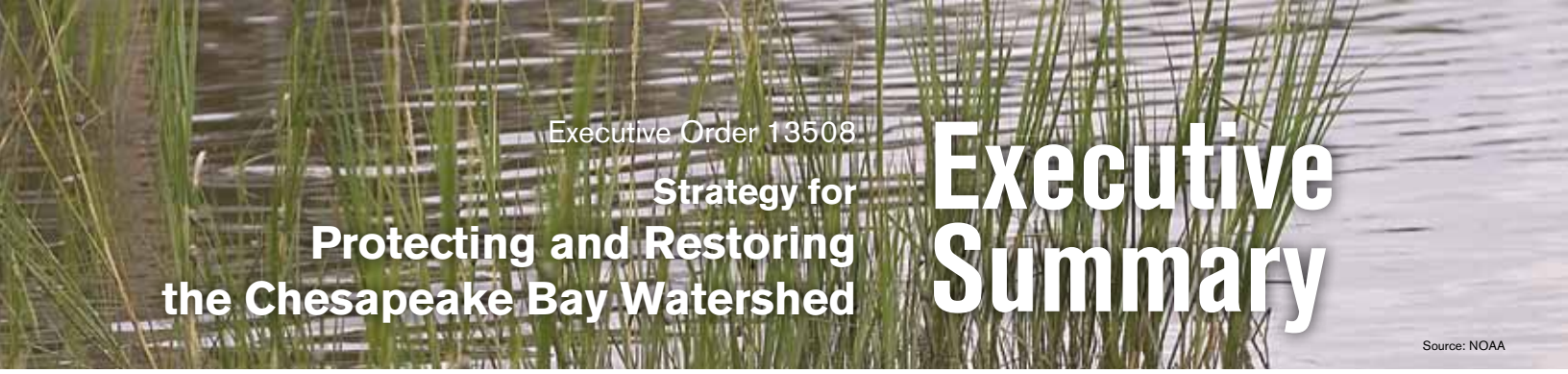


Executive Order 13508

Strategy for

Protecting and Restoring the Chesapeake Bay Watershed

Executive Summary

Source: NOAA

The Chesapeake Bay watershed is one of the most extraordinary places in America. The nation's largest estuary and its network of streams, creeks and rivers hold tremendous ecological, cultural, economic, historic and recreational value for the region and its citizens. But the Bay and its tributaries remain in poor health, with polluted water, low populations of fish and shellfish, degraded habitats and landscapes lost to development.

May 12, 2009 was a historic day for the Chesapeake Bay and its watershed. On that date, President Obama issued Executive Order 13508 on Chesapeake Bay Protection and Restoration. In the Executive Order, President Obama declared the Chesapeake Bay a "national treasure" and ushered in a new era of federal leadership, action and accountability. The purpose of the Executive Order is "to protect and restore the health, heritage, natural resources, and social and economic value of the nation's largest estuarine ecosystem and the natural sustainability of its watershed."

To bring the full weight of the federal government to address the Chesapeake's challenges, the Executive Order established the Federal Leadership Committee (FLC) for the Chesapeake Bay, which is chaired by the Administrator of the U.S. Environmental Protection Agency and includes senior representatives from the departments of Agriculture, Commerce, Defense, Homeland Security, Interior and Transportation. The Executive Order charged the FLC with developing and implementing a new strategy for protection and restoration of the Chesapeake region.

The Executive Order acknowledges that although the federal government should assume a strong leadership role in the restoration of the Bay, success depends on a collaborative effort involving state and local governments, businesses, non-governmental organizations and the region's residents. To develop the strategy, federal agencies consulted with the six Bay watershed states, the District of Columbia and the Chesapeake Bay Commission, engaged key stakeholders and held public meetings.

Vision for the Chesapeake

As a guiding foundation for the strategy, federal agencies drafted a vision statement that describes the desired conditions of the Chesapeake Bay and its watershed. Achieving this vision is an important commitment to the citizens of today and generations of tomorrow.

A Chesapeake watershed with:

- clean water that is swimmable and fishable in streams, rivers and the Bay
- sustainable, healthy populations of blue crabs, oysters, fish and other wildlife
- a broad network of land and water habitats that support life and are resilient to the impacts of development and climate change
- abundant forests and thriving farms that benefit both the economy and environment
- extensive areas of conserved lands that protect nature and the region's heritage
- ample access to provide for public enjoyment
- cities, towns and neighborhoods where citizens are stewards of nature

Developed by the Federal Leadership Committee for the Chesapeake Bay

Executive Summary

Focus of the Strategy

The progress of the past several decades has not been sufficient to fully restore and protect the Chesapeake Bay watershed. Federal agencies recognize the need to fundamentally shift efforts, take bold action and increase accountability. The strategy includes several areas of focus that will lead to greater success.

Launching major initiatives & accounting for progress:

- **Launching major environmental initiatives:**
  - Establish rigorous new regulation and enforcement to implement all pollution controls for clean water.
  - Put new agricultural conservation practices on 4 million acres of farms.
  - Protect 2 million acres of land important to environment, farms, forests and people.
  - Restore oysters in 20 tributaries.
- **Short-term action:** To accelerate the pace of restoration and protection, many actions occur in the next few years, and many of the actions are "on-the-ground" and "in-the-water" throughout the Chesapeake watershed.
- **Two-year milestones**: To increase accountability, federal agencies will establish milestones every two years for actions to meet environmental goals. These will support and complement the states' two-year milestones for water quality.
- **Measureable environmental goals:** Actions are designed to accomplish specific and measureable improvements in water quality, habitat recovery, fish and wildlife protection and land conservation.

Partnering with communities:

- **For the entire region:** The strategy is about much more than the Chesapeake Bay. It is about restoration and protection needed in communities around the 64,000-square-mile watershed, across the landscape and in thousands of streams, creeks and rivers. The natural resources of the Chesapeake region are important to the lives and livelihood of 17 million people.
- **Supporting local efforts:** Local communities have the greatest interest in and ability to impact conservation of their local environment. The strategy is designed to directly support the restoration activities of local governments, watershed groups, county conservation districts, landowners and citizens.
- **Benefiting economies and jobs:** Many federal actions will provide economic benefits for communities, citizens and the region, including conservation of working farms and forests, expanded oyster aquaculture, support for conservation corps programs and green jobs, and development of an innovative environmental marketplace for selling, buying and trading credits for pollution reductions.

Deepening the federal commitment:

- **Unprecedented level of activity:** The strategy reflects an unprecedented depth and breadth of federal actions and resources dedicated to the Chesapeake region.
- **Targeting of resources:** Agencies will be aggressively targeting resources where they can have the most impact – areas with the most pollution and potential for runoff, with the highest potential for restoring fish and wildlife, and with habitats and lands most in need of protection.
- **Federal leadership by example:** The federal government is one of the largest landowners in the region (owning 5.3 percent of land in

the watershed). The federal government will lead by example by restoring water quality, habitats, fish and wildlife, conserving lands, and increasing public access on its properties.

- **A comprehensive approach:** The Chesapeake Bay watershed is an ecosystem – a network that includes people, plants, fish and wildlife and the places they live, each one related to and connected to the other. The strategy recognizes this interdependence, and the actions included in the strategy are designed to benefit the entire ecosystem.

Regional Strategy Reflects National Initiatives

In developing the Chesapeake strategy, federal agencies have incorporated cornerstone principles from several major national initiatives that are guiding overall environmental improvement in the United States, including the Ocean Policy Task Force, the America's Great Outdoors Initiative, and the Interagency Climate Change Adaptation Task Force. Reflecting national policy in a regional strategy further illustrates that solutions in the Chesapeake Bay watershed can serve as a model for restoring ecosystems elsewhere in the country. Federal agencies will be able to share the lessons learned in the Chesapeake with partners on other national initiatives.

Presidential actions that have also shaped this strategy include the Executive Order on Federal Leadership in Environmental, Energy and Economic Performance; the memorandum on Transparency and Open Government; and the Executive Order on Environmental Justice, which calls for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Ecosystem-based management is also among the most significant overarching principles included in this strategy. This approach recognizes the interdependence of all aspects of an ecosystem, including water, fish and wildlife, habitats and land-use. Management actions are guided by this scientific understanding and aim to protect, maintain and restore overall environmental functioning to achieve long-term sustainability of ecosystems and the human communities that depend on them.

Structure of the Strategy

The Executive Order directed federal agencies to "define environmental goals for the Chesapeake Bay and describe milestones for making progress toward attainment of these goals." For the strategy, federal agencies have focused on achieving the most essential priorities for a healthy Chesapeake ecosystem:

- **Restore Clean Water**
- **Recover Habitat**
- **Sustain Fish and Wildlife**
- **Conserve Land and Increase Public Access**

Federal agencies also developed 12 key environmental outcomes that will be achieved through expanded federal actions described in the strategy and ongoing state activities, and will reflect progress toward attainment of the overall goals.

The strategy also features supporting strategies that provide invaluable cross-cutting support to achieving environmental goals or are critical complementary efforts in the restoration and protection of the Chesapeake Bay and watershed. The supporting strategy chapters are:

- **Expand Citizen Stewardship**
- **Respond to Climate Change**
- **Develop Environmental Markets**
- **Strengthen Science**

Restore Clean Water

Goal: Reduce nitrogen, phosphorus, sediment and other pollutants to meet Bay water quality goals for dissolved oxygen, clarity, chlorophyll-a and toxic contaminants.

Why It's Important

Clean water is one of the most precious resources to people and communities throughout the region and is essential for healthy habitats, wildlife and fish, from the most remote streams in the watershed to the depths of the Chesapeake Bay. It is vital to have water that is not polluted, has enough oxygen to support fish, crabs and other aquatic life, and is clear enough for sunlight to reach underwater grasses. In 2009, however, water quality in the Bay was extremely poor, meeting only 24 percent of goals established by the Chesapeake Bay Program. Stream quality in the watershed was also degraded, with 52 percent of the streams having a rating of poor or very poor (based on the index of biological integrity). Significant reductions in nitrogen, phosphorous, sediment and chemical contaminants are needed to achieve water quality goals throughout the Bay and its watershed.

Action Overview

The water quality chapter contains a comprehensive range of actions to achieve this goal, including EPA's establishment and, in partnership with the Bay jurisdictions and other federal agencies, implementation of the Chesapeake Total Maximum Daily Load or TMDL (a rigorous pollution diet for the Bay and region's waterways), rulemaking for expanded regulation of stormwater and concentrated animal feeding operations, a stronger emphasis on enforcement and compliance activities, and increased grant funding for state regulatory programs. The U.S. Department of Agriculture (USDA) will aggressively target its financial resources and technical assistance to priority watersheds, help states meet two-year milestones for implementing agriculture conservation practices, accelerate the development of new conservation technologies, and develop a system for improving the reporting of conservation practices. EPA will coordinate the effort to reduce stormwater pollution from federal facilities and lands and to implement federal land management practices that protect forests, wetlands and waterways. EPA, DOI and NOAA will expand the understanding of the toxic contaminant problem in the Bay and its watershed and develop contaminant reduction outcomes and strategies.

OUTCOMES

Water Quality Meet water quality standards for dissolved oxygen, clarity/underwater grasses and chlorophyll-a in the Bay and tidal tributaries by implementing 100 percent of pollution reduction actions for nitrogen, phosphorus and sediment no later than 2025, with 60 percent of segments attaining water quality standards by 2025. *(Current condition: 89 of the 92 segments of the Bay and its tidal waters are impaired.)*

Stream Restoration: Improve the health of streams so that 70 percent of sampled streams throughout the Chesapeake watershed in a condition of fair, good or excellent as measured by the Index of Biotic Integrity by 2025. *(Current condition: 45 percent of sampled streams rated fair, good or excellent.)*

Agriculture Conservation: Work with producers to apply new conservation practices on 4 million acres of working agricultural lands in high priority watersheds by 2025 to improve water quality in the Chesapeake Bay and its tributaries. *(Current condition: Of the approximately 8 million acres of agricultural working lands in high-priority watersheds, approximately 4 million acres are identified as having soils with the highest potential for leaching and runoff, which may affect water quality. The 4-million-acre target is to apply or expand conservation treatment on virtually all of the most vulnerable agricultural lands.)*


Source: NPS

Recover Habitat

Goal: Restore a network of land and water habitats to support priority species and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.

Why It's Important

Wetlands, forests, fields, streams, underwater grasses and mudflats in the Chesapeake watershed provide thousands of species of plants, fish and wildlife with the places they need to find food, shelter, reproduce and rear their young. Chesapeake habitats also provide "habitat highways" for Atlantic Coast fish populations and birds migrating along the Atlantic Flyway. These habitats play an important role in filtering pollution before it enters waterways. Wetlands serve as holding tanks and water filters for coastal storm surge and heavy rainfall and help prevent costly flood damage. Forest buffers along streams and shorelines provide shade to keep streams cool, food for aquatic organisms and corridors for wildlife movement. Streams are the arteries that connect the watershed and provide not only passage for fish but also a physical connection from every local community to the Bay.

Action Overview

The habitat chapter includes a variety of actions by federal agencies including the U.S. Fish and Wildlife Service (FWS), the National Oceanic and Atmospheric Administration (NOAA), the U.S. Army Corps of Engineers (USACE) and USDA that will restore and protect habitats. For wetlands, this includes actions to sustain the most important marshes, increase incentives for restoration on private land, combat invasive species and strengthen federal coordination on permits with direct impacts on marshes. Efforts to restore vital island habitats in the Bay itself will expand. Forest buffers that benefit stream health will be expanded through increased targeting of restoration and accelerated application of the Conservation Reserve Enhancement Program. Streams will be prioritized and barriers removed to allow fish to return to historical migration routes. The U.S. Department of Transportation (DOT) will work with partner agencies to encourage ecosystem-level planning for mitigation of highway impacts on habitat.

OUTCOMES

Wetland Restoration: Restore 30,000 acres of tidal and non-tidal wetlands and enhance the function of 150,000 additional acres of degraded wetlands by 2025. *(Current condition: 1 million acres of tidal and non-tidal wetlands estimated to be available in the Chesapeake watershed for restoration or enhancement. Between 1998 and 2008, 18,217 acres of wetlands were restored and 97,738 acres were enhanced.)*

Forest Buffers: Restore riparian forest buffers to 63 percent, or 181,440 miles, of the total riparian miles (streambank and shoreline miles) in the Bay watershed by 2025. *(Current condition: 58 percent of the 288,000 total riparian miles in the Bay watershed has forest buffers in place.)*

Fish Passage: Restore historical fish migratory routes by opening an additional 1,000 stream miles by 2025, with restoration success indicated by the presence of River herring, American shad and/or American eel. *(Current condition:*

Source: NOAA

Approximately 1,924 stream miles in the Chesapeake Bay watershed have been opened and are accessible for fish migration. Projects are currently being ranked and prioritized through a collaborative federal and state process designed to strategically target priority projects.)

Sustain Fish and Wildlife

Goal: Sustain healthy populations of fish and wildlife, which contribute to a resilient ecosystem and vibrant economy.

Why It's Important

The Chesapeake Bay is one of the premier fish production areas for the East Coast. More than 250 fish species, both resident and migratory, use the Bay and tributaries for some portion of their life cycles. American and hickory shad, river herring, striped bass, eel, weakfish, bluefish, flounder, oysters, and blue crabs hold tremendous ecological, commercial, and cultural value. More than 300 migratory bird species can be found in the watershed. During the fall, the skies come alive as one million ducks, geese, and swans return to overwinter on the Chesapeake. Managing Bay fisheries and wildlife is critical to restoring and protecting the population of these species and their important place in the ecosystem. Habitat loss as a result of poor water quality, land use and urbanization, climate change, and other human activities is threatening the sustainability of fish and wildlife species. Oyster populations are less than one percent of historic levels. Over 5,000 miles of fish spawning habitat on Bay tributaries remain blocked by man-made obstructions. Key fish and shellfish species have declined dramatically in abundance or productivity.

Action Overview

For the purpose of tracking progress in the Bay and headwaters, this strategy focuses on four species (oysters, blue crab, brook trout and black duck) because they reflect the overall health of their habitat and hold great ecological, commercial and recreational significance. The importance of other species is clearly recognized, and a prioritization framework is described. For oysters, NOAA and USACE will launch a Bay-wide restoration strategy in collaboration with Maryland, Virginia and the Potomac River Fisheries Commission that focuses on priority tributaries, supports expansion of commercial aquaculture and bolsters research on oyster stock, habitat and restoration progress. For blue crabs, NOAA will enhance the science used to support interjurisdictional management and restoration. Along with partners, NOAA will revise the long-term goal for blue crab abundance. For brook trout, FWS will restore key stream habitats, establish a monitoring program in the watershed and consider the impact of climate change in selecting stream habitats for restoration.

OUTCOMES

Oysters: Restore native oyster habitats and populations in 20 out of 35 to 40 candidate tributaries by 2025. *(Current condition: 0 tributaries with fully restored oyster populations; several tributaries with successful living oyster reef habitat.)*

Blue Crabs: Maintain sustainable blue crab interim rebuilding target of 200 million adults (1+ years old) in 2011 and develop a new population target for 2012 through 2025. *(Current condition: 2007-2008: 131 million; 2008-2009: 223 million; 2009-2010: 315 million.)*

Brook Trout: Restore naturally reproducing brook trout populations in headwater streams by improving 58 sub-watersheds from "reduced" classification (10-50 percent of habitat loss) to "healthy" (less than 10 percent of habitat loss) by 2025. *(Current condition: 388 of 1,294 sub-watersheds in the Chesapeake Bay currently classified as "reduced" for brook trout.)*


Source: Ben Fertig/IAN Image Library

Black Duck: Restore a three-year average wintering black duck population in the Chesapeake Bay watershed of 100,000 birds by 2025. *(Current condition: Recent mid-winter aerial surveys estimate the 2007-2009 rolling three-year average at 37,158 black ducks in the Chesapeake Bay.)*

Conserve Land and Increase Public Access

Goal: Conserve landscapes to maintain water quality, habitat, sustainable working forests, farms and maritime communities; and cultural, community and indigenous values. It will also expand public access to the Bay and its tributaries through existing and new federal, state, and local parks, refuges, reserves, trails and partner sites.

Why It's Important

At the heart of the Chesapeake region are the landscapes alongside the Bay and its major tributaries. These treasured landscapes are the special places we revere as individuals, as communities and as a people for their ecological, cultural, historical, economic and recreational values. Yet, many of the Chesapeake's treasured landscapes are threatened. Poorly planned development increasingly pressures both natural and cultural lands. Forests in the region are converted to other land uses at the rate of 100 acres each day. Cropland and pasture land in the Chesapeake Bay watershed have also been influenced by alternative land uses, with approximately 100 acres a day lost to development between 1982 and 2003. Public access to the Bay and its tributaries is also limited.

Action Overview

The land conservation chapter contains numerous actions to achieve this goal, including DOI's plans to launch a Chesapeake Treasured Landscape Initiative, expand land conservation through coordinating federal funding and community assistance, and use strategic geographic information systems in setting conservation priorities. USDA will contribute in collaboration with states and federal partners through a watershed-wide strategy to reduce the loss of farms and forests. NPS will develop a plan and prioritize funding for expanding public access. NOAA will support exploration of land-water conservation priorities. All of these actions will involve a high degree of collaboration, directly engaging state and local government, communities, non-governmental organizations and other federal agencies. DOT, working through its Partnership for Sustainable Communities with EPA and the Department of Housing and Urban Development, will provide technical assistance to communities that undertake development of integrated transportation, housing and water infrastructure plans.

OUTCOMES

Land Conservation: Protect an additional 2 million additional acres of lands throughout the watershed currently identified as high conservation priorities at the federal, state or local level by 2025 including 695,000 acres of forest land of highest value for maintaining water quality.

Public Access: Increase public access to the Bay and its tributaries by adding 300 new public access sites (40 percent increase) by 2025. *(Current condition: 761 public access sites providing access to Bay and its tributaries exist in DC, MD, PA, VA. Data on existing access sites in NY, DE and WV will be collected in the future.)*

Source: NOAA

Supporting Strategies

The strategy also features four chapters on supporting strategies that provide invaluable cross-cutting support to achieving environmental goals or are critical complementary efforts in the restoration and protection of the Chesapeake Bay and watershed. The supporting strategy chapters are:

Expand Citizen Stewardship

Objective: Foster a dramatic increase in the number of citizen stewards of every age who support and carry out local conservation and restoration.

Why it's Important

People tend to protect the places they understand and care about. Regional residents increasingly seek opportunities to reconnect with the outdoors. For citizens of the watershed, the places where people experience the Chesapeake – parks, waterways, refuges, nature centers, museums, etc. – and the places where people spend most of their time – their homes, schools and neighborhoods – provide venues for further engagement and action. Ultimately, meeting the water quality, habitat restoration and land conservation goals described in this strategy depends on engaged citizens who both support stewardship in the larger community and take personal action to carry it out.

Action Overview

Expanding citizen stewardship is a multi-pronged approach that begins with engaging adults through an expansion of Chesapeake conservation corps workforces and the master watershed stewards program, as well as prioritization of citizen stewardship programs in awarding of grants. The U.S. Department of the Interior (DOI) will also build stewardship by enhancing visitor experiences and messaging at Chesapeake sites and trails and by building partnerships with communities and citizens. NOAA will develop stewards of the next generation by expanding hands-on experiences and creating a more robust and comprehensive elementary and secondary school environmental literacy initiative.

Develop Environmental Markets

Objective: Working collaboratively, USDA, EPA, bay states and other federal partners will develop environmental markets for the Chesapeake Bay, including the management infrastructure for measuring, reporting and verifying environmental performance for a suite of ecosystem services.

Why it's Important

Environmental markets are an innovative approach to natural resource management that can accomplish environmental protection goals, encourage new technologies, improve efficiencies, reduce costs and help manage growth. The basic premise of environmental markets is that an entity that needs to reduce impacts to the environment buys credits representing an equivalent or greater amount of environmental improvement from a provider of that improvement. Private landowners will be a major provider of these credits because of their vast land holdings and their ability to install cost effective conservation practices that result in needed environmental improvement. These credits can be verified through standardized scientific metrics to represent a certain level of measurable environmental improvement and may be registered and traded much like any other commodity. Resulting environmental markets have the potential to increase the efficiency, reduce the cost and increase the quality of environmental solutions. The strategy will expand the current suite of environmental market potential to increase pace and scope of conservation by coordinating, and conforming where appropriate, federal and state regulatory requirements to develop a robust market in the Chesapeake Bay watershed.

Action Overview

In partnership with Bay states, EPA will issue guidance concerning credits for nutrient and sediment reduction to accompany the Chesapeake Bay TMDL, which is expected to be final in December of 2010. EPA will work with the newly formed Environmental Market Team to assure that tools and protocols developed by the team are reflected in this and subsequent guidance to greatest extent possible. On a parallel track, USDA will lead, in coordination with EPA and other federal agencies (including DOC, DOI, DOT, DOD, USACE, CEQ and OMB), an interdepartmental Environmental Market Team to establish the broader infrastructure for an effective environmental market in the Chesapeake Bay watershed. This team will address a wide range of issues including defining environmental performance of conservation practices; evaluating tools for measuring conservation practice performance; establishing protocols for setting baselines, developing registries and designing certification processes; creating opportunities for stacking and bundling ecosystem services; and exploring options for insurance mechanisms.

Respond to Climate Change

Objective: Improve information on the communities, habitats and resources at risk from the impacts of climate change and develop products to increase knowledge and capacity to plan for and implement adaptation projects.

Why it's Important

Climate change is one of the most significant challenges to successful restoration and protection of the Chesapeake Bay and its watershed. Although there is still some uncertainty surrounding specific climate change projections, and impacts at the scale of the Chesapeake Bay, expected impacts to the Bay and watershed include sea-level rise; increases in water temperature, acidity and salinity; changing rainfall patterns and increases in rainfall intensity; and changes to freshwater flows with corresponding significant impacts to water quality and habitats. Many of the region's major cities and significant ecosystems are in low-lying areas that are particularly vulnerable to sea-level rise and storm surge. The impacts of climate change extend to infrastructure, habitat, fish and wildlife populations, stream flow, water quality, and valued Bay landscapes and waters. Climate change threatens past restoration gains and the effectiveness of future actions. Adapting to the impacts of climate change involves maintaining or enhancing the resiliency and reducing the vulnerability of the Chesapeake Bay and its watershed.

Action Overview

The climate change chapter contains a host of actions to adapt to the rising challenge of the 21st century. Led by NOAA and the U.S. Geological Survey (USGS), these actions include conducting comprehensive research to identify vulnerable communities and habitats throughout the watershed and assessing the risks posed by the impacts of climate change. This work also involves prediction of changes in pollution loads and monitoring actual climate impacts in the watershed. These agencies will develop tools and training to provide states, local communities and resource managers with effective climate adaptation resources. Agencies will ensure that vulnerable habitats are protected and public infrastructure on federal lands is planned and implemented to increase resiliency to climate change impacts.

Strengthen Science

Objective: Strengthen science to support ecosystem-based adaptive management, to more effectively prioritize, implement, monitor and evaluate the actions and policies needed, and to identify new threats to the health of the Chesapeake Bay and its watershed.

Why it's Important

Restoration and protection of the Chesapeake Bay watershed requires strengthening science and implementing ecosystem-based management. This will require improved monitoring, computer models and research to enhance decision making for all the goals in the strategy. The strategy outlines actions to strengthen science to promote ecosystem-based adaptive management – which will more effectively prioritize, implement, monitor and evaluate the actions and policies needed – and provide early warning about new threats to the health of the Chesapeake Bay and its watershed.

Action Overview

The science chapter and text throughout the strategy chapters outline actions to increase science support for the Chesapeake Bay restoration effort. USGS and NOAA are working with federal, state and academic partners to expand their scientific capabilities in concert with the Chesapeake Bay Program. New decision-support tools and an expanded set of models will allow for better prioritization and adjustment of management activities. USGS and NOAA will lead the establishment of a Chesapeake Monitoring Alliance and Data Enterprise to improve documentation of changes in ecosystem conditions and progress toward environmental goals.

Implementation and Accountability

The final chapter of the strategy focuses on implementation and accountability. This chapter outlines the role and responsibilities of the Federal Leadership Committee in implementing the strategy, as well as the federal government's commitment to increase accountability by establishing milestones every two years for taking action. The final chapter also outlines a series of accountability tools and processes to promote transparency in the planning, tracking, reporting, evaluating and adapting of restoration activities. These tools include:

- **Federal Two-Year Milestones:** Federal agencies will join the states in establishing two-year milestones with many federal efforts designed to support the states and District in meeting their current and future water quality milestones. But federal agencies will also develop appropriate two-year milestones for the other outcomes outlined in this strategy, beyond those for water quality.
- **Annual Action Plan:** The action plan will identify the protection and restoration activities FLC agencies will undertake in the following year to carry out the actions and move toward the goals outlined in this strategy.
- **Annual Progress Report:** The annual progress report will assess the success of the federal agencies' efforts in implementing the actions identified in the preceding year's action plan.
- **Independent Evaluation:** The FLC will arrange for thorough and ongoing independent evaluation of the implementation of the strategy's protection and restoration actions, including progress toward environmental goals.
- **Adaptive Management:** The FLC will adopt an adaptive management process built on the cycle of: set goals, plan actions, implement, monitor, evaluate and adjust.

Greater transparency and integration of federal, state and local actions will be greatly enhanced through *ChesapeakeStat*, a web-based tool designed to provide performance data and information in a format that allows a range of audiences to understand the work being done in the Chesapeake watershed. Over time, this tool will increase accountability by providing greater access to data. When combined with science-based analysis explaining the effectiveness of management actions, it will inform decisions and facilitate adaptive management of efforts. Visitors to the *ChesapeakeStat* website will have the ability to view information about specific restoration activities, spending and progress toward goals and milestones.

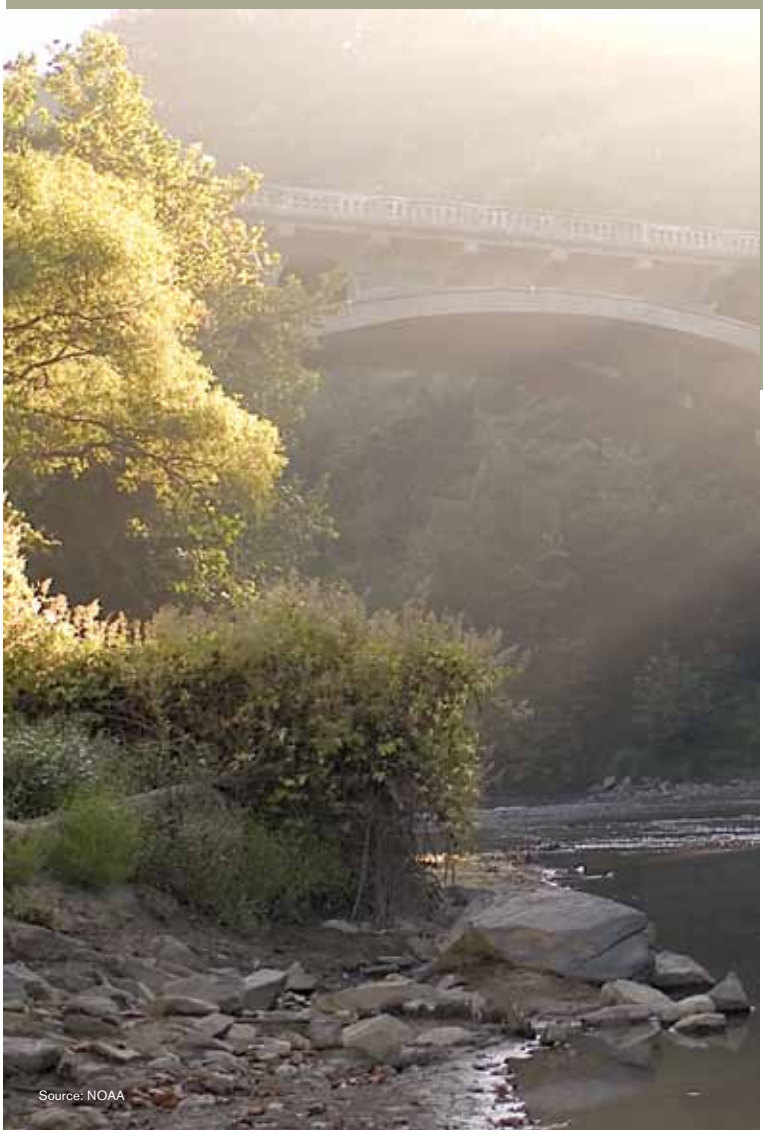
Source: Jane Thomas/IAN Image Library

In Conclusion

Restoring and protecting the Chesapeake Bay and its watershed is a significant challenge, as the last several decades have shown. The wide spectrum of serious environmental problems, combined with the sheer size of the Bay and its 64,000-square-mile watershed, magnify the challenge. Success will depend on an unprecedented level of engagement and collaboration among all levels of government, the private sector, nonprofit organizations and especially the 17 million residents of the watershed.

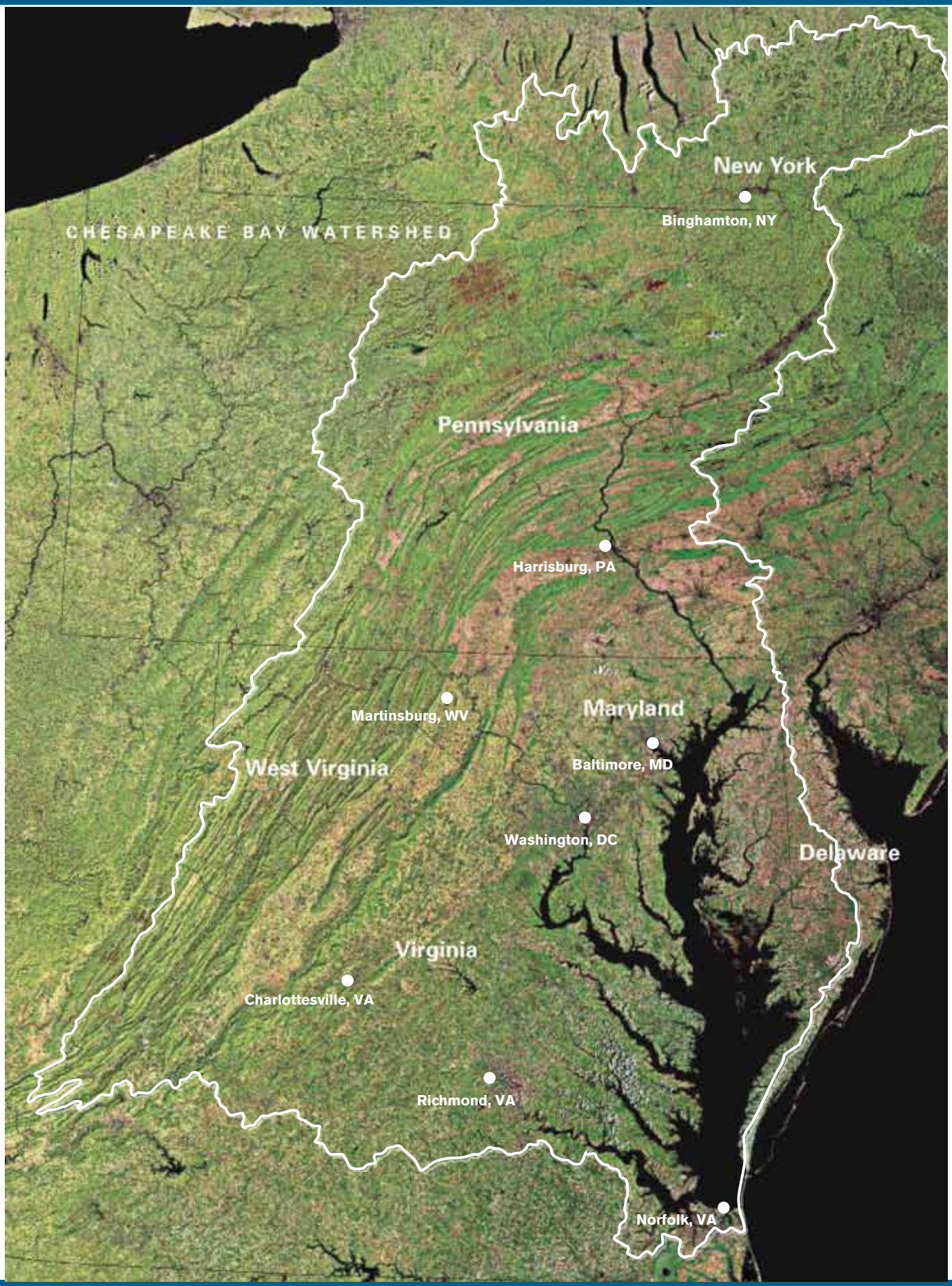
But the increased investment of resources in the Chesapeake Bay and regional landscape – including the thousands of streams, creeks and rivers – will yield a priceless return for the environment, for local and regional economies, for the cultural and historic heritage, and, most importantly, for communities in cities, suburbs and rural areas.

The Executive Order emphasizes the urgency and need for renewed commitment to restoration. The pieces for success are in place around the watershed in the form of leadership, science and public interest. Restoring clean water and protecting nature throughout the region is a duty to the millions of people who call this place home. The generations that come after us will point to this time as a defining moment for reviving the integrity and splendor of the Chesapeake Bay and its watershed.



The Chesapeake Bay Program provides a partnership in which federal agencies, states, local governments and citizens work together to identify and address the most critical challenges facing Bay protection and restoration.

EPA-903-S-10-001
May 2010



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