2010 STATE OF THE

CHESAPEAKE BAY PROGRAM



Image courtesy of Mike Land

Summary Report to the Chesapeake Executive Council
June 3, 2010



A Message from Jim Edward, Acting Director of CBP

New Era Underway for Chesapeake Bay Watershed

We are truly in the midst of a historic time for the Chesapeake Bay and its watershed. The great level of focus on the restoration effort and the number of unique opportunities to make progress are unprecedented. The past year, since the May 2009, Chesapeake Executive Council meeting, has been especially busy for this partnership, as outlined in the 2010 State of the Chesapeake Bay Program Report.

One year ago at Mount Vernon, Virginia, the Chesapeake Executive Council made two announcements that fundamentally shifted the restoration effort and launched a new era of action and accountability. On the banks of the Potomac River, the partnership established two-year milestones and unveiled President Obama's Executive Order.

Since May 2009, Chesapeake Bay Program (CBP) partners have worked to implement on-the-ground and in-the-water actions to make progress toward the first set of two-year milestones, which end in December 2011. It has been a year of action, as evidenced by restoration highlights found on page 3 of this report.

CBP partners have also spent the past year developing the Chesapeake TMDL, which, when completed in December 2010, will be the most comprehensive "pollution diet" ever in the watershed and the nation, with rigorous accountability for all levels of government, sources of pollution and stakeholders in the watershed. (see page 4)

The new strategy required by the President's Executive Order was released on May 12, 2010 and sets forth significant new actions aimed at using regulation and enforcement to restore clean water, implementing new conservation practices on four million acres of farms, conserving two million acres of undeveloped land and rebuilding oysters in 20 tributaries of the Bay. During the next year, federal agencies will be working to ensure full coordination with CBP goals and activities. (See page 7)

EPA's Chesapeake Bay funding increased during this past year, and 75 percent of that increase, or \$11.2 million was provided directly to the states, which more than doubled previous grant funding levels. The funds are for very different purposes than past EPA Bay program grants and are focused on helping states develop new regulations, conduct inspections, enforce permits, and design TMDL Watershed Implementation Plans to achieve TMDL pollution reduction targets. (See page 6)

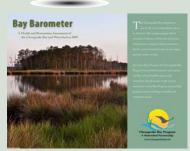
Capping off the busy year is the launch at the 2010 Executive Council meeting of *ChesapeakeStat*, an innovative online tool to improve coordination of restoration activities and increase government accountability - through transferability - by publicly presenting comprehensive information about CBP projects, funding and progress toward goals. (See page 4)

Despite all of these exciting developments, the Bay Barometer showed the Chesapeake only meeting 45 percent of health goals. Water quality was only at 24 percent of goals. (See page 2)

The continued poor health of the estuary and its tributaries underscores the importance of CBP partners capitalizing on the historic opportunities, conducting bold restoration actions and holding all stakeholders accountable. Our commitment to these steps will determine success in this new era for the Chesapeake Bay, its watershed and the 17 million people in the region.



How Is The Bay Doing? 2009 Bay Barometer Overview



Each year, the Bay Program partners work together to produce the Bay Barometer: A Health and Restoration Assessment of the Chesapeake Bay and Watershed. The 2009 report and data is available online at www.chesapeakebay.net.

BAY HEALTH: Goals & Results

The Bay's health is measured in three primary categories that are broken down further into 13 indicators that represent major components of the Bay ecosystem. When all quantitative restoration goals for these areas are reached, it should mean a restored Bay.

Water Quality is broken down into four health indicators: dissolved oxygen, water clarity, Chlorophyll a, and chemical contaminants. For 2009: Water quality met just 24 percent of health goals, a 2 percent increase from 2008.

- Habitats & Lower Food Web are measured with four indicators: Bay grass abundance, phytoplankton, bottom habitat, and tidal wetlands abundance. For 2009: The Bay's critical habitats and lower food web increased in health by 7 percent from 2008. However, they remain far below what is needed to support thriving populations of underwater life.
- Fish & Shellfish health is measured by the abundance of the following five species: blue crabs, native oysters, striped bass, shad, and juvenile menhaden. For 2009: Overall, 59 percent of the health goals for fish and shellfish abundance have been met, a 9 percent increase from 2008. Yet, most fish and shellfish populations remain far below desired levels.

Summary

Despite a 6 percent improvement in health since 2008, the Bay continues to have poor water quality, degraded habitats, and low populations of many fish and shellfish species. Based on these three areas, the overall health averaged 45 percent. The modest gain in the health score in 2009 was due to a large increase in the adult blue crab population, expansions of underwater grass beds growing in the Bay's shallows, and improvements in water clarity and bottom habitat health.

BAY RESTORATION: Goals & Results

New restoration programs and projects were put in place in 2009, but resulted in only incremental gains toward goals. The measures for restoration and protection efforts averaged 64 percent, a three percent increase from 2008.

- Reducing Pollution: Bay Program partners have implemented 62 percent of needed efforts to reduce nitrogen, phosphorus and sediment pollution, a 3 percent increase from 2008.

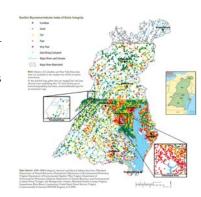
Restoring Habitats: Efforts to restore habitats throughout the watershed achieved modest gains in 2009, with progress toward the overall goal at 63 percent, an 8 percent increase from 2008.

- Managing Fisheries: Overall work to develop ecosystem-based fisheries management plans for blue crabs, oysters, striped bass, Atlantic menhaden and American shad stands at 51 percent.
- Protecting Watersheds: Progress was made toward protection of the thousands of smaller watersheds in the region during 2009, with a 2 percent gain toward the overall goal. The partnership is 77 percent of the way toward its goals for protecting watersheds.
- Fostering Stewardship: Programs to foster the public's stewardship of the Chesapeake Bay and its watershed resulted in a score of 67 percent, which reflects an increase of 2 percent from 2008.

HEALTH OF FRESHWATER STREAMS

Healthy freshwater streams and rivers have both local and regional importance. Since freshwater streams, creeks, and rivers flow into the Bay, their water quality has a direct effect on the entire Chesapeake. Between 2000-2008, the average stream health scores in 10,452 sampling locations indicated that 5,459 were in very poor or poor condition and 4,656 were in fair, good or excellent condition. Although sampling densities differ throughout the watershed, generally speaking:

- Streams tend to be in very poor to fair condition around large urban areas;
- Streams in heavily farmed or mined areas are also often in very poor to fair condition; and,
- Streams tend to be in good to excellent condition in areas with ample natural habitat and low pollution levels.







HIGHLIGHTS OF BAY PARTNERS AT WORK

Maryland:

- Created the Chesapeake and Atlantic Coastal Bays Trust Fund with \$20 million committed in FY '11;
- Enacted blue crab regulations in partnership with VA. and the Potomac River Fisheries Commission;
- Unveiled its Oyster Restoration and Aquaculture Development Plan; and,
- Is developing a protocol to follow non-government funded conservation practices for TMDL tracking.

Virginia:

- Committed nearly \$627 million to WWTP upgrades;
- Put new nutrient management regulations in place;
- Implemented a Nutrient Credit Exchange Program;
- Strengthened crab populations through a winter dredge moratorium;
- Created a dedicated funding source for its Agricultural BMP Cost-Share Program (VACS); and,
- Created regulations for enhanced tracking and accounting of poultry litter.

Pennsylvania:

- Is working with agricultural partners to fund 50 district positions and 60 BMP projects annually;
- Anticipates \$600 million more for Bay projects via PennVEST (PA State Revolving Loan Fund); and,
- Is using nutrient trading as a platform to promote new technologies to address excess manure.

District of Columbia:

- Is working toward a solid MS4 Stormwater Permit;
- Is pursuing a strong Anacostia Restoration Plan;
- Is continuing its "RiverSmart Homes Program" that offers incentives for BMPs for homeowners.

Chesapeake Bay Commission:

- With PA, published Chesapeake Biofuel Policies: Balancing Energy, Economy and Environment;
- Is partnering with Chesapeake Conservancy for a report on many aspects of land conservation; and,
- Continues working to support federal funds for the Blue Plains wastewater treatment plant upgrade.

Delaware:

- Has relocated almost all excess poultry litter, most of which comes from within the Bay watershed;
- Is preparing to modify their CAFO regulations, that they expect to present publicly this summer;
- Is creating a database to track stormwater BMPs;
- Is operating its successful shad hatchery; and,
- Will soon launch the Nanticoke River Water Trail.

New York:

- Issued permit enhancements on CAFO's to ensure appropriate nutrient management practices; and,
- Will be creating and implementing an action plan for the Susquehanna and Chemung River Basins.

West Virginia:

- Launched new website, www.wvca.us/bay;
- Produced the Potomac Headwaters Water Quality Report; and,
- Created the state's first agriculture financial and technical assistance program.

CBP Advisory Committees 2009 IN Review

Citizens Advisory Committee (CAC)

Over the course of 2009, CAC was busy on many fronts. In addition to following and providing formal comments on the Executive Order reports and implementation strategy, CAC supported the Chesapeake Clean Water and Ecosystem Act (S 1816 and HR 3852) with letters to offices and staff of Sen. Benjamin Cardin and Rep. Elijah Cummings and participated in the first annual conference of the Choose Clean Water Coalition in January. CAC was a strong proponent and supporter of this Coalition's creation stemming from a 2008 CAC workshop.

CAC created a pilot website and a simple survey for website visitors to share their ideas on the Chesapeake Bay restoration effort to make it easier for the general / interested public to know what it is doing.

Looking into the future, CAC will closely follow the development of the TMDL and Watershed Implementation Plans as well as following and offering comments on the CBP independent evaluation.

Local Government Advisory Committee (LGAC)

The Local Government Advisory Committee (LGAC) chaired by DC Councilman Tommy Wells made significant progress on its three priority issues. The first year of a very successful Circuit Rider pilot project in York County, PA, was completed and a report on its findings was issued in May. LGAC (with STAC, see below) conducted a popular Stormwater Workshop for local government officials and expects to publish an advisory report in June. Finally, LGAC members played a significant role in the TMDL public meeting process in late 2009 and continue to monitor local pilot projects that are engaging local governments in developing State Watershed Implementation Plans. In April 2010 LGAC elected Councilwoman Mary Ann Lisanti of Harford County, MD as its new Chair.

Scientific and Technical Advisory Committee (STAC)

In 2009, STAC developed a process to re-align the CBP's monitoring programs that was carried out by CBP's MRAT (see p. 5). Further, it provided formal comments on the draft Executive Strategy and both formal comment and review of the Executive Order 202 Reports. STAC continues to track climate change action within the CBP Partnership following its deliberation of a review of 2008 research needs and recommendations. It also continues to track and provide support for the development and implementation of the Bay-wide TMDL. Two expert reviews were conducted to determine the suitability of CBP modeling tools for setting load allocations: 1) a review of the biological reference curve methodology, and 2) a review of the water clarity and submerged aquatic vegetation parts of the Water Quality Sediment Transport Model.

The Committee is also leading an effort to assess social science research priorities for Chesapeake Bay restoration. Information on these efforts will be presented to the Partnership this fall. Lastly, given the changes occurring within the CBP, STAC is looking at its goals and operations to ensure more efficient and effective engagement with the CBP.

STAC sponsored three workshops this year: Exemplary Local Stormwater Strategies to Protect and Restore Urban Watersheds: Combining Technology, Economics and Policy (with LGAC); and Best Management Practices: Test Case of Pasture Management (a two-part series).



Toward a Bay-wide TMDL



The Bay Total Maximum Daily Load (TMDL) is in essence a rigorous "pollution diet" that will drive actions to restore local waters and the Chesapeake Bay. The Bay TMDL, to be completed by Dec. 31, 2010, will set limits on nitrogen, phosphorus and sediment pollution in order to meet the states' Bay water quality standards.

CBP's TMDL Work in 2009

In October 2009, the Principals' Staff Committee (PSC) and the CBP partners reached agreement on a new strategy for allocating nutrient and sediment loads designed to meet the Bay water quality standards.

In November 2009 letters from Acting EPA Regional Administrator William C. Early to the PSC, the EPA established draft target loads and set clear expectations for the development of Watershed Implementation Plans.

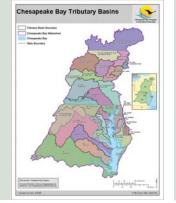
The following month, EPA Regional Administrator Shawn Garvin communicated to the PSC on Federal actions or consequences to backstop inaction or insufficient progress on the implementation plans or on the states' two-year milestones as part of a strict accountability system that will ensure results.

EPA has provided funding for contractor support to help states and D.C. build their implementation plans, including a special pot of funds for WIP pilot projects.

To communicate in a transparent way with the public, EPA:

- Held sixteen public meetings and dozens of stakeholder briefings throughout the watershed between early November and mid-December 2009, reaching more than 3,000 people, including an online webinar audience;
- Sponsored an ongoing, monthly webinar series beginning in February 2010 to provide updates on the Bay TMDL;
- Scheduled targeted webinars with the agricultural and development communities; and,
- Established a dedicated TMDL website,

www.epa.gov/ chesapeakebaytmdl



NEW WEBSITES OPENING NEW DOORS



http://stat.chesapeakebay.net

ChesapeakeStat is the next evolution of a continuing focus by the CBP partners to be accountable, transparent and to adaptively manage the restoration of the Bay. ChesapeakeStat is a systematic process within the partnership of analyzing information and data in a manner that allows us to continually assess progress towards goals and adapt strategies and tactics when needed. ChesapeakeStat is also a public website that promotes improved accountability, fosters coordination, and promotes transparency by sharing performance information on goals, indicators, strategies and funding.

The Vision for the Future

ChesapeakeStat will continue to evolve openly with suggestions and data from the Bay community. It can be a forum for coordinating local actions by sharing and posting geo-referenced information, data and best management practices among Bay groups. Individuals and groups can add their actions to ChesapeakeStat maps and reference what others have done as well. Activities in local watersheds will be connected to performance at the county, state, and federal levels, and local action and monitoring will be related to regional goals and strategies. Additionally, CBP data will be accessible for reuse by others and data transfers across the partnership will be better facilitated as well. Overall, ChesapeakeStat will help to coordinate activities, identify gaps, target restoration and improve the ability of the Bay Program to implement an adaptive management process.



www.baybackpack.com

In support of environmental education across the watershed, the CBP Education Workgroup, was charged with evaluating and recommending policies related to bay education. To help accomplish the group's goals, the workgroup developed the *Bay Backpack*, an online resource designed to help educators provide meaningful watershed educational experiences (MWEEs) to their students.

MWEEs enable students to participate in hands-on environmental learning about the Chesapeake Bay watershed. Throughout the MWEE process, students develop a sense of environmental ethics and stewardship that are essential to the long-term sustainability of the Chesapeake Bay. This experience will serve as the foundation for a rich, lifelong relationship between students and their Bay. MWEEs are investigative, integrated into curricula, involve preparation, action and reflection, reveal the watershed as a system, and are infused throughout the school year.

Bay Backpack offers teachers a resource for finding: educational materials (across topics, by grade level, and by type of materials), field studies opportunities (or how to create them), teacher trainings by state, funding information, and sharing via a blog. Bay Backpack content, wherever possible, aligns with state standards of learning and/or academic standards.



CBP PROGRESS AT HOME

Goal Implementation Teams (GITs)

The CPB leadership has now chartered and launched all of the organizational units of the restructured program, known as Goal Implementation Teams or GITs. The membership of the new teams shows a wide breadth of leadership, partner, and stakeholder participation (federal, state, NGO, and local governments) who are now better represented under the new re-organized structure.

The new GITs have assumed ownership of their goals and strategic areas of focus and are finding ways to work across the teams such as through the Science, Technical Analysis, and Reporting (STAR) Team. Additionally, through the GITs, CBP has also established the organizational infrastructure needed to support the new initiatives described in the federal strategy while concurrently charging ahead with ongoing strategic activities that involve Bay program partners, such as development of the TMDL.

Independent Evaluator

In December 2009, the first independent evaluation of the CBP began with the purpose of assessing the program's implementation efforts toward nutrient reduction goals for water quality. This study, which takes a pilot approach and focuses on accountability, is being conducted through an EPA contract with the National Academies of Science (NAS). While an Independent Evaluator is now included as an organizational function in the new CBP structure, its ongoing role has yet to be fully defined. Therefore the Principals' Staff Committee decided to begin with a pilot study approach to gain a better understanding of what the ongoing function might look like.

The final NAS report, due in 2011 will contain recommendations that can be put into action by partners and others in an adaptive management context. The intention of this first evaluation is to develop recommendations to be used to manage the CBP by informing the next round of two-year milestones, scheduled to begin in 2012.

Chesapeake Registry

- Chesapeake Registry, formerly called the Activity Integration Plan, is a database of reported partner activities and expended resources related to Bay restoration. In 2009, changes to the registry included:
- Expansion to accept data from local governments, non-profits and other stakeholders to provide the partnership with a broader set of information for planning and adaptive decision-making;

- Modification of the format and data entry guidance in response to feedback from partners; and,
- Integration of Registry data into the *ChesapeakeStat* (see p. 4) website, launching in June 2010.

CBP Reviews Its Monitoring Strategies

In spring 2009, the CBP Management Board (MB) accepted the findings of a STAC review of CBP monitoring program priorities and objectives that identified several priorities for this program including:

- Delisting the tidal segments of the Bay and determining the effectiveness of management actions in the watershed that should be the priorities of the CBP funded monitoring programs; and
- Rebalancing of the current allocation of monitoring resources to better reflect these priorities.

However, before making recommendations on possible reallocation of funds for monitoring, the MB requested additional information. The Monitoring Re-alignment Action Team (MRAT) was then created to pursue an evaluation of monitoring re-alignment options to better address the priorities. A series of intensive meetings and discussions in 2009 led to recommendations, pulled together by the MRAT.

Considering the information collected and the outcomes from the Senior Manager Workshops, the MB meeting, the MRAT team deliberations, the Executive Order, and state unilateral disinvestments, in fall 2009 the MRAT recommended to the MB that:

- 1) The CBP adopt the list of monitoring enhancements provided as the highest priority for allocation of monitoring funds as they become available;
- 2) After these enhancements are met, other information provided in the summary report be used as a guide for the allocation of new monitoring funds;
- 3) A specific designated amount be disinvested from tidal programs designated and reinvested in other targeted watershed programs;
- 4) A workgroup of EPA, MD, and VA grant managers, and the Scientific, Technical, Analysis, and Reporting (STAR)* Chairman, be formed to determine the most expeditious way to disinvest EPA funds from current tidal monitoring so that: a) EPA and state match are appropriately aligned; and b) there is an orderly transition;
- 5) STAC make recommendations to the MB on how frequently to repeat a review of CBP monitoring; and,
- 6) STAR* make recommendations on how it might undertake a similar process to establish priorities for monitoring the living resources and habitat restoration goals of the Bay program.

Since fall 2009, CBP has begun implementing the suggested recommendations for disinvestments and re-investments into the monitoring strategy.

* formerly Technical and Support Services (TSS)



FUNDING & BUDGETING

CBP Funding & New Regulatory Grants

In FY2010, Congress provided \$50 million to EPA for the CBP. This represents a \$19 million dollar increase compared to the 2009 budget and a \$15 million increase over the 2010 President's request.

For the first time ever, EPA has distributed seventy-five percent of the \$15 million increase, or \$11.2 million, to the six Bay watershed states and the District of Columbia as Chesapeake Bay Regulatory and Accountability Program (CBRAP) Grants. These additional grant funds more than double the funding available to states through existing Chesapeake Bay Implementation Grants (currently funded at \$8.9 million), for a total of over \$20 million. EPA expects to maintain this level in 2011.

These new funds are intended to support state work to develop and implement additional regulatory and accountability programs to control urban, suburban and agricultural runoff in the watershed. The new grants will also help states to develop new regulations, design TMDL Watershed Implementation Plans, reissue and enforce permits, and provide technical and compliance assistance to local governments and regulated entities. Consistent with Section 202 (c) of the Executive Order, in 2010 these grant funds are being "targeted...to better protect the Chesapeake Bay and it tributary waters, including resources under the Clean Water Act." Beginning in 2011, EPA will begin targeting its other Clean Water Act funds (e.g., Chesapeake Bay Implementation Grants) in the Chesapeake Bay watershed to better protect the Bay and its tributaries.

The President's FY2011 budget reflects the Administration's continued commitment to Bay restoration with a request for \$63.0 million in FY2011 which proposes continued funding for these Chesapeake Bay grant programs for the states.



Farm Bill Funds

The 2008 Farm Bill allocated \$188 million over four years in mandatory spending for agricultural conservation practices in the Chesapeake Bay watershed portion of the six Bay states. As enacted, it provides the National Resource Conservation Service with \$43 million in fiscal year 2010 and up to \$72 million in 2011. Through the Executive Order Strategy, the NRCS committed to targeting those funds to the places and practices that would be most effective in reducing nutrient and sediment runoff. Working with local and state partners, NRCS will use these funds to target priority watersheds and conservation practices to maximize water quality improvements in the



bay and its tributaries. In addition, NRCS is establishing three focus areas to demonstrate water quality improvements through expanded producer outreach efforts and intensive conservation planning and implementation activities.

EPA LAWSUIT SETTLED

The U.S. EPA reached settlement in May 2010 with the Chesapeake Bay Foundation, four former Maryland, Virginia and Washington, D.C. elected officials, and organizations representing watermen and sports fishermen in resolving a lawsuit filed in January 2009. The suit, Fowler v. EPA, claimed that EPA had failed to take adequate measures to protect and restore the Chesapeake Bay.

The settlement agreement tracks the comprehensive suite of strong regulatory and other actions that EPA has initiated or pledged to take under the Obama Administration to restore water quality in the Chesapeake Bay and its tributaries. These actions include establishing the stringent Chesapeake Bay total maximum daily load (TMDL), putting in place an effective implementation framework, expanding its review of Chesapeake

Bay watershed permits, and initiating rulemaking for new regulations for concentrated animal feeding operations and urban and suburban stormwater. The agreement also includes a commitment to establish a publicly accessible tracking and accounting system to monitor progress in reducing pollution through the TMDL and two-year milestones.



Image by CBP staff



CLEAN WATER ACT RE-AUTHORIZATION

The Chesapeake Clean Water and Ecosystem Act

In 2009, Sen. Benjamin Cardin (D-MD), chair of the Environment and Public Works Committee's Water and Wildlife Subcommittee and Rep. Elijah Cummings (D-MD) introduced the Chesapeake Clean Water and Ecosystem Act (S 1816 and HR 3852). The legislation would reauthorize the CBP and expand EPA authority to hold states accountable for meeting pollution reduction goals in the Bay and local waterways. It would mandate elements of a new accountability framework by codifying EPA's Chesapeake TMDL for nitrogen, phosphorus and sediment. It would authorize EPA to require states to submit "watershed implementation plans" (WIPs) explaining how pollution reductions will be met by 2025, and requiring states to submit biennial progress reports beginning in 2014. Backstop consequences for states that fail to meet WIP requirements or milestones would include funding reallocation and stricter regulatory requirements. Federal agencies would be required to participate in regional and sub-watershed planning and restoration programs.

EPA would be required to develop stormwater regulations with standards for new development or redevelopment projects. The legislation would authorize \$1.5 billion in grants to reduce stormwater runoff; \$625 million would also be authorized for implementation, monitoring and assistance grants. EPA would be authorized to establish a pollution trading program to support load reductions and lower compliance costs.

NOAA Chesapeake Bay Office Reauthorization

In September 2009, the U.S. House of Representatives passed a bill that would reauthorize the research programs of the NOAA Chesapeake Bay Office and provide more authority to support Bay observation, conservation and education. Introduced by Rep. John Sarbanes (D-MD), the Chesapeake Bay Science, Education, and Ecosystem Enhancement Act (H.R. 1771) would authorize NOAA to support an integrated coastal observation system which would include the Chesapeake Bay Interpretive Buoy System. It would authorize the agency's Bay Watershed Education and Training (B-WET) grant program and establish a new program to support the management and conservation of key Bay species and habitats. Similar legislation (S. 1224) is pending in the US Senate.

Chesapeake Gateways & Watertrails Reauthorization

On March 22, 2010, legislation introduced by Senator Cardin and Congressman Sarbanes, the Chesapeake Bay Gateways and Watertrails Network Continuing Authorization Act (S. 479) was reported out of the Senate Committee on Environment and Public Works. The legislation would amend the Chesapeake Bay Initiative Act of 1998 to make permanent the authorization of appropriations for the Chesapeake Bay Gateways and Watertrails Network.

EXECUTIVE ORDER STRATEGY

Chesapeake Bay Watershed", issues May 12, 2010, focuses on protecting and restoring the environment in communities throughout Bay watershed and in its thousands of waterways. It calls for using rigorous regulations to restore clean water. To increase accountability, federal agencies will establish milestones every two years for actions to make progress toward measurable environmental goals. These will support and complement the states' two-year milestones.

The new "Strategy for Protecting and Restoring the

The strategy deepens the federal commitment to the Chesapeake region, with agencies dedicating unprecedented resources, targeting actions where they can have the most impact, ensuring that federal lands and facilities lead by example in environmental stewardship and taking a comprehensive, ecosystem-wide approach to restoration. Many federal actions will directly support restoration efforts of local governments, nonprofit groups and citizens and provide economic benefits across the Chesapeake region.

<u>EPA:</u> Will implement the Chesapeake Bay total maximum daily load, expand regulation of urban and suburban stormwater and concentrated animal feeding operations, and increase enforcement activities and funding for state regulatory programs.

<u>USDA:</u> Will provide farmers and forest owners with the resources to prevent erosion and keep nitrogen and phosphorous out of local waterways, targeting federal funds to the places where it will have the greatest water quality impact and ensure that agricultural producers' work is accurately reported. USDA will also lead an initiative to develop a watershed-wide environmental services market.

<u>Department of Interior:</u> Will conserve 2 million acres of natural areas, forests and farmland, thereby preserving the environmental, recreational, cultural and economic benefits these lands provide. They will also launch a collaborative Chesapeake Treasured Landscape Initiative and expand land conservation, and develop a plan for increasing public access to the bay and its rivers.

NOAA and the U.S. Army Corps of Engineers: Will launch a bay-wide oyster restoration strategy in collaboration with MD and VA that focuses on priority tributaries, expands commercial aquaculture and research on oyster stock, habitat and restoration progress.

Several overarching approaches are also important.

- Short-term actions: To accelerate the pace of restoration, many actions occur soon and are "on-the-ground", and "in-the-water".
- Supporting local efforts: 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 actions will provide economic benefits, including conserving working farms, expanding oyster aquaculture, supporting conservation corps programs and green jobs, and developing an environmental marketplace for selling, buying and trading credits for pollution reductions.
- Targeting resources: Agencies will be 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.

