Executive Order 13508

Action Plan

Strategy for Protecting and Restoring the Chesapeake Bay Watershed

March 30, 2012

FY2012

Developed by the Federal Leadership Committee for the Chesapeake Bay

March 30, 2012

The Chesapeake Bay watershed is a dynamic region characterized by diverse people and places. From the headwaters of the Susquehanna River to the bay's mouth where it meets the Atlantic Ocean; from the Appalachian Mountains to the flatter lands of the Eastern Shore; and yes, encompassing all of our nation's capital, roughly **17 million people call this 64,000 square mile area home.**

Some live close to the water, have jobs that depend on the health of the bay, or enjoy recreation linked to the bay and are therefore intimately connected to its well being. Others—while they live near a creek that drains into a stream that flows into one of the Chesapeake's mighty tributary rivers—may not even realize that many of their daily decisions affect the health of North America's largest estuary. But all 17 million of us do affect the bay, its water quality, and the watershed's resident fish, shellfish and wildlife.

Economy and ecology—protection and restoration of the health of the Chesapeake Bay can achieve so much for so many. Our work to restore clean, fishable, swimmable water; recover a variety of habitats that provide critical ecosystem services; sustain healthy blue crab populations and develop a viable oyster aquaculture industry; increase public access so residents and visitors can truly connect with the bay; and more will return significant ecological value, while helping to protect the jobs of those who rely on a healthy bay for their bottom line. **It is in the spirit of enabling a sustainable future and in using science to guide policy that we conduct our work.**

Executive Order 13508, which was signed by President Obama in May 2009, set the stage for a renewed and reinvigorated federal effort to protect and restore the Chesapeake Bay, as described in the *Strategy for Protecting and Restoring the Chesapeake Bay*, released in May 2010. The Executive Order committed the Federal Leadership Committee to presenting an annual Action Plan to describe finer details, and **we are pleased to present this look forward at federal efforts in 2012.**

We look forward to working in a continued, collaborative effort with federal, state and local governments; nongovernmental organizations; academia; community groups and individual citizens to reach our goals to sustain the bay.

Sincerely,

Federal Leadership Committee for the Chesapeake Bay

Senior Designees

Nancy Stoner, Acting Assistant Administrator for Office of Water, U.S. Environmental Protection Agency

Ann Mills, Deputy Under Secretary, Natural Resources and Environment, U.S. Department of Agriculture

Eric Schwaab, Acting Assistant Secretary for Conservation and Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

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Overview

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As required by Executive Order 13508, each year, the Federal Leadership Committee for the Chesapeake Bay—composed of representatives from the **U.S. Environmental Protection Agency and the Departments of Agriculture, Commerce, Defense, Homeland Security, Interior and Transportation**—will release a Chesapeake Bay Action Plan. This Action Plan covers fiscal year (FY) 2012, which runs from October 1, 2011, through September 30, 2012.

The Action Plan provides information on key actions that will be conducted by the federal agencies in FY 2012 – many in cooperation with state and local partners. The plan also contains two-year milestones that highlight key efforts that are needed for each Executive Order goal and supporting strategy. More detailed information about the federal activities is contained in a comprehensive database that is available upon request.

Selected highlights from the Strategy's four goal areas—**"restore water quality," "recover habitat," "sustain fish and wildlife,"** and **"conserve land and increase public access"**—to be accomplished in FY 2012 are described in this document, as well as FY 2012 plans for the four supporting strategy sections—**"expand citizen stewardship," "develop environmental markets," "respond to climate change,"** and **"strengthen science."** Some actions initially planned in the FY 2012 President's Budget will not occur due to funding constraints in the program levels appropriated by Congress.

While highlights are mentioned under a given section in this document, many efforts have relevance for multiple goal areas and/or strategy sections, underscoring the importance and effectiveness of interagency collaboration.


Source: Ben Fertig/IAN Image Library


Source: NOAA


Source: Jane Thomas/IAN Image Library

Executive Summary

Source: NOAA

The FY 2012 Action Plan includes a tangible list of efforts to be undertaken by federal agencies. While some are continuations of projects started in FY 2011, others are new initiatives that build on preparatory work completed earlier. All are designed to increase the overall health of the Chesapeake Bay and achieve the goals set forth in the May 2010 *Strategy for Protecting and Restoring the Chesapeake Bay*.

While a comprehensive database of intended FY 2012 action is available online (http://executiveorder.chesapeakebay.net), this Action Plan narrative highlights key work to be accomplished in FY 2012 to **restore clean water, recover habitat, sustain fish and wildlife, and conserve land and increase public access.** Actions include:

- Continue to provide technical **assistance and resources to the Chesapeake Bay jurisdictions** as they finalize their Phase II Watershed Implementation Plans, supporting implementation of the Total Maximum Daily Load.
- Invest in **financial and technical assistance to farmers** to help them implement voluntary conservation practices in high-priority watersheds within the Chesapeake watershed.
- Prepare a report on toxic contaminants in the bay and watershed that will help guide new reduction goals for toxic contaminants in 2013.
- Continue monitoring sea-level rise at Blackwater National Wildlife Refuge.
- Plant additional acres of wetlands at the nation's premier island habitat restoration site, Poplar Island.
- Continue oyster reef construction, spat-on-shell planting, and restoration monitoring and evaluation in Harris Creek, Maryland, as a **blueprint for additional large-scale sanctuary restoration** that can be applied in other Chesapeake tributaries.
- Continue work to establish a watershed-side **geographic information system (GIS)-based land conservation priority system.**

Collaborative actions will also enhance supporting efforts to expand citizen stewardship, develop environmental markets, respond to climate change, and strengthen science. For example:

- Develop a Chesapeake **Conservation Corps Network** that will identify and provide a continuum of service opportunities to help engage youth in meaningful work in the outdoors.
- Finalize the Elementary and Secondary **Environmental Literacy Strategy** that addresses goals for students, educators, and school grounds as well as coordination of the environmental education community.
- Support an economic study to better understand the **costs of water quality improvements** and the role a nutrient trading program can play in establishing environmental markets in the Chesapeake Bay.
- Hold workshops to integrate climate adaption with restoration and conservation techniques at the sub-watershed level.
- Produce a report summarizing the potential changes in streamflow conditions in the watershed that will be used to help assess potential changes in water quality.
- **Collaborate with state and academic partners** to implement adaptive management though Chesapeake*Stat* and establish the Monitoring Alliance and Data Enterprise to help partners **more effectively prioritize and implement needed actions and policies.**

TOTAL FUNDING FOR FY 2012

Department/Agency	Total
USDA Total	$121,488,000
USFS	$1,310,000
NRCS	$119,828,000
Office of Environmental Markets	$350,000
U.S. Department of Commerce / NOAA	$9,208,425
DoD Total	$84,827,963
Services	$64,619,963
USACE	$20,208,000
DOI Total	$23,906,000
FWS	$10,146,000
NPS	$6,411,000
USGS	$7,349,000
EPA	$184,010,730
Total	**$419,632,152**

Goal and Supporting Strategy Highlights

Restore Clean Water

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

OUTCOMES

- 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.
- Work with producers to apply new conservation practices on 4 million acres of agricultural working lands in high-priority watersheds by 2025 to improve water quality in the Chesapeake Bay and its tributaries.
- Work with state and local governments and stakeholders to significantly expand understanding of toxic pollutant contamination in the bay and its watershed and to develop contaminant reduction outcomes by 2013 and strategies by 2015.
- Improve the health of streams so that 70 percent of sampled streams throughout the Chesapeake watershed rate fair, good or excellent, as measured by the Index of Biotic Integrity, by 2025.

WATER QUALITY OUTCOME

Clean water is essential for people, fish and wildlife, and healthy habitats. Despite some significant progress in reducing pollution levels in the Chesapeake Bay watershed in the past decades, in 2010, less than half – 45 percent – of the streams in the watershed are in fair, good or excellent condition and only 18 percent of tidal waters met or exceeded water clarity guidelines.

Significant reductions in nutrients, sediment and contaminants are needed to support bay health and enhance resilience to help it recover from significant weather events like the heavy rain and snow events experienced in early spring and fall 2011.

The U.S. Environmental Protection Agency will continue working with state partners to implement the December 2010 bay-wide Total Maximum Daily Load (TMDL), or "pollution diet," to set limits on nitrogen, phosphorus and sediment pollution sufficient to achieve water quality standards for dissolved oxygen, water clarity

and chlorophyll *a*. As part of that undertaking, EPA will continue to provide technical assistance and resources directly to the bay watershed jurisdictions (Delaware, New York, Maryland, Pennsylvania, Virginia, West Virginia and the District of Columbia) as they finalize their Phase II Watershed Implementation Plans (WIPs).

> WIPs provide a roadmap for how the states and the District of Columbia, in partnership with federal and local governments, will achieve and maintain the bay TMDL nitrogen, phosphorus and sediment limits necessary to meet bay water quality standards.

The primary purpose of Phase II WIPs is to ensure that local partners who will play a key role in cleaning up our waterways are ready to help implement their state's WIP strategy. They provide a roadmap for how the states and the District of Columbia, in partnership with federal and local governments, will achieve and maintain the bay TMDL nitrogen, phosphorus and sediment limits necessary to meet bay water quality standards. This year, federal agencies and our jurisdiction partners will finalize their first set of two-year milestones to help ensure that we are on track to have all practices in place by 2025 to fully restore the bay. Not only will the bay benefit from these actions, **thousands of local streams and rivers that feed into the bay will be improved – protecting drinking water sources, improving recreational opportunities, and supporting local economies that rely on clean water and healthy habitats.** EPA will continue to provide the jurisdictions with resources to help them develop and implement their Phase II WIPs, including contractor support, financial resources and technical assistance. **An innovative new tool, Chesapeake Assessment and Scenario Tool (CAST), was developed in 2011 to help jurisdictions and other interested parties across the watershed develop and quickly receive feedback on various pollution reduction scenarios.**

EPA will continue its work on several regulatory and other actions to support the states' and District of Columbia's plans to implement the TMDL. For example, EPA is working on establishing specific requirements for stormwater discharges from new and redeveloped sites and other requirements to strengthen the stormwater program. EPA will also continue its work to propose revisions to the national concentrated animal feeding operation (CAFO) rule that will provide additional pollutant reductions. For both of these rules EPA is considering including additional conditions that would apply to the Chesapeake watershed. The agency will also conduct field effectiveness studies of state non-CAFO programs to assess compliance with state regulations and effectiveness of controls in priority states. And, to address stormwater runoff from onsite (septic) systems, EPA will develop a draft model state program for managing these systems effectively.

In support of these efforts EPA will again this year provide significant assistance to the states and the District of Columbia to help target and improve water quality restoration and protection efforts in the Chesapeake region. **EPA will provide more than $20.3 million directly to the states and the District of Columbia through Chesapeake Bay Regulatory and Accountability Program and Implementation grants.** These funds will support state work to develop and implement stronger regulatory and accountability programs to control urban, suburban and agricultural runoff and will assist them in implementation of their Phase II WIPs. In addition to these grants, **continued funding of several base national funding programs will further help augment state water quality improvement efforts**, including more than an estimated $8.2 million in Clean Water Act (CWA) Section 319 non-point source program grants; an estimated $10.6 million in CWA Section 106 Water Pollution Control program grants; and an estimated $107.8 million in EPA Clean Water State Revolving Fund allocations. EPA is also providing more than $3 million in grants to support state tidal and non-tidal monitoring programs. This includes $1 million to work with the jurisdictions and USGS to complete the bay TMDL Monitoring Enhancement Initiative for the expansion of the bay Nontidal Monitoring Network. In addition, funding will continue for the annual submerged aquatic vegetation (SAV) survey, which is important in measuring attainment of water clarity standards under the bay TMDL.

Funding will also be available at the local level to help put in place on-the-ground and in-the-water strategies needed to improve water quality. EPA's Innovative Nutrient and Sediment Reduction Grants Program, administered by the

National Fish and Wildlife Foundation, will provide **more than $8 million in grants for innovative, cost-effective projects that reduce agricultural and urban nutrient and sediment pollution in local and bay waters**. An additional $2 million in grants will be available through the Small Watersheds Grants Program. These funds are leveraged with other public and private funds to help organizations and local governments working on a local level to implement projects that improve small watersheds in the Chesapeake Bay basin, while building citizen-based resource stewardship.

The Executive Order Strategy also includes a strong compliance component. To help effectively target pollution reduction efforts in the watershed, EPA will continue to implement a Chesapeake Bay Compliance and Enforcement Strategy for stormwater, agriculture, wastewater and air pollution sources. EPA will target key regulated business sectors, including wastewater treatment plants, CAFOs, municipal separate storm sewer systems, and others that contribute significant amounts of nutrients, sediment and other pollutants into the bay.

USGS will provide results from its new SPARROW Chesapeake Bay models so EPA can work with states to better focus practices in areas of the highest nutrient and sediment delivery to the bay and streams.

EPA will work with the U.S. Geological Survey, National Oceanic and Atmospheric Administration and the state partners to enhance the science activities to implement and monitor progress toward the TMDL. USGS will provide results from its new SPARROW Chesapeake Bay models so EPA can work with states to better focus practices in areas of the highest nutrient and sediment delivery to the bay and streams. EPA is working with USGS and jurisdictions to add 20 sites to the Chesapeake Nontidal Monitoring Network to better measure progress toward the TMDL allocations. USGS will work with EPA to update the trends of the nutrient and sediment conditions that are measured in the network. USGS will also work with EPA and the jurisdictions to apply a new technique to **better assess progress in load reductions using monitoring data to support assessment of the two-year milestones.**

In addition to monitoring in the nontidal network, **USGS will continue monitoring and assessment in three small watersheds to better assess the effect of management practices**. USGS is working in one urban watershed (Difficult Run, Virginia) and two U.S. Department of Agriculture showcase watersheds (Smith Creek, Virginia and Upper Chester River, Maryland) to expand monitoring and conduct research on the reduction of nutrient and sediment sources and factors affecting water quality. EPA, through the Chesapeake Bay Program monitoring team, is leading an effort to summarize results from existing small watershed studies, to improve understanding of water quality improvements from management practices.

USGS will begin an assessment to explain nutrient conditions and changes on the Eastern Shore As part of the assessment, **USGS will publish a groundwater model of the Eastern Shore Coastal Plain to help better understand the lag time between implementing practices and detecting water-quality improvement.**

The U.S. Department of Defense (DoD) will continue to participate in federal, state and local stakeholder advisory groups and workgroups working with each of the bay jurisdictions in the development of their Phase II WIPs. Other federal agencies will continue working with bay jurisdictions on development and implementation of the bay jurisdictions' Phase II WIPs and plan to have more specific targets in future milestones. Consistent with the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed* released May 12, 2010, "Federal agencies will incorporate Section 502 guidance considerations as part of their overall strategy to meet load reductions under the jurisdictions' Phase II WIPs."

DoD has completed and will continue to complete opportunities assessments as funded at installations in the bay watershed. DoD continues to identify and assess opportunities to strengthen stormwater management including structural and non-structural best management practices (BMPs), erosion control, and infrastructure maintenance and repair opportunities. **The opportunities assessments will better enable installations to install stormwater management controls to reduce pollutant loadings, improve stormwater quality and meet TMDL requirements.** BMPs to be implemented will be prioritized to achieve

load reductions to comply with the bay TMDL requirements. Structural BMPs may include but are not limited to vegetated roofs, rooftop disconnection, bioretention, permeable pavement and constructed wetlands. Non-structural BMPs include vegetation management, reforestation and landscaping maintenance. Additionally, DoD will develop a BMP operation and maintenance policy for each military service.

The NOAA Chesapeake Bay Interpretive Buoy System (CBIBS) will continue to play a role in water quality monitoring and assessment in 2012. Building on groundwork laid in 2011, CBIBS data on dissolved oxygen and other key measurements of water quality will be added into water quality indices and models. **Connecting observing systems from all bay agencies will maximize the amount and frequency of data on water quality.**

NOAA will work to validate models that use satellite and other data to predict harmful algal blooms in the Chesapeake Bay. This combination of computer modeling and in situ sampling will advance analysis techniques and move us one step closer to accurate forecasting of harmful algal bloom events and their impacts.

Satellite observations from NOAA will continue to play a key role in the Chesapeake Bay this year by providing synoptic views of the entire bay on a daily basis. NOAA expects to add space-based water quality measurements like temperature, salinity, chlorophyll and sediment concentration. Space-based platforms used by NOAA are combined with aircraft, buoy and in situ measurements to provide the best possible assessment of bay conditions along a spectrum of time and space scales.

Energy Independence and Security Act (EISA) 438: EPA will continue to lead the federal agencies by providing a forum for exchange of information across agencies. Tracking and reporting mechanisms including EISA 438 tracking will be developed by EPA with significant input from the other agencies. Additional information on federal implementation of EISA 438 and retrofits are expected in the Phase II WIPs. An assistance workshop will be organized by EPA to provide technical training and support to federal facility stormwater managers. The workshop will enable agencies to share best practices and showcase their success.

AGRICULTURAL OUTCOME

Agriculture Conservation Outcome

This includes the Environmental Quality Incentives Program (EQIP), Chesapeake Bay Watershed Initiative (CBWI), Agricultural Management Assistance (AMA) Program, Wildlife Habitat Incentive Program (WHIP) and Conservation Technical Assistance (CTA) funds. Conservation Security Program, Conservation Stewardship Program and Easement Program funds were not included.

In fiscal years 2012-2013, USDA has committed to applying conservation practices on an additional 540,000 acres in priority watersheds. USGS will provide results of new Chesapeake Bay nutrient and sediment models to NRCS, so they can consider where to focus practices within priority watersheds.

Federal agencies have committed to applying 4 million acres of new conservation practices in high priority watersheds identified by the USDA, based on information provided by U.S. Geological Survey and EPA on watersheds that contribute higher-than-average amounts of nitrogen and phosphorus to the bay. From May 2010 to September 2011, NRCS applied at least one conservation practice on more than 650,000 acres of agricultural working land in priority watersheds. In order to address multiple resource concerns or to fully address a particular resource concern, multiple conservation practices will be applied on many of these acres. In fiscal years 2012-2013, USDA has committed to applying conservation practices on an additional 540,000 acres in priority watersheds. USGS will provide results of new Chesapeake Bay nutrient and sediment models to NRCS, so they can consider where to focus practices within priority watersheds.

Through the CBWI, **NRCS is targeting $51.25 million in financial and technical assistance to help farmers implement voluntary conservation practices in high priority watersheds**. Focusing conservation efforts in these areas ensures that applied conservation practices **will contribute directly to reductions in nitrogen, phosphorus and sediment losses from agricultural**

fields. Financial and technical assistance from other USDA programs such as EQIP, AMA Program, and WHIP, as well as direct CTA, will also be used to address resource concerns in the watershed.

Collaborative work in the Showcase Watersheds will continue this year. USGS will work in the Smith Creek (Virginia) and Upper Chester River (Maryland) watersheds to continue monitoring of water quality and assessment of nutrient and sediment sources and factors affecting their delivery to streams. USGS will work with NRCS to explain changes in water quality as conservation practices are implemented. NRCS will continue to focus on outreach in the Smith Creek Watershed and on the development of watershed-wide farm assessments in the Conewago Creek and Upper Chester River watersheds.

Particular focus will be placed on collecting more specific data on nutrient management practices and cover crops. This effort will allow NRCS to refine estimates of conservation effectiveness in the Chesapeake Bay watershed.

NRCS will revisit the Chesapeake Bay Watershed Conservation Effects Assessment Project (CEAP) report this year. NRCS will increase the number of farmer surveys and gather data on 2009-2011 agricultural and conservation operations on cultivated crop land in the Chesapeake Bay watershed. Particular focus will be placed on collecting more specific data on nutrient management practices and cover crops. This effort will allow NRCS to refine estimates of conservation effectiveness in the Chesapeake Bay watershed. USGS and EPA will work with the states to continue long-term monitoring stations in the three NRCS showcase watersheds. USGS is expanding monitoring and research to assess baseline conditions and sources of nutrients and sediment in two of the USDA showcase watersheds (Smith Creek and Upper Chester River). USGS also expects to finalize an automated data collection process for reporting NRCS and Farm Service Agency conservation practice data at the small watershed scale. USGS will interact with states, USDA and EPA to determine how best to provide the conservation practice information for the CBP watershed model and work to summarize information for studies of NRCS showcase watersheds.

TOXIC CONTAMINANTS OUTCOME

EPA, USGS, U.S. Fish and Wildlife Service (FWS) and NOAA will summarize results from studies on impacts of chemical contaminants on fish and wildlife, the occurrence and sources of chemical contaminants, and prepare a report on the seriousness of toxic contaminants in the bay and watershed (due in November). The report will be used by EPA and the states to develop new reduction goals for toxic contaminants in 2013. **USGS will complete chemical analyses of toxic contaminants in fish and fish-eating bird samples collected from the Potomac in 2011 and will conduct sampling in selected areas in the James and Elizabeth rivers.** USGS will expand sampling of the sources and extent of toxic contaminants, including endocrine-disrupting compounds, in the Potomac basin and summarize information from both the Potomac and Susquehanna basins.

STREAM RESTORATION OUTCOME

EPA, through the CBP monitoring team, will be working with the Interstate Commission on the Potomac River Basin (ICPRB) to develop a methodology to calculate changes in stream health over time using the Stream Health Index.

This methodology will be used to track progress towards achieving the Stream Health Outcome. **Many of the practices to reduce nutrients and sediment as part of the bay TMDL will also benefit stream health.** Additional information on restoration activities to improve stream conditions, including use of riparian forest buffers, is discussed in the Recover Habitat section of this report.

Combined appropriations for this goal area total $310.1 million. The following table is a breakdown of these figures by agency.

Restore Clean Water	
DoD (Services)	***$35.2 million***
DOI (FWS)	***$61,901***
DOI (USGS)	***$4.6 million***
EPA	***$175.7 million***
NOAA	***$912,500***
USDA (NRCS)	***$93.4 million***
USDA (USFS)	***$210,000***
Total	***$310.1 million***

OUTCOMES AND MILESTONES FOR THIS GOAL AREA INCLUDE:

2025 Outcome	Baseline	2012-2013 Milestone
Tidal Waters: 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.	89 of the 92 segments of the bay and its tidal waters are impaired.	Methodology under development.
	For pollution reduction actions, the FY 2010 baseline is 0 percent. The universe is 100 percent goal achievement by December 31, 2025 (FY 2026).	**22.5 percent** of goal achieved for implementing nitrogen, phosphorus and sediment pollution reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model. (cumulative from 2009 baseline)
		EPA's portion of air deposition load reduction to tidal surface waters of **316,000 pounds of nitrogen**. (18 percent of the required load reductions from 2009 to achieve the 15.7 million pound air deposition load allocation to tidal waters.)
Stream Condition: Improve the health of streams so that 70 percent of sampled streams throughout the Chesapeake watershed rate fair, good or excellent, as measured by the Index of Biotic Integrity, by 2025.	45 percent of sampled streams are rated fair, good or excellent.	**50 percent** of sampled streams rate fair, good or excellent as measured by the Index of Biotic Integrity.
Agricultural Conservation: Work with producers to apply new conservation practices on 4 million acres of agricultural working lands in high-priority watersheds by 2025 to improve water quality in the Chesapeake Bay and its tributaries.		Apply **540,000 acres** of conservation practices in priority watersheds in conjunction with U.S. Department of Agriculture High Priority Performance Goals.

ADDITIONAL PROGRAMMATIC MILESTONES FOR THIS GOAL AREA INCLUDE:

Target Date	Programmatic Milestone
TMDL/WIPs	
January 2012 – February 2012	Evaluate and announce federal and jurisdictional 2012-2013 two-year milestones. (EPA)
January 2012 – June 2012	Evaluate draft and final Phase 2 WIPs. (EPA)
June 2012	Assess progress made to implement the May 2009 – December 2011 two-year milestones. (EPA)
2012/2013 as needed	Technical amendments to the 2010 bay TMDL. (EPA)
2012	Participate in jurisdictions' Phase 2 WIP processes: provide DoD installation information to jurisdictions and disseminate jurisdiction information throughout DoD to support the most effective implementation of future WIP requirements on DoD installations. (DoD)
2013	Develop and implement a Best Management Practices Operation and Maintenance Policy for each Service. (DoD)
May 2013	Provide mid-term evaluation of 2012 milestones progress to jurisdictions. (EPA)
AGRICULTURE	
July 2012	Develop and implement tracking, reporting and verification mechanisms for voluntary conservation practices and other best management practices installed on agricultural lands. (EPA/USDA co-lead)
2012	Update the Conservation Effects Assessment Project (CEAP) Cropland Report for the bay region; increase the spatial resolution of the model results and account for changes in conservation adoption since 2006. (USDA)
	Direct up to $5 million to stimulate innovative conservation approaches, including the development of ecosystem markets in the watershed. (USDA)
2012	Pilot the Conservation Delivery Streamlining Initiative's Conservation Desktop for national use; integrate resource concerns, selected inventory and analysis tools, electronic signature, and geospatial information into conservation planning tools. (USDA)
2012	Propose revisions to the national CAFO rule. (EPA)
ATMOSPHERIC – RULES, DEPOSITION, ALLOCATIONS	
	Significantly reduce nitrogen deposition to the bay and watershed by 2020. (EPA)
2012	• NOxSOx Secondary National Ambient Air Quality Standards finalized. (EPA)
2012	• New air deposition modeling for the Chesapeake Bay watershed incorporating the most recent finalized rules with significant NOx reductions. (EPA)
2012	• EPA/DOT 2017–2025 Model Year Light-Duty Vehicle GHG Emissions and CAFÉ Standards final rule. (EPA)
2012/2013	• Tier 3 Light-Duty Vehicle Emission and Fuel Standards final rule (criteria and toxic pollutants). (EPA)

Target Date	Programmatic Milestone
STORMWATER	
	Proposed actions on revisions to the national stormwater rule. (EPA)
ONSITE (SEPTIC) SYSTEMS	
June 2013	Develop a model state program with general recommendations for activities to reduce pollution from onsite (septic) systems. (EPA)
TOXIC CONTAMINANTS	
November 2012 December 2013	Issue a report summarizing the extent and seriousness of toxic contaminants in the bay and its watershed that will include an assessment of progress on the Chesapeake Bay Basinwide Toxins Reduction and Prevention Strategy. (USGS/FWS/EPA co-lead) Work with DOI (FWS/USGS), the bay states, the District of Columbia and stakeholders to develop toxic contaminant reduction goals. (EPA)
OVERSIGHT AND ENFORCEMENT	
December 2012 December 2012 and 2013 December 2012 and 2013	Permit and Enforcement Oversight – Stormwater, Wastewater, Agriculture, Trading/Offsets, Air. • Review Chesapeake Bay states' technical standards for nutrient management to ensure that they meet CAFO regulations. (EPA) • NPDES Permit Reviews – Report annually on number of permits reviewed and objections. (EPA) • Inspections and Case Development – Report annually on results and/or status. (EPA)
MONITORING AND SCIENCE SUPPORT	
December 2012 December 2012 December 2012	Implement year two expansion (20 sites) of the non-tidal monitoring network to support TMDL. (EPA/USGS co-lead) Evaluate water quality changes and progress to adjust management actions in support of the TMDL/WIPs and milestone progress evaluation. (EPA/USGS/NOAA co-lead) • USGS will issue an annual update of nutrient and sediment trends based on the CBP non-tidal monitoring network and apply a new technique to assess progress toward reductions. (EPA) • EPA and NOAA will provide annual updates of trends in estuary monitoring data to assess progress toward water quality standards, including using NOAA CBIBS data. (EPA)
EPA GRANT SUPPORT TO STATES AND THE DISTRICT OF COLUMBIA	
2012/2013	Provide financial support to jurisdictions by maintaining funding, as authorized, through EPA's assistance programs including CWA Section 319, SRF, CBIG and CBRAP. (EPA)

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.

OUTCOMES

- Restore 30,000 acres of tidal and non-tidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025.
- Restore riparian forest buffers to 63 percent, or 181,440 miles, of the total riparian miles (stream bank and shoreline miles) in the bay watershed by 2025.
- Restore historical fish migratory routes by opening 1,000 additional stream miles by 2025, with restoration success indicated by the presence of River herring, American shad and/or American eel.

Many habitats within the Chesapeake Bay watershed—including wetlands, streams, forests, fields, islands, underwater grasses, sand beaches and mudflats—have been degraded and no longer provide the robust ecosystem services that bay species require. Federal and state partners are now targeting shared priorities for joint implementation, to significantly accelerate achievement of wetland, fish passage and riparian forest buffer outcomes. Restoration of these habitats is critical to support priority species and to afford other public benefits, including enhanced water quality, expanded recreational uses and improved scenic value throughout the watershed. USDA NRCS will provide $12.4 million through the Wetlands Reserve Program (WRP) for restoration practices and the purchase of easements to restore wetlands previously altered through an agricultural use.

FWS, NRCS, NOAA and the U.S. Army Corps of Engineers have committed to working with state and local partners to restore 30,000 acres of tidal and non-tidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025. To meet this goal, **partners will need to restore 4,000 and enhance 20,000 acres of wetlands every two years**. To hasten progress, partners will engage wildlife and natural resource agencies in strategic wetland action teams in interested bay states in 2012. Some key science activities to support wetland restoration include USGS efforts monitoring sea-level rise near Blackwater National Wildlife Refuge to assess potential impacts on wetlands.

Actions planned by USACE at the Nation's premier island habitat restoration site, Poplar Island, include restoring, planting and opening 35 acres of wetland and tidal gut habitat to fish and natural tidal flow, allow inflow of dredged material and begin designs for expansion of the Poplar Island project.

FWS, NRCS and NOAA have committed to working with state and local partners to open 1,000 additional stream miles for fish passage by 2025. To achieve this goal, **132 miles will be reopened every two years.** In 2012, partners in the CBP Fish Passage Workgroup will work with The Nature Conservancy to complete a bay-wide fish passage prioritization tool for blockages in Maryland, Virginia and Pennsylvania. Priority status is given to projects which open larger stretches of high quality habitats and projects which enhance passage of target species.

The restoration of riparian forest buffers along streams throughout the watershed is essential to establishing networks of habitats and also for filtering water of pollutants before it enters the river system. The U.S. Forest Service has led the effort of restoring the watershed's riparian forest buffers since 1994. Federal agencies are renewing their efforts to restore buffers as a result of this outcome. Partners have committed to restoring forest buffers to 63 percent, or 181,440 miles, of the total riparian miles (stream bank and shoreline miles) in the

In 2012, partners in the CBP Fish Passage Workgroup will work with The Nature Conservancy to complete a bay-wide fish passage prioritization tool for blockages in Maryland, Virginia and Pennsylvania.

Chesapeake Bay watershed by 2025. To meet this goal, **1,800 miles of riparian forest buffer will be restored every two years.**

It is essential that federal partners continue to work with state and local partners to implement riparian forest buffers. This has long been recognized as one of the most beneficial practices for the bay ecosystem. USFS is developing tools and collaborating with NRCS and the Farm Service Agency to ensure that the most important federal programs for delivering this practice are focused and effective. **FWS and USFS will also continue to provide resources for technical assistance specifically to encourage landowners to adopt riparian forest buffers.** USGS and USFS will also make available a web-based tool to help partners track changes in forest, riparian buffer, and impervious surface cover at the local level.

Combined appropriations for this goal area total $49.1 million. The following table is a breakdown of these figures by agency.

Recover Habitat	
DoD (Services)	***$14.3 million***
DoD (USACE)	***$15.2 million***
DOI (FWS)	***$5.2 million***
DOI (USGS)	***$206,246***
NOAA	***$1.8 million***
USDA (NRCS)	***$11.9 million***
USDA (USFS)	***$535,000***
Total	***$49.1 million***

OUTCOMES AND MILESTONES FOR THIS GOAL AREA INCLUDE:

2025 Outcome	Baseline	2012-2013 Milestone
Wetlands: Restore 30,000 acres of tidal and non-tidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025.	The National Wetlands Inventory estimates that 1 million acres of tidal and non-tidal wetlands are available in the Chesapeake watershed for restoration or enhancement.	Restore 4,000 acres of wetlands every two years. (FWS) Enhance 20,000 acres of degraded wetlands every two years. (FWS)
Riparian Forest Buffer: Restore riparian forest buffers to 63 percent, or 181,440 miles, of the total riparian miles (stream bank and shoreline miles) in the bay watershed by 2025.	58 percent of the 288,000 total riparian miles in the bay watershed have forest buffers in place.	Restore 1,800 miles of riparian forest every two years (900 miles annually) in order to achieve the goal of restoring an additional 14,440 miles of riparian forest (to get to 181,440 miles, or 63 percent) by 2025. This effort is consistent with USDA's High Priority Goal initiative and includes restoration efforts by individuals, nonprofit organizations and all levels of government. (USFS)
Fish Passage: Restore historical fish migratory routes by opening 1,000 additional stream miles by 2025, with restoration success indicated by the presence of river herring, American shad and/or American eel.	Approximately 1,924 stream miles in the Chesapeake Bay watershed have been opened and are accessible for fish migration.	Reopen 132 additional stream miles with the degree of restoration success measured by the presence of river herring, American shad, hickory shad, brook trout and/or American eel. To determine degree of project success, document the presence/absence of indicator species (river herring, American shad, hickory shad, brook trout and/or American eel) at 50 percent of fish passage projects completed. (FWS/NOAA)

ADDITIONAL PROGRAMMATIC MILESTONES FOR THIS GOAL AREA INCLUDE:

Target Date	Programmatic Milestone
WETLANDS	
December 2012	Restore, plant and open 35 acres of wetland and tidal gut habitat to fish and natural tidal flow, allow inflow of dredged material and begin designs for expansion of the Poplar Island project. (USACE)
December 2012	Complete the cost estimate update for the Mid Chesapeake Bay Ecosystem Restoration project, Dorchester County, Maryland. (USACE)
December 2013	Engage wildlife and natural resource agencies in strategic wetland action teams in interested bay states by 2013. (FWS)
FISH PASSAGE	
December 2013	Complete a bay-wide fish passage prioritization tool by 2013 for blockages in Maryland, Virginia and Pennsylvania. Priority status will be given to projects which open larger stretches of high quality habitats and projects which enhance passage of target fish species. (FWS/NOAA)
RIPARIAN FOREST	
December 2012	Complete a strategy to accelerate forest restoration in priority areas (USFS) and release a tool for improved monitoring of riparian forest buffers (USFS and USGS).
ADDITIONAL MILESTONES	
November 2011	Organize and chair the Sixth Mid-Atlantic Stream Restoration Conference, bringing together stream professionals from academia, government and the private sector to explore the science, engineering and policy of restoring stream functions. (FWS)
June 2012	Finalize project management plans with Montgomery County, Maryland and Prince George's County, Maryland to study the implementation of habitat restoration projects. (USACE)
December 2012	Sign cost-sharing agreement(s) for the initiation of a watershed feasibility study in the upper Rappahannock River to address multiple aspects of EO 13508. Investigations under this study authority are likely to include sediment, stream bank erosion, water supply issues and fish passage. (USACE)
December 2012	Draft feasibility study to provide for restoration of 94 acres of SAV, 38 acres of wetlands, 32 acres of reef habitat and 22 acres for reintroduction of the bay scallop in the Lynnhaven River watershed. (USACE)
December 2012	Conduct bathymetric surveys, collect and analyze sediment data, conduct detailed literature searches, assemble water quality data, develop hydraulic and sediment transport models to simulate processes within the reservoirs and riverine system, validate the models, and prepare a hydraulic modeling report for the Lower Susquehanna River watershed. (USACE, USGS)
December 2013	CBP partners are developing a methodology to calculate trends in stream health over time using the Stream Health Index. This methodology will be used to track progress towards achieving the Stream Health Outcome. (USGS/EPA)
December 2013	Execute cost-sharing agreements with Montgomery County, Maryland and Prince George's County, Maryland to study the implementation of habitat restoration projects. (USACE)

Sustain Fish and Wildlife

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

OUTCOMES

- Restore native oyster habitat and populations in 20 tributaries out of 35 to 40 candidate tributaries by 2025.
- 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.
- Restore naturally reproducing brook trout populations in headwater streams by improving 58 sub-watersheds from "reduced" classification (10–50 percent of habitat lost) to "healthy" (less than 10 percent of habitat lost) by 2025.
- Restore a three-year average wintering black duck population in the Chesapeake Bay watershed of 100,000 birds by 2025.

Success in protecting and restoring the Chesapeake Bay ecosystem will ultimately be measured by the vitality and richness of its living resources and the health and well being of the people who rely on them. To this end, **the EO 13508 Strategy established outcomes for four species—blue crab, oysters, brook trout and black duck. These species were chosen based on their ecological, commercial and recreational significance and are assumed to be representative of the overall health of the Chesapeake Bay watershed.** Restoration, conservation, planning and management actions taken to achieve the stated outcomes for these four species will also address the needs of other species and improve bay and watershed health. While the combined efforts of federal, state and local governments, as well as nongovernmental organizations and private citizens, have enabled significant progress in advancing the health of fish and wildlife in the Chesapeake Bay and its watershed, these living resources—as well as the habitat on which they depend—need our continued, sustained effort.

Blue Crab and Collaborative Fisheries Management

The Sustainable Fisheries Goal Implementation Team has been established as the forum for coordinating science-based fisheries policy and management bay-wide. This year, the Fisheries GIT, chaired by NOAA, will adopt new blue crab abundance and exploitation targets and thresholds to ensure sustainability of the blue crab fishery and population, and will establish an approach to develop ecological reference points. NOAA will work with federal and state partners to strengthen coordination of regional efforts with national policies and programs; use ecosystem models to support decision making on keystone fishery species; expand coordination, collaboration and communication of fisheries research to assist in prioritization of research goals; and improve understanding of fisheries health, status and trends to support management decisions.

Federal agencies will work with state partners to prepare and release a report on the extent and seriousness of toxic contaminants, including impacts on fisheries, in the bay and its watershed.

Oysters

Restoring native oyster populations and the habitat they provide other species in the Chesapeake Bay remains a priority for NOAA, USACE and state agencies. NOAA, USACE and the Maryland Department of Natural Resources will **continue reef construction, spat on shell planting, and restoration monitoring and evaluation in Harris Creek, Maryland, as a blueprint for large-scale sanctuary restoration.** USACE will complete the Native Oyster Restoration Master Plan and NOAA will lead development of a collaborative strategy to guide selection of an agreed-upon federal-state list targeting four to six tributaries for restoration. NOAA and Maryland will also **provide pre-restoration**

seafloor mapping and habitat assessments for two to three tributaries to guide oyster restoration projects, design a pilot project to quantify the ecosystem services provided by oyster reefs, and initiate restoration in the Lafayette River, Virginia. USACE is working with the Virginia Marine Resources Commission and Virginia Institute of Marine Science to quantify and classify fossil shell resources in the James and Elizabeth rivers and Tangier-Pocomoke Sound; to model commercial and environmental benefits on sanctuary areas and rotational harvest areas; and to provide monitoring of federally funded and constructed projects. USACE will also continue restoration in the Great Wicomico and Lynnhaven rivers. The Fisheries GIT will adopt oyster restoration performance metrics and apply them to current and existing projects in tributaries, such as Harris Creek and the Great Wicomico River to evaluate the restoration success.

USGS is focused this year on identifying parasites, bacterial and viral pathogens associated with fish mortalities (working with FWS) and occurrence with different types of land use.

Federal agencies continue to work with the states, the public, watermen and resource agencies on the challenges of large, tributary-scale oyster restoration. Challenges include acquiring the large quantities of shell and hard substrates required for constructing oyster reef habitat and balancing competing uses at candidate restoration sites. Federal efforts continue to work through these challenges with all Chesapeake Bay oyster restoration stakeholders.

Brook Trout

The Eastern Brook Trout Joint Venture Science and Data Committee (which includes FWS and USGS) and the Habitat GIT will continue to coordinate among federal and state agencies' experts to refine field assessments of brook trout populations and of riparian and in-stream habitat characteristics necessary to maintain sustainable populations of brook trout and other coldwater species. The Eastern Brook Trout Joint Venture Science and Data Committee and Habitat GIT will host a workshop in 2012 to **decide on a watershed metric for brook trout abundance; recommend catchments in which to focus stream restoration to meet two-year milestones for this species; identify a consistent monitoring protocol among the states; and discuss how best to leverage funding** to make progress toward the outcome. In addition, USFS will complete a watershed-wide stream segment ranking for brook trout restoration. USGS will work with FWS through the Landscape Conservation Cooperatives to identify additional science needs related to brook trout including potential impacts from Marcellus Shale drilling. USGS is beginning a local study of the potential impacts of temperature change on streams with brook trout in the Shenandoah National Park. USGS and FWS will also provide science to determine the factors causing fish kills of other key species in the bay watershed. USGS is focused this year on identifying parasites, bacterial and viral pathogens associated with fish mortalities (working with FWS) and occurrence with different types of land use. Findings from these studies will also contribute to a report on the extent and seriousness of toxic contaminants and endocrine-disrupting compounds in the bay watershed (see water quality goal).

Black Duck

Federal, state and nongovernmental partners are planning a strategic decision making workshop for spring 2012 to compare the number of wintering ducks to the ability of the bay to sustain the required level of food, habitat, water and other necessities. Toward that end, USGS and other partners are developing regional and local models for black ducks that will better define energetic carrying capacity, including using results from testing food preferences on a captive colony of black ducks at Patuxent Wildlife Research Center. Results of this research and modeling will inform decisions by habitat managers, such as those at National Wildlife Refuges within the watershed and along the Atlantic flyway, on **how much acreage and what type of forage is needed to support 100,000 wintering black ducks in the Chesapeake Bay watershed.** In addition, the Habitat GIT will work with the SAV community to explore potential for expanding seagrass beds adjacent to National Wildlife Refuge lands and National Estuarine Research Reserves in order **to provide a continued source of food for waterfowl** while adapting to conversion of marsh to shallow water habitat.

The EO Strategy sets out a goal of protecting an additional 2 million acres of high-priority conservation lands by 2025.

Combined appropriations for this goal area total $12.6 million. The following table is a breakdown of these figures by agency.

Sustain Fish and Wildlife	
DoD (Services)	***$1.7 million***
DoD (USACE)	***$5 million***
DOI (FWS)	***$737,818***
DOI (USGS)	***$1.1 million***
NOAA	***$3.9 million***
USDA (USFS)	***$170,000***
Total	***$12.6 million***

OUTCOMES AND MILESTONES FOR THIS GOAL AREA INCLUDE:

2025 Outcome	Baseline	2012-2013 Milestone
Oysters: Restore native oyster habitat and populations in 20 tributaries out of 35 to 40 candidate tributaries by 2025.	There are several tributaries with ongoing restoration of oyster reef habitat; zero tributaries have been evaluated per the recently established oyster restoration performance metrics.	NOAA and USACE will continue restoration in the Great Wicomico and Lynnhaven rivers and Harris Creek in 2012 and begin focused planning and restoration in two to three additional bay tributaries by 2013 (candidate tributaries include, but are not limited to, Little Choptank River and Lafayette River). However, we note that the first several years are focusing more heavily on establishing standardized assessment protocols and developing tributary restoration plans with accelerated implementation of in-water restoration expected in the outyears. (NOAA/ USACE)
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.	The 2010-2011 Blue Crab Advisory Report indicated the abundance of adult blue crabs was 254 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 lost) to "healthy" (less than 10 percent of habitat lost) by 2025.	The Eastern Brook Trout Joint Venture classified 388 of 1,294 sub-watersheds in Chesapeake Bay as 'reduced' for brook trout.	Improve 10 sub-watersheds every two years in order to restore naturally reproducing brook trout populations in headwater streams by improving 58 sub-watersheds from 'reduced' classification (10-50 percent of habitat lost) to "healthy" (less than 10 percent of habitat lost) by 2025. (FWS)

2025 Outcome	Baseline	2012-2013 Milestone
Black Ducks: Restore a three-year average wintering black duck population in the Chesapeake Bay watershed of 100,000 birds by 2025.	Recent mid-winter aerial surveys estimated the 2007-2009 rolling three-year average at 37,158 black ducks in the Chesapeake Bay.	Create 3 percent more forage on refuge lands every two years in order to restore a three-year average wintering black duck population in the Chesapeake Bay watershed of 100,000 birds by 2025. (FWS)

ADDITIONAL PROGRAMMATIC MILESTONES FOR THIS GOAL AREA INCLUDE:

Target Date	Programmatic Milestone
OYSTER	
December 2012	The Fisheries GIT will continue to adopt and apply oyster restoration performance metrics to existing projects in the Great Wicomico and Lynnhaven rivers. These metrics will be used to guide new tributary restoration planning and monitoring. (NOAA/USACE)
December 2012	Complete native oyster protection and restoration strategy, including a collaborative and agreed-upon federal-state list of priority tributaries targeting four to six tributaries for restoration and lay out steps for expanding aquaculture and evaluating sustainability of wild fishery. The collaborative strategy will document a phased approach for developing tributary scale restoration plans, reef construction, monitoring and performance evaluation. (NOAA)
December 2012	Complete USACE Native Oyster Restoration Master Plan. (USACE)
December 2012	Complete bay-wide Oyster Stock Assessment. (NOAA)
BLUE CRAB	
December 2012	New bay-wide abundance and exploitation targets and thresholds for blue crabs recommended by the Chesapeake Bay Stock Assessment Committee and adopted by the states. (NOAA)
December 2012	Assess extent to which the population is sustainable (i.e., between the abundance and exploitation targets and thresholds) by preparing and delivering the Blue Crab Advisory Report annually (2012 and 2013) and convening the Fisheries GIT to discuss the report and adapt management approaches when necessary. (NOAA)
BROOK TROUT	
December 2012	Complete watershed-wide stream segment rankings for brook trout restoration under climate change. (USFS)
December 2012	Host working session of Chesapeake Bay Subcommittee of Eastern Black Trout Joint Venture Science and Data Committee to recommend catchment-level metric, restoration targets and monitoring options. (FWS, USGS)
BLACK DUCK	
December 2012	In spring 2012, host strategic decision-making workshop to engage experts in translating number of wintering ducks to energetic carrying capacity of Bay habitats. (FWS, USGS)

Conserve Land and Increase Public Access

Goal: Conserve landscapes treasured by citizens to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value. Expand public access to the Bay and its tributaries through existing and new local, state and federal parks, refuges, reserves trails and partner sites.

OUTCOMES

- Protect an additional 2 million 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.
- Increase public access to the bay and its tributaries by adding 300 new public access sites by 2025.

Achieving the land conservation goal requires a focus on conserving the most important lands. Partners in the bay watershed would benefit from a shared understanding of what landscapes citizens value most and how agencies charged to protect and manage them can do so most effectively. This Action Plan continues a major step toward that end—**developing a publicly accessible geographic information and priority system to facilitate collaboration among state, federal, local, and nongovernmental organization partners and support sound land conservation planning, decision making and implementation throughout the watershed**. This year, the U.S. National Park Service and USGS will expand work to establish a watershed-wide geographic information system (GIS)-based land conservation priority system by forming a partnership with NatureServe's LandScope America. USGS will work with NPS, NatureServe and other partners to revise and enhance the Chesapeake Land Conservation Priority System, which is considered a prototype by DOI for other areas of the nation, completing initial build-out of the system by the end of the year. USGS will also incorporate results from the USGS Chesapeake Land-Change model to help assess vulnerability of lands to future development.

In order to continue the EO Strategy's commitment to identify culturally significant and ecologically important landscapes, **NPS will continue to work with federal, state and local partners to further develop the methodology for identifying indigenous cultural landscapes through initial pilot mapping efforts**. NPS is committing resources to expand this work to fully cover priority areas along the Captain John Smith Chesapeake National Historic Trail. NPS is also developing a conservation strategy for the Captain John Smith Chesapeake National Historic Trail that will identify focus areas along the major tributaries.

Direct land conservation efforts will continue to be carried out by a wide range of private landowners, local and regional land trusts, and local, state and federal agencies. **While most land conservation action in the Chesapeake region is carried out at the state and local level, some federal support for land conservation or direct federal land protection is anticipated this year.** NRCS, FWS, NPS and USFS all contribute to this. DoD will continue through the Readiness and Environmental Protection Initiative (REPI)

Expanding and maintaining public access to the Chesapeake Bay goes hand in hand with the conservation of valuable landscapes in the Chesapeake region. But public access – especially to and from the water – remains limited.

Program to identify opportunities to conserve priority landscapes around defense installations.

Expanding and maintaining public access to the Chesapeake Bay goes hand in hand with the conservation of valuable landscapes in the Chesapeake region. But public access – especially to and from the water – remains limited. Based on this Action Plan, federal, state, local, nongovernmental and community partners will finalize an effort to develop a regional public access plan to inform and guide expansion of Chesapeake watershed public access sites. **The public access plan will identify key projects for potential funding and will identify public access needs and opportunities along the Captain John Smith Trail, Star Spangled Banner Trail and the Potomac Heritage National Scenic Trail.**

Combined appropriations for this goal area total $30.2 million. The following table is a breakdown of these figures by agency.

Conserve Land and Increase Public Access	
DoD (Services)	***$13.3 million***
DOI (FWS)	***$1.7 million***
DOI (NPS)	***$5.5 million***
DOI (USGS)	***$175,000***
USDA (NRCS)	***$9.5 million***
USDA (USFS)	***$60,000***
Total	***$30.2 million***

OUTCOMES AND MILESTONES FOR THIS GOAL AREA INCLUDE:

2025 Outcome	Baseline	2012-2013 Milestone
Land Conservation: Protect an additional 2 million 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.	7.8 million acres protected watershed-wide.	Protect an additional 2 million acres of land by 2025, an average of 133,333 acres annually. This includes total land protected by local, state, and federal government and nonprofit organizations. (NPS)
Public Access: Increase public access to the bay and its tributaries by adding 300 new public access sites by 2025.	761 public access sites providing access to the bay and its tributaries exist in the District of Columbia, Maryland, Pennsylvania and Virginia (based on 2010 data); data on existing access sites in New York, Delaware and West Virginia are to be collected in the future.	Add 300 public access sites by 2025 by adding an average of 20 public access sites annually. This includes total sites added by local, state, and federal government and nonprofit organizations. (NPS)

ADDITIONAL PROGRAMMATIC MILESTONES FOR THIS GOAL AREA INCLUDE:

Target Date	Programmatic Milestone
December 2012	Complete initial build-out of the Land Conservation Priority Mapping Tool. (NPS and USGS)
December 2012	Finalize public access plan. (NPS)
December 2012	Complete strategy to reduce the loss of working lands. (USFS)

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.

America has a long history of stewardship. Unfortunately, increased pressures and competing interests have resulted in a degraded bay. The citizens of this region have yet to find the elusive balance between conservation and growth development—and the need for increased stewardship of the Chesapeake watershed is great. The citizen stewardship section of the EO Strategy outlines key actions needed to continue to educate and engage people in the important work of protecting and restoring the bay's fragile ecosystem.

The citizens of this region have yet to find the elusive balance between conservation and growth development—and the need for increased stewardship of the Chesapeake watershed is great.

The EO Strategy calls for expanding Chesapeake Conservation Corps programs to help fill this need. Existing conservation corps in the Chesapeake watershed support work on trail development, improving public access, planting trees, removing invasive species, improving stormwater systems, restoring wildlife habitats, implementing education programs, and maintaining parks and trails—all while expanding participants' skills to aid in their future employment. NPS will continue to convene federal, state and nongovernmental partners **to expand existing conservation corps that create jobs and carry out conservation and restoration projects in priority watersheds, creating a broader Chesapeake Conservation Corps.** Federal partners will complete a strategy and coordinate development of meaningful projects with other federal agencies. Partners will also develop a Chesapeake Conservation Corps Network to collectively market and evaluate programs throughout the watershed. Most importantly, the Network will identify and provide a continuum of service opportunities to help **engage youth in meaningful work in the outdoors.**

In order to enhance visitor experiences and stewardship, NPS will continue to build long-term local partnerships for engaging communities and citizens along national trails. NPS will continue to work with state and local partners to develop orientation and interpretive media along the Captain John Smith Chesapeake National Historic Trail and Star-Spangled Banner National Historic Trail.

Fostering systemic change in school divisions to support student environmental education is critical to grow the next generation of bay stewards. This year, federal partners will finalize their Elementary and Secondary Environmental Literacy Strategy that addresses goals related to students, educators, school grounds, and the coordination of the environmental education community. The objective of this strategy is to ensure that federal programs and resources are coordinated, informed by state priorities, and fully available to and used by state partners. Specifically, NOAA will coordinate an informal public review; work with other federal agencies to incorporate comments and release a final strategy; and work with partners to develop shared metrics to track success towards the goals of the strategy. In addition, **NOAA, on behalf of the Mid-Atlantic Education Workgroup of the CBP, will convene a biennial Environmental Literacy Summit** in support of the strategy to advance policy discussions related to environmental and science education in the region.

Forestry for the Bay, a program sponsored by the USFS, provides education and outreach to landowners to promote sustainable forest management. This program **will continue to expand its outreach with woodland owners** by enhancing existing partnerships and engaging new, non-traditional partners like local governments and realtors. The program's web resources and tools will be regularly updated to ensure their utility for landowners.

EPA's Small Watershed Grant Program provides funds for projects that foster citizen stewardship.

Combined appropriations for this strategy total $6.6 million. The following table is a breakdown of these figures by agency.

Expand Citizen Stewardship	
DoD (Services)	***$133,800***
DOI (FWS)	***$2.5 million***
DOI (NPS)	***$885,000***
EPA	***$2.3 million***
NOAA	***$519,925***
USDA (USFS)	***$335,000***
Total	***$6.6 million***

PROGRAMMATIC MILESTONES FOR THIS STRATEGY INCLUDE:

Target Date	Programmatic Milestone
November 2011	NOAA will convene a Mid-Atlantic Environmental Literacy Summit to focus on the intersection of science education and environmental literacy priorities, and to solicit state input on the draft federal K-12 Environmental Literacy Strategy. (NOAA)
December 2012	The education workgroup will draft and adopt metrics to assess the environmental literacy of the region's students using the principles of the National Science Foundation (NSF) funded framework for assessing environmental literacy. (NOAA)
December 2012	Chesapeake Conservation Corps strategy will be finalized. (NPS)

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.

This year, the Environmental Markets Team (EMT) intends to continue developing the infrastructure for environmental markets in the Chesapeake Bay. The EMT will be looking at demand drivers and other mechanisms to support establishment of a sustainable market. **The EMT intends to continue to support the World Resources Institute's development of a trading platform by investing in the Nutrient Tracking Tool as a model for field scale estimations of nutrient reductions from changed management practices.** The EMT also intends to support an economic study to better understand the true costs of water quality improvements and the role a nutrient trading program can play in reducing those costs.

The EMT will look at other environmental market opportunities, such as mitigation and conservation banking potential. Throughout this process, coordination, education and outreach will underscore the actions taken.

The EMT will focus efforts in five areas:

1. STRENGTHEN FEDERAL, STATE AND LOCAL COORDINATION – Facilitate meetings of federal and state agencies to inform development of markets and market infrastructure, and host stakeholder workshops to advance development and implementation of market mechanisms for environmental markets.

2. FACILITATE DEVELOPMENT/EXPANSION OF CONSERVATION AND MITIGATION BANKING MARKETS – Identify opportunities for use of mitigation and conservation banking as tools

for conserving and restoring ecosystem services. Identify strategies to expand existing markets and develop public-private partnerships for credits supplied to and sold by conservation banks, and clarify how conservation banks would overlap or interact with wetland/stream mitigation banking as well as TMDL markets.

3. ANALYZE MARKET DEMAND – Explore emerging market demand and identify potential federal investment strategies or mechanisms that could be used to support environmental market development and catalyze their use in meeting water quality and other Chesapeake Bay goals.

4. BUILD LOCAL CAPACITY – Conduct outreach and education, and facilitate stakeholder engagement through workshops, training sessions and by improving access to existing information, databases, registries and other resources.

5. TARGET CONSERVATION INNOVATION GRANTS – USDA has targeted up to $5 million in Conservation Innovation Grants specifically for the design and implementation of a coordinated water quality trading system across the Chesapeake Bay region. **Water quality credit trading is a market-based approach to lowering the costs of reducing pollution, and has the potential to engage more farmers and ranchers in water quality improvement efforts through the implementation of more conservation practices on agricultural lands.** The CIG funds are designed to support States and other entities as they work to develop market infrastructures and pilot the testing of tools and approaches to trading water quality credits.

Combined appropriations for this strategy total $5.5 million. The following table is a breakdown of these figures by agency.

Develop Environmental Markets	
EPA	***$150,000***
USDA (NRCS)	***$5 million***
USDA (OEM)	***$350,000***
Total	***$5.5 million***

Respond to Climate Change

Objective: Minimize the vulnerability of the Chesapeake Bay watershed, including its habitats, public infrastructure and human communities, to adverse impacts from climate change.

Projecting land use and climate change effects on bay resources and communities is essential to planning for future health of the Chesapeake Bay and its watershed and to meet the long-term goals and outcomes of the EO and the Chesapeake Bay partnership. Federal agency partners will continue putting mechanisms in place to better instill an understanding of climate change into planning and modeling of water quality, habitat, fish and wildlife, and land conservation.

Science and Monitoring

USGS will focus on science and modeling to support future integration of potential change into planning for stream habitat, water quality and the TMDL. **USGS will improve its Chesapeake Land Change model and produce a report summarizing the potential changes in streamflow conditions in the bay watershed** that will be used by EPA to help assess potential changes in water quality (note that this is the key action supporting the climate change two-year milestone). USGS is working with FWS, USFS, and state partners, through the Appalachian Conservation Cooperative, to **prioritize science needs to address the potential impact of land and climate change on brook trout habitat.** USGS is beginning a local study of the potential impacts of temperature change on streams with brook trout in the Shenandoah National Park.

NOAA and USGS will continue monitoring and modeling of sea level rise along the Atlantic Coast, including focused analysis of risks to coastal wetlands in sentinel sites such as Blackwater National Wildlife Refuge and National Estuarine Research Reserve sites. Similarly, the USACE will complete a sea-level rise

pilot study at Willoughby Spit, Virginia. USGS will summarize information about the potential rates of sea-level rise in the bay region. With support initiated in 2010 from NOAA, the University of Maryland continues to investigate how climate change will affect sediment and nutrient impacts to tidal marshes. NOAA also is supporting both an inventory of Light Detection and Ranging (LiDAR) data for Maryland, Virginia and other mid-Atlantic states, and the use of that data for the Sea Level Rise and Coastal Flooding Impacts Viewer.

Tools, Training and Guidance

NOAA will support tools and training to assist with restoration adaptation planning, including:

- Workshops with the National Wildlife Federation to integrate climate adaptation with restoration and conservation techniques at the sub-watershed level.
- A technical workshop on how tidal and geodetic infrastructure can be applied to sustainable wetland restoration.
- Development of guidelines with USGS and NPS on monitoring wetland surface elevation change.
- Workshops on drought and the Chesapeake Bay as a basis for establishing the Chesapeake Bay Regional Drought Early Warning Information System.

To assist understanding of community-level decisions, NOAA is funding Virginia Sea Grant support for the "Community Adaptation to Sea Level Rise" project, which will evaluate data visualization, awareness of sea level rise, and policymakers' response to community policy preferences. In addition, NOAA will connect the work of the NSF-funded Maryland and Delaware Climate Change Education, Assessment and Research project to the regional climate literacy effort and the citizen stewardship components of the CBP.

Federal agencies will continue advancing climate adaptation in specific locations in the watershed. For example, FWS is working in partnership with the Maryland Audubon Society to develop a watershed management plan for the Blackwater River. The partnership focuses on increasing adaption and resilience of watershed habitats and wildlife to sea level rise and improving the quality of water entering the bay.

Integrating Climate Change Efforts with the Chesapeake Bay Program

FWS, USGS and NPS are working with other federal and state partners, through the Landscape Conservation Cooperatives, to coordinate resource management activities associated with climate change with the CBP. USGS, FWS and NPS will also be working through the DOI Climate Science Center to supply climate science for the Chesapeake and Northeast areas and working with regional groups that are implementing the Ocean Action Plan.

Combined appropriations for this strategy total $1.3 million. The following table is a breakdown of these figures by agency.

Respond to Climate Change	
DOI (USGS)	***$250,000***
EPA	***$700,000***
NOAA	***$312,500***
Total	***$1.3 million***

PROGRAMMATIC MILESTONES FOR THIS STRATEGY INCLUDE:

Target Date	Programmatic Milestone
December 2013	Complete improvements to Chesapeake Land Change Model (version 3) to enhance assessments of the combined impact of climate and land change on the bay and its watershed. Results from the model will also be used to assess vulnerability of conserved lands to future development. (USGS)

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.

Federal agencies are working with state and academic partners on two key efforts to strengthen science in 2012: **(1)** providing science to the Goal Teams and helping them implement adaptive management through Chesapeake*Stat*, and **(2)** establishing the Monitoring Alliance and Data Enterprise. These activities will help CBP partners 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.

Providing science to the CBP Goal Teams and implementing Chesapeake*Stat*: Federal agencies are working with state and academic partners to provide science to meet the highest priority needs of the CBP Goal Teams. These science needs will be refined as the CBP implements its new adaptive-management decision framework, Chesapeke*Stat*. The decision framework involves using the best available science to develop restoration and protection goals, formulate management strategies, and establish monitoring to assess progress toward the goals. The federal agencies will interact with the Goal Teams to provide the latest science to help them implement the decision framework and refine their science needs. The revised science needs will be considered for 2013 activities working with state and academic partners through CBP's Scientific, Technical and Assessment Reporting (STAR) team. Selected science activities to support the Goal Teams this year include:

- **For the Fisheries Goal Team:** NOAA will be providing science on oysters to help site locations for restoration projects and working with partners to improve modeling and monitoring to improve fisheries management. USGS and FWS will continue studies of factors causing fish kills in streams of the bay watershed so the Goal Team can consider approaches to reduce fish mortalities.
- **For the Habitat Goal Team:** FWS will lead workshops on improved metrics for brook trout and wetland restoration needed to increase black duck populations. FWS, USGS and USFS will improve assessments to identify priority areas to focus restoration and protection actions for streams supporting brook trout. The agencies will also enhance studies of the potential changes in brook trout habitats due to land and climate change. FWS, USGS and NOAA will continue monitoring of sea-level rise to assess impacts on coastal wetlands near Blackwater Refuge. USGS will summarize information about the potential rates of sea-level rise in the bay region.
- **For the Water Quality Goal Team:** EPA will work with USGS, NOAA and the state partners to expand monitoring and explanation of progress toward the TMDL, and assess the effect of best management practices (BMPs) on water quality changes in urban and agricultural watersheds. EPA, USGS, FWS and NOAA will be working with partners to summarize the extent and seriousness of the impact of toxic contaminants on fish and wildlife in the bay and its watershed.
- **Healthy Watersheds and Stewardship Goal Teams:** NPS and USGS will enhance efforts to develop the Land Conservation Priorities System by forming a partnership with NatureServe to build out a system to support sound conservation planning and decision making. USFS and USGS are also working on a tool to help states better prioritize conservation of forests.

Monitoring Alliance and Data Enterprise: To improve coordination of federal and state monitoring programs, CBP is establishing a Monitoring Alliance. Federal agencies will work with state partners to improve water quality and land cover information. USGS will be producing more recent land cover (2011 data) for the

bay watershed. EPA, USGS and NOAA will work with states to expand water-quality monitoring in the watershed and estuary to help assess progress toward the TMDL. EPA will also begin to engage local jurisdictions and non-governmental organizations on partnerships to expand the use of their water-quality monitoring to assess conditions in the bay and its watershed. To better manage and share monitoring information, EPA is leading efforts to establish a Data Enterprise. **EPA will be working with NOAA and USGS and the states to improve management and access to water-quality data collected in the bay and its watershed.** Building on designs considered in 2011 to improve management of monitoring observations, NOAA will work with EPA and USGS to connect real-time observations of water quality (e.g., temperature, salinity, dissolved oxygen, turbidity) with observations taken by other agencies in the watershed. The goal in 2012 is to have an expanded base of observations from which to calculate more accurate water quality metrics and better describe the connection between watershed, tributaries and mainstem.

The majority of milestones to strengthen science, which includes modeling, monitoring and assessment activities, are listed in each of the major EO Strategy goals.

Combined appropriations for this strategy total $4.2 million. The following table is a breakdown of these figures by agency.

Strengthen Science	
DOI (USGS)	***$976,239***
EPA	***$1.4 million***
NOAA	***$1.8 million***
Total	***$4.2 million***

PROGRAMMATIC MILESTONES FOR THIS STRATEGY INCLUDE:

Target Date	Programmatic Milestone
December 2012	Implement the CBP decision framework through interaction with all GITs. Summarize the information in Chesapeake*Stat* (EPA) and work to provide the science needed to help support this adaptive management process. (USGS, NOAA and EPA)
July 2013	As part of the Monitoring Alliance, engage local jurisdictions and nongovernmental organizations on partnerships to expand the use of their water quality monitoring to assess conditions in the bay and its watershed. (EPA) Integrate federal and state dissolved oxygen data across tidal, non-tidal and main stem monitoring data through the Data Enterprise to advance understanding of hypoxia and progress toward water-quality standards. (EPA, USGS, NOAA)
December 2013	Implement the Chesapeake Monitoring Alliance by producing more recent land cover (2011 data) for the bay watershed that can be used to support the implementation of EO goals. (USGS)

Implementation and Accountability

Objective: The Executive Order recognizes the federal government alone cannot achieve the goals an outcomes needed to restore and protect the Chesapeake Bay and its watershed without significant collaboration with state and local government, nongovernmental organizations and citizens.

As chair of the Federal Leadership Committee, and as directed by Section 117 of the Clean Water Act, EPA has unique responsibilities to coordinate and facilitate partnerships to restore and protect the Chesapeake Bay. As such, EPA will take the lead on the actions called for in the EO Strategy's implementation and accountability chapter. This year, these actions include continuing to align the FLC and Chesapeake Bay Program Executive Council functions. This includes using adaptive management to improve understanding of actions that need to be taken; developing annual action plans and progress reports; and developing, implementing and reporting progress on two-year milestones. The adaptive management decision framework will be developed and visualized using Chesapeake*Stat*. **Chesapeake*Stat* will be enhanced to provide a website for use in decision-making for the CBP's Goal Implementation Teams and Management Board.** EPA's responsibility to the partnerships also calls for EPA to maintain advisory committees for science and technology, citizens, and local governments, as well as multijurisdictional GITs. This responsibility also calls for periodic meetings of state and federal agency principals, including those from Washington, D.C. and the Chesapeake Bay Commission. Finally, EPA maintains a program office for the partnership. Although only EPA's funding is associated with management of the CBP and has been allocated specifically to the implementation and accountability section of the EO Strategy, each agency has and will continue to contribute significantly to these activities.

FY 2012 costs associated with this are approximately $3.8 million.

Implementation and Accountability	
EPA	***$3.8 million***
Total	***$3.8 million***

Funding Summary

The 2012 Action Plan provides a breakdown of how FY 2012 funding provided by Congress would be used by FLC agencies to advance protection and restoration of the Chesapeake Bay and its watershed. In total, more than $420 million is targeted toward meeting the outcomes and goals set forth in the EO Strategy. Funding is summarized in the following table by goal and supporting strategy and agency. Allocations are based on funding that is directly attributable to implementing the EO Strategy by the FLC agencies.

This includes:

- **Direct budget lines for specific agencies for Chesapeake Bay activities.**
- **Allocations of agency base funding towards the EO Strategy.**
- **Shares of national programs that can be reasonably and directly attributed to supporting the EO Strategy in the Chesapeake watershed.**

In a few cases, it is not feasible to project all federal/state partnership programs that will support implementation, due to the structure of the programs. In addition, this Action Plan does not reflect the sum total of all activities that may be supported through federal funding in the Chesapeake Bay watershed. Rather, it is focused specifically on the funding that aligns directly with the actions and outcomes identified in the EO Strategy. Therefore, the allocations do not include substantial other federal funding occurring within the watershed that does not directly support the specific EO Strategy actions.

The funding levels outlined in this Action Plan are not comparable with prior estimates of federal expenditures toward the Chesapeake Bay. This represents funding projections that have been made for FY 2012 based on an explicit strategy and a set of actions jointly adopted by all participating agencies.

Department/ Agency	Water Quality	Habitat	Fish and Wildlife	Land Conservation and Public Access	Citizen Stewardship	Environmental Markets	Climate Change	Science	Total
USDA Total	$93,630,000	$12,426,000	$170,000	$9,577,000	$335,000	$5,350,000			$121,488,000
USFS	$210,000	$535,000	$170,000	$60,000	$335,000				**$1,310,000**
NRCS	$93,420,000	$11,891,000		$9,517,000		$5,000,000			$119,828,000
Office of Environmental Markets						$350,000			**$350,000**
U.S. Department of Commerce / NOAA	$912,500	$1,792,500	$3,854,500		$519,925		$312,500	$1,816,500	$9,208,425
DoD Total	$35,179,298	$29,512,668	$6,708,697	$13,293,500	$133,800				$84,827,963
Services	$35,179,298	$14,304,668	$1,708,697	$13,293,500	$133,800				$64,619,963
USACE		$15,208,000	$5,000,000						$20,208,000
DOI Total	$4,693,881	$5,400,182	$1,847,353	$7,371,323	$3,367,022		$250,000	$976,239	$23,906,000
FWS	$61,901	$5,193,936	$737,818	$1,670,323	$2,482,022				$10,146,000
NPS				$5,526,000	$885,000				**$6,411,000**
USGS	$4,631,980	$206,246	$1,109,535	$175,000			$250,000	$976,239	**$7,349,000**
EPA	$175,679,498				$2,272,000	$150,000	$700,000	$1,400,266	$184,010,730**
Total	$310,095,177	$49,131,350	$12,580,550	$30,241,823	$6,627,747	$5,500,000	$1,262,500	$4,193,005	$419,632,152

*NRCS figures include Chesapeake Bay Watershed Initiative (CBWI), Conservation Technical Assistance (CTA), Environmental Quality Incentives Program (EQIP), Conservation Innovation Grants (CIG), Agricultural Management Assistance (AMA), Wildlife Habitat Incentives Program (WHIP), Wetlands Reserve Program (WRP), Grasslands Reserve Program (GRP), Healthy Forests Reserve Program (HFRP) and Farm and Ranch Lands Protection Program (FRPP).

**EPA's total of $184,010,730 includes approximately $3.8 million of EPA funds dedicated to actions associated with the EO Strategy's Implementation and Accountability chapter and Chesapeake Bay Program support as described in the text in this section.

Note 1: The Department of Transportation is a member of the Federal Leadership Committee. While DOT does not make any direct programmatic or base funding contributions specifically for Chesapeake Bay restoration activities under federal surface transportation programs, it is expected that DOT programs will be used to support Chesapeake Bay restoration in 2012. DOT offers funding assistance to all states and to local transportation agencies by formula for a broad range of surface transportation improvements. States and transit agencies determine what activities they will finance from formula funds through state and metropolitan transportation planning. The Department offers funding assistance to states and metropolitan areas for transportation planning, including activities that integrate transportation planning with housing and other infrastructure planning. DOT also funds discretionary programs such as the Transportation Infrastructure Generating Economic Recovery program, transit New Start program, and the Transportation and Community and System Preservation program that can foster livable communities; awards for 2012 discretionary programs have not yet been announced.

Note 2: The Department of Homeland Security is a member of the Federal Leadership Committee. However, DHS is still in the process of determining its Chesapeake Bay activities and programmatic contributions for 2012.

Development of the Annual Action Plan Process


Source: FWS

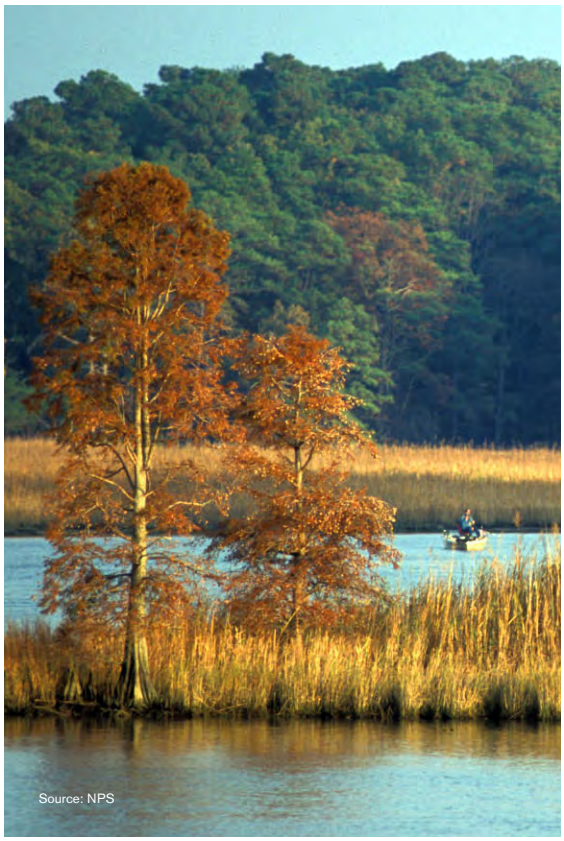
The EO directed the Federal Leadership Committee to "consult with stakeholders—including relevant bay jurisdiction agencies—and members of the public in developing the Action Plan and Annual Progress Report." The lead agency for each goal area or supporting strategy took responsibility for carrying out overall consultation with bay jurisdictions and other key stakeholders during the development of the Action Plan. Consultations took place in the summer and fall of 2011.


Source: NOAA


Source: NOAA

Progress Reports

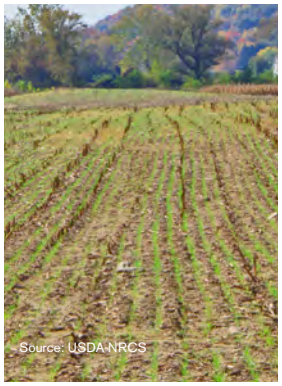
The EO directs the Federal Leadership Committee to publish "an Annual Progress Report reviewing indicators of environmental conditions in the Chesapeake Bay, assessing implementation of the Action Plan during the preceding fiscal year, and recommending steps to improve progress in restoring and protecting the Chesapeake Bay." These progress reports will help assess the success of the FLC agencies' efforts in implementing the actions identified in annual action plans and provide the agencies with a regular opportunity to adjust their implementation efforts to maximize success. The FLC is also working with the states to consider how to best align the FLC's annual progress report with the Chesapeake Bay Program's progress reports. The 2011 Progress Report is also available at http://executiveorder.chesapeakebay.net/.


Source: NPS

Public Comment

The Federal Leadership Committee provided drafts of the report for public comment prior to their final release. The FLC was particularly interested in comments that will help improve the development of this Action Plan, including the level of detail needed, format, quantity of information included, timing of Action Plans, as well as how to involve the bay watershed community in development of this and future plans.


Source: NOAA


Source: USDA-NRCS


Source: CPB