Chesapeake Bay Program
Science. Restoration. Partnership.

Wetlands Outcome

Management Strategy

2015–2025, v.2

I. Introduction

Wetlands provide a wealth of functions and services to support a healthy Chesapeake Bay ecosystem and support the needs of people who live, work and recreate in the watershed. They are thriving habitats for a diversity of species including birds that migrate along the Atlantic Flyway and fish and juvenile blue crabs that spawn and take shelter in coastal wetlands. Chesapeake wetlands provide world-class hunting, kayaking, and bird watching opportunities that greatly contribute to the regional economy and quality of life. Tidal wetlands can help stabilize shorelines, control erosion and buffer inland and coastal communities from the costly damages associated with floods and storm surge. Wetlands act as natural filters by absorbing nutrients and sediment from overland flow and shallow groundwater before it enters the Bay, and some also provide groundwater recharge (surface water

drains into the ground). Over the long-term, organic, saturated wetland soils store carbon from the atmosphere and help offset greenhouse gas emissions.

Wetland restoration is a credited best management practice (BMP) in the Chesapeake Bay Program's watershed model (16.75 average percent reduction/acre for nitrogen, 32.18 average percent reduction/acre for phosphorus, and 9.82 average percent reduction/acre for sediment). Both restoration and enhancement are intended to provide a range of benefits (including both habitat and water quality improvements) that are dependent on wetland type and landscape position (location of wetland relative to elevation, waterway, stressors). For purposes of clarity and accuracy, restoration, which results in an actual gain of wetland acreage, is tracked separately from enhancement, which results in gains in function of existing wetlands. Wetland restoration where wetlands historically existed is typically more successful than wetland creation where wetlands never existed

II. Goal, Outcome and Baseline

This management strategy identifies approaches for achieving the following goal and outcome:

Vital Habitats Goal

Restore, enhance and protect a network of land and water habitats to support fish and wildlife, and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.

Wetlands Outcome

Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 85,000 acres of tidal and nontidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025. These activities may occur in any land use (including urban) but primarily occur in agricultural or natural landscapes.

Baseline and Current Condition

The progress of the Wetlands Outcome is measured from zero acres starting in 2010 when the first Watershed Implementation Plans (WIPs) were drafted and adopted by the watershed jurisdictions. Between 2010 and 2013, 6,098 acres of wetlands were established, rehabilitated or reestablished on agricultural lands (including cropland, pasture, fallow fields and forests) in the Chesapeake Bay watershed.

III. Participating Partners

Team Lead: Habitat Goal Implementation Team

Workgroup Lead: Wetland Workgroup

Opportunities for Cross-Goal Team Collaboration:

- Habitat Goal Implementation Team
  - Black Duck Action Team
- Maintain Healthy Watersheds Goal Implementation Team

  - Healthy Watersheds Outcome Team
  - Land Use Options and Evaluation Outcome Team
- Water Quality Goal Team
  - Forestry Workgroup (Riparian Forest Buffer Outcome)
- Fostering Chesapeake Stewardship Goal Implementation Team
  - Protected Lands Outcome Team
  - Environmental Literacy Outcome Team
- Enhancing Partnering, Leadership and Management Goal Implementation Team
  - Local Leadership Outcome Team. Local governments, watershed associations, county conservation districts, nonprofits, and the private sector all play a role in the implementation of this strategy. Specifically, they provide outreach to landowners, identify and work with interested landowners, provide technical expertise and resources and in some states, participate in regulatory decision-making (wetlands permitting) regarding the implementation of living shorelines to address shoreline management.

Active Current Participation and Role **(Signatory Agencies in Bold**):

Level of Participation: High (actively involved in drafting the Management Strategy)

- **Maryland Department of Natural Resources (MD DNR)**
- The Nature Conservancy
- **Maryland Department of the Environment (MDE)**
- U.S. Fish and Wildlife Service (USFWS)
- Natural Resources Conservation Service, Maryland
- U.S. Army Corps of Engineers (USACE)

Level of Participation: Medium (actively involved in reviewing the draft documents)

- **Delaware Department of Natural Resources and Environmental Control**
- **Pennsylvania Department of Environmental Protection**
- **Virginia Department of Conservation and Recreation**
- **Virginia Department of Environmental Quality**
- **West Virginia Division of Natural Resources**
- Upper Susquehanna Coalition
- **U.S. Environmental Protection Agency (EPA), Region III**
- U.S. Geological Survey (USGS)
- Virginia Institute of Marine Science
- Biohabitats, Inc.
- Department of Defense (DoD) Chesapeake Bay Program
- NOAA Fisheries Office of Habitat Conservation

Level of Participation: Low (generally interested in the development of the Management Strategy)

- **District of Columbia Department of Energy and the Environment**
- **Virginia Governor's Office**
- **Chesapeake Bay Commission**
- U.S. Department of Agriculture

- Chesapeake Bay Foundation
- Troutman Sanders
- Virginia Agribusiness Council

IV. Factors Influencing Success

Many social, political, and programmatic factors influence the rate and success of implementing wetland restoration and enhancement projects. Understanding the following factors will help conservation and agency partners formulate key policy, technical, and socioeconomic solutions and better target restoration efforts where they provide the greatest benefit:

1. **Funding and incentives**
   Funding must be dedicated for wetland restoration and enhancement on a scale that can combat the pace of wetland losses, and at levels that recognize the value of ecosystem services provided by wetlands. Restoration practitioners must have effective staffing and resources to manage these projects. Both public and private funding should be leveraged to provide options for landowners to restore wetlands on their property based on their individual goals. All funding sources should recognize wetland co-benefits and the multiple government plans, outcomes, and initiatives satisfied by wetland restoration and enhancement.

2. **Communication**
   Effective communication with landowners, decisionmakers, and practitioners is essential to meeting the Wetlands Outcome. Education and outreach must be targeted to these three groups in the following ways:
   a. *Landowners*: Increasing and incentivizing landowner willingness to restore wetlands on their lands is essential to the success of wetland restoration and enhancement. There is a strong need to better understand the obstacles to landowner participation, including interest and eligibility to enroll in existing programs, economic implications, the effectiveness of current outreach efforts, and other social and political factors to restoring wetlands. A few states are experiencing competition for the best wetland restoration sites from mitigation banks, which result in no net increase in wetland acreage and loss of wetland function, rather than providing increases in wetland acreage and function.

   b. *Decision-makers*: Conflicting state priorities can impede restoration and enhancement efforts. Wetland restoration needs to be elevated as a consistent priority to meet multiple environmental and societal problems such as water quality, reduced wildlife habitat, flood resiliency, and climate change. Decision-makers should emphasize the ecosystem services provided by wetlands and act to protect and restore wetlands to increase these services.

   c. *Practitioners*: Funding does not always exist for technical training of wetland practitioners. A series of technical publications specific to wetland restoration on the Chesapeake Bay and/or a series of workshops would be useful to train practitioners on: living shorelines design and construction, wetlands restoration or enhancement design and installation; wetland pollutant removal rates for different wetland landscape scenarios; new and innovative design criteria; effective outreach efforts; and how to integrate multiple programs to provide multiple benefits (e.g., tree plantings to meet afforestation goals

(creating a forest where there was previously none), riparian buffers, and wetland restoration for habitat and water-quality benefits).

3. **Data and reporting**
   The Wetland Workgroup recognizes that not all wetland restoration and enhancement projects are being reported to the Chesapeake Bay Program and that some of the reported information may be inaccurately categorized.

4. **Leadership and commitment**
   It is imperative that natural resource and water quality regulators, leaders, and decision-makers in each state are committed to wetland restoration, rehabilitations, and enhancement and are aware of the co-benefits that wetlands provide. These leaders, through their position and influence, can ensure that wetlands are a priority in Bay restoration efforts, identify opportunities to increase and leverage funding and resources, and provide guidance to other state programs, partner entities, and the Wetland Workgroup.

V. Current Efforts and Gaps

Partners in the Chesapeake Bay Program's Wetland Workgroup have been working together to protect and restore the watershed's wetlands for more than 30 years. The following are primary programmatic efforts being taken by partners to achieve the Wetland Outcome:

Current efforts:

- **Natural Resource Conservation Service (NRCS) Wetland Easement Program** - The NRCS Agricultural Conservation Easement Program, Wetlands Reserve Easement (WRE) component is a voluntary program that provides an opportunity for landowners to receive financial assistance to enhance wetlands in exchange for retiring marginal land from agricultural. WRE provides technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resource concerns on private lands in an environmentally beneficial and cost-effective manner.
- **Farm Service Agency Conservation Reserve Enhancement Program (CREP) -** CREP is an offshoot of the Conservation Reserve Program (CRP), the country's largest private-land conservation program. Administered by the Farm Service Agency (FSA), CREP targets high-priority conservation issues identified by local, state, or tribal governments or non-governmental organizations. In exchange for removing environmentally sensitive land from production and introducing conservation practices, farmers, ranchers, and agricultural land owners are paid an annual rental rate. Participation is voluntary, and the contract period is typically 10–15 years, along with other federal and state incentives as applicable per each CREP agreement.
- **USFWS Partners for Fish and Wildlife Program -** The *Partners for Fish and Wildlife Program* was established in 1987 with a core group of biologists and a small budget for on-the-ground wetland restoration projects on private lands. This successful, results-oriented program has garnered support through the years and has grown into a larger and more diversified habitat restoration program assisting thousands of private landowners across the nation. Click here for a history of the *Partners for Fish and Wildlife Program*.

- **North American Wetland Conservation Act (NAWCA) grants -** The NAWCA of 1989 provides matching grants to organizations and individuals who have developed partnerships to carry out wetlands conservation projects in the United States, Canada and Mexico for the benefit of wetlands-associated migratory birds and other wildlife.
- **National Oceanographic and Atmospheric Administration (NOAA**) - The Nature Conservancy and NOAA have developed a Habitat Prioritization Tool for coastal areas. The Chesapeake Bay Habitat Tool provides spatial context for multi-habitat conservation opportunities in the Bay. Features of the tool include: A web map with Bay-wide data for important near shore habitats, new benthic data layers to better describe the habitat on the Bay floor, and an interactive tool to prioritize wetland protection and restoration. Potential applications of the tool include developing place-based habitat conservation plans to meet multiple objectives, and identifying locations where natural infrastructure can support coastal resiliency
- **US Army Corps of Engineers** - Under its ecosystem restoration mission, USACE restores wetlands, riparian and other floodplains, and aquatic habitats with an emphasis on native species. USACE undertakes ecosystem restoration as single purpose projects or as components of multiple purpose projects that may include navigation, flood damage reduction, coastal storm damage reduction, and other purposes. USACE wetlands restoration projects are cost-shared between the federal government and a nonfederal sponsor (state, municipal government, port authority, etc.). Important criteria include funding from the nonfederal sponsor's federal limits on the program or authority. The Chesapeake Bay watershed is a national priority for USACE restoration efforts. USACE wetlands restoration projects constructed and in-construction in the Chesapeake Bay watershed range in size from several acres, such as in Upper Marlboro, MD, to hundreds of acres, such as at Poplar Island, with costs of these examples ranging from millions to hundreds of millions of dollars, respectively. USACE undertakes wetland restoration projects for the purpose of habitat restoration and does not cost share projects that focus solely on water quality.
- **US Geological Survey** - USGS has existing studies of the effects of climate change on coastal wetlands. USGS has employed equipment at over 200 sites to accurately measure relative sea-level rise near Blackwater Wildlife Refuge and other coastal wetlands. USGS studies are 1) assessing long-term changes in wetlands due to climate change, 2) modeling marsh migration due to sea-level rise and land-use change; and 3) assessing near-shore habitats for waterbird use to determine the optimal shoreline type (part of a joint project with NOAA). USGS is also involved in studies of freshwater wetlands with a research on the natural water-quality functions of wetlands, and on the level of performance and optimization of design for water-quality benefits. This research on both natural and created/restored wetlands helps with targeting management actions in the watershed. USGS can provide technical support, using the Chesapeake Land Change Model, to forecast areas where development may cause loss of wetlands. In support of the Wetlands and Black Duck Outcomes, USGS is also starting an investigation to assess potential loss/migration of marshes due to sea-level rise.
- **The Nature Conservancy (TNC)** – Through state chapters in each of the Bay states, TNC restores and protects wetlands on preserves and private lands that they own. TNC uses a science-based approach to assess restoration opportunities across the different landscapes, prioritize locations that will achieve the greatest water quality and habitat benefits and then perform targeted

outreach to priority landowners to offer a suite of restoration options through public and private programs.

- **Ducks Unlimited** - DU is a non-profit organization working toward the goal of wetland habitat sufficient to support sustainable North American waterfowl populations. Founded in 1937, DU delivers wetland conservation projects on private and public lands across the entire North American continent, including all six Chesapeake Bay watershed states. DU's priorities within the watershed include high use waterfowl areas such as the tidal portions of the Western Shore of Virginia and Maryland, the Lower Susquehanna River, and the Delmarva Peninsula. DU achieves its conservation mission through diverse partnerships with other non-profits, government agencies, foundations, corporations, individuals and others. Specific DU conservation programs vary within each state and are dependent upon funding sources and scientific guidance.
- **Maryland Department of the Environment -** MDE implements regulatory programs for waterways, tidal and nontidal wetlands and authorizes restoration projects in regulated waters and wetlands. MDE has undertaken numerous actions to expedite review of restoration projects. MDE offers pre-application consultation and field visits to help expedite review of restoration projects in regulated resources. In addition, MDE has sample drawings and siting guidance for "living shoreline" tidal wetland projects. MDE requires living shorelines, typically tidal marsh creation, for shoreline stabilization unless applicants demonstrate through a waiver process that a living shoreline would be unsuitable or ineffective. MDE has worked with the USACE and the NRCS to develop a streamlined application form for NRCS restoration projects. MDE and the USACE are currently revising their joint application to include special sections and instructions for non-NRCS restoration projects. MDE is hiring additional staff to focus on restoration projects to provide more efficient review of restoration proposals. MDE also provides review and comments on proposed Chesapeake Bay Trust Fund projects to identify and potentially resolve regulatory issues early in the project planning process.
- **Virginia Marine Resources Commission –** the VMRC has oversight authority for tidal shoreline resources including wetlands, beach and dunes. In order to implement the Virginia policy that identifies living shorelines as the preferred shoreline erosion control approach, the VMRC had promulgated two general permits.

Gaps:

Tracking Wetland Restoration and Enhancement

There is a clear need to streamline wetland restoration and enhancement tracking and to improve the accuracy of the data reported. The Wetland Workgroup is working with the National Environmental Information Exchange Network (NEIEN) contacts in each state to develop a clear and transparent process of how information flows from practitioners to the NEIEN database, and to improve the accuracy of wetland restoration practice reporting. Another concern is that NEIEN is not currently adequate for certain functional gains which are not BMPs, such as nutria eradication or Phragmites removal (enhancement projects). Trainings for state NEIEN contacts and restoration practitioners will be included in the biennial logic and action plan to be updated in association with this strategy.

In many nontidal wetland situations, uplands and wetlands exist in a mosaic. Restoration of wetland/upland complexes could potentially be credited as a block. Small areas, or pockets, of upland, non-wetland soils could be considered with the wetlands as a system. This would remove the difficult task of delineating small "islands" of nonhydric soils. However, this may prove difficult due to code requirements.

Funding

Dedicated funding for restoration and enhancement implementation is not sufficient to meet the Wetland Outcome goals. A great example of a state funding source that can be used to leverage existing funds and supplement ongoing efforts is the Chesapeake and Atlantic Coastal Bays Trust Fund in Maryland. The Trust Fund was created to support the implementation of projects that reduce non-point source pollution and reach Chesapeake Bay Total Maximum Daily Load (Bay TMDL) and local WIP goals. The source of funding is Maryland's motor fuel tax and rental car tax. The Trust Fund represents an innovative approach to leverage resources, focus funds to the most cost-effective, efficient locations and practices, engage the community and hold everyone accountable. Guided by the Maryland BayStat agencies and the Scientific Advisory Panel, the Trust Fund continually adapts to incorporate new scientific advances and knowledge. Some projects include, but are not limited to, stream and floodplain restoration, wetland restoration and creation, bioremediation, tidal marsh restoration, urban stormwater management, forested buffers and reforestation as well as some agricultural and residential BMPs.

Staffing

There is a need for more coordinated outreach and technical personnel to engage landowners and to increase staff capacity to develop design plans for restoration projects and perform project management (permitting, contracting construction etc.). It is imperative these professionals are connected with interested landowners.

Data

Some states lack a comprehensive map of wetland resources in their state. Maps that would be useful in identifying potential wetland restoration opportunities include:

- Regularly updated National Wetland Inventory or equivalent maps for each state.
- Accumulated sediment in riparian wetlands from historic land clearing and/or dams (legacy sediments).
- Ditches and channelized streams.
- Incised stream channels that are disconnected from floodplains.
- Historic anthropogenic wetland loss areas.

Targeting/Prioritization Tools

While there is currently no overall wetland restoration and enhancement targeting and prioritization tool for the entire Chesapeake Bay watershed, several tools are available to help decision-makers prioritize wetland restoration and protection projects (see details below in local engagement section).

Actions, Tools and Support to Empower Local Government and Others

The following tools have proven useful in empowering local governments and others to pursue wetlands restoration and enhancement projects. If not already underway, consideration should be given to expanding the use of these tools in other jurisdictions.

As part of two EPA Wetland Program Development grants, MDE completed projects to prioritize areas for wetland restoration, preservation and mitigation in Maryland's Coastal Bays in 2004 and throughout Maryland in 2006. The resulting documents, sorted by county and watershed, characterize the aquatic resources in each watershed and identify the highest-priority areas for protection and restoration. These documents also identify and summarize pertinent existing documents and resources, including local watershed plans, Watershed Restoration Action Strategies, Maryland Biological Stream Surveys (MBSS), Stream Corridor Assessments, state plans, local water-quality monitoring reports, 303(d) lists, 305(b) reports, and TMDL calculations. Based on this information, Geographic Information System (GIS) and desktop data were used to identify desirable and undesirable locations for wetland restoration, preservation and mitigation. (http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/Programs/WaterPrograms/Wetlands_Waterways/about_wetlands/prioritizingareas.aspx)

The Watershed Resources Registry (WRR) is a GIS-based watershed planning tool developed through several years of extensive coordination between the Technical Advisory Committee (TAC) that included numerous federal, state and local governments, such as MDE, USACE, USFWS, EPA, MD DNR, Maryland Environmental Services and Maryland State Highway Administration, and nongovernmental organizations. This GIS-based tool provides a watershed-based planning framework for aquatic resources throughout Maryland. The WRR includes the most-pertinent conservation models available in the state, which will be maintained and revised periodically, as new and updated data is acquired. These GIS layers were carefully selected by the TAC to represent the most important resources to protect and restore throughout Maryland. This initiative is now expanding to other states (http://watershedresourcesregistry.com).

The Center for Coastal Resources Management, Virginia Institute of Marine Science has developed a Shoreline Management Model guided by the State preference for living shorelines for shoreline erosion control. The model provides a recommended approach for shorelines based on physical, biological and development factors. The model is available for all of Virginia and in development for certain localities in Maryland (https://www.vims.edu/ccrm/ccrmp/bmp/smm/index.php).

Additional actions, tools and support needed to empower local government and others will be identified during development of the logic and action plan.

VI. Management Approaches

The Chesapeake Bay Program will work together to carry out the following approaches and actions to achieve the goals of the Wetland Outcome. These approaches seek to address the factors affecting the ability to meet the goals and the gaps identified above.

1) Improve wetland mapping, and the wetland restoration reporting and tracking process.

Mapping
The Wetland Workgroup will encourage ongoing commitment to improving tidal and nontidal wetland mapping. They will engage with the Chesapeake Bay Program GIS and Modeling teams through joint meetings, speakers and presentations to stay informed of, and make use of, the best available science.

Reporting
The Wetland Workgroup will work with NEIEN contacts for each Bay state to make recommendations to improve the form and process of inputting NEIEN data collection, as well as confirm the accuracy of information reported. The Workgroup accepts the Wetland Expert Panel recommendations to not credit wetland enhancement as a BMP but needs a data entry portal for tracking enhancements to meet the Watershed Agreement goal for enhancing 150,000 acres. The data entry field should be named to clearly indicate that the reporting is not for nutrient/sediment reductions, but for other gains.

2) Develop solutions to address barriers to wetland restoration and enhancement.

The Wetland Workgroup has identified several barriers to wetland restoration and enhancement that the workgroup can mitigate and develop actions to address. They will address barriers in landowner willingness and participation, legal and regulatory barriers and barriers in the crediting of wetlands in the Watershed Model by:

1) Tailoring effective communication to landowners.
2) Targeting effective communication to decision-makers.
3) Identifying public and private funding opportunities to support accelerating the rate of wetland restoration.
4) Assessing the need for increased state investments (staffing and additional resources) to support meeting wetland restoration goals.
5) Working with other CBP management, workgroups, and partners to identify and address new barriers to wetland restoration.

3) Increase our technical understanding of the factors influencing restoration and enhancement success.

The workgroup will identify tools, models and other science needs for improving wetland restoration and enhancement techniques, as well as maximizing water quality and wildlife habitat accomplishments.

The workgroup will also commit to working with other Bay Program goal teams, work groups and partners to continuously inform workgroup members of latest information, science, technology, tools, policy and funding opportunities related to tidal and non-tidal wetland restoration and enhancement. They will engage other Chesapeake Bay Program teams, such as the Land Conservation Workgroup and Healthy Watershed Goal Implementation Team (GIT), on mutual issues such as wetland protection.

4) Prioritize areas for wetland restoration and enhancement.

Wetland Workgroup members will work to identify outcomes and criteria to prioritize areas for wetland restoration in each state, considering the impacts of development and climate change. The USGS will provide technical support, using the Chesapeake Land Change Model, to forecast areas where development may cause loss of wetlands, as well as potential loss of marsh habitat due to projected sea-level rise.

Specifically, the workgroup can:

- Maximize limited resources by focusing efforts on projects that help Chesapeake Bay Program partners meet multiple goals.
    - Water quality and habitat priorities sometimes overlap. For water-quality oriented projects, practitioners should look for opportunities to maximize habitat improvements.
    - Work with experts in black duck ecology to help provide the habitat needed in the Chesapeake Bay watershed to meet the black duck outcome and support other wintering and breeding waterfowl populations.
    - Work with experts in fish ecology to help provide the habitat needed in the Chesapeake Bay watershed to meet the fish habitat outcome.
- Identify areas where wetlands can be restored to avoid highly productive agricultural lands out of production, such as:
    - Historic wetlands that have been buried by legacy sediments (extend analysis to include both Piedmont and Coastal Plain physiographic regions).
    - Severely incised stream channels that are disconnected from floodplain wetlands.
    - Channelized and deepened streams and artificial levees that disconnect streams from floodplain wetlands.
    - Marginal cropland that consistently does not provide positive return on investment.
- Identify opportunities for large acreage gains.
- Educate the Principle Staff Committee (PSC) about opportunities to make progress towards the enhancement goal by stopping wetland mowing.

5) Expand the involvement of local stakeholders.

Local government involvement is crucial to meeting the Wetlands Outcomes. To facilitate greater local participation, including participation from underserved and underrepresented communities, the Habitat GIT, in partnership with the Local Government Advisory Committee, Citizens Advisory Committee and the Diversity Workgroup, will actively seek representatives from local governments, county conservation districts, watershed associations, trusted service provider networks and other nonprofit organizations to serve on the Wetland Workgroup. In addition, the Wetland Workgroup will actively seek opportunities through development of proposals for GIT funding, Scientific and Technical Advisory Committee workshops, and conferences to engage local stakeholders in a meaningful way. The Wetland Workgroup will provide annual reports to the Habitat GIT and stakeholders including local governments.

VII. Monitoring Progress

To track progress toward the goal, representatives from each jurisdiction compile all state, federal and nongovernmental wetland restoration and enhancement accomplishments that take place in their jurisdictions. Data are submitted to the Chesapeake Bay Program's Watershed Model scenario input deck through state submissions reported via NEIEN.

The Wetland Workgroup has uncovered inconsistencies in reporting. One of the priorities of the Workgroup is to streamline wetland restoration tracking and improve reporting overall, as well as the accuracy of the reported practices and acreages.

VIII. Assessing Progress

Wetland restoration acreages will be tracked through NEIEN. By improving the degree and accuracy of reporting, NEIEN should be a fairly accurate tracking tool.

IX. Adaptively Managing

The partnership will use the following approaches to ensure adaptive management:

- The Wetland Workgroup will meet in the fall of each year to share progress and discuss any new challenges or opportunities. The workgroup will use this time to review performance assessment information and adjust management strategies if appropriate. As new issues are identified, the workgroup will collectively develop strategies to overcome barriers to restoration and identify future science needs.

X. Biennial Workplan

Biennial logic and actions plans for each management strategy will be updated on a biennial basis. The following information will be updated:

- Each key action.
- Timeline for the action.
- Expected outcome.
- Partners responsible for each action.
- Estimated resources.

Lessons Learned

The Wetland Workgroup updated the workplan to reflect newly identified barriers to progress and updated actions to address these barriers. The workgroup updated sections IV (Factors Influencing Success) and VI (Management Approaches) of the Management Strategy to better reflect the changes made to the workplan. The Factors Influencing Success include four major barriers: funding and incentives, leadership and commitment, data and reporting, and communication with landowners/decision-makers/practitioners. Each action in the workplan directly addresses one of these factors.

The five Management Approaches did not change but were updated to include new actions and more specific language about ways the workgroup will address each factor. The updates reflect an overarching commitment to work more closely with other workgroups, GITs and Bay Program partners to identify similar priorities and goals and work together to overcome challenges and achieve outcomes.

The workgroup will also benefit from the designation of “thought-leaders” to lead each of the four major categories of work related to the factors influencing success. Having a designated leader will lead to more accountability to actions listed in the workplan, as well as more participation and commitment from workgroup members.

Finally, Section III (Participating Partners) of the Management Strategy was updated to acknowledge the participation of both the Department of Defense (DoD) Chesapeake Bay Program and NOAA Fisheries Office of Habitat Conservation in updating and reviewing the draft documents.