

# THE RIPARIAN FOREST BUFFER INITIATIVE OF THE CHESAPEAKE BAY PROGRAM

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**Abstract.** The Chesapeake Bay Program (CBP) has been working to protect and restore the Chesapeake Bay and its tributary rivers for nearly 15 years. This unique intergovernmental partnership has been repeatedly studied as an international model for ecosystem management on a large watershed scale. As part of its continuing efforts, the CBP has recognized the important role of natural systems like forests and wetlands as critical parts of its pollution control strategies.

In 1994, the CBP Executive Council, composed of the EPA Administrator, Governors of the States of Maryland, Pennsylvania, Virginia, the Mayor of Washington, DC and the Chair of the Chesapeake Bay Commission - a tri-state legislative body, called for a new focus on riparian forests and other buffers and eventually launched in 1996, a major watershed-wide *Riparian Forest Buffer Initiative*. In the eastern US, Riparian forests provide a critical link between land and water - upland and aquatic ecosystems. Long valued for their provision of shade, food supply, habitat, and stable banks to streams and shorelines, scientific research of the last decade has brought water quality buffering and flood reduction benefits into prominence as well. For these reasons the CBP and its member jurisdictions have begun work to accomplish some of the most aggressive buffer goals in the country.

The Riparian Forest Buffer Initiative calls for actions to promote all types of buffers and to ensure that riparian forests in particular, are conserved in the watershed through land use planning and protection efforts. The Initiative will also result in restoration of riparian forests along 2010 miles of the Bay watershed's streams and shoreline. Planning is underway and implementation has already begun to increase education, land use planning, incentives, public/private partnerships, and the planting projects needed to accomplish these goals.

The history and status of this initiative will be reviewed along with examples of innovative approaches and actions being pursued by state, local communities, and federal agencies.

## INTRODUCTION

Lowering harmful concentrations of nitrogen, phosphorus and sediments from agricultural and urban land uses and restoring streams and rivers are a primary focus of the Chesapeake Bay Program (CBP).

The *Chesapeake Bay Riparian Buffer Initiative* is the result of the efforts of concerned stakeholders, using science and practical experience, in a collaborative effort to reduce nutrient runoff, restore critical habitat, and improve water quality in the Chesapeake Bay. In 1996, the Chesapeake Executive Council (EC) recognized the significance of riparian forests in helping to meet Bay restoration objectives, and set new goals to conserve existing streamside forests and restore those that have been lost or degraded. The EC called for the development of a watershed-wide riparian forest buffer policy which would bring new emphasis on riparian stewardship and direct efforts to where they were needed most.

The *Initiative* directs Bay partners to improve communication and build partnerships among federal, state and local government agencies, as well as with private landowners and the public; to coordinate existing programs; and provide additional incentives for action. It further encourages research and the development of educational programs needed to promote riparian forest buffer protection and restoration throughout the watershed. Each of the states and the federal government are responsible for implementing the *Chesapeake Bay Riparian Buffer Initiative* in their jurisdictions. Since 1996, over 215 miles of new riparian forest buffers have been planted in the watershed.

Many creative partnerships and innovative approaches have been created to get the job done. For example, *American Forests*' "Global ReLeaf for the Chesapeake Bay" is raising awareness and generating private funds to plant over 1 million trees in the Bay watershed by 2000. Numerous local governments have taken action to protect stream corridors through zoning and planning guidance.

New incentives such as the federal *Conservation*

*Reserve Enhancement Program* have been developed for agricultural landowners. Furthermore, tax relief and conservation easement programs at the local level have begun to accelerate accomplishment of the Executive Council goals.

Interest in conserving and restoring riparian forest buffers (RFBs) is increasing around the country, but the Bay region is the first to set a specific forest buffer restoration goal. Finding ways to reduce nutrients while enhancing habitat critical to creatures is essential to restoring the Bay watershed to a healthier state. Streamside buffers provide one very important and common sense solution.

### **COORDINATION, DEDICATION AND CAREFUL PLANNING: KEYS TO THE INITIATIVE**

In 1994, the Executive Council recognized RFBs as an important resource for achieving both nutrient reduction and habitat restoration goals. By issuing Directive #94-1, the Executive Council called on the Chesapeake Bay Program to increase its focus on riparian stewardship throughout the watershed.

A Riparian Forest Buffer Panel was established to bring together a variety of stakeholders to develop future goals and policy recommendations for a watershed-wide effort to protect, maintain and restore riparian forest buffers. The Panel's recommendations were expected to initiate action and encourage creative solutions among the participants. The 30-member Panel was a diverse group, with members representing federal, state and local government, scientists, land managers, and citizen, farming, forest industry, developers, and environmental interests.

In October of 1996, the Executive Council adopted the report of the expert panel and endorsed the many actions included in its recommendations for stream and riparian management. The EC called upon each Bay Program partner, including the Federal Government, to conserve existing streamside forests and increase efforts to restore streams and riparian areas. The Executive Council set several goals:

**Goal #1:** *To assure, to the extent feasible, that all streams and shorelines will be protected by a forested or other riparian buffer.*

**Goal #2:** *To conserve existing forests along all streams and shorelines.*

**Goal #3:** *To increase the use of all riparian buffers and restore riparian forests on 2,010 miles of stream and shoreline in the watershed by 2010, targeting efforts where they will be of greatest value to water quality and living resources.*

Coordinating committees, representing government and private stakeholder interests, gathered in each participating state and among federal agencies. Months of tireless effort

and initiative to create comprehensive and dynamic plans to meet these goals culminated with impressive commitments from the stakeholders.

On June 30, 1998, the states of Maryland, Pennsylvania, and Virginia and the federal government submitted individual implementation plans for the riparian forest buffer initiative, mapping out how the three goals will be met. These plans address the following policy recommendations set forth in the *Final Report of the Riparian Forest Buffer Panel*, and comprise a watershed-based strategy that is responsive to the unique needs of each state.

1. Enhance Program Coordination
2. Promote Private Sector Involvement
3. Enhance Incentives
4. Support Research, Monitoring, and Technology Transfer
5. Promote Education and Information

### **A COMMITMENT TO RIPARIAN STEWARDSHIP: THE STATE AND FEDERAL AGENCY IMPLEMENTATION PLANS**

In order to achieve the 2,010 mile goal, Maryland, Pennsylvania, Virginia, the District of Columbia and the federal government committed to reaching individual goals. Maryland and Pennsylvania will each restore 600 miles. Virginia will plant 610 miles and 200 miles will be restored on Federal lands and in the District of Columbia.

The implementation plans detail actions that will be taken to conserve existing forests along streams and shorelines. They ensure that missing or inadequate RFBs will be restored, targeting those areas that would derive the greatest benefit, and providing guidance for tracking and recording progress.

#### ***Maryland Stream ReLeaf Plan***

Maryland's Stream ReLeaf Plan is a performance-based strategy outlining goals, objectives, actions and performance measures for restoring and conserving riparian buffers. Maryland builds on its many existing programs to achieve the goal of conserving forests. Another hallmark of the effort is its focus on a watershed approach, voluntary participation with incentives, monitoring of success, and building new private partnerships.

Maryland's plan outlines a process for Tributary Teams, watershed-based groups of local stakeholders in 10 basins covering the state, and other watershed organizations to develop local efforts and commitments for buffer conservation and restoration.

The Conservation Reserve Enhancement Program (CREP) establishes a federal-state partnership, targeting

federal Conservation Reserve Program funds to provide more incentives to farmers who restore stream buffers on environmentally sensitive lands. Under the CREP, Maryland will restore 70,000 acres of riparian buffers. They were the first state to gain approval for this program. Federal funding for farmers may exceed \$200 million over a 15 year period. Pennsylvania and Virginia are currently seeking funds through CREP.

### ***Pennsylvania Stream ReLeaf Plan***

Implemented state-wide, the Pennsylvania plan focuses on local community and watershed initiatives to accomplish streamside buffer restoration and conservation. State agencies will provide education, technical assistance and funding to watershed and conservation groups and local governments through ongoing programs. Enhancing outreach, education and incentives are important parts of the plan. It serves as a guide - listing sources of assistance available from both government agencies and private non-profit organizations.

As the state's lead agency in implementing the initiative, the Pennsylvania Department of Environmental Protection (DEP) will be guided by a multi-agency steering committee and supported by DEP's Bureau of Watershed Conservation and the Pennsylvania Department of Conservation and Natural Resources' (DCNR) Bureau of Forestry.

The Alliance for the Chesapeake Bay has produced a buffer "tool-kit." A practical guide for grassroots organizations, this user-friendly manual is intended to stimulate interest in streamside reforestation projects. Complementing the Pennsylvania Streamside Forest Fund, it provides useful technical information, and other materials for guiding local volunteer groups through a buffer planting project. The kit, called the "Pennsylvania Stream ReLeaf Kit," is available through DEP's Bureau of Watershed Conservation and the Alliance for the Chesapeake Bay.

### ***Commonwealth of Virginia Riparian Buffer Implementation Plan***

The Virginia plan describes a strategy for meeting each of the five recommendations of the Riparian Forest Buffer Panel. It targets support of private landowners and the participation of local governments as the key to the success of the initiative. The plan expands the initiative from the Bay Watershed to a state-wide effort. Actions which evaluate new incentives, integrate riparian buffers into current state programs, build links with private industry, and enhance landowner and local government outreach efforts will help to expand the use of RFBs. A state Riparian Advisory Committee has been formed and each year the progress of the plan will be evaluated, and strategies revised as needed to

ensure goals are achieved. A comprehensive assessment of the plan will be conducted every three years. In 1998, legislation was adopted authorizing local property tax breaks for riparian forest buffers (HOUSE BILL #1419). Currently, the Water Quality Improvement Fund can reimburse localities for revenue losses due to buffer land tax breaks.

### **Federal Agencies Plans**

Federal lands and facilities comprise less than 5% of the Bay's watershed but contain valuable stream and shoreline resources. Most federally-owned lands are managed by one of four entities: the USDA Forest Service, Department of Defense, National Park Service and US Fish and Wildlife Service.

Federal agencies will work together in targeted watersheds like the Anacostia River. Each of the major land management agencies has prepared a separate implementation plan targeted to their needs. These plans ensure that land and facilities management guidelines afford maximum protection of streams and streamside forests. In addition to restoration efforts, federal agencies will also enhance the delivery of their many incentives programs for private landowners. The CBP Federal Agencies Committee will track accomplishments. Federal Agencies have been instrumental in gathering, evaluating and communicating the scientific foundation for RFBs and providing technical tools and assistance for outreach, education and training. The USDA Forest Service, Cooperative Extension, and US Fish and Wildlife Service have developed numerous documents, videos, training programs, brochures and fact sheets in support of the Initiative, such as the Chesapeake Bay Riparian Handbook. Federal lands will host demonstration and research sites.