



FOREST BUFFERS
WATER QUALITY GOAL TEAM - FORESTRY WORKGROUP

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

FOREST BUFFER OUTCOME:

Continually increase the capacity of forest buffers to provide water quality and habitat benefits throughout the watershed. Restore 900 miles per year of riparian forest buffer and conserve existing buffers until at least 70 percent of riparian areas throughout the watershed are forested.

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.

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD: UPDATE

VALUE OF THE OUTCOME

The Bay Program has a long history of providing leadership around riparian forest buffers. Riparian forests are specifically referenced in Sec. 117 of the Clean Water Act which calls for the Program to develop and implement management plans to achieve and maintain habitat restoration, protection, creation, and enhancement goals for riparian forests (among other priority habitat types). As such, the partnership has prioritized riparian forest buffers as one of the most cost-effective practices for improving water quality due to their proven ability to stabilize stream banks, reduce erosion, and filter nonpoint source pollution. Riparian forest buffers remain foundational for meeting the vision and multiple goals in the current Watershed Agreement, including the Vital Habitats, Water Quality, Healthy Watersheds, and Land Conservation Goals. The multiple benefits forest buffers provide to ecosystems and communities are clear to the public and are reflected in multiple public comments expressing support for buffers in the partnership's work Beyond 2025.

The Forestry Workgroup (coordinated by the USDA Forest Service) has provided leadership on riparian forest buffers dating back to 1989. Over that time, having forest buffers identified as a priority by the partnership has helped drive programming, leadership and policy support, and state and federal funding towards implementation. Recent investments in programs that are able to deliver buffers quickly to a wider range of landowners than traditional cost-share programs have generated notable increases in planting rates across the watershed.

A watershed approach to forest buffer restoration has also supported more coordinated and efficient tracking, monitoring and reporting systems to inform adaptive management. Backed by the Bay Program's BMP reporting infrastructure and the high-resolution land use land cover data, the Workgroup has been able to evaluate progress and identify challenges to meeting goals. Regional coordination has also enabled the development of both a regional [Forest Restoration Strategy](#) and [state-level forest buffer strategies](#) that reflect lessons learned and best practices from across the watershed, while further aligning with other state priorities and programs.

CHALLENGES AND OPPORTUNITIES

Recognizing forest buffers as one of the most cost-effective practices for achieving water quality goals, the Partnership set very ambitious goals for buffers, both in the 2014 Watershed Agreement and the state Watershed Implementation Plans. Thanks to strategic investments in forest buffer programs, the

latest update of the [Forest Buffer indicator on Chesapeake Progress](#) showed significant increases in planting rates, with the 640.5 miles of forest buffers planted in 2023 marking the highest number of new forest buffers restored in any year since 2016. However, planting is still below the 900 mile/year target and riparian forest cover is decreasing. Watershed-wide, 68.9% of the riparian area was forested in 2017/18, although some jurisdictions (VA & WV) have exceeded the 70% minimum target for riparian forest cover. The outcome therefore remains “off course” and requires continued partnership focus.

The planting, maintenance, stewardship and conservation of forest buffers can be resource intensive in terms of the financial and human capacity required. However, one of the benefits of the sustained partnership focus on forest buffers is that substantial financial resources have been leveraged to advance goals. Despite uncertainty around future funding levels, it is essential that plantings receive the maintenance and stewardship needed to ensure the trees can grow and generate benefits for ecosystems and communities. Long-term conservation can also be challenging since although the Forestry Workgroup provides leadership and strategic coordination around forest buffer planting efforts, it has less control over land use decisions driving riparian forest loss.

At the same time, conserving healthy upland forests is also essential for clean water. Additional focus is needed on conserving and stewarding these upland forests as part of a more holistic approach to watershed forestry in the Chesapeake Bay. With an increased emphasis on conservation at the Bay Program, partners can provide leadership in identifying mechanisms to better incentivize long-term maintenance, stewardship and protection of both riparian and upland forests.

CONSIDERATIONS FOR UPDATING THE OUTCOME

The Forest Buffer outcome is specific, measurable, and time-bound, but whether it is achievable and realistic depends on multiple factors, including whether the rate of loss can be reduced. The outcome as currently framed has two discrete components to consider:

Riparian forest cover: Riparian forest cover is the desired impact the Program wants to have on the landscape, so should be considered an outcome. 70% was set as a *minimum* target in a [2003 Executive Council Directive](#), and this target has been maintained by the partnership. However, according to the latest Chesapeake Healthy Watersheds 2.0 Assessment, streams with “good” or “excellent” biotic integrity have catchments with an average 73% to 79% riparian tree cover respectively. The Workgroup may consider setting both a long-term goal to achieve the riparian forest cover needed to support stream health and a 10-year interim goal. With new hydrography data and analyses, the riparian forest cover target could be further refined to focus on riparian forest cover in sites suitable for planting.

Annual planting goals: Reported planting rates are an important complement to the land use data since there is a lag before tree plantings can be detected in the remotely sensed imagery. Forestry Workgroup partners have more control over planting than they do over riparian land use and having planting targets helps drive investments and programmatic focus. Planting can also generate multiple benefits for public stewardship and education. When updating the annual planting goals for the outcome, the Workgroup will seek to balance achievability with the planting rates needed to achieve the riparian forest cover target. The Workgroup will also consider whether to replace the annual mileage goal with an annual acreage goal to improve alignment with annual progress reporting.

As the Workgroup updates the outcome, there is also interest in strengthening the focus on conservation, for example, by adding language or targets specific to the maintenance and permanent protection of buffers (planted and natural). An updated Forest Buffer outcome would likely still fit well under the Vital Habitats Goal. Depending on how the structure of the Program evolves, the outcome could also be moved given the relevance of Forest Buffers to multiple other goals in the Agreement and the current structural alignment under the Water Quality Goal Team.

Links Cited:

Chesapeake Forest Restoration Strategy (2020):

https://d18lev1ok5leia.cloudfront.net/chesapeakebay/cst91_chesapeake_forest_restoration_strategy_web_508_final.pdf

State-level Buffer Strategies (2022): <https://chesapeakeforestbuffers.net/chesapeake-rfb-initiative/>

Forest Buffer Indicator on Chesapeake Progress (2024):

<https://www.chesapeakeprogress.com/abundant-life/forest-buffers>

Executive Council Directive on Expanded Riparian Forest Buffer Goals (2003):

https://d38c6ppuvmfp.cloudfront.net/content/publications/cbp_13252.pdf