Logo

Description automatically generated

**Riparian Forest Buffer Program Best Practices Discussion Summary**

***In Preparation for Chesapeake Riparian Forest Buffer 2022 Leadership Workshop***

***Maryland Discussion: March 24, 2022***

**Section 1. Background and Objectives**

To help the states prepare for the upcoming Chesapeake Riparian Forest Buffer (RFB) 2022 Leadership Workshop, Eastern Research Group (ERG) led a discussion in each state about state specific RFB programs. Ultimately, these discussions were designed to assist the jurisdictions in writing their Strategic Action Plans for RFB that will be discussed at the workshop. See the Strategic Action Plans for RFB guidance accompanying this summary for additional information.

This document summarizes the discussion that ERG organized and facilitated with representatives from various agencies working on RFB programs and projects in Maryland.

**Participants**

The following individuals participated in the Maryland RFB discussion on March 24, 2022:

* Matt Fleming, Maryland Department of Natural Resources (DNR)
* Phil Hager, Maryland DNR
* Anne Hairston-Strang, Maryland DNR Forest Service
* Iris Allen, Maryland DNR Forest Service
* David Goshorn, Maryland DNR

**Section 2. RFB Program Best Practices Discussion Guide**

**Part I. General Reflections on Maryland’s Existing RFB Program(s)**

This portion of the discussion focused on successful elements of existing RFB programs in Maryland, as well as challenges. The group considered the following questions:

* How has buffer rollout gone in recent years for programs in your state?
* What elements have worked well in your state and have led to your greatest successes?
* Do the elements for success vary between urban and rural locations?
* What are some of the barriers your program faces?
* Do the barriers vary between urban and rural locations?

Below is a narrative summary of the key take-aways from Part I of the RFB discussion.

**Maryland Discussion Summary**

**Current Successes:**

* Maryland is fortunate to have forestry experts working in the watershed.
* Maryland has fostered partnerships that reach landowners in different communities and result in RFB project implementation.
* The Healthy Forests, Healthy Waters program funded through the Chesapeake Bay Trust Fund has been a successful tree planting initiative in Maryland. Landowners receive two years of maintenance in return for a 10-year agreement. This program is a collaborative effort among the Alliance for the Chesapeake Bay, the Maryland Forest Service, the Maryland Forestry Foundation, and private landowners throughout Maryland. The Maryland Forest Service creates the planting plan and other partners provide help with the financial and coordination elements that the Maryland Forest Service does not have adequate staff to support. The program has resulted in scaling-up progress, although the program does not focus solely on RFB. (<https://www.allianceforthebay.org/project/healthy-forests-healthy-waters/>)
* Maryland has three decades of statewide afforestation experience.
* Maryland has a buffer design and maintenance guide and studies to help refine practices.
* The state has a strong tree nursery.
* Maryland has the needed targeting information to prioritize and identify RFB gaps, including the stream health website and a cold-water mapper.
* Maryland prioritizes trees through funding sources because trees are a cost-effective practice; RFB puts landowners to the front of the line for funding.
* Maryland is a leader in easements through a permanent easement program. Program Open Space funding is available through state Conservation Reserve Enhancement Program (CREP). (<https://dnr.maryland.gov/land/Pages/ProgramOpenSpace/Program-Open-Space-Stateside-Targeting.aspx>)
* The Maryland General Assembly passed House Bill 991 in 2021 that authorized and funded the planting and maintaining 5 million native trees in the State by 2031. Implementation through this initiative on track to help be strategic. This legislation includes a carve-out for urban underserved areas that will open opportunities for areas that Maryland had not yet put time or money into. (<https://us.1t.org/pledge/state-of-maryland-growing-five-million-trees-by-2030/>)

**Current Challenges/Barriers:**

* Lack of funding for maintenance (with the exception of the Healthy Forest, Healthy Waters program), contributing to a lack of landowner interest in RFB as a practice.
* Landowner resistance to RFB as a practice. There is a need to identify and address their various issues with RFB (e.g., shading cropland, maintenance, land out of production). Farm-friendly RFB designs with feathered edges and shorter trees can help to address agricultural landowners’ issues.
* Maryland’s procurement rules also affect landowner interest. It is challenging to keep a grant open for an extended period to help facilitate longer-term maintenance activities and adaptive management. There needs to be a contingency fund for these activities.
* The process for landowners to sign up for federal funding programs such as CREP and the Environmental Quality Incentives Program (EQIP) is complex.
* The need for a landowner interface on programs to guide them to the right program and help them through the process requires technical assistance that staff capacity cannot support.
* Staffing shortages create challenges for RFB progress.
* Staff training and transition planning are also barriers to RFB progress.

**Part II. Information on Maryland’s Existing RFB Program(s) Logistics**

This portion of the discussion focused on program logistics for Maryland’s RFB programs in urban and/or rural locations. The group considered how existing RFB programs incorporate these elements now, as well as steps that Maryland is taking to incorporate these elements soon. Where RFB programs may not fully address these elements, discussion participants identified some challenges that might arise in trying to do so. Each element related to program logistics is listed, with the associated discussion summary provided underneath.

Eligibility and Flexibility

* Flexible to meet landowner needs
* Available to agricultural and non-agricultural landowners

**Maryland Discussion Summary:**

* Programs like CREP, EQIP, and the Conservation Buffer Initiative focus on agricultural landowners. Maryland’s Backyard Buffer program focuses on non-agricultural landowners.
* Maryland’s Conservation Buffer Initiative helps to fill gaps in CREP. However, this funding source does not have a wide-open eligibility and has an enrollment period, as opposed to rolling enrollment. Maryland expanded the eligibility for some non-CREP acres during the second year of the program and this resulted in increased participation. If a landowner is eligible for CREP, there really is not an incentive to sign up for the Conservation Buffer Initiative because CREP is still a more generous program and gives landowners an annual rental payment. RFB programs should not siphon landowners away from federal programs; instead, any new RFB programs should fill the gaps that exist with the suite of existing federal and state programs.

Funding Processes

* No out-of-pocket expense for landowners
* Sustainable source(s) of funding available “on demand”

**Maryland Discussion Summary:**

* The Conservation Buffer Initiative avoids out-of-pocket expenses for landowners.
* Maryland agency staff often cobble together funding from a variety of programs for RFB projects. It would be beneficial to design a simplified funding program that is easy for landowners to navigate and produces efficiencies for state agency staff.

Program Services

* Technical assistance provided
* Maintenance provided

**Maryland Discussion Summary:**

* The Healthy Forests, Healthy Waters program funded through the Chesapeake Bay Trust Fund provides landowners with two years of maintenance in return for a 10-year agreement.
* Maryland provides limited technical assistance through existing RFB programs; scaling up technical assistance will require additional staff.
* Maryland’s procurement requirements do not allow grants to remain open for longer periods of time, creating barriers to conducting long-term RFB maintenance.
* The U.S. Department of Agriculture Farm Service Agency cost-share program requirements often focus on contract compliance with the original contract and do not easily allow for different technical assistance or maintenance to reflect on-the-ground conditions 10 years into a 15-year contract. Contracts need to acknowledge that field conditions can vary from what was anticipated in the initial stages of the project and allow for different interventions over time.

Program Integration/Synergy

* Integration of buffers into other existing like-minded state programs (for example, land conservation and the state revolving loan fund program)
* Opportunities to pair programs and funding

**Maryland Discussion Summary:**

* Maryland intends to leverage Maryland’s Rural Legacy Program and the Maryland Environmental Trust, the statewide land trust organization, to promote RFB implementation on privately-owned land. The Maryland Environmental Trust currently has about 130,000 acres in easement across the state of Maryland, some of which are in areas that Maryland plans to target for RFB plantings. Agency staff will need to work with private property owners. (https://dnr.maryland.gov/land/pages/rurallegacy/home.aspx)
* The Backyard Buffer program began through the Potomac Watershed Partnership and surrounding counties adopted the program. Maryland then funded it through the state’s Chesapeake Bay implementation grant. With additional partners, Maryland could expand this program. (<https://dnr.maryland.gov/forests/pages/programs/backyard-buffer-program.aspx>)
* There is an opportunity to expand the existing partnerships with Trout Unlimited and their efforts to protect and restore cold-water streams, maybe through a new RFB focused program (e.g., Trees for Trout).

**Part III. Information on Enabling Conditions for Maryland’s Existing RFB Programs**

Discussion participants considered how Maryland’s RFB programs incorporate enabling conditions now and steps that Maryland is taking to incorporate these conditions in the near-term. The group mentioned where programs may not have these conditions in place and what challenges they would face in providing these enabling conditions. Each element related to program logistics is listed, with the associated discussion summary provided underneath.

Supporting Planning and Policy

* High-level coordination and direction at state-level (including a state Buffer Strategy)
* State or local policies supporting buffer restoration or conservation
* Local government engagement to incorporate buffers in planning efforts
* Information on where to prioritize buffer plantings based on areas with the highest potential impact, the greatest opportunity, or other criteria

**Maryland Discussion Summary:**

* The Maryland Department of Natural Resources Forest Service’s Chesapeake Bay watershed forester coordinates Maryland’s Stream ReLEAF Coordinating Committee. The committee, which comprises agencies and nongovernmental organizations who work on RFB, meets throughout the year to discuss issues and progress to inform Maryland’s state RFB strategy. (<https://dnr.maryland.gov/forests/Pages/programapps/ripfbi.aspx>)
* The Maryland Department of Natural Resources Stream Health Forested Stream Buffer website provides information on the presence and absence of forested stream buffers throughout Maryland by county. This information helps identify gaps in RFB and identify restoration opportunities. (https://dnr.maryland.gov/streams/Pages/streamhealth/Forested-Stream-Buffers.aspx)
* Local governments are demonstrating leadership on RFB implementation due to municipal separate storm sewer system (MS4) regulations. Maryland is trying to make tools and financing available to local governments that will allow them to estimate the benefits of RFB and tree options in their MS4 permit applications and watershed implementation plans. Allegany County is an example of a local government that has significantly incorporated trees into its watershed implementation plan.
* Maryland helps local governments consider RFB project costs through Maryland’s Forest Financing Implementation Tool (MD FFIT). This free calculator assists Maryland’s local governments, counties, and partners in estimating the costs and benefits associated with various forest projects, including RFB. (<https://mde.maryland.gov/programs/Water/TMDL/DataCenter/Documents/MDFFIT/MD_FFIT_Brochure_05Aug2021.pdf>) and (<https://mde.maryland.gov/programs/water/TMDL/DataCenter/Documents/MDFFIT/MD_FFIT_Calculator_Ver_2.0_Updated_31Mar2022.xlsx>)
* Maryland has a variety of targeting tools. For example, Maryland DNR uses a “Program Open Space Targeting” land conservation system based first on ecological priorities. (<https://dnr.maryland.gov/land/Pages/ProgramOpenSpace/Program-Open-Space-Evaluation.aspx>)
* Trout Unlimited uses a cold-water mapper to help prioritize trout streams for RFB implementation.

Financial and human resources capacity

* State has adequate staff to effectively implement programs
* Programs have adequate funding to meet demand for buffers

**Maryland Discussion Summary:**

* Staffing shortages are an issue. Maryland Department of Natural Resource is at a 15 percent vacancy level with four forester positions open. Maryland’s 5 Million Trees Initiative will result in 13 additional positions. These positions are contractual versus permanent and are not all forester positions.
* Maryland’s RFB related programs have adequate funding, but the demand for this funding is not as robust as it could be, especially from agricultural landowners. There is a need to educate landowners on the benefits of RFB to the landowner and to the landowner’s community. Education and outreach to landowners needs to come from trusted sources, not necessarily governmental agencies.

Trained and Cost-Effective Service Providers

* Cost-effective restoration contractors available to complete work
* Trained technical assistance providers available to work with landowners

**Maryland Discussion Summary:**

* There is a need to train and expand the contractor base as Maryland tries to rapidly expand planting rates. The University of Maryland Extension recently held a natural areas management training for smaller sites and is planning to expand to mid-sized projects.
* Partners are currently developing regional trainings. Specifically, the James River Watershed Association is talking to Stroud Water Research about planning and conducting expert roundtables on improving buffer techniques.
* The Chesapeake Bay Forest Buffer website has a lot of useful resources that Maryland often uses as part of RFB training. There is an opportunity to add more robust training resources on this existing website for partners and contractors.

Materials

* Adequate supplies (e.g., trees, planting tubes, etc.)

**Maryland Discussion Summary:**

* Maryland has strong state nursery in Preston. However, there is a need to pay attention to staffing at the nursery.

The matrix below provides an integrated summary of the discussion points related to all of the RFB best practice elements. This integrated summary highlights key issues related to each of the best practices and denotes where the group did not identify a program, need, or challenge related to a best practice.

| **Best Practices for Successful RFB Programs (both urban and rural)** | **Existing Programs and Activities**  **Fully or Partially Addressing Best Practice** | **Needs and Challenges to Achieve Best Practice** |
| --- | --- | --- |
| ***Program Logistics*** | | |
| No out-of-pocket expense for landowners | Conservation Buffer Initiative avoids out-of-pocket expenses for landowners | No additional needs or challenges related to providing programs with no out-of-pocket expenses for landowners specifically addressed during discussion. |
| Sustainable source(s) of funding available “on demand” | No specific examples of programs with sustainable “on-demand” funding provided during the discussion. | Need a simplified funding program that is easy for landowners to navigate and does not require state agency staff to cobble together project funding from multiple programs. |
| Technical assistance provided | Technical assistance provided through various programs but limited due to staffing shortages. | Need to fill existing forestry vacancies in Maryland Department of Natural Resources and expand existing partnerships to increase technical assistance to landowners. Need more flexibility in CREP contracts to allow for adaptive management related to technical assistance based on changing on-the-ground conditions over time. |
| Maintenance provided | Healthy Forests, Healthy Waters program provides landowners with two years of maintenance. | Need contingency funds for long-term maintenance activities because procurement rules associated with state grants do not allow for needed long-term maintenance. |
| Flexible to meet landowner needs | Conservation Buffer Initiative expanded eligibility to include more non-CREP eligible acreage. | Federal programs like CREP remain complex for landowners to navigate. Need a simplified RFB program that fills more program gaps for landowners, possibly using 5 Million Tree Initiative funding and other state appropriations for trees. |
| Available to agricultural and non-agricultural landowners | Multiple federal and state programs promote RFB to agricultural landowners. Backyard Buffer Program an example of a program that addresses non-agricultural landowners. | No additional needs or challenges related to providing programs to both agricultural and non-agricultural landowners specifically addressed during discussion. |
| Program integration and pairing to incorporate buffers into other existing like-minded state programs (for example, land conservation, state revolving loan fund program, stream restoration) | Maryland intends to leverage Maryland’s Rural Legacy Program and the Maryland Environmental Trust to promote RFB implementation on privately-owned land. | Need to expand partnerships to leverage help scale-up RFB through Backyard Buffer Program or efforts led by Trout Unlimited. |
| ***Enabling Conditions*** | | |
| Adequate state staff to effectively implement programs | Hiring 13 positions through 5 Million Trees Initiative and have four vacant forestry positions to fill. | Maryland Department of Natural Resources has 15 percent vacancy. Need for additional staff to support RFB efforts and provide adequate technical assistance to landowners. Need staff transition planning. |
| Adequate program funding to meet demand for buffers | Demand for existing funding is not as robust as it could be, especially from agricultural landowners. | Need to educate landowners on the benefits of RFB using trusted sources, not necessarily governmental agencies, to create demand for existing funding. |
| Cost-effective restoration contractors available to complete work | No specific examples of programs with cost-effective restoration contractor to complete work provided during the discussion. | Need to ensure contractors have up-to-date training. |
| Trained technical assistance providers available to work with landowners | Partners are developing regional trainings. Chesapeake Bay Forest Buffer website has a lot of useful resources that Maryland often uses as part of RFB training. | Need to expand the offerings on the Chesapeake Bay Forest Buffer website to include more training resources. Need more agency staff training. |
| High-level coordination and direction at state-level (including a state Buffer Strategy) | Maryland Department of Natural Resources Forest Service’s Chesapeake Bay watershed forester coordinates Maryland’s Stream ReLEAF Coordinating Committee that discusses state’s RFB strategy and associated progress. | No additional needs or challenges related to high-level coordination specifically addressed during discussion. |
| State or local policies supporting buffer restoration or conservation | No specific examples of state or local policies supporting buffer restoration or conservation provided during the discussion. | No additional needs or challenges related to state or local policies supporting buffer restoration or conservation specifically addressed during discussion. |
| Local government engagement to incorporate buffers in planning efforts | Maryland’s Forest Financing Implementation Tool (MD FFIT) assists Maryland’s local governments, counties, and partners in estimating the costs and benefits associated with RFB. | No additional needs or challenges related to local government engagement to incorporate buffers in planning efforts specifically addressed during discussion. |
| Information on where to prioritize buffer plantings based on areas with the highest potential impact, the greatest opportunity, or other criteria | Maryland and partners like Trout Unlimited have a variety of tools to assist with RFB prioritization. | No additional needs or challenges related to RFB prioritization information specifically addressed during discussion. |
| Adequate supply of trees and planting tubes | Maryland’s state tree nursery in Preston is strong. | Need to monitor staffing levels at the state nursery. |