BIENNIAL STRATEGY REVIEW SYSTEM
Chesapeake Bay Program

Narrative Analysis

RIPARIAN FOREST BUFFERS- AUGUST 13TH 2020

The narrative analysis summarizes the findings of the logic and action plan and serves as the bridge between the logic and action plan and the quarterly progress meeting presentation. Based on what you learned over the past two years from your successes and challenges, you will describe whether the partnership should make adaptations or change course.

Use your completed pre-quarterly logic and action plan to answer the questions below. After the quarterly progress meeting, your responses to these questions will guide your updates to your logic and action plan. Additional guidance can be found on ChesapeakeDecisions.

1. Examine your red/yellow/green analysis of your management actions. What lessons have you learned over the past two years of implementation?

Summarize what you have learned about what worked and what didn't. For example, have you identified additional factors to consider or filled an information gap?

Based on the analysis of our management actions, we cannot rely on the Conservation Reserve Enhancement Program (CREP) as the primary means to meet our RFB goals. There have been limitations with the design and delivery of CREP that despite previous efforts, have not improved. (See lists of some of the identified issues needing resolution by state and Actions 1.4, 2.1, 2.3 in Workplan document) Even a high-functioning CREP is estimated to deliver at most 20% of the total need for RFB as determined by the state WIPs. A new program is needed, but fundamentally, a better functioning CREP as proposed in the 2018 Farm Bill is needed and can help support a new buffer program.

There is growing momentum to develop a new Bay-wide buffer program that will be more flexible and effective at meeting our goals. Various states and other partners have successfully tested new buffer program aspects through grant funded trials and have served as a model for a Program concept called the Natural Filters Restoration Program.

One area where we have seen some progress in the last two years is in our ability to prioritize where buffers are most needed on the landscape. For example, multiple states are using land use/land cover data to identify priority planting areas, tree planting opportunity areas, and eco-hydrologically active areas where buffers may have the greatest benefits. These new geographic data will also show where buffers are being lost to development – an unfortunate occurrence that will require even more work and expense to realize improved water quality—and new actions will arise from that knowledge.

In addition to being able to target riparian areas that have the greatest potential to improve water quality, we have also improved our ability to target based on other

priorities and data sources. Pennsylvania's Prime Prospects project provides an example for how to use biophysical and social science to identify places that have high amounts of potentially bufferable land and where there are landowners who are more likely to be willing to put in buffers. These sorts of analyses could help inform the identification of areas where new buffer programs may be most effective.

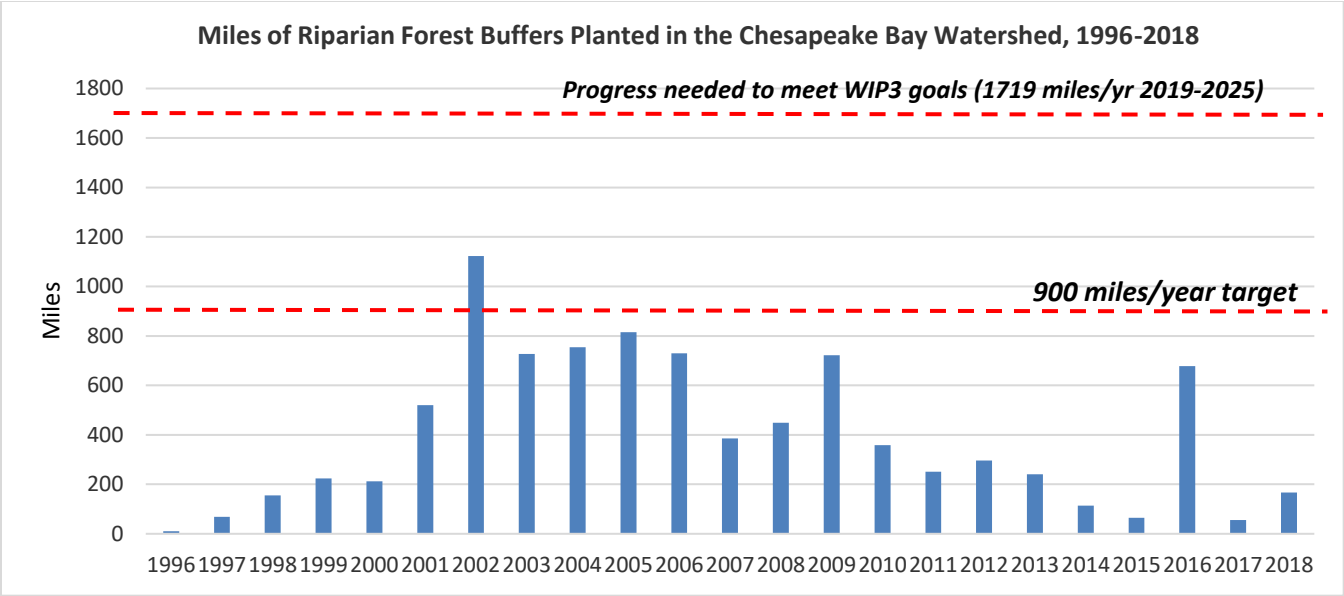
There were other RFB successes; however, more work is needed in all areas to improve progress towards meeting our forest buffer goals. For example, we were able to secure additional funding through the Farm Service Agency to continue funding 11 field personnel providing technical assistance in each state. Most of these positions have been in place since 2017 and for various reasons-- some associated with CREP being offline for some of that time-- these additional personnel have not yet generated a significant improvement in buffer implementation. This suggests to us that 11 positions is a fraction of the additional TA needed. Increased capacity such as additional buffer planting and maintenance contractors, tree nurseries, coordinated outreach, education, verification, etc., are also needed and would help to build a robust restoration economy. One result of the previous SRS cycle, the formation of a Riparian Forest Buffer Action team, continued to work on some of the identified gaps regarding actions that could help improve progress in each state. The Natural Filters Restoration Program concept evolved from the work of the Action Team and has become its overarching action but there is still lacking traction with Bay leadership.

2. Regardless of how successful your short-term progress has been over the past two years, indicate whether we are making progress at a rate that is necessary to achieve the outcome you are working toward. The example graph below illustrates this concept.

*Use the **editable** graph below (or your own chart) to illustrate your progress. Explain any gap(s) between our actual progress and our anticipated trajectory.*

We are well short of the 900-mile per year target outlined in the Watershed Agreement and furthermore, this target is inadequate to meet the buffer goals outlined in the Phase III WIPs. To fill the gap between 2018 Progress and 2025 WIP III goals, we would need to add over 1,700 miles of forest buffers annually between 2019-2025 (assuming 100 ft. buffer widths). Many of the same factors we identified in our previous workplan are still limiting our progress towards meeting our buffer goals (for example, a lack of consistent funding, inadequate government engagement at all levels, insufficient availability of technical assistance).

Although we are able to monitor progress towards meeting our short-term, 900-mile per year target through NEIEN and CAST, we need a clearer perspective on our progress towards meeting our long-term goal of having seventy percent of riparian areas throughout the watershed forested. The new high-resolution datasets should provide an updated calculation of the percentage of forested riparian areas throughout the watershed. Once this data is available, we should reassess whether the shorter-term goal of planting 900 miles/year is appropriate for reaching our long-term goals.



3. What scientific, fiscal and policy-related developments will influence your work over the next two years?

This may include information learned at the previous biennial SRS meeting or more specific information about your outcome such as an increase or decrease in funding, new programs that address gaps, and new scientific data or research. Describe how these developments are likely to impact your recommended measure(s) of progress, the factors you believe impact your ability to succeed, and newly created or filled gaps. These changes should be reflected in the first three columns of your revised logic and action plan after your quarterly progress meeting.

Existing sources of funding, while critical, do not ensure the dependability needed to create and maintain a well-functioning ecosystem of non-profits, volunteers and private restoration companies that is paramount to meeting our buffer goals. The availability of additional funding and the flexibility of that funding will influence our progress in the coming two years in terms of our capacity to both directly fund buffers and to support the dedicated staff needed to facilitate these efforts.

Given limited public funding, we are particularly interested in exploring opportunities to utilize private finance to accelerate progress towards meeting our buffer goals. To do so, we need to start setting up partnerships and identifying pools of public funding that we can leverage to attract private dollars. For example, EPA Clean Water State Revolving Fund (CWSRF) dollars or 319 money could be dedicated to buffer implementation. There is also a potential for our buffer planting efforts to benefit from increasing public and private investments in the global Trillion Trees Initiative, which the United States has also committed to supporting. Our ability to develop the needed partnerships and public and private sources of finance will influence our success in developing conservation finance for riparian forest buffer implementation.

Although there were some promising provisions for CREP in the 2018 Farm Bill, the way these provisions are ultimately interpreted will influence our work over the next two years. The way the provisions are currently being interpreted raises many questions. For example, the provisions do provide some additional funding for maintenance, but they do not improve the overall financial incentive as they reduce total available funding for

implementation. Bay partners have raised the question of whether they could update State CREP agreements en masse to adopt the new provisions without losing the previously negotiated cost-share rates. This would save months of work and also maintain the needed incentives to attract landowners.

The continuing impacts of Covid-19 will present both challenges and opportunities that are likely to affect our buffer planting and maintenance efforts. In terms of challenges, shrinking state budgets, hiring freezes and restrictions on activities may inhibit the planting of new buffers. At the same time, rising unemployment rates have generated renewed interest in building a workforce for conservation and restoration, including tree-planting. If stimulus dollars become available, these could be put towards increasing the available workforce for planting and maintaining buffers across the watershed.

As new high-resolution hydrography and land use data becomes available, we will have an even better idea of where the greatest opportunities are for implementing RFB across the landscape and also where we have lost buffers. As capabilities improve, there may also be potential to use remote sensing for buffer verification initially in individual states, but ideally this capacity would be built watershed-wide to limit the costs associated with monitoring and verification.

Another development that will influence our progress towards meeting buffer goals is the rapid expansion of stream restoration projects and the growth of a stream restoration industry. Although the expert panel and ad-hoc panel reports have done a good job of outlining key qualifying conditions that should minimize unintended adverse consequences for existing forest buffers, there is evidence that these conditions are not consistently applied. There is growing concern among the forestry workgroup regarding situations in which functioning forest buffers are being removed to make way for stream restoration projects.

Finally, climate change impacts, both known and unknown, could have an overwhelming impact on forests and riparian buffers. Climate projections for the region suggest that generally speaking, conditions will become hotter and wetter, although there is also likely to be more variability. This means that riparian forests are likely to experience a greater frequency of both extreme flooding and late-season flash droughts that could negatively affect tree establishment and growth. At the same time, riparian forest buffers will become increasingly critical for shading and controlling effects of rising temperatures on stream life, moderating the stream environment and triggering self-healing processes in the stream. We therefore will need to pay increasing attention to ensuring that riparian forest buffers are planted in a way that will be resilient to future climate change.

4. Based on your response to the questions above, how will your work change over the next two years?

Describe the adaptations that will be necessary to more efficiently achieve your outcome and explain how these changes will lead you to adjust your management strategy or the actions described in column four of your logic and action plan. Changes that the workgroup, GIT or Management Board consider significant should be reflected in your management strategy.

In the next two years, we will focus more on supporting new and existing buffer programs that offer greater efficiency and flexibility. There are some models for more

effective and flexible buffer programs that could be replicated and expanded. For example, Pennsylvania DCNR funds buffers on a rolling, first-come-first-serve basis, rather than an annual, competitive grant process, making funding quickly accessible to fit the needs of both implementers and landowners. Making programs available to non-agricultural streamside landowners will also increase the reach of new buffer programs and help reduce the perception that farmers are the only landowners that need to install buffers. Existing buffer programs have also been effective in better integrating buffer maintenance and any new programs should ensure that buffer maintenance costs have been accounted for.

We also plan to increase focus on conservation finance and exploring opportunities for private finance to accelerate buffer implementation. The USFS and the Alliance for the Chesapeake Bay have been working with a conservation finance consultant to explore possibilities for establishing a new Natural Filters Restoration Fund and plan to continue these efforts in the next two years. The goal of the Natural Filters Restoration Program is to bring long-term financial stability and certainty that is needed to grow our network of partners. This new program will focus on Pay-for-Success approaches that create win-win solutions for both the landowners and public entities. For example, we may work with private investors to design a scheme to enroll landowners in practices that generate water quality credits. Local municipalities would then be able to use those credits to meet their regulatory requirements. With sufficient and stable funding, the Natural Filters Restoration Program will create jobs by providing certainty to non-profits and private restoration businesses, who will scale up in response to consistent program direction and funding. However, we will likely need to tie into other state programs, such as the CWSRF and MS4 programs to use public dollars to attract private finance.

To support the expansion of buffer implementation and maintenance efforts through new and existing programs, additional technical service providers (TSPs) will be needed. As turnover among TSPs has stalled progress, we want to work to create new stable, permanent and well-paid technical assistance positions. At the same time, although we have made some progress in hiring TSPs to service USDA programs, it would also be beneficial to train more versatile TSPs that could assist with non-USDA programs. One of our goals with the Natural Filters Restoration Program will be to increase available funding for training technical assistance providers who can deliver a wide range of natural filter practices, institutionalizing a restoration economy and workforce that delivers effective and efficient outcomes. This will involve extensive cross-training across sectors, including with the well-established and rapidly growing stream restoration industry.

We have also identified several opportunities to improve collaboration with other workgroups and GITs at the Bay Program. For example, we have been working with the wetlands workgroup as we have developed the concept for the Natural Filters Restoration Program and hope that this program could eventually accelerate implementation of both wetlands and buffers. We have also collaborated with the urban stormwater and stream health workgroups to develop a GIT-funding proposal that would identify opportunities to reduce the loss of forest buffers to stream restoration projects. If funded, we plan to continue working with these workgroups to better couple RFB and stream restoration BMPs.

However, there are also areas where we still need to develop better collaborative relationships with CBP workgroups and leadership. For example, as RFBs feature prominently in the Phase III WIPs, we need to work more closely with the Water Quality

GIT leadership ensure that state water quality leads are identifying opportunities to expand buffer implementation through funding and dedicated staff to meet their WIP buffer goals. Another area in which we hope to work with the WQ GIT is to explore opportunities to address buffer verification issues. Forestry Workgroup members have expressed some confusion over verification and NEIEN and would benefit from additional reporting capabilities to confirm that they have effectively verified buffer acres in NEIEN.

We also want to work more closely with the Agricultural Workgroup to improve consideration of buffers as a part of whole farm planning with other conservation practices, like cover cropping. This whole farm planning approach can serve to address multiple resource concerns, while also improving the efficacy of buffers to improve water quality by increasing upstream infiltration and reducing concentrated flow issues. There are also opportunities to improve outreach on buffers with the agricultural community, who have historically been resistant to putting in more buffers. We would like to work with the Agriculture Workgroup to consider how we can better reach the agriculture community and incentivize additional buffer implementation.

Although we will be focusing more attention on supporting new and existing flexible buffer programs in the coming two years, there are opportunities for the Bay partnership to improve CREP. We will continue to work to ensure that CREP in the 2018 Farm Bill are interpreted favorably. We will also explore opportunities to provide additional flexibility with contracts, while still supporting the major objectives of improving water quality and wildlife habitat. In particular, there could be room to consider less expensive ways to install buffers, such as reducing the required planting density. Finally, we will consider ways to improve equity in access to federal funding for buffers across the watershed. Relaxing the federal match requirements for RFB could help ensure that communities that are less well-off economically can also access these critical federal funds. One option would be to implement a sliding scale for match based on the socio-economic strength of communities. We will work to facilitate collaboration between NRCS, FSA and EPA CBP to further consider opportunities to improve the efficacy of CREP.

What, if any, actions can the Management Board take to help ensure success in achieving your outcome?

> *Please be as specific as possible. Do you need direct action by the Management Board? Or can the Management Board direct or facilitate action through other groups? Can you describe efforts the workgroup has already taken to address this issue? If this need is not met, how will progress toward your outcome be affected? This assistance may include support from within a Management Board member's jurisdiction or agency.*

There are many opportunities for CBP leadership to better support our efforts to achieve our RFB outcome. First, we would like additional support from the Management Board in pursuing conservation finance for RFB. The Management Board could assist with identifying public financing opportunities that could contribute to the new Natural Filters Restoration program as leverage to attract private financing. For example, state CWSRF or 319 funds and potential COVID stimulus dollars could contribute. The Management Board could assist by identifying funding programs in each state that could most likely be leveraged in such a Program and a knowledgeable state contact to shape these funding sources. The WQ GIT and Management Board could also support an effort to revive and reinvigorate the Trading & Offsets workgroup to support conservation

finance efforts. This Workgroup could help build capacity within the partnership to utilize conservation finance to meet multiple outcomes, including the RFB outcome.

We would also benefit from more focus from the Management Board in identifying commitments that could be made by the partnership, other workgroups and GITs to support buffers and see these commitments through. This should include both the planting of new buffers and the conservation of existing buffers, to ensure we aren't losing buffers to other restoration practices. We would also welcome the opportunity for a future EC meeting to focus on forests and RFBs.

The Management Board could support efforts, some that were identified by the PSC, to improve CREP. The MB should have a working understanding of the program to advocate for additional staff in their state, to troubleshoot problems and streamline processes, and to facilitate more intentional conversations between USDA agencies, water quality leads, entities currently external to the CBP partnership, and the general public. A multi-disciplinary Task Force, if developed by the MB, could work to consider opportunities to improve current USDA programming for RFB as described earlier.