

## Riparian Forest Buffer Logic Table and Work Plan

**Primary Users:** Goal Implementation Teams, Workgroups, and Management Board | **Secondary Audience:** Interested Internal or External Parties

**Primary Purpose:** To assist partners in thinking through the relationships between their actions and specific factors, existing programs and gaps (either new or identified in their Management Strategies) and to help workgroups and Goal Implementation Teams prepare to present significant findings related to these actions and/or factors, existing programs and gaps to the Management Board. | **Secondary Purpose:** To enable those who are not familiar with a workgroup to understand and trace the logic driving its actions.

**Reminder:** As you complete the table below, keep in mind that removing actions, adapting actions, or adding new actions may require you to adjust the high-level Management Approaches outlined in your Management Strategy (to ensure these approaches continue to represent the collection of actions below them).

**Long-term Target:** (the metric for success of Outcome):

**Two-year Target:** (increment of metric for success):

**KEY: Use the following colors to indicate whether a Metric and Expected Response have been identified.**

<b>Metric</b>	Specific metrics have not been identified
	Metrics have been identified
<b>Expected Response</b>	No timeline for progress for this action has been specified
	Timeline has been specified

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
<i>What is impacting our ability to achieve our outcome?</i>	<i>What current efforts are addressing this factor?</i>	<i>What further efforts or information are needed to fully address this factor?</i>	<i>What actions are essential to achieve our outcome?</i>	<i>Optional: Do we have a measure of progress? How do we know if we have achieved the intended result?</i>	<i>Optional: What effects do we expect to see as a result of this action, when, and what is the anticipated application of these changes?</i>	<i>Optional: What did we learn from taking this action? How will this lesson impact our work?</i>
<b>Scientific and Technical Understanding</b>	Lots of data, good targeting and use of high-resolution	Not a priority at this time	<a href="#">2.8</a> , <a href="#">5.1</a> , <a href="#">5.4</a> , <a href="#">5.9</a> , <a href="#">6.1</a> , <a href="#">7.1</a> , <a href="#">7.3</a> , <a href="#">7.4</a> , <a href="#">8.1</a> , <a href="#">8.3</a>			
<b>Improved Technical Assistance</b>	11 new positions in forestry, some additional trainings,	Need for consistent funding for positions	<a href="#">3.4</a> , <a href="#">3.5</a> , <a href="#">5.2</a> , <a href="#">5.8</a> , <a href="#">7.4</a> ,			

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<b>Partner Coordination</b>	PSC appointed State RFB Lead, not all partners are onboard,	Help from upper-level state WQ lead, federal programs have important role	<a href="#">1.1</a> , <a href="#">1.4</a> , <a href="#">2.1</a> , <a href="#">3.4</a> , <a href="#">4.3</a> , <a href="#">4.6</a> , <a href="#">5.2</a> , <a href="#">5.3</a> , <a href="#">5.4</a> , <a href="#">7.3</a> , <a href="#">7.4</a> , <a href="#">8.5</a> ,			
<b>Nongovernmental Organization Engagement</b>	Good involvement, but through soft money	More funding, training ops, TSP	<a href="#">2.5</a> , <a href="#">2.3</a> , <a href="#">7.2</a> , <a href="#">9.3</a> ,			
<b>Legislative Engagement at the Federal, State, and/or Local Levels</b>	Fed- 2018 Farm Bill, Clean Water Act; State grant funds	Farm Bill influence for CREP and TA	<a href="#">1.6</a> , <a href="#">5.6</a> , <a href="#">8.4</a>			
<b>Government Agency Engagement at the Federal, State and/or Local Levels</b>	FSA, and some states and locals are engaged	More engagement needed at all levels	<a href="#">1.1</a> , <a href="#">4.5</a> , <a href="#">5.7</a> , <a href="#">5.9</a> , <a href="#">8.2</a> , <a href="#">9.4</a> ,			
<b>Public Engagement</b>	Some general outreach efforts	Not a priority at this time	<a href="#">9.1</a>			
<b>Landowner Engagement</b>	Some targeted outreach	More education/TA needed	<a href="#">3.1</a> , <a href="#">3.3</a> , <a href="#">3.5</a> , <a href="#">4.1</a> , <a href="#">4.2</a> , <a href="#">4.3</a> , <a href="#">4.4</a> , <a href="#">6.2</a> , <a href="#">6.3</a> ,			
<b>Funding or Financial Resources; Partner Coordination</b>			<a href="#">2.3</a> , <a href="#">2.4</a> , <a href="#">2.6</a> , <a href="#">2.7</a> , <a href="#">3.1</a> , <a href="#">3.3</a> , <a href="#">9.2</a> , <a href="#">1.5</a> ,			
<b>Funding or Financial Resources</b>	FSA passing along funding for positions/outreach	Need more consistent funding for staff and TA	<a href="#">1.2</a> , <a href="#">1.3</a> , <a href="#">2.2</a> , <a href="#">3.2</a> , <a href="#">3.5</a> , <a href="#">5.5</a> , <a href="#">7.1</a> , <a href="#">9.5</a>			

**WORK PLAN ACTIONS**

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Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Management Approach 1: RFB Leadership</b>					
1.1	Meet with RFB leadership within each state to develop a coordinated, riparian forest buffer (RFB) strategy to boost enrollment	a) State Lead for RFB activities is appointed and helps coordinate work at all levels-- from state leadership to field b) Host a watershed wide 2-day RFB Forum c) Pursue opportunities for state leadership to express need/RFB is a priority practice d) Establish a RFB Leadership Team in PA and host a statewide RFB summit	USFS, FSA, ACB, State Leads, PA DCNR, PA DEP, MD CREP Committee		Ongoing Some states did not get additional assistance from FSA
1.2	States augment CREP program for RFB using additional funding from FSA	Increase acres enrolled in Chesapeake Bay CREPS, CP22	FSA, State Leads	DE, VA, WV, NY	December 2017
1.3	Work to access additional financial assistance to augment programs for RFB	a) Increase acres enrolled in Chesapeake Bay CREPS, CP22. Continue to assess available financial assistance as needed to encourage landowner interest in CREP and implementing conservation practice Compile and publish bi-annual Chesapeake Bay Protected Lands Dataset b) Make non-federal match available as new opportunities present for federal funding	FSA, State Leads	Split FA and TA, add NRCS	December 2017
1.4	Coordinate and support State Leads and other partners in achieving RFB goals	Work with each state to help accomplish actions in 2-year workplan	USFS, FWG	Make maps	December 2017
1.5	Pilot Projects to Inform Leadership	a) Coordinate with Sustainable Ag community b) Develop a flexible buffer program with innovative tools and programs to fill niches not met by traditional buffer programs	MD DNR FS, USC, NFWF	State grant programs; PA, NY,	July 2016

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1.6	Work on Policies to Advance RFB programs	a) Work with partners to identify legislative, budgetary and policy needs to advance RFB and other goals b) Pursue action within our member state General Assemblies and the United States Congress	Chesapeake Bay Commission, Choose Clean Water Coalition		December 2017
<b>Management Approach 2: RFB Enhancements</b>					
2.1	Look broadly to plan for new buffers and align related projects/funding	a) Coordinate with allied ag practices in NY especially streambank fencing, streambank stabilization and/or transitional woodland practice using AgNPS b) Seek more opportunities to engage landowners about opportunities for RFB c) Incorporate RFBs into planning efforts, e.g., the State Planning Board, county comprehensive plans, and local zoning ordinances d) Work with other programs and agencies that do preservation, restoration, etc. to improve overlap with RFB	NY NRCS, TU, FSA, USC, State Leads	Follow up with conservation community and SWCDs- stronger conversations around fencing in VA and new pipeline mitigation funding	December 2017
2.2	For the scale of buffer work needed, make leveraging the power of other funding and programs a priority	a) Explore using Ag Land Preservation funds to drive new RFB b) Leverage other USDA programs to complement CREP	State Leads, FSA, NRCS		December 2017
2.3	Accelerate RFB implementation through NFWF's 2015 Regional Conservation Partnership Program (RCP) project award, "Comprehensive Watershed-Scale Restoration in Dairy and Livestock Landscapes of the Chesapeake Bay"	a) Utilize NFWF grant funding and technical and financial assistance to increase RFB and leverage existing cost-share funding b) Support local USDA NRCS and FSA staff, SWCDs, and NGOs in collaborating and prioritizing RCP funding to enhance RFB CREP implementation at the local level	Stroud Water Research Center, TU, CBF, ACB, Bradford County (PA) Conservation District		December 2017

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2.4	Support states in prioritizing funding for RFB and explore new funding options	a) Work with states to align available funding with priority practices like RFB b) Explore converting RFBs to nutrient banks to provide additional incentive to maintain, conserve RFB	EPA, FWG		December 2017
2.5	Apply the Healthy Streams Farm Stewardship Program	Identify projects in conjunction with SWCD and ag consultants	ACB	Done and looking for more funding; VA has new pilot in Augusta from court settlement USFWS	December 2017
2.6	Pilot voluntary purchase of nutrient credits by businesses to pay for the installation of forest buffers	a) Work with partners to identify businesses interested in this investment b) Make purchases on behalf of businesses and establish RFB	PENNVEST		December 2017
2.7	Pursue a state/private-funded RFB program	a) Test methods for flexibility in buffer administration and management b) Introduce needed policy changes to implement the program c) Pilot sites showcasing different approaches including maintenance needs d) Look for funding and funding partners	PA DCNR and DEP		December 2017
2.8	Consider climate change in future actions for RFB	a) Review and refine climate resiliency decision making matrix and implementation process for the RFB outcome b) Develop climate change strategies for RFB	Climate Resiliency Workgroup and FWG	Judy's crosswalk; is this still the process for CR Workplan;	December 2017

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				conservation plus scenario-check specific CR	
<b>Management Approach 3: RFB Technical Assistance</b>					
<b>3.1</b>	Increase staffing levels to provide more technical assistance	a) Hire 8 additional field personnel through grant from FSA b) Increase technical capacity to increase RFB establishment and enrollment	FSA, USFS, ACB, MD, PA, VA, WV, TU, NRCS	Continuation??	December 2017
<b>3.2</b>	Improve tracking and spending of TA funding provided by FSA	a) FSA provides TA funding for CRP/CREP to USFS b) Track and suggest improvements in spending as needed	State Leads	Still get thru USFS	December 2017
<b>3.3</b>	Increase effectiveness of landowner education on RFB establishment and maintenance	a) Identify successful programs and begin expanding them in states b) Reach out to local groups with interest in RFB such as SWCDs, NGOs, Land Trusts c) Support PACD outreach efforts in creating a clearinghouse of informational materials d) Enhance collaboration among organizations to better understand farmers' needs e) Technical Service Providers receive training on RFB outreach through grant from FSA f) NRCS employees receive >3 trainings per year g) Determine how best to engage SWCDs	State Lead, PA DCNR and DEP, USFS, ACB, NRCS	TELEgrant with CI and MD; MD has had joint trainings; PA NRCS also receiving training; Should develop curriculum esp for NRCS; across the board? Trainings resources for xx staff suggested	December 2017

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				sequence on website-	
3.4	Expand partnerships to address technical assistance needs	Identify potential new partners and establish working agreements	State Leads, TU		January 2017
3.5	Technical Assistance provided by NYS DEC Forester	Provide forestry support on EQIP and CREP projects	NYS DEC, USFS		December 2017
<b>Management Approach 4: RFB Outreach and Increasing New Enrollment</b>					
4.1	Address programmatic design/delivery that are barriers to new enrollment	Work with decision-makers to secure state cost-share funding to process CRP/CREP new contracts	DNREC, DE NRCS		January 2017
4.2	Execute Outreach Strategy for 2016	Improve outreach of RFB: webinar education series, information packets, posters, displays, forum, support for re-enrollment	USFS, FSA, ACB		December 2016
4.3	Improve outreach and education to landowners on RFB	a) Technical Service Providers receive training on RFB outreach through grant from FSA b) NRCS employees receive >3 trainings per year c) Determine how best to engage SWCDs	USFS, ACB, NRCS		December 2017
4.4	Seek liaisons (leaders, early adopters) within farming communities	a) Reach out to dairy, horse, and poultry farmers, and others b) Reach out to plain sect community	USFS Dept. Ag., PA CREP partners		December 2016
4.5	Evaluate current MPL soil rental rates and determine if updates are necessary	Work with FSA to make adjustments in CREP agreements, as needed	State Leads		December 2017
4.6	Share local case studies of successful buffers-- how to integrate with better overall environmental health (e.g., LandCare model)	Reports on case studies and how LandCare model could be used	State Leads		December 2017

**Management Approach 5: Improve Establishment/Maintenance/Verification**

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Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
5.1	Improve tracking and reporting of RFB implementation	a) Utilize GIS, CAST, and other tools b) Analyze efficiencies and quantify benefits of RFB c) Track progress through reports and maps	State Leads, FSA, USFS, ARS, PA DEP and DCNR, Penn State		December 2017
5.2	Survey recent NFWF grantees to determine extent of RFB vs. grassed buffer implementation	Develop, implement, and analyze survey of NFWF grantees to determine likelihood of RFBs going in on grants that don't specify type of riparian buffer being used	NFWF, USFS		December 2016
5.3	Strengthen inter-organizational operations, including reporting, cross-training, and Verification for RFB BMP	a) States work internally with partners b) Enable verification to be completed by multiple entities, independent of landowner/installer c) Work with other Workgroups and Goal Teams to integrate RFB into planning d) Work with Ag Workgroup on improving Verification procedures for RFB	State Leads, EPA, PA DEP and DCNR, FWG, USFS		December 2017
5.4	Evaluate State RFB BMP Verification Protocol	Work with states to examine how RFB verification is working	USFS		December 2017
5.5	Examine effectiveness of annual maintenance payments and evaluate if current rate is appropriate	Annual maintenance payments increase (e.g., from \$5/acre to \$10/acre) where feasible	State Leads, ACB, USFS		December 2016
5.6	Evaluate current establishment period effectiveness and recommend potential changes	Expand the RFB establishment period from 2 years to 3-4 years (already happened in PA)	State Leads		December 2017
5.7	Work with FSA to make cost share available for weed suppression during RFB establishment	Determine level of invasive plant control cost-share that is part of extended establishment	State Leads, FSA		December 2016
5.8	Put maintenance tips in conservation plans, contracts, and landowner info	a) Produce information on common maintenance needs/issues for website/handbook	USFS, ACB	Mostly in PA handbook	January 2017



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Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		b) Distribute handbook to contract holders through SWCD and field offices			
5.9	Evaluation of Buffer Effectiveness/Tree Planting Success	a) Complete evaluation of tree planting mortality/success for three years after initial planting and secure additional planting stock to correct planting failures b) Look at sites with legacy sediment issues	State Leads		December 2017
<b>Management Approach 6: Improve Re-enrollment</b>					
6.1	Consider fate of non-re-enrolling RFB acres	Develop model to determine situational likelihood that landowners not re-enrolling will maintain their RFB	FSA, FWG		December 2016
6.2	Provide targeted outreach to CREP participants in the last 1-2 years of contract	a) Send postcards to expiring contract holders and follow-up with phone calls b) Provide maintenance crews to assist landowners with successful RFB c) Encourage TSPs re-enrolling RFBs to include upgrades, such as increased acres and/or alternative water, stream crossings, fencing	State Leads, USFS, State FSA, ACB		December 2017
6.3	Contact landholders with expiring contracts	a) Provide contact information for expiring contract holders to State Leads b) Send landowner RFB outreach and promotional material, follow with phone call	FSA, State Leads		December 2017
<b>Management Approach 7: Improve Targeting of RFB</b>					
7.1	Develop nutrient incentive payment practice	Pilot program to target long-term nutrient reduction/ecological services for RFB & wetlands	MDA, NFWF		December 2017
7.2	Utilize CREP targeting tools	Make maps of high-priority areas for reforestation	State Leads		December 2017

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7.3	Incorporate other WQ, brook trout, and demographic targeting tools for RFB	a) Utilize tools to identify and implement RFB restoration opportunities considering climate change b) Analyze for effectiveness	VA, TNC		December 2017
7.4	Use high-resolution land cover data to map RFB and train partners on how to use the new data for prioritizing their work	a) Pilot method in James to target areas for new RFB b) Work with the SWCDs, JRA and others to independently incorporate the new high-resolution data into their planning and ranking frameworks	James River Assoc, NFWF, Chesapeake Conservancy, SWCDs		December 2017
<b>Management Approach 8: Ramp-up conservation of RFB</b>					
8.1	Explore RFB preservation policies to analyze their effectiveness/need for enforcement	Identify local RFB preservation policies and conduct analysis	FWG,LUWG		December 2017
8.2	Increase participation with the Agriculture Conservation Partnership Program (ACEP)	Determine opportunities for CREP participants to transition enrollments to NRCS ACEP easement programs	NRCS		December 2017
8.3	Explore a buffer easement program	Incorporate RFBs into a broader forest conservation easement program, if created	DCNR, DEP, FBC, Ag, DCED		December 2017
8.4	Integrate RFB in local green space planning and protection	Work to incorporate RFBs into other planning efforts, such as the State Planning Board, county comprehensive plans, and local zoning ordinances	DCNR		December 2017
8.5	Improve easement language for RFB	Suggest acceptable language standards for RFB easements	FWG		December 2016
<b>Management Approach 9: Focus on non-ag RFB</b>					
9.1	Broaden awareness with non-ag owners about tree planting/RFB/reduced mowing	a) State/County-level programs work with federal land managers to promote RFB at b) Target locations through GIS analysis	Stat Leads, USFS, PA DCNR, MD DNR, VA DOF		December 2017

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<b>9.2</b>	Look for funding opportunities for local tree planting and conservation efforts, including RFB in developed areas	a) Assess and summarize local, state, federal and private funding opportunities b) Continue to work with volunteers to replant stream sides	FWG, NY Trees for Tribs		December 2017
<b>9.3</b>	Work with local groups to expand tree planting programs	Successful programs such as Turf to Trees, Backyard Buffers, NY's Trees for Tribs, and CLIPS (Baltimore Co)--meet with LGAC, local leadership group, and others to determine how best to do this	FWG		December 2017
<b>9.4</b>	Work to better integrate urban tree canopy and RFB with TMDL/WIP implementation and MS4 programs	a) Meet to assess options, needs, of MS4 Permit holders and other stakeholders b) Develop examples of buffers & SWM	FWG, CWP		December 2017
<b>9.5</b>	Increase CBIG/319 funding for RFB establishment on urban lands	Assign 1-2 additional no-ag buffer projects to CREP foresters	WVDOF		December 2017