

**Technical Advisory Committee – Stream Protection Subcommittee**

DCR Staunton Office  
Staunton, Virginia

**Stream Protection Subcommittee Members Present**

Mark Hollberg, Dept. of Conservation & Recreation – Div. of Soil & Water Conservation (DCR-DSWC)  
(Chair)

Stefanie Kitchen, VA Farm Bureau

Gary Boring, Virginia Assn. of Soil & Water Conservation Districts (VASWCD) Area IV Representative

Robert Bradford, VASWCD Area II Representative

Elizabeth Dellinger, Shenandoah Valley Soil & Water Conservation District

Nick Livesay, Lord Fairfax Soil & Water Conservation District

Alston Horn, Chesapeake Bay Foundation (Proxy for Matt Kowalski)

Anna Killius, James River Association

Aaron Lucas, Headwaters Soil & Water Conservation District

Chris Barbour, Outside of the Chesapeake Bay (OCB) Districts Representative

Raleigh Coleman\*, DCR-DSWC

**Stream Protection Subcommittee Members Absent**

Charlie Wootton, Piedmont Soil & Water Conservation District

Tom Turner, Chesapeake Bay Districts Representative

Luke Longanecker, Thomas Jefferson Soil & Water Conservation District

Ashley Wendt, Department of Environmental Quality

David Massie, Culpeper Soil & Water Conservation District

Chad Wentz, United States Dept. of Agriculture – Natural Resources Conservation Service (USDA-NRCS)

Emily Horsley, United States Dept. of Agriculture – Farm Service Agency (USDA-FSA)

Tracy Fitzsimmons, VA Cattleman's Association

Tim Higgs, Virginia Department of Agriculture and Consumer Services

Stacy Horton\*, DCR-DSWC

(\*Non-voting member)

**WELCOME**

The subcommittee meeting began at 9:45am with an introduction from Mr. Hollberg. A quorum was not established with only 9 voting members present. Mr. Hollberg suggested proceeding with discussion of items on the agenda in hopes that a quorum would be achieved.

**DRAFT MINUTES**

The minutes of the September 24, 2019, meeting of the Stream Protection Subcommittee were presented for approval. A minor typographic error (spelling of Culpeper) was corrected in the list of members absent.

## **REVIEW OF OCTOBER 8 TAC**

Mr. Hollberg gave a brief review of the items that the Stream Protection Subcommittee presented to the full TAC on October 8. All items that the subcommittee had previously presented to the TAC as “tabled” were tabled by the full TAC. Regarding the definition “live stream/water”, there was a request that language be added to the definition clarifying that the definition only applies to VACS practices. Adding the word “all” to the “Description and Purpose” for SL-6 and WP-2 practices engendered no discussion. The changes to the SL-7 (making fields with narrow buffers eligible for 50% cost-share) and to the SL-11/WP-3 also created no discussion. Regarding the subcommittee’s suggestion to make SL-6A eligible for 50% cost-share, Mr. Glover made note of the stocking rate requirements in the SL-6A that might need to be addressed. Therefore, this practice was transferred to the Animal Waste subcommittee. A new item (Matrix Item 14C) was transferred to the Stream Protection Subcommittee from the Cover Crop subcommittee regarding creating a summer cover crop practice for sacrifice areas.

*Ms. Killius arrived at 9:55am, so a quorum was established with 10 voting members present.*

## **ACTION ON MINUTES**

Mr. Hollberg returned to the minutes for action since a quorum was present. Mr. Lucas made a motion to approve the minutes as amended. Mr. Boring seconded the motion. The motion passed unanimously (10Y, 0N).

### **1.A. MAKING “DESCRIPTION & PURPOSE” FOR CCI-SL-6 AND CCI-WP-2 MATCH SL-6 AND WP-2**

Mr. Hollberg explained that it might make sense to update the language in the “Description & Purpose” of the CCI-SL-6 and CCI-WP-2 specifications to match the subcommittee’s suggested changes to the language in the WP-2N/W and SL-6N/W. There was some discussion about how to handle SL-6 practices that were put in pre-2011 when “sky ponds” were not yet determined to be eligible as a “triggering” water body for SL-6. Another concern was expressed regarding adding the word “all”, if it might prevent existing stream exclusion from being counted in the Chesapeake Bay model. Ultimately, the group felt that the CCI equivalents of the SL-6 and WP-2 practices should be consistent with the cost-share versions. Mr. Boring made a motion to make the Description and Purpose for the CCI-SL-6 and CCI-WP-2 consistent by changing the wording from “all water bodies and streams” to “all live streams.” Mr. Lucas seconded the motion. The motion passed unanimously (10Y, 0N).

### **1.B. ADDING CLARIFIER TO PROPOSED DEFINITION OF “LIVE STREAM/WATER”**

Mr. Hollberg explained that one of the requests from the presentation to the full TAC on October 8 was to add a clarifier to the definition of “live stream/water” that the definition is specific to the VACS program. The subcommittee decided to add “for the purpose of the Virginia Agricultural Cost-Share Program” to the definition. Mr. Bradford made a motion to that effect. Mr. Boring seconded the motion. The motion passed unanimously (10Y, 0N).

## **2. MATRIX ITEM 14C - SUMMER COVER CROP**

Ms. Dellinger explained that this summer cover crop would be intended to be planted on areas where winter feeding creates a resource concern (erosion and heavy manure concentration). It would be a planting of annual summer species for the purpose of stabilizing the area to prevent erosion and taking up excess nutrients. Some committee members expressed that there are better ways of feeding to

evenly distribute manure throughout pasture. There were also concerns with the logistics of such a practice – the amount of staff time involved for what may be a minimal benefit, especially if the feeding areas are far from a stream and buffered. Mr. Barbour suggested making proximity to stream a potential qualifier (assuming the feeding area cannot instead be moved to a location with less negative environmental impact). He also proposed the possibility of planting a perennial species and requiring that they move their feeding area around each winter. Mr. Hollberg also suggested looking at the SL-10 practice for ideas. The subcommittee decided that it was too late this year to have a draft spec to present to the TAC, but that Ms. Dellinger and Mr. Horn could work on something to talk about in the subcommittee next year.

**NEXT MEETINGS**

The subcommittee decided on the next meeting date of December 4, 2019. This meeting will be held in the Staunton DCR office building, beginning at 9:30 am.

**ADJOURN**

The meeting adjourned around 11am.

## For 11/20/19 TAC meeting

>Description and Purpose statements as proposed to the TAC on October 8, 2019:

### SL-6N and SL-6W:

A structural and/or management practice that will enhance or protect vegetative cover to reduce runoff of sediment and nutrients from grazing livestock on existing pastureland through livestock exclusion.

Provide livestock water systems, fencing and/or a hardened pad for winter-feeding that will improve water quality control erosion and eliminate direct access to or a direct runoff input to **all live streams**. **Stream exclusion fencing and an off-stream watering facility are required components of this practice.** Rotational grazing is an optional enhancement of this practice. The exclusion and/or rotational grazing system receiving cost share should reflect the least cost, technically feasible, environmentally effective approach to resolve the existing water quality problem.

### WP-2N and WP-2W:

Protection by fencing along **all live streams** in a field, to reduce erosion, sedimentation, and the pollution of water from agricultural nonpoint sources.

The purpose of this practice is to offer an incentive that will change land use or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.

>Current Description and Purpose statements in PY20 VACS manual (track changes approved by Stream Protection subcommittee 10/28/19):

### CCI-SL-6N and CCI-SL-6W:

Protection by fencing along all ~~live water bodies and~~ streams in a field to prevent stream bank erosion, direct deposition of animal waste and contamination of water from agricultural nonpoint sources of pollution.

The purpose of this practice is to offer an incentive payment to maintain exclusion fences, water systems and associated components [watering systems (wells, pumps, pressure tanks, pipelines, troughs, spring developments] livestock crossings, and hardened accesses) that together maintain land use change and/or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.

### CCI-WP-2N and CCI-WP-2W:

Protection by fencing along all ~~live water bodies and~~ streams in a field to prevent stream bank erosion, direct deposition of animal waste and contamination of water from agricultural nonpoint sources of pollution.

The purpose of this practice is to offer an incentive payment to maintain exclusion fences and associated components (livestock crossings and hardened accesses) that together maintain land use change and/or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.

8/29/19 - Stream Protection subcomm approved adding this to the FY21 manual's glossary

10/8/19 TAC suggested adding a clarifier that this definition is only for VACS and thus minimize the chance anyone would attempt to apply this definition for any other purpose.

**THUS, the Stream Protection subcommittee on 10/28/19 approved adding the clarifier "...for the purpose of the Virginia Agricultural Cost Share Program."**

***Live Stream/Water (for the purpose of the Virginia Agricultural Cost Share Program)***: A creek, stream, river or other water feature which has surface flow, or creates a surface flow, for a substantial portion of the year.

-from 7/31/19 "Guidelines for Determining Buffer Area for Stream Exclusion BMPs"

| MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021 |                                  |   |   |              |             |
|---|----------------------------------|---|---|--------------|-------------|
| Item #  | Ag. BMP                          | Suggestion to the TAC   | TAC Recommendations   | DCR Supports | FY2021/2022 |
| 1S  | SL-6N<br>SL-6W<br>WP-2N<br>WP-2W | Increase the flexibility to work with landowners who like to protect the streams on their portion/parcel of a larger farm. Increasingly, real property lines may divide functioning grazing units into odd configurations (i.e. zig zag, diagonal cross cut etc.) that differ from exiting historical fence lines. In our county, it often occurs so that siblings inherent the exact number of acres a piece. In the past, we have made the participating landowner(s) pay for a “new” boundary line fence that isolates their parcel, but would like the flexibility of using existing more natural divisions. Perhaps an agreement letter template can be generated for use between siblings/neighbors who farm together or rent to the same cattle operator, to save this expense to the program participant. | <b>TABLED</b> by subcommittee 7/30/19....can be handled on a case X case basis within the District with DCR input as needed.<br><br>Accepted by TAC 10/8/19                         |              |             |
| 2S  |                                  | Long term crop rotation cost share practice to define hay/pasture plantings that are within a 5 year or longer crop rotation. Practice would include lifespans between 5-9 years and would be at a lower rate than SL-1.  | <b>TABLED</b> by subcommittee 7/30/19...Cover Crop/NM committee is already considering this suggestion.<br><br>Accepted by TAC 10/8/19  |              |             |
| 3S  |                                  | Higher incentive rates for cropland filter strips and cropland sod waterways should be considered.  | <b>TABLED</b> by subcommittee 7/30/19...no obvious justification for this.<br>No one at 8/14 TAC meeting offered any justification.<br>Accepted by TAC 10/8/19                      |              |             |
| 4S  | SL-6N<br>SL-6W<br>WP-2N<br>WP-2W | Doubled driveway fencing is a commonly seen issue in the field that is not "least cost, technically feasible". Spell this out as an item not to be allowed under B.12. in the SL-6 spec, etc. This would also be a good opportunity to specifically spell out commonly seen abuses of this practice.  | <b>TABLED</b> by subcommittee 7/30/19...reluctant to spell out “thou shall nots.” Double driveway fencing is clearly not “least cost/tech feasible.”<br><br>Accepted by TAC 10/8/19 |              |             |

| MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021 |                                  |   |  |              |             |
|---|----------------------------------|---|--|--------------|-------------|
| Item #  | Ag. BMP                          | Suggestion to the TAC   | TAC Recommendations  | DCR Supports | FY2021/2022 |
| 5S  |                                  | A Board member has asked that DCR looks at the issue of projects where the stream is the boundary line on the property. In some cases only one side of the stream is under control of the potential participant, but they have cattle in the stream that they are willing to fence out. Should VACS pay? Will the Bay Model accept this and what can be done about it? How does this fit in with the stipulation we don't pay boundary fence? Connected with this question, further clarify what "waters" can and cannot be excluded using VACS funds.  | <p><b>TABLED</b> by subcommittee 7/30/19...VACS can pay on exclusion fence protecting a stream that serves as a property line. Participant must protect the buffer. Said protected buffer is reportable to the Bay Model.</p> <p>Said exclusion fence is not equal to boundary fence as it "replaces" whatever barrier, if any, was restraining livestock to the property of the participant. Defining "waters" to be considered within 6S.</p> <p>(definition of "waters" resolved 8/29/19-see 6S below)</p> <p>Accepted by TAC 10/8/19</p> |              |             |
| 6S  |                                  | Define "live stream" and "surface waters" for the Glossary to be applied on many VACS practices.  | <p>Discussion, but no action 7/30/19</p> <p>Approved use of 1<sup>st</sup> sentence from Buffer Guidelines definition – 8/29/19</p> <p><b>Live Stream/Water:</b> A creek, stream, river or other water feature which has surface flow, or creates a surface flow, for a substantial portion of the year. To 10/8/19 TAC with a suggestion for a clarifier.</p> <p>10/28/19 Strm Protxn aprvd adding "...for the purpose of the Virginia Agricultural Cost-Share Program."</p>  |              |             |
| 7S  | SL-6N<br>SL-6W<br>WP-2N<br>WP-2W | For stream protection practices that create new pumping plants when needed (e.g., SL-6, LE-2, etc.), the VACS manual does not clearly define what may be an eligible cost regarding power source establishment. This causes several issues: (1) eligible costs are highly variable between districts, (2) it becomes difficult to determine when solar systems are truly the "least-cost, technically feasible" approach (over conventional electric systems), and (3) program participation may suffer when the participant is left with more out-of-pocket expenses when power establishment (whether solar or conventional) is a legitimate need as part of the practice but the | <p>Discussion, but no action 7/30/19.</p> <p>Approved edits to deal with these issue 8/29/19</p> <p>Policy B6.i.a.II) - <del>Pumps may operate on purchased electrical current or alternative energy sources such as solar, battery, mechanical or hydraulic energy.</del> The payment for the selected pump, provision of power, and associated equipment should be the most cost effective for the specific site and application.</p>  |              |             |

| MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021 |         |  |  |              |             |
|---|---------|--|--|--------------|-------------|
| Item #  | Ag. BMP | Suggestion to the TAC  | TAC Recommendations  | DCR Supports | FY2021/2022 |
|   |         | <p>individual district is of the opinion that power establishment is not an eligible cost.</p> <p>In the SL-6 specification, #6.i.a.II, it is stated that: "Pumps and equipment associated with portable and permanent watering systems. Pumps may operate on purchased electrical current or alternative energy sources such as solar, battery, mechanical or hydraulic energy. The selected pump and associated equipment should be the most cost effective for the specific site and application." Can the meter base or solar panels be considered "associated equipment"?</p> <p>In the SL-6 specification, #11, it is stated that "State cost-share and tax credit is not permitted for any electrical, structural, or plumbing supplies, including pipe, or associated construction costs for developing any incidental use." This implies that electrical costs are eligible as long as they are not strictly for incidental use, but this may be confusing.</p> | <p>Policy B10. – Generators <b>for emergency use</b> may not receive cost-share.</p> <p>Also at the 8/29/19 meeting:<br/>                     Deletion of "Note" in Rates section in SL-6W and in WP-2W (buffer incentive payment limitation to 100' or 1/3 of floodplain up to 300')</p> <p>Discussed deletion of feeding pad option, but decided to wait and see what comes of the proposed WP-4L animal feeding practice.</p> <p>To 10/8/19 TAC – no comments aside from general agreement that the feeding pad option may not be needed pending proposed WP-4L.</p> <p>For 11/20/19 TAC vote</p> |              |             |
| 8S  |         | <p>Create a CCI-type practice that pays to maintain grass or other lined drainage channels in crop fields. Also a similar practice to maintain drop structures. There are many farmer installed sod/grass waterways that continue to function without any financial assistance. The justification of this practice is similar to CCI-SE-1 practice that pays to maintain fence along surface waters where livestock are present. This would help in BMP reporting to address soil loss.</p>  | <p>New item added 8/14/19</p> <p><b>TABLED</b> 8/29/19 – low priority, opens a can of worms as every VACS bmp could be CCI'd. Not ready to consider this degree of expansion.</p> <p>Accepted by TAC 10/8/19</p>   |              |             |



| MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021 |         |  |  |              |             |
|---|---------|--|--|--------------|-------------|
| Item #  | Ag. BMP | Suggestion to the TAC  | TAC Recommendations  | DCR Supports | FY2021/2022 |
| 9S  |         | Expand the SL-7 practice to allow for the extension of a watering system associated with a narrow buffer. To maximize the effectiveness of a narrow buffer, management of upland fields is critical therefore, implementation of rotational grazing components should be incentivized.   | <p>New item added 8/14/19</p> <p>Approved expanding eligibility to narrow buffers (less than 35' and min 10') – 9/24/19</p> <p>Edited the Rates section to include “Fields which have had livestock excluded at less than 35 feet, but at a minimum of 10 feet, shall receive 50% cost share on eligible components.”</p> <p>To 10/8/19 TAC – no comments</p> <p>For 11/20/19 TAC vote</p>   |              |             |
| 10S   |         | Include 642-Water Well in the SL-7 practice.   | <p>New item added 8/14/19</p> <p>TABLED 8/29/19 – rejected last season.</p> <p>Accepted by TAC 10/8/19</p>   |              |             |
| 11S   |         | Include 362-Diversion, 620-Underground Outlet, and 606-Subsurface Drain in the SL-11-Permanent Vegetative Cover on Critical Areas specification. The description and purpose of the practice is to promote land shaping and planting permanent vegetative cover on critically eroding areas to improve water quality by reducing the movement of sediment and nutrients from the site. The majority of these areas require more than land smoothing and reseeding. They are often critically eroded due to underground flow from seeps that destabilize the area causing it to erode and thus require the installation of measures to address the flow of water as well as land shaping and reseeding. | <p>New item added 8/14/19</p> <p>Approved edits to SL-11 and WP-3 on 9/24/19:</p> <p>Kept SL-11 as a simple, non-structural 5 year practice but added 382 Fence and 484 Mulching standards. Inserted a new Policy in SL-11, “For permanent fencing needed to protect vegetative cover.” Inserted new Policy in both SL-11 and WP-3, “Livestock must be excluded after planting for a minimum of 12 months.” To WP-3, added “permanent fencing” to Policy B.2., added 342 Critical Area Planting, 382 Fence, 484 Mulching, 606 Subsurface Drain, 620 Underground Outlet and “When a subsurface drain is used in conjunction with the practice, a wetlands determination shall be performed prior to installation.”</p> <p>To TAC 10/8/19 – no comments</p> <p>For 11/20/19 TAC vote</p> |              |             |

| MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021 |         |   |   |              |             |
|---|---------|---|---|--------------|-------------|
| Item #  | Ag. BMP | Suggestion to the TAC   | TAC Recommendations   | DCR Supports | FY2021/2022 |
| 1E  |         | <p>Consider making SL-6A Small Acreage Grazing System a cost-share practice in addition to being a tax credit practice. This is also an opportunity to review the practice to see if any tweaks should be made.</p> <p>Sent from Programmatic Subcommittee as a result of the Equine Workgroup's Recommendation #6 focused on practices that could be offered for equine producers.</p> | <p>New item added 8/14/19, but there was some discussion 7/30/19</p> <p>Approved making this bmp eligible for 50% cost-share on 9/24/19. Willing to see if allowing cost share will increase the use of this rigorous bmp.</p> <p>To TAC 10/8/19 – TAC suggested transferring this matrix item to the Animal Waste subcommittee to see how it might fit with the pending WP-4L. Concern raised with referenced stocking rate.</p> |              |             |
| 14C   |         | <p>Create a summer cover crop practice to incentivize the reseeding of sacrifice areas to ensure protection from erosion and the reduction of nutrient losses</p>   | <p>The Cover Crop subcomm recommended the reseeding of sacrifice areas be sent to the Stream Protection subcomm as this needs to be included in a gazing plan. This type of reseeding could also be included for critical areas or highly erodible areas.</p> <p>10/28/19 Strm Protxn subcomm deferred discussion until next year.</p>  |              |             |

| MATRIX OF TABLED STREAM PROTECTION RECOMMENDATIONS |   |                                 |  |
|--|---|---------------------------------|--|
| Item #   | Ag. BMP   | Suggestion to the TAC           | Reason for Tabling   |
| 1S   | Eligibility of unique scenario                              | Tabling approved by TAC 10/8/19 | Can be handled on a case X case basis within the District with DCR input as needed |
| 2S   | SL-1 variants   | Tabling approved by TAC 10/8/19 | Cover Crop subcommittee is addressing SL-1   |
| 3S   | Increase CS rate for cropland filter strips & sod waterways | Tabling approved by TAC 10/8/19 | No justification provided. No one at 8/14/19 able to offer a justification.        |

| <b>MATRIX OF TABLED STREAM PROTECTION RECOMMENDATIONS</b> |   |                                 |  |
|---|---|---------------------------------|--|
| <b>Item #</b>   | <b>Ag. BMP</b>                                      | <b>Suggestion to the TAC</b>    | <b>Reason for Tabling</b>  |
| <b>4S</b>   | Double driveway fencing                             | Tabling approved by TAC 10/8/19 | Reluctant to spell out prohibitions, double driveway fencing is clearly not “least cost/tech feasible”   |
| <b>5S</b>   | Multiple questions about eligibility-stream fencing | Tabling approved by TAC 10/8/19 | VACS can pay on exclusion fence protecting a stream that serves as a property line. Participant must protect the buffer. Said protected buffer is reportable to the Bay Model.<br>Said exclusion fence is not equal to boundary fence as it “replaces” whatever barrier, if any, was restraining livestock to the property of the participant. Defining “waters” to be considered within 6S. |
| <b>8S</b>   | Create CCI for for sod waterways, drop stuctures    | Tabling aprvd by TAC 10/8/19    | Low priority, opens a can of worms as every VACS bmp could be CCI’d. Not ready to consider this degree of expansion.   |
| <b>10S</b>  | Include well in SL-7                                | Tabling aprvd by TAC 10/8/19    | Rejected last season   |