Virginia Agricultural BMP Technical Advisory Committee

Virginia Department of Forestry Headquarters 900 Natural Resources Drive, Charlottesville, VA 22903 July 9, 2019 9:30 AM – 3:30 PM

Attendance

Dan Goerlich, Virginia Cooperative Extension

Jen Edwards, DCR Marie Abowd, DCR Alexa Maione, DCR

Sue Alvis, Virginia Horse Council David Lamb, Virginia Horse Council Marianne Jolley, Virginia Horse Council Susan McSwain, Virginia Horse Council Debbie Easter, Virginia Thoroughbred

Association

Robin Mellen, Virginia Thoroughbred

Association

Diana Dodge, Virginia Horse Show Association

Laura Martlock, Virginia Horse Council Steve Escobar, Springfield Farm and Virginia

Agribusiness Council Darry Glover, DCR

Brandon Dillistin, Northern Neck SWCD Carrie Swanson, Virginia Cooperative Extension

Charles Newton, Virginia Soil and Water

Conservation Board

Dana Gochenour, Lord Fairfax SWCD

Joseph Stepp, VASWCD

Kyle Shreve, Virginia Agribusiness Council

Martha Moore, Virginia Farm Bureau

Ricky Rash, Piedmont SWCD Steven Meeks, VASWCD

Willie Woode, Northern Virginia SWCD

Christine Watlington, DCR

David Bryan, DCR Roland Owens, DCR Blair Gordon, DCR Kendall Tyree, VASWCD

Amanda Pennington, DCR

Darrell Marshall, VDACS

Josh Walker, Headwaters SWCD Kevin Dunn, Piedmont SWCD

Megen Dalton, Shenandoah Valley SWCD

Sam Truban, Lord Fairfax SWCD

Ben Chester, DCR

Alison Sloop, Lord Fairfax SWCD

Alston Horn, Chesapeake Bay Foundation

Spencer Yager, VACDE

Amanda McCullen, Culpeper SWCD

Carl Thiel-Goin, DCR Stephanie Drzal, DCR Scott Ambler, DCR Mark Hollberg, DCR

Aaron Lucas, Headwaters SWCD

Ashley Wendt, DEQ Chad Wentz, NRCS Charlie Wootton, VACDE Emily Horsley, FSA Gary Boring, VASWCD

Luke Longanecker, Thomas Jefferson SWCD Matt Kowalski, Chesapeake Bay Foundation

Nick Livesay, Lord Fairfax SWCD

Robert Bradford, VASWCD

Anna Killius, James River Association Stefanie Kitchen, Virginia Farm Bureau

Tim Higgs, VDACS

Tom Turner, John Marshall SWCD Tracy Fitzsimmons, Virginia Cattlemen's

Association

Raleigh Coleman, DCR Stacy Horton, DCR

David Massie, Culpeper SWCD

Meeting Opened – 9:30 AM

Welcome and Review of Agenda (Darryl Glover)

Mr. Glover welcomed the BMP TAC members back for the 2019 TAC year and reviewed the agenda.

Chesapeake Bay WIP III Update (Darryl Glover)

Mr. Glover noted that the draft WIP was submitted and the comment period closed. Hundreds of comments were received; many were "post card" comments. Edits have been proposed to the WIP in response to the comments that were received. The final WIP is due to EPA in August.

2019 TAC Schedule (David Bryan)

David Bryan went over the updated rules for the BMP TAC meeting format.

- Five subcommittees remain. Nutrient Management and Cover Crop will be combined as many of the issues remaining need input from both subcommittees.
 Animal Waste, Forestry, Programmatic, and Stream Protection will be continued as they currently are.
- Members can participate on as more than one committees but may be a voting member on only one committee.
- Suggestions were made after the deadline for this year. The TAC will vote in August on whether or not to accept all of those suggestions and add them to the workload for this year or not. The vote will be to accept all or nothing, so either accept all of the suggestions or save them all for next year.
- Votes within the subcommittee still have the 80% threshold.
- After a subcommittee votes on an issue, that decision will be reported to the full TAC. The TAC will provide input and, if warranted, the suggestion will go back to the subcommittee for further discussion. The subcommittee decision will be re-presented to the full TAC at the next meeting for a full TAC vote. Since discussion on the issue has already taken place, this second presentation will be only for a vote, there will be no more discussion.
- If the TAC vote does not "pass" a change, the TAC can vote to send it back to the subcommittee with amendments, or the suggestion becomes tabled.

Mr. Bryan also announced the upcoming meeting schedule: August 14^{th} at DOF, October 8^{th} at Central High School in Goochland, Nov. 20^{th} at the Augusta County Government Center, December 18^{th} at Central High School in Goochland. All meetings will run from 9:30 am -3:30 pm.

Those subcommittees that have already voted on items will present those items for discussion today, with voting taking place at the August meeting.

FOIA Review for TAC Activities (Christine Watlington)

Ms. Watlington reminded all participants that all full TAC and subcommittee meetings are public meetings and minutes will be taken and posted to the Virginia Regulatory Town Hall. A member cannot vote if not physically present at the meeting location; there will be no email or phone votes. Meeting dates and locations are publically noticed on the Town Hall. All of the FOIA rules apply to all work of the TAC and subcommittees.

Equine Workgroup Report (Kyle Shreve)

Mr. Shreve presented the report from the Equine Workgroup. He noted that the workgroup had about 40 stakeholders involved. They held three meeting to explore how best to address equine operations, how to increase the involvement from equine operations , whether or not a pilot program should be established

and what that would look like, how to address the WIP recommendations, and possible maximum horse stocking rates to qualify for the program.

The workgroup has two key recommendations to address for horse operations first and foremost. The first recommendation involves the definition used for qualifying for the VACS program. Does it include commercial horse operations? The workgroup discovered that some SWCDs were allowing commercial horse operations to participate in the VACS program and others were not. The committee proposes a clarification of the VACS definition.

Proposed definition of Agricultural Products: The production for commercial purposes of crops, livestock, and livestock products, and includes the processing or retail sales by the producer or crops, livestock or livestock products which are produced on the parcel or in the district. For equine operations, agricultural products include equine activities that create the need for agricultural best management practice to reduce nonpoint source pollutants which are conducted on the parcel or in the district.

A member asked for clarification on what a "commercial operation" really means. Mr. Shreve explained that is follows the same definition already used in the program: \$1,000 of product from equine activities and a minimum of 5 acres. He further explained that this would apply to the horse boarding operations, but does aim to exclude those "back yard" horses who often do not meet the \$1,000 or 5 acre minimum thresholds. He continued to explain that the intent of the definition change was to ensure that even if a producer makes \$1,000 from another type of product on the farm, he would qualify for VACS. For example, if a producer earns \$999 from horses and has 1,000 acres of corn, the profit from the corn can bump the producer over the \$1,000 requirement.

Mr. Bryan then noted that all recommendations from the equine workgroup will go onto formal subcommittees of the TAC. The proposed revisions to the definition will go to the programmatic subcommittee.

The workgroup's second recommendation is to establish a pilot program for those equine operations that do not qualify for VACS. Producers should not be able to apply for both VACS and the pilot program. The pilot program would target those smaller operations that do not qualify for the VACS program. The workgroup suggested putting aside a separate pot of money to fund this pilot project, rather than utilize the same funds as the VACS program.

An additional recommendation is to develop a formula for funding distribution and pilot program participants. The pilot should look and function like the VACS program in order to install as many BMPs on the ground. The details of a pilot program have not been discussed yet. The amount of money available for the project would be completely up to the General Assembly.

A member reminded people that if funding is wanted for this program, then members should lobby the Secretary's office.

The workgroup recognized that must more research is needed to develop a stocking rate and that the Department has begun conducting this research.

The workgroup also recognized that general BMP specifications needed to be developed for review by the full TAC. If horse operations do not qualify for VACS, different specifications would be needed to address the "back yard" operations. The development of the specifications would be handled by the five TAC subcommittees, rather than by the equine workgroup.

Break - 10:14 am to 10:39 am

Equine Intern Presentation (Marie Abowd)

Mr. Glover introduced Ms. Abowd and explained the research she has been conducting on stocking rates in the Commonwealth and in other states. The research was originally going to be used to recommend a stocking rate for horses that would also address manure management; however, manure management is problem that can't be adequately addressed through the existing stocking rates. Current stocking rates are typically based on the nutrition needs of the horses, not the amount of land that is needed to adequately address manure management. DCR is now researching potential methods to address manure management for these types of operations.

Ms. Abowd presented other states' programs and information on ordinances adopted by Virginia localities. See the attached presentation.

After the presentation, several people asked questions regarding Ms. Abowd's research. Questions were asked about how localities decided on the stocking rates included in their ordinances. Ms. Abowd responded that many of the ordinances were older and many localities directed questions to the local extension agents for a recommended stocking rate.

Another public commenter wondered if any studies were found that recommended stocking rate based on the actual grasses, weather, type of horse, condition of horse, etc. Ms. Abowd responded that localities recommended contacting local extension offices for specific site recommendations.

A member asked if Texas had a state wide stocking rate; similar to Virginia, citizens were referred to local extension agent.

Subcommittee Reports

Only concepts and ideas being discussed by each Subcommittee were presented to the TAC to allow for discussion; no votes were made by the full TAC at this meeting.

Animal Waste (Amanda Pennington)

The Animal Waste Subcommittee has met twice this year and has voted on a few items.

- 1A still currently working on a new specification that would address that.
- 2A working on that along with 1A in the new specification
- 3A WP-4 layer/breeder operations are on a different cycle from broiler operations. Layer/breeders change flocks every 11 months. One of the issues facing the layer/breeder operations is the higher moisture content in the litter. The higher moisture content makes it harder to sell the litter. The subcommittee supports adding language into the specification to allow for a clarification for layer/breeder operations.
- 4A The subcommittee defined the terms "free stall", "loose housing" and "bedded pack" (aka "pack barn") for the VACS Manual Glossary. It was noted that VACS will not pay for a "free stall" system.
- 5A This practice is often done in conjunction with other practices being installed on the farm. In an effort to allow easier construction for both practices, the subcommittee supports allowing this practice to have a carry-over period.
- 6A Currently, the VACS program does not provide species-specific specifications for any of the practices. Practices are based on "least cost, technically feasible" standards, regardless of species type. The subcommittee voted to not recommend equine specific practices for the VACS program at this time. The committee feels that it is addressed in other recommendations.

The committee is also working on a loafing lot management/bedded pack for all operations, not just dairy. It will include enough flexibility to allow for different animal operations.

Cover Crop (Carl Thiel-Goin)

The committee is exploring how to adjust the SL-8 practice to include other specialty crops and summer cover crops. Several recommendations were received regarding the application of different fertilizers to cover crops and looking into the different research that has been done related to this. The subcommittee is looking into adding dura winter rye as an acceptable cover crop species.

The committee is also interested in exploring a change to SL-1. A request has been made to eliminate the 5 year option and to revise the practice to allow only a 10 year option. This practice is currently being used as a field rotation practice rather than a land conversion practice; the subcommittee wants to try and capture the real purpose of the practice. The subcommittee will also investigate a "no fallow" type practice so that some type of cover is always on the ground behind specialty crops. The next meeting of the subcommittee will be July 22^{nd} .

Forestry (Jim Echols)

Mr. Echols reminded everyone about potential changes to the CREP program as a result of the new Farm Bill, although those potential changes are still unknown at this time. The subcommittee hopes to have additional information by the next full TAC meeting. Until more information is available, the subcommittee will hold off on making any recommendations.

The subcommittee will meet again on September 16th at 9 am at the DCR Staunton office.

A member asked about the potential changes to the CREP program. It was noted that the regulations developed in response to the 2018 Farm Bill had not yet been released.

Nutrient Management (Steph Drzal)

Ms. Drzal presented the subcommittee update. The subcommittee met earlier this month and did cover all of the issues at their first meeting.

- 2N The request was for a simple word change to clarify part of the specification. The subcommittee agreed with the recommend word change.
- 3N The subcommittee suggested changing the NM-5N to match the NM-5P language. The full TAC did not raise any issues; there was no further discussion on this issue.
- 4N The subcommittee believes the issue of "double dipping" with the NRCS 590C applies to the entire VACS program, not just nutrient management. As this is a program-wide concern, DCR will handle this issue internally by including language on the Contract Part 1 clarifying the prohibition on "double-dipping". This clarification would not prohibit the "piggy backing" of practices between two agencies.
- 1N Additional revisions to the SL-1 specification remained from last year. The subcommittee discussed the issues and recommends having a grassland plan that only needs to be written once for a period of 5 years. The Districts would not be in charge of verifying it the grassland plan. The updated language to the specification was presented. A member asked what would happen if the producer has an actual 3 year nutrient management plan that covers these fields. Would both the nutrient management plan and a grasslands plan be needed? Ms. Drzal and other committee members agreed that was not the intent of the language and that a producer could have a 3 year nutrient management plan instead but the nutrient management plan would need to be active for the full 5 years. The subcommittee will re-visit that language to make sure that is clear.

Programmatic (Darryl Glover)

Mr. Glover noted the committee met on June 5th and only voted on one issue. The additional meeting dates and locations was also noted.

- 7P The suggestion that the district's average cost list should be allowed to be updated throughout the program year was discussed; however, the subcommittee voted to table this item. There was concern about the fairness to program participants cost estimates and approved cost-share amounts changed during the program year. A member expressed concern over the tabling of this issue. Questions were raised about how project overages during implementation are handled and what levels of flexibility Districts had to address overages.
- 2P The suggestion recommends using CEF as a ranking tool instead of HUCs. This
 recommendation will involve additional discussion by the subcommittee and internal DCR
 discussions.
- 3P Creating a regionalized program. The subcommittee will continue this discussion.
- 4P How to handle CREP and RCPP cancelations. The subcommittee will continue talking about this recommendation. A discussion about how practices funded through these programs was held with the TAC; these reporting mechanisms impacts how CREP and RECPP contracts and cancelations are reported.
- 5P Addresses the issue of small farms not ranking for cost share. Questions were raised by members of the TAC about the impacts of the CEF rankings, priority considerations, and other program guidelines on small farmers. A member asked if a carve-out for small farms could be made.
- 6P The suggestions is about cost lists and payment methods. There will be additional conversations about this suggestion by the subcommittee.
- 10P The issue is in regards to cost-share payments and issuing tax credits. Members of the TAC asked whether this was truly an issue. The District will be aware if the producer receives cost-share funding and is eligible to receive a tax credit.

Stream Protection (Mark Hollberg)

Mr. Hollberg reported that the committee has three new members this year. The committee has not yet met and acted on any issue yet. He noted that the subcommittee will meet on July 30th, DCR Staunton Office.

Public Comment

Mr. Bryan opened the meeting up for public comment. A member requested that any concerns DCR has with any of the TAC recommendations be raised prior to the Virginia Soil and Water Conservation Board meetings.

Closing Comments

Mr. Bryan announced that the next meeting is August 14th and the TAC will vote on the issues presented by the subcommittees today. Additional suggestions that came in after the deadline will also be voted on to decide if those suggestions should be added to the subcommittee workloads.

Adjourn – 1:30 pm.





EQUINE STOCKING RATES & CONSERVATION MEASURES FOR VIRGINIA LOCALITIES

Marie Abowd

Equine Specialist Intern

Department of Conservation & Recreation

Division of Soil and Water Conservation

July 9, 2019

OVERVIEW

- 1. Introduction & methods
- 2. Neighboring state programs
- 3. Research on Virginia localities' equine stocking rates in residential & agricultural zones
- 4. Equine stocking rate data
- 5. Equine stocking rate conclusions



INTRODUCTION & METHODS

- Researched what other states have with respect to environmental requirements and incentives for small,
 noncommercial properties with horses
 - Typically 5 acres or less
 - Noncommercial can be interpreted as the private use of recreational livestock for personal enjoyment and not profit



INTRODUCTION & METHODS, CONT.

- Researched local zoning in all of Virginia's soil and water conservation districts with respect to equine stocking rates (how many horses/acre) in residential and agricultural zoned lands for noncommercial use
- Contacted zoning administrators, planners, and/or directors
- Accessed zoning ordinances on localities' websites for every county and city in Virginia's SWCD





NEIGHBORING STATE PROGRAMS





Key

- States researched for equine BMPs for small properties
- △ States that have equine BMPs for small properties

CALIFORNIA



- The Equine Facilities Assistance Program's goal is to "protect San Francisco Bay Area water resources by assisting in effective management of possible non-point source pollutants associated with horses"
 - "Conservation Measures to Reduce Non-point Source Pollution at Horse Facilities"



CALIFORNIA, CONT.



- Council of Bay Area Resource Conservation Districts Equine Facilities
 - Assistance Program:
 - Manure management
 - Stream protection
 - Pasture management
 - Storm water runoff management
 - Correct application rates of fertilizer or manure to pastures
 - Integrated Pest Management techniques
 - Plant or construct windbreaks around bare soil areas

HORSE MANURE MANAGEMENT

A Guide for Bay Area Horse Keepers



FLORIDA



- "1 mature horse (~1,000 lbs.) may require 2-5 acres of pasture"
- "On productive and well-managed pasture, 1-1.5 acres/horse is adequate during the summer"
 - pg. 18 Small Scale Horse Operations



FLORIDA, CONT.



- BMPs for noncommercial small lots with equines:
 - Composting manure
 - Grazing plans
 - Fencing
 - Compost spreader
 - Buffers
 - Filter strips
 - Water troughs
 - Swale/rain gardens

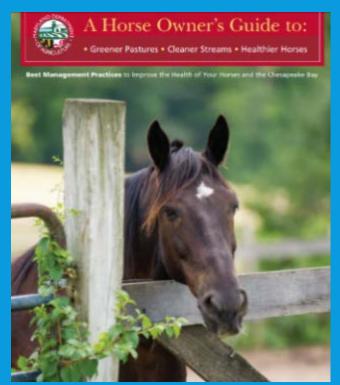


nttps://floridadep.gov/water/industrial-wastewater/documents/bmps-small-scale-horse-operations

MARYLAND



- MD Department of Agriculture Horse Outreach Workgroup (HOW)
- HOW partners with local soil conservation districts for technical assistance for operations
- "1-2 acres of well managed pastures can support one mature horse during the grazing season with rotation"
- "4-5 acres without rotation will support only one mature horse for the entire grazing season"
 - (pg. 11, A Horse Owner's Guide)

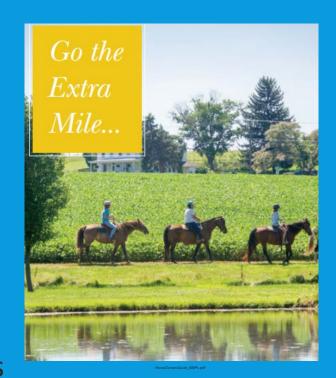


nttps://mda.maryiand.gov/resource_conservation/Documents/HorseOwnersGuide_BMHs

MARYLAND, CONT.



- Nutrient Management Plan:
 - 8,000 lbs. of live animal weight or
 - farm generates at least \$2,500 in gross income
- Landowners are required by MD law to manage operation using a nutrient management plan that has been approved by MD Department of Agriculture
 - Gross income from selling or boarding horses and other horse related and Ag activities would count towards the threshold (pg. 5)
- MD Association of Soil Conservation Districts' Farm Stewardship Certification & Assessment Program (FSCAP) recognizes these efforts

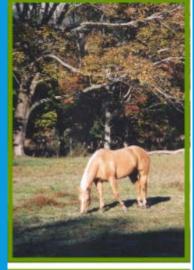


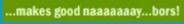
NEW YORK



- Department of Agriculture: Agricultural Environmental Management (AEM)
- NYS Soil and Water Conservation Committee and NYS Department of Agriculture and Markets work locally via each County Soil and Water Conservation District to deliver the program
 - Supported by Ag Nonpoint Source Abatement and Control Program or Climate Resilient Farming Program
- Covers management areas of farms, including a set specific to horse farms







https://www.rvs.soilandwater.org/aem/forms/horsing%coamund%cowith%coAEM.nd

NEW YORK, CONT.



- BMPs systems for: pastures, manure management, horse washes, etc. are planned by combining individual practices defined by NRCS standards for what the farm-specific resource concerns called for
- Cost share programs (as well as NRCS funds)
- State supported system with the AEM Base Program supporting AEM technical staff in each District (~\$4M/year), AgNPS for implementation of WQ-specific projects (~\$14M/year), and the Climate Resilient Farming Program for GHG and adaptation implementation projects (~\$4M/year)

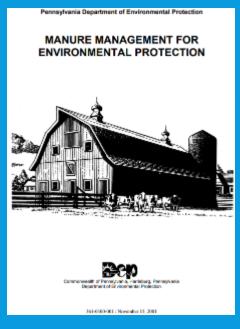


PENNSYLVANIA



https://fotw.info/flags/us-pa.htr

- Every farm in the state that generates or uses manure, regardless of size that:
 - Pasture livestock or poultry
 - Maintain an Animal Concentration Area (barnyard, exercise lot, feedlot) or
 - Apply manure to their crop fields
- Must have a Soil Erosion BMP Manure Management Plan ("Overview")
 - Funding through NRCS for educational outreach by Penn State Cooperative Extension
 - "Environmentally Friendly Farm" plan



//www.depgreenport.state.pa.us/mwg-internal/degfs23hu73ds/progress?id=T-NOfjoHhpyyXFVAw5y/pgiJWBKBIIvGEI8Xm3pqYSA

PENNSYLVANIA, CONT.



Grazing Guidelines: 1 horse can be maintained on:

- o.5 acre pasture with turnout time being less than 3 hours/day
- 1 acre with turnout time being 3-8 hours/day
- 1.5 acres with turnout time being 8-12 hours/day
- 2 or more acres are needed if turnout time is unlimited
 - (Penn State Extension recommendations)

Funding goes toward:

- Fencing (streambank or paddock fencing for rotational grazing)
- Roof runoff controls
- Heavy use area protection
- Manure stacking pads/composting pads
- Diversions away from barnyard areas

Penn State Extension

Are You Managing Your Farm to be
Environmentally Friendly?

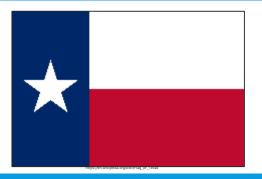
Do you manage and maintain healthy pastures to control soil and nutrient loss? Are barnyards and manure storages managed to limit nutrient runoff? Do you adopt sound management practices to protect water quality and the environment?





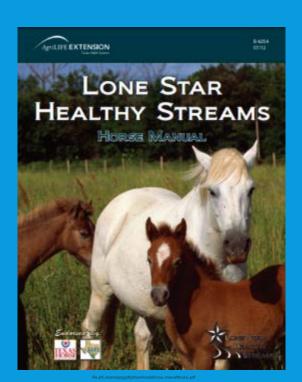
Penn State Extension would like to recognize farmers that practice good stewardship and promote a healthy environment for their animals, their families, and their community.

TEXAS



- TX Department of Agriculture partnered with TX Extension Office (TX A&M) to promote equine BMPs:
 - Pasture management
 - Runoff management
 - Riparian area management
 - Manure management
 - Mortality management

Financial Assistance Texas State Soil and Water Conservation Board (TSSWCB): - Senate Bill 503 Program: Water Quality Management Plans Clean Water Act 319 Nonpoint Source Grant Program Natural Resources Conservation Service (NRCS): - Environmental Quality Incentives Program (EQIP) Wildlife Habitat Incentives Program (WHIP) Grassland Reserve Program/Wetland Reserve Program Conservation Security Program USDA Farm Service Agency (FSA): Conservation Reserve Program Conservation Reserve Enhancement Program Source Water Protection Program

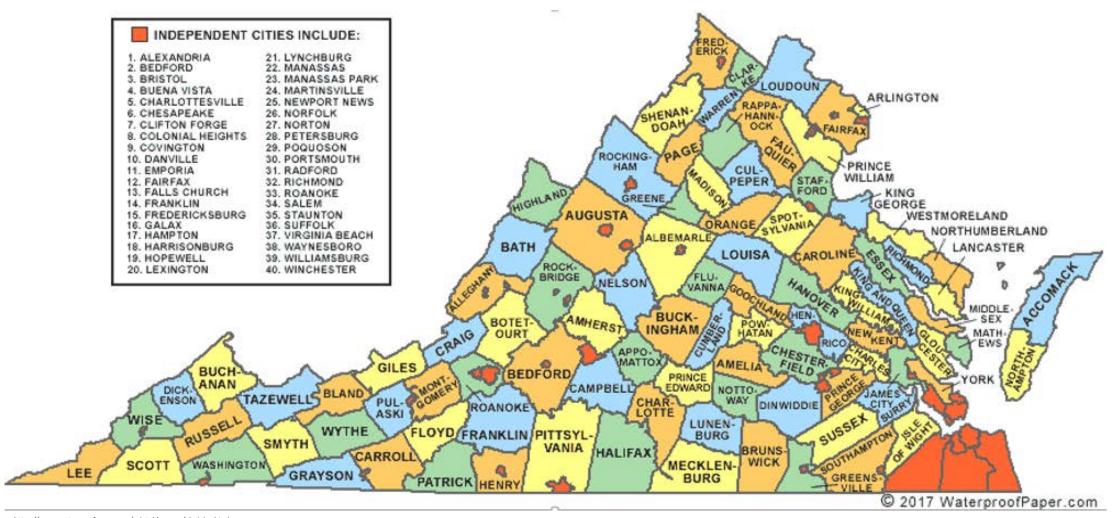


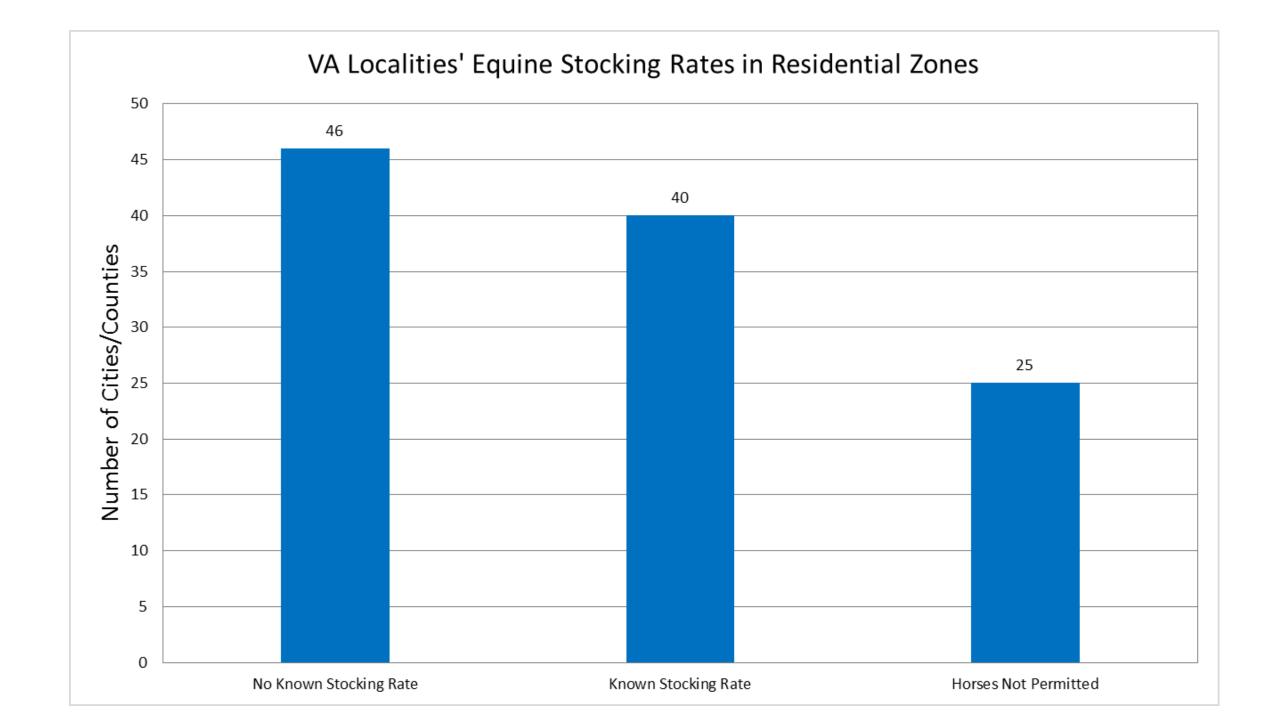
Soil and Water Conservation Districts (SWCD): Offer technical assistance to farmers and ranchers in preparing soil and water conservation plans to meet each land unit's specific capabilities and needs Texas State Soil and Water Conservation Board (TSSWCB): Offers technical assistance to SWCDs. Natural Resources Conservation Service (NRCS): - Helps landowners and managers improve and protect their soil, water, and other natural resources.

Texas AgriLife Extension Service: Offers technical assistance to citizens of Texas on natural resources issues, as well as many other topics.

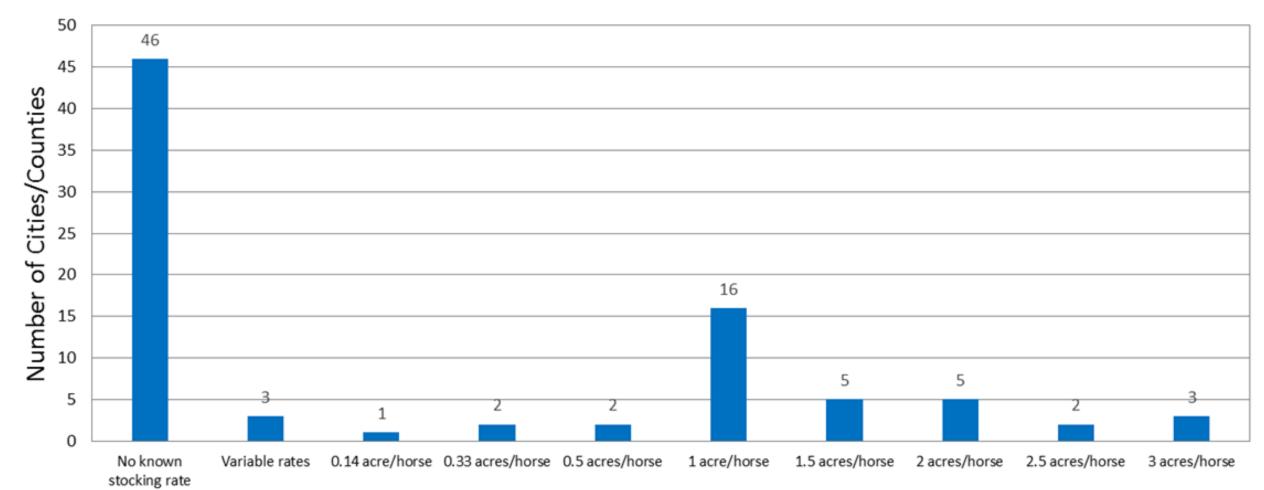
Technical Assistance

RESEARCH ON VA LOCALITIES' EQUINE STOCKING RATES





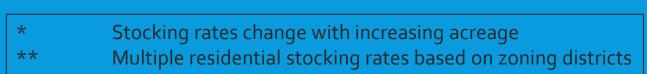




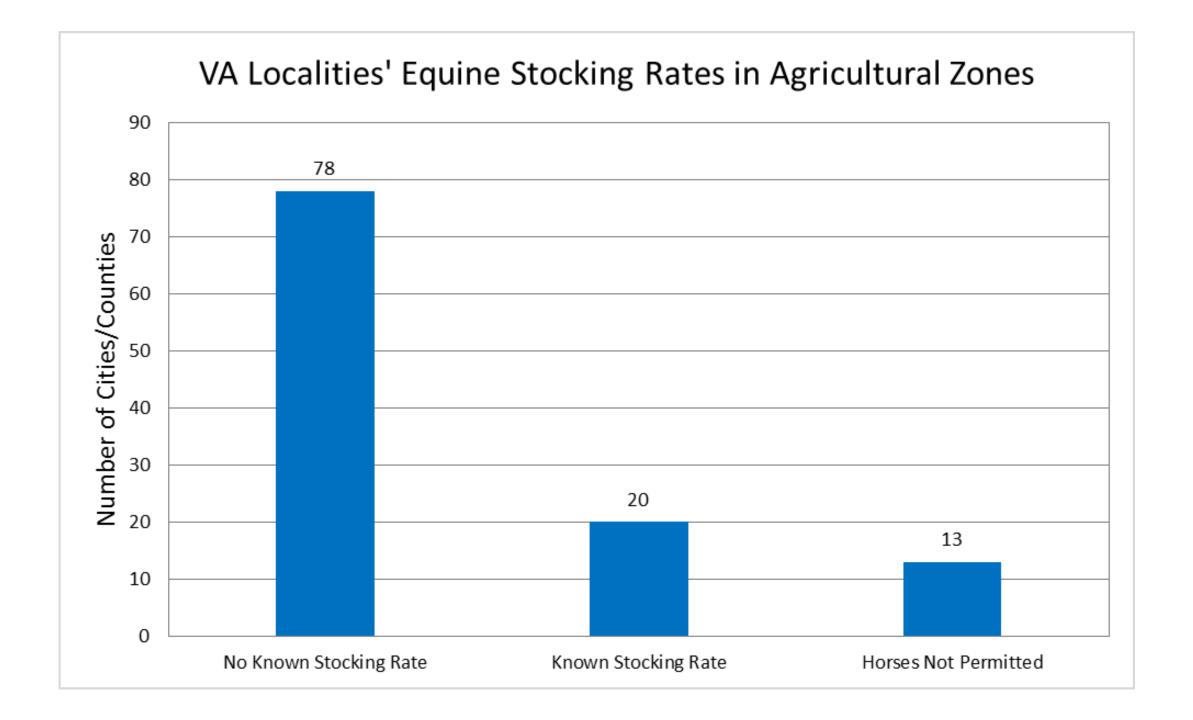
Number of acres per horse

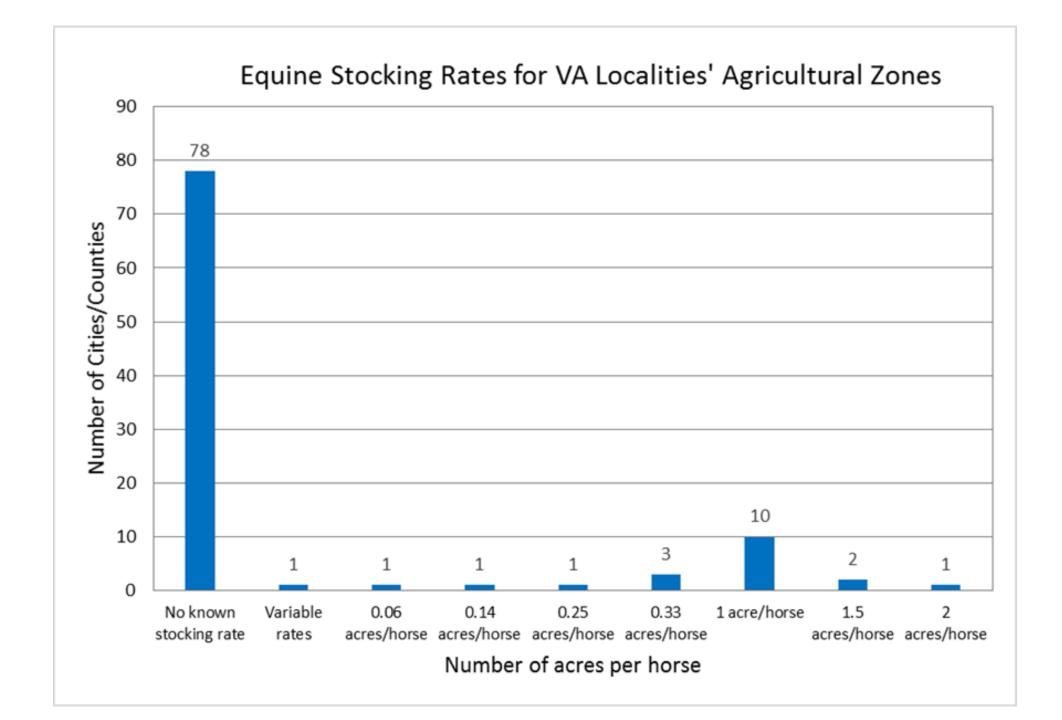
COUNTIES WITH A RATE THAT IS NOT A RATIO

- Brunswick County*: In the Rural Residential zone
 - On minimum of 3 acres, 1-2 horses are allowed
 - On minimum of 5 acres, 3-4 horses are allowed
 - · Dawn P. Washburn, County of Brunswick Planner
- Mecklenburg County: In R-2A zone
 - Maximum of 4 horses on a minimum of 5 acres
 - Robert Hendrick, Mecklenburg County Zoning Administrator
- Powhatan County* **:
 - RR-5 is 1 horse/5 acres (5 acres/horse), with 1 horse/acre additions
 - R-2: On minimum of 3 acres, only 1 horse is allowed.
 - For an additional acre, an additional horse is allowed, but the maximum amount of horses allowed is 3
 - · Juli Kurnos, CZO, Powhatan County Planner I









COUNTY WITH A RATE THAT IS NOT A RATIO

- Rockingham County*: Properties less than 6 acres in agricultural zones can have up to 4 horses
 - Properties over 6 acres do not have a limit
 - Diana Stultz, Rockingham County Zoning Administrator/Subdivision Agent







EQUINE STOCKING RATES & CONSERVATION MEASURES FOR VIRGINIA LOCALITIES

Marie Abowd

Equine Specialist Intern

Department of Conservation & Recreation

Division of Soil and Water Conservation

July 9, 2019

	MATRIX OF ANIMAL WASTE RECOMMENDATIONS FOR PROGRAM YEAR 2021					
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022	
1A	WP-4B	Include all livestock types in order to account for different management styles and resource concerns, in addition to dairy livestock operations.				
2A	WP-4B	Limit animal feeding facilities to a certain animal unit per acres served. If the winter feeding facility is to serve 60 acres, the barn could be sized for no more than 90 animal units (1.5AU per acre) or something along those lines? I believe complete confinement is more environmentally conscious on overstocked farms, and reasonably stocked acreages are better suited to our non-confined facilities.				
3A	WP-4	Edit the WP-4 specifications to give exceptions to the six month litter storage criteria for poultry breeding operations.				
4A	WP-4B	Define "Loose Housing", "Free Stall" and "Pack Barn" for inclusion in the Glossary.				
5A	WQ-12	Consider adding WQ-12 to the list of practices eligible for carryover and decide which category they fall under. Suggested: a one year carryover practice.				
6 A	WP-4 WP-4B SL-9	Though many large horse producers are VACS eligible, nonetheless there are currently various water quality issues that cannot be addressed due to lack of applicable practices. It is important to find a way to address these issues to meet WIPIII goals. Consider revised or new practices for loafing lot				

	MATRIX OF ANIMAL WASTE RECOMMENDATIONS FOR PROGRAM YEAR 2021							
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022			
		management, (2) pasture management and (3) manure management including storage, handling, composting, and distribution. This is NOT for the small-scale the pilot project, but for regular VACS projects involving horses.						

MATRIX OF TABLED ANIMAL WASTE RECOMMENDATIONS					
Item #	Ag. BMP	Suggestion to the TAC	Reason for Tabling		

	MATRIX OF COVER CROP RECOMMENDATIONS FOR PROGRAM YEAR 2021					
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022	
1C	SL-8	Turf grass production should be allowed in the SL-8 specialty crop cover crop practice. More than 1/3 of the cropland in our District is in turfgrass production and an incentive is needed for these farmers to plant cover crops between harvesting and planting sod.				
2 C	SL-8B SL-8H WQ-4	Should allow a certain amount of fertilizer or manure on the cover crop to tiller and thicken the stand.				
3C	SL-8B SL-8H WQ-4	Allow producers to add a shot of starter nitrogen to their cover crop. To get a better stand of cover crop following a good summer harvest. Not all producers would want to do this, but some would and they would definitely see a benefit with greater cover crop growth in a shorter amount of time.				
4 C		Summer cover crop cost share practice to decrease soil erosion and nutrient runoff on fallow fields or crop fields unable to get cash crop planted due to extreme weather events or other extenuating circumstances. Create a new BMP that provides incentives to plant summer cover crops. Summer cover crops could be applied to cropland that has experienced crop failure or land that could not be planted in time due to the weather. These summer crops would uptake the excess nutrients not being picked up by the planned crops and protect the soil during the summer. A cost share payment for this				

		MATRIX OF COVER CROP RECOMME	NDATIONS FOR PROGRAM YEAR 2021		
Item#	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022
		practice would be applicable across the state and yield considerable reductions.			
5 C	SL-8B SL-8H WQ-4	Encourage mixed species cover crops. Instead of \$8/acre bonus for rye, make the base payment for any cover crop \$23/acre or more. Many producers do not plant rye because of the seed cost or due to the rye producing too much biomass which is difficult to plant into. More research needs to be done whether rye is still the "best" cover crop species or whether it's actually more beneficial to use Mixed Species cover crops. Encourage mixed species cover crops; do away with \$8/acre for "pure rye" and allow the bonus payment if it's a cover crop of rye plus Legume or Radish.			
6C	SL-8B SL-8H WQ-4	A way to pay and rank for cover crops based off the biggest bang for the tax payers dollars. Currently it is \$40 dollars for basically every type of CC except rye and pure stands of legumes. Adjusting prices and ranking based on planting method and species. A lot of producers broadcast CC, but if you can get additional credit for no-till drilling we should be giving an incentive to do so.			
7C	SL-8B SL-8H WQ-4	Allow for a fall cover crop with nutrients applied.			
8C	SL-8B SL-8H WQ-4	Examine the seeding rates for cover crops. Some seeding rates may be too high (2 bushels per acre).			

	MATRIX OF COVER CROP RECOMMENDATIONS FOR PROGRAM YEAR 2021					
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations DCR Supports	FY2021/2022		
9C		Develop new specification for cover crop after soybeans. Currently many fields lay fallow after soybeans; instead of moving back overall fall planting dates for cover crop, a new spec should be developed to specifically address the soybean issue. Subcommittee will need to look at soybean maturity dates, which cover crops have good survival on late plantings, etc. Rye?				
10 C	SL-8B SL-8H	Dr. Wade Thomason of VT recommends adding Dura winter rye to our approved list of cover crop options in VACS. The CC Subcommittee should explore the Dura winter rye variety and if the Bay program will accept it.				
11C	SL-1	The SL-1 practice is currently a 5 year or 10 year practice depending on the participant's choice. Experience and data shows that many 5 year SL-1 practices are part of a longer term crop rotation and eventually revert back to cropland, often before the 5 year lifespan of the grass is over. In this case the SL-1 is essentially a long term cover crop not a land conversion practice. A SL-1 that has a 10 year lifespan rarely is converted back to cropland and most always ends up as "true" land use conversion. The WIP3 input decks (definitions) says SL-1 gets land conversion credits. A 5 year SL-1 going back to crops isn't much of a "land conversion", but 10 years get us real conversion.				

		MATRIX OF COVER CROP RE	COMMENDATIONS FOR PROGRAM YEAR 2021		
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022
		Two proposals: 1. Make the SL-1 a 10 year only practice to achieve true land use conversion. If we truly want the credits in the Bay Model and we want those acres to remain as grass, then let's make it so. 2. Split the SL-1 into 2 practices. First there would be a SL-1 practice (e.g. SL-1C for cover crop), which would be a 5 year longer term vegetative cover crop practice whereby we know that the land will likely be returned to crops. If it is not returned to cropland offer a CCI-SL-1C incentive to get another. 5 years of credit in the Bay Model. Then add an additional SL-1 (e.g. SL-1L for land conversion) with a 10 year lifespan at a higher cost share rate for the true conversion to grass.			
12C	SL-3	Please review and correct contradictory language in SL-3 as seen below: An incentive rate of \$30 per acre has been established for all acreage within the field. A 75% add on cost-share rate has been established for components in those systems that require obstruction removal or subsurface drainage. Multiplying \$30 per acre times the field acreage and adding 75% of the obstruction removal and/or subsurface drainage cost will compute the final amount. The state cost-share payment, alone or when combined with any other cost-share program,			

	MATRIX OF COVER CROP RECOMMENDATIONS FOR PROGRAM YEAR 2021							
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		will not exceed 75% of the total eligible costs. Cost- share is authorized for operations not receiving cost- share payments from other sources for the same practice components (i.e. flat rate, tile, or obstruction removal) on the same acreage.						
		These sentences are contradictory. Once this language is clarified, please update the table on page 56, particularly the "Other C-S" column, which is confusing for the SL-3 practice.						

	MATRIX OF TABLED COVER CROP RECOMMENDATIONS					
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	MATRIX OF FORESTRY RECOMMENDATIONS FOR PROGRAM YEAR 2021						
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022		
1F		Federal partner(s) have asked DCR to consider increasing the CREP match to greater than the 35% in FY2020 in order to provide a higher overall costshare rate.					
2F		DCR has also been asked to consider state match for land rental on CREP renewals. Consider and make a recommendation.					

	MATRIX OF TABLED FORESTRY RECOMMENDATIONS					
Item #	Ag. BMP	Suggestion to the TAC	Reason for Tabling			

	MATRIX OF NUTRIENT MANAGEMENT RECOMMENDATIONS FOR PROGRAM YEAR 2021						
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations DCR Supports	FY2021/2022			
1N	SL-1	As part of the 2018 TAC cycle, the TAC was given the following suggestion: "The NMP requirement for SL-1 practice is overkill". The SL-1 specification language was revised (as follows here), but the TAC only voted to support the language change on a one year trial basis. The Subcommittee should further consider the issue and bring language back to the TAC for a vote. B.1. In order to be eligible for cost-share or tax credit, producers must be fully implementing a current Nutrient Management Plan (NMP) during the year of establishment on all agricultural production acreage contained within the field that this practice will be implemented on to ensure proper nutrient application for successful practice installation. A Nutrient Management Plan for the following years of practice lifespan is optional. B.9. Fertility - Lime and fertilizer can be applied for maintenance purposes but must be done in accordance with current soil test recommendations using Virginia Tech Cooperative Extension maintenance rates for the appropriate sod species. Maintenance applications are the obligation of the participant. If biosolids or manure is used, the material must be properly sampled and tested for nutrient content and given credit in fertilizer recommendations. Test results must be part of practice documentation.					

		MATRIX OF NUTRIENT MANAGEMENT RECO	MMENDATIONS FOR PROGRAM YEAR 2021		
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022
2N	NM-5N NM-5P	For NM-5N and NM-5P, in the Rates section, add the word "funding" before the word "source" to clarify that each spec is talking about the funding source and not the nutrient source. There has been confusion in the field regarding whether the word "source" refers to the nutrient source or source of money.			
3N	NM-5N NM-5P	For NM-5N and NM-5P, standardize the language under the Rates section. NM-5N currently uses the terminology of "nutrients" (C1) whereas NM-5P uses the terminology of "phosphorus" (C2). It should be either "nutrients" for both specs OR "nitrogen" and "phosphorus", respectively.			
4N	NM-5N NM-5P	The TAC needs to decide how it wants to handle the new NRCS 590C enhanced nutrient management program issue as a whole. Currently a farmer can sign up for 590C with NRCS as well as NM-5N and/or NM-5P with their local District. NRCS is okay with this and there isn't anything in the VACS manual to prevent this as long as the 590C scenario chosen is not a precision nitrogen or phosphorus application. It would be against NRCS guidance and against VACS manual guidance for the same farmer to be paid for the same precision nitrogen or phosphorus application on the same acres. In any case, Districts seem to have mixed feelings on this and formal guidance would be appreciated.			

	MATRIX OF TABLED NUTRIENT MANAGEMENT RECOMMENDATIONS					
Item #	Ag. BMP	Suggestion to the TAC	Reason for Tabling			

		MATRIX OF PROGRAMMATIC I	RECOMMENDATIONS FOR PROGRAM YEAR 2021	
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations DCR Supports	FY2021/2022
1P		Revisit the raising of participant caps (going to 100K in FY2020) or outright elimination of participant caps altogether.		
2Р		Using CEF value rather than hydrologic unit (HU) rankings as the primary factor for ranking instances for the cost-share program. Stronger utilization of the CEF value over the HU. HUs are archaic and the CEF value is more scientific when comparing like practices; and therefore, the CEF value should be the primary factor. Generated CEF value should be used as the primary ranking factor when comparing like practices as it encompasses many detailed parameters already when taking into account the HU. This will make it easier to explain to producers why their application was not funded.		
3P		VACS Regional Program. Strongly support any regionally specific VACS programs and/or implementation. Baseline surveys, outreach and educational programming would be an essential part developing any regional program in order to get the most accurate data and to be able to determine what resource concerns have yet to be addressed.		
4P		Clarify policy on CREP/RCPP cancellations, namely when USDA cancels a CREP contract (upon death or move of the participant), yet the practices have already been installed, paid for, and are functioning properly. Why lose the data credit in the Bay Model		

		MATRIX OF PROGRAMMATIC RECOM	IMENDATIONS FOR PROGRAM YEAR 2021		
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022
		if the practices are still in place and functioning properly?			
		Similarly, if a BMP is abandoned (e.g. property sold), but is still functioning, is prorated cost share reimbursement necessary?			
5P		Develop method for dealing with Small Farms, especially as caps continue to go up. Should DCR mandate that a certain percentage of funds (e.g. carve-out) go to small farms who often cannot compete with the large corporate farmers in our programs and often become discouraged from participation thereafter? Will need a clear definition of "Small Farm".			
6P		Consider paying flat rate for unit installed (e.g. \$X/foot of fence, \$Y/trough, \$Z/sq.ft. of waste storage, etc.) just like our partners at NRCS. Doing so could save tremendous administrative headaches for the Districts. DCR could use NRCS's regional pricing as a basis for a VACS pricing list. These costs are based on 75% of average cost in the region. Straying far from NRCS pricing could be a difficult and expensive task, but once accomplished, it probably would be relatively easy to update annually. Participants using state tax credits would still need to submit bills unless agBMP Tax Credit code is modified.			

	MATRIX OF PROGRAMMATIC RECOMMENDATIONS FOR PROGRAM YEAR 2021						
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022		
7 P		CDCs tell SWCDs to establish "Average Cost Lists" annually, prior to approving BMP contracts in the new program year. Nowhere in the Manual is this explicitly stated, nor is it stated that once an item from the list is used to generate a BMP's estimated cost that its estimated cost is fixed for the entire program year. The point is that all applicants are treated the same throughout a given program year. Clarify in the VACS Manual.					
8P		On Conservation Easements where livestock exclusion is required, the Manual is clear that participants are eligible for installation cost-share. Should this continue? Additionally, once the BMP is out of lifespan, should the producer be eligible for CCI maintenance practices after the exclusion BMP is out of lifespan? Clarify in Manual.					
9 P		According to the Payment section on II-27 and II-28 of the 2019 Manual, VACS cost-share may include the costs of cultural resource reviews, T&E surveys and so forth. On the other hand, many specs (such as SL-6) specifically state that "all permits or approvals necessary are the responsibility of the applicant". Many VACS participants are seeing ballooning permit costs for E&S in one recent case it was \$12,000, a massive out of pocket expense for producers. The TAC should consider whether or not cost-share should be allowed on such permits just as cost-share is allowed for CRR, T&E, floodplain reviews, etc.					

	MATRIX OF PROGRAMMATIC RECOMMENDATIONS FOR PROGRAM YEAR 2021						
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022		
10P	NM-3C NM-4 NM-5N NM-5P SL-8 SL-8B SL-8H SL-15A SL-15B WQ-4	Clarify tax credit language for Cover Crop and Nutrient Management specifications. When signing up for cost-share, a participant certifies that they "will not claim the tax credit". Later in the same paragraph it says "any cost-share funds received must be returned should I claim the tax credit." There are no exceptions written in here for participants whose applications are not funded. Clarify according to subcommittees wishes: (1) If participants are self-certifying they are not claiming tax credit as the form says, they should not claim tax credit (regardless of cost-share funding), or (2) if program applicants should be eligible for tax credit if they aren't funded, this should clearly be stated on the form, essentially as an either-or. For example, "I, understand that by participating in the XXXXXXXX, SL-XX practice, that I am only eligible for tax credits in the event that I do not receive cost-share funding for the practice. I understand that any cost-share funds received must be returned should I claim the tax credit. Signed: ". ". ". ". ". ".					

	MATRIX OF TABLED PROGRAMMATIC RECOMMENDATIONS				
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	MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021				
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022
15	SL-6N SL-6W WP-2N 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.			
25		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.			
35		Higher incentive rates for cropland filter strips and cropland sod waterways should be considered.			
45	SL-6N SL-6W WP-2N 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			

	MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021				
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		a good opportunity to specifically spell out commonly seen abuses of this practice.			
5\$		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.			
68		Define "live stream" and "surface waters" for the Glossary to be applied on many VACS practices.			
75	SL-6N SL-6W WP-2N 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			

	MATRIX OF STREAM PROTECTION RECOMMENDATIONS FOR PROGRAM YEAR 2021					
Item #	Ag. BMP	Suggestion to the TAC	TAC Recommendations	DCR Supports	FY2021/2022	
		practice but the individual district is of the opinion that power establishment is not an eligible cost. 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"? 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.		зиррогьз		

	MATRIX OF TABLED STREAM PROTECTION RECOMMENDATIONS				
Item # Ag. BMP Suggestion to the TAC Reason for Tabling		Reason for Tabling			